APPENDIX E

TRANSPORTATION PLANNING STUDY

Transportation Planning

FINAL REPORT

Seminole Fee-To-Trust Development Project Transportation Planning Study

Prepared for:

Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, California 95811

June 20, 2012

Prepared by

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Certificate of Authorization #1337
Project No. 17996.00

FINAL REPORT

Seminole Fee-To-Trust Development Project Transportation Planning Study

Prepared for:

Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, California 95811

June 20, 2012

Prepared by

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Certificate of Authorization #1337
Project No. 17996.00

EXECUTIVE SUMMARY

Introduction

This Transportation Planning Study (TPS) was prepared for the Seminole Fee-To-Trust Development Project (Proposed Project) in Coconut Creek, Broward County, Florida. The TPS is a technical support document for the Environmental Impact Statement (EIS) being prepared by Analytical Environmental Services (AES) associated with the Proposed Project. The proposed action is to place 45.64± acres of land into federal trust for the Seminole Tribe of Florida (STOF).

The Proposed Project site is near the western city limits of Coconut Creek and in the general vicinity of the northeastern quadrant of the intersection of two main thoroughfares, Sample Road (SR 834) and State Route 7 (SR 7), also known as US 441. The site is generally bounded on the east by NW 54th Avenue (Wochna Boulevard); on the south by car dealerships along Sample Road; on the west by SR 7; and on the north by a Florida Power and Light (FPL) high power transmission corridor, see **Figure ES-1**.

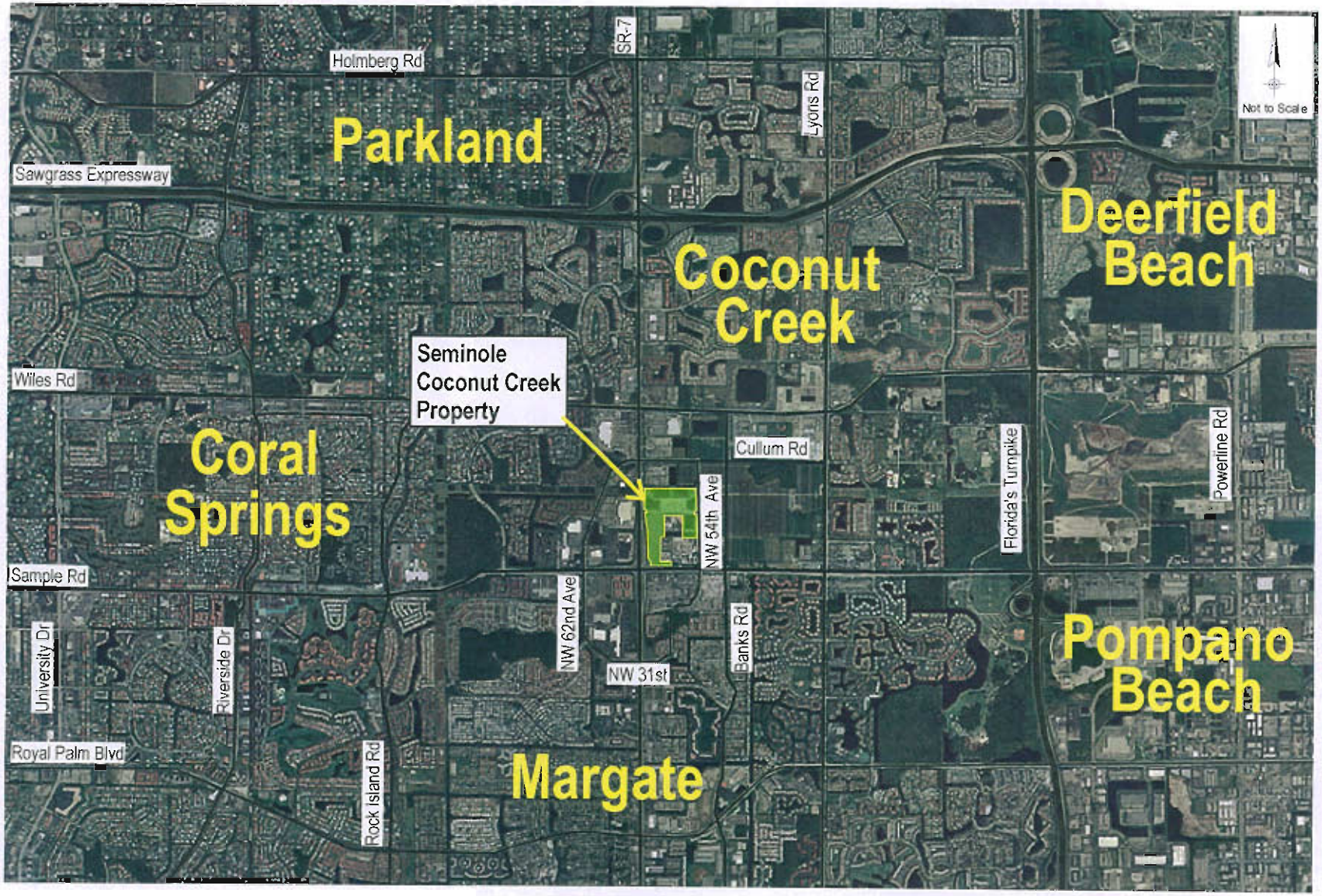
Proposed Project Alternatives

The Proposed Project traffic impacts were determined and evaluated for the following alternatives:

- **Alternative A:** Proposed Project with City of Coconut Creek Agreements;
    - **Sub-Alternative A-1:** No City of Coconut Creek Approvals or Agreements;
- **Alternative B:** Reduced Intensity Alternative with No City of Coconut Creek Agreements;
- **Alternative C:** No Action by Federal Government and with Coconut Creek Approvals and Agreements; and
    - **Sub-Alternative C-1:** No City of Coconut Creek Approvals or Agreements and no additional development beyond the existing facilities and land uses as of December 2011.

All of the alternatives, with the exception of Sub-Alternative C-1, assume the subsequent development of the current fee/non-trust properties to include a resort hotel, retail, restaurant space, convention center, a showroom, an expanded parking structure, and associated facilities. Gaming would not take place on these properties currently under consideration.

Alternative A (Proposed Project) consists of the transfer of the fee land currently owned by the STOF into Federal Trust. This alternative is predicated on existence of zoning and site plan approvals, permits and other agreements with the City providing the STOF with public services and utilities to the new facility, and the approved Planned MainStreet Development District (PMDD) Mitigation Agreement between the STOF and the City of Coconut Creek.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Seminole Coconut Creek Property

Figure No. ES-1

The Mitigation Agreement between the City and STOF (Coconut Creek Fee to Trust Lands Mitigation Agreement, dated January 27, 2011, adopted by City Resolution No. 2011-09), specifies public services and utilities to be provided by the City and compensation for such services to be paid by STOF. The Mitigation Agreement also states that although the project site would not be subject to City regulations after being brought into federal trust, STOF would comply with the MainStreet Design Standards of the City-approved Seminole PMDD. Under this Agreement, STOF would abide by height limits, development densities, off-site improvements, approved levels of service, and emergency vehicle access requirements, but would have the flexibility to modify design standards as necessary to meet constructability considerations. The City agrees to acquire all necessary right-of-way and/or easements to construct roadway and landscape improvements included in the approved PMDD. STOF would be responsible for construction of roadway and landscape improvements enumerated in the PMDD along public rights-of-way and/or easements.

Sub-Alternative A-1 consists of the transfer of the fee land currently owned by the STOF into Federal Trust. However, there would be no zoning or site plan approvals, permits or other agreements between the City and STOF and public services and utilities, provided by the City under Alternative A. These would be provided by STOF on-site.

Sub-Alternative A-1 would include similar development features as those proposed under Alternative A, with the addition of an on-site water treatment facility, wastewater treatment plant (WWTP), and Tribal Fire/Police Department station to be developed in the southwestern portion of the project site on the ground floor of the parking structure. The traffic mitigation outlined in the PMDD would be implemented if warranted by traffic conditions.

Alternative B proposes a reduction in fee-to-trust acreage from approximately 46-acres under Alternatives A and A-1 to approximately 25-acres. Similar to Sub-Alternative A-1, Alternative B assumes that STOF would not reach a binding agreement with the City in regards to provision of public services and utilities including PMDD traffic mitigation. Under Alternative B, STOF would provide these utilities and services on-site through the creation of STOF operated facilities. The traffic mitigation outlined in the PMDD would be implemented if warranted by traffic conditions.

Alternative C assumes that the non-trust STOF lands would not be brought into federal trust. For the purposes of this analysis, two potential scenarios could then occur. Under the first scenario, STOF would continue with plans to develop the project site in compliance with the current Seminole PMDD plan. This assumes that the STOF can obtain all necessary permits and approvals from the City to construct the facility. The project components and environmental effects of the development of the PMDD plans would be similar in size and scope as those evaluated under Alternative A. PMDD traffic mitigation would be implemented under Alternative C.

Sub-Alternative C-1 is the second option for Alternative C. Under this scenario, it is assumed that if STOF is unable to obtain zoning and site plan approvals, permits and other agreements, or if these are overturned, the project site would not be developed and would remain in its current condition (Phase II of the Seminole PMDD as of December 2011).

Analysis Timeframes

The TPS analyses were performed for the STOF property under existing Phase II conditions (2011) and for the Proposed Project and alternatives to the Proposed Project at the following milestones:

- Build-out 2020 -- The Project build-out horizon year consistent with the STOF Master Plan including Phase V (2018-2020) of development; and
- Cumulative 2035 -- Cumulative analysis year which corresponds to the current 2035 Broward County Long Range Transportation Plan (LRTP).

Additionally, the alternatives were analyzed for the following time periods and site development as per the STOF Master Plan:

- Phase III, 2013-2015; and
- Phase IV, 2016-2018.

Proposed Project Alternatives Development Trip Generation

The trip generation for the project alternatives was prepared based on:

- The current traffic volumes for the existing development (Phase II, 2011) as determined on the basis of the April 2011 traffic counts and adjusted to Phase II development conditions;
- Traffic data and land use development information from the Seminole Hollywood Hard Rock Casino (a similar site); and
- Trip generation rates and equations from the Institute of Transportation Engineers' Trip Generation, 8th Edition, applied where warranted.

Significance Test and Study Area

Based on the procedure where project trips on regional roadway segments equal or exceed five (5) percent of the adopted peak-hour directional maximum service volume define the extent of the short-term (Build-out 2020) and long-term (Cumulative 2035) final study areas with significance impact were identified as the following:

Short-Term: Build-out 2020

- Cullum Road between SR 7 and NW 54th Avenue; and
- NW 54th Avenue between Sample Road and Cullum Road.

Long-term: Cumulative 2035

- North Boundary: Wiles Road (four lanes, divided arterial) between SR 7/US 441 and Lyons Road;
- East Boundary: Lyons Road (six lanes, divided arterial) between Sample Road and Wiles Road;
- South Boundary: Sample Road (six lanes, divided State principal arterial) between SR 7/US 441 and Lyons Road; and
- West Boundary: SR 7/US 441 (six lanes, divided State principal arterial) between Wiles Road and Sample Road.

Consistent with current traffic engineering practice in Florida for large scale projects, a roadway segment is determined to be significantly impacted by a proposed project only if both of the following criteria are met:

1. The PM peak hour directional volume exceeds the adopted LOS "D" standard; and
2. Regional roadway segments where project trips equal or exceed five (5) percent of the adopted peak-hour directional maximum service volume.

An important caveat to these criteria is that if an impacted roadway can be improved such that it operates equal to or better than it would without the project, impacts are considered to be mitigated. It should also be noted that the STOF has committed to several roadway/intersection improvement projects as part of the approval for the Seminole Planned MainStreet Development District by the City of Coconut Creek. In addition, programmed roadway improvements as identified in the currently approved Florida Department of Transportation (FDOT) work program, the Broward County Transportation Improvement Plan, and the executed development agreement for the MainStreet at Coconut Creek Development of Regional Impact (DRI) were assumed as committed roadway system improvements in the analysis.

Findings of Impacts and Mitigations

- Alternative A: Proposed Project with City of Coconut Creek Agreements

  The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. However, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) based on the committed improvements under the PMDD. As such, the impacts of the significant link would be mitigated with the committed PMDD improvements at the intersections.

  Nonetheless, Alternative A will require the following access mitigation by Phase IV (2015-2018):

  - Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Sub-Alternative A-1: No City of Coconut Creek Approvals or Agreements

  The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. Also, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) assuming intersection improvements similar to those described under the under the PMDD. Unlike the PMDD, this alternative does not have pre-approved committed improvements. As such, the impacts of the significant link would require mitigation as follows:

  - Construct a two-lane roundabout or implement signalization at the intersection of NW 54th Avenue and Cullum;
  - Construct the main site access at NW 54th Avenue and North Access;
  - Close the site access and signalize the intersection at NW 54th Avenue and NW 40th Street; and
  - Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Alternative B: Reduced Intensity Alternative with No City of Coconut Creek Agreements;

  The link analysis for this alternative demonstrated that no significantly impacted links (failing and significant) through Cumulative 2035 would occur.

  Nonetheless, Alternative B will require the following access mitigation by Phase IV (2015-2018):

  - Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Alternative C: No Action by Federal Government and with Coconut Creek Approvals and Agreements

  The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. However, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) based on the committed improvements under the PMDD. As such, the impacts of the significant link would be mitigated with the committed PMDD improvements at the intersections.

  Nonetheless, Alternative C will require the following access mitigation by Phase IV (2015-2018):

- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Sub-Alternative C-1: Maintain Current Level of Development.

  Since under this alternative no further development on the STOF site is projected, there are no projected traffic impacts and, thus, no traffic mitigation is required.

TABLE OF CONTENTS

Section Page

SECTION 1.0 INTRODUCTION 1-1

SECTION 2.0 SITE LOCATION, PROPOSED ACTION AND ALTERNATIVES 2-1
2.1 Introduction 2-1
2.2 Existing Site Location and Description 2-1
2.3 Alternative A – Proposed Project with Coconut Creek Agreements 2-4
2.3.1 Proposed Development 2-4
2.3.2 STOF/City of Coconut Creek Mitigation Agreement and PMDD 2-6
2.4 Sub-Alternative A-1 – Proposed Project with No Coconut Creek Agreements 2-10
2.5 Alternative B – Reduced Intensity Project 2-14
2.6 Alternative C – No-Action by Federal Government 2-17
2.7 Federal Trust Land (Tract 65) Development 2-17

SECTION 3.0 TRAFFIC ANALYSIS METHODOLOGY 3-1
3.1 Introduction 3-1
3.2 Analysis Years and Study Area 3-2
3.2.1 Analysis Years 3-2
3.2.2 Study Area 3.2
3.3 Existing Transportation Network 3-2
3.4 Traffic Data Collection, Phase I-2011 3-5
3.4.1 Arterial Roadway Link Volumes 3-5
3.4.2 Intersection Counts 3-6
3.4.3 Florida Department of Transportation (FDOT) 3-6
3.4.4 Traffic Factors 3-8
3.5 Trip Generation 3-11
3.5.1 Site Related Traffic Data 3-11
3.5.2 Seminole Coconut Creek Casino Trip Rate Estimation – Phase I (April 2011) 3-12
3.5.3 Phase II PM Peak Hour Trip Estimation – Current Conditions 3-12
3.5.4 Seminole Hollywood Hard Rock Casino Trip Rate 3-13
3.5.5 Estimation of HHRC Non-Casino Traffic 3-13
3.5.6 2020 STOF Trips 3-16
3.5.7 Coconut Creek STOF Tract 65 and Fee-To-Trust Proportioning 3-17
3.5.8 2020 STOF Non-Casino Trips 3-18
3.5.9 Segregation of Fee-To-Trust and Tract 65 Non-Casino Trips 3-20
3-5.10 Fee-To-Trust PM Peak Hour Trips 3-22
3.6 Phased Development, Alternatives A, B, and C and Sub-Alternative A-1 3-23
3.7 Traffic Forecast 3-23
3.7.1 Short-Term/Build-out Growth Rate 3-23
3.7.2 Planning Model Forecast – Long-Term/Cumulative Growth 3-23
3.7.3 Applied TPS Growth Rate 3-26

TABLE OF CONTENTS (continued)

Section Page

3.8 Programmed and Planned Roadway Improvements ... 3-26
3.8.1 FDOT District IV, Five-Year Work Program ... 3-26
3.8.2 Broward County TIP ... 3-28
3.8.3 MainStreet and Coconut Creek DRI ... 3-29
3.8.4 STOF PMDD Agreement Projects ... 3-30
3.9 Committed Developments ... 3-31
3.10 Trip Assignment ... 3-33
3.11 Short and Long Term Final Study Areas ... 3-33
3.12 Peak Hour Directional Volumes ... 3-38
3.13 Turning Movement Volumes ... 3-42
3.14 Operational Analysis Procedure ... 3-42

SECTION 4.0 TRANSIT ... 4-1
4.1 Current Transit Services ... 4-1
4.1.1 Broward County Transit ... 4-1
4.1.2 Community Bus Services ... 4-3
4.1.3 Regional Transit ... 4-5
4.2 Transit Ridership ... 4-6
4.2.1 Broward County Transit ... 4-6
4.2.2 Community Bus Routes ... 4-7
4.2.3 STOF Transit Ridership ... 4-7
4.3 Programmed Transit Improvements ... 4-8
4.3.1 BCT Planned Service Implementation Program ... 4-8
4.3.2 LRTP Transit Enhancement Plans ... 4-9
4.4 Proposed Seminole Coconut Casino Transportation Center ... 4-11
4.5 Other Multimodal Information ... 4-12
4.5.1 High-Occupancy Vehicle Lanes ... 4-12
4.5.2 Rail Transit Service ... 4-12
4.5.3 Multi-Use Trails ... 4-12
4.5.4 Bicycle Lanes ... 4-12
4.5.5 Sidewalks/Pedestrian Facilities ... 4-13

SECTION 5.0 EXISTING TRAFFIC CONDITIONS ANALYSIS ... 5-1
5.1 Existing Static Link Analysis ... 5-1
5.2 Existing Intersection Analysis ... 5-1

SECTION 6.0 BACKGROUND TRAFFIC CONDITIONS ANALYSIS ... 6-1
6.1 Background Static Link Analysis ... 6-1
6.2 Background Intersection Analysis ... 6-10

TABLE OF CONTENTS (continued)

Section Page

SECTION 7.0 ALTERNATIVES EVALUATED 7-1
7.1 Introduction 7-1
7.2 Programmed Roadway Improvements and Intersection Geometries 7-1
7.3 Site Access Configurations 7-2
7.4 Proposed Project Static Link Analysis 7-3
7.5 Significance Criteria 7-14
7.6 Significant and Failing Link 7-14
7.7 Intersection Analysis 7-15
7.7.1 Intersection Analysis: Alternatives A and C and Sub-Alternative A-1 7-16
7.7.2 Intersection Analysis: Alternative B 7-16
7.7.3 Intersection Analysis: Alternative C-1 7-16
7.8 Summary of Impacts and Mitigation 7-17
7.8.1 Alternative A: Proposed Project with City of Coconut Creek Agreements 7-17
7.8.2 Sub-Alternative A-1: No City of Coconut Creek Approvals or Agreements 7-18
7.8.3 Alternative B: Reduced Intensity Alternative with No City of Coconut Agreements 7-18
7.8.4 Alternative C: No Action by Federal Government and with Coconut Creek Approvals and Agreements 7-19
7.9 Construction Impacts 7-19

SECTION 8.0 SUMMARY OF FINDINGS 8-1
8.1 Project Alternatives 8-1
8.2 Analysis Timeframes 8-1
8.3 STOF Property Development Trip Generation 8-1
8.4 Significance Test and Study Area 8-2
8.5 Project Alternatives Impacts and Mitigations 8-2

LIST OF FIGURES

Figures Page

Figure 2.1 Seminole Coconut Creek Property 2-2
Figure 2.2 Existing and Proposed Trust Properties 2-3
Figure 2.3 Alternative A – Proposed Project with Coconut Creek Approval and Agreements 2-5
Figure 2.4 Exhibit 11 G, PMDD Improvements 2-9
Figure 2.5 Sub-Alternative A-1 – Proposed Project with No Coconut Creek Approval and Agreements 2-11

LIST OF FIGURES (continued)

Figures Page

Figure 2.6 Alternative B – Reduced Intensity Project 2-15
Figure 3.1 Existing 2012 Roadway System 3-3
Figure 3.2 Traffic Data Collection Locations 3-7
Figure 3.3 Existing 2011 Phase II PM Peak Hour Traffic 3-14
Figure 3.4 Existing 2011 Phase II PM Peak Hour Trip Distribution 3-15
Figure 3.5 Approved 2012-2015 Roadway Construction 3-27
Figure 3.6 2020 and 2035 PM Peak Hour Trip Distribution, Alternatives A and C and Sub-Alternative A-1 3-34
Figure 3.7 2020 and 2035 PM Peak Hour Trip Distribution, Alternative B 3-35
Figure 3.8 2020 and 2035 PM Peak Hour Trip Distribution, Alternative C-1 3-36
Figure 3.9 Regional Project Distribution Percentages, All Alternatives 3-37
Figure 3.10 Short Term Link Study Area 3-39
Figure 3.11 Long Term Link Study Area 3-40
Figure 4.1 Broward County Transit Routes 4-2
Figure 4.2 Community Bus Service 4-4
Figure 5.1 Existing Intersection Geometry 5-2
Figure 5.2 Existing 2011 PM Peak Hour Failing Roadways 5-3
Figure 5.3 Existing 2011 PM Peak Hour Intersection Level of Service 5-5
Figure 6.1 2020 and 2035 Background Intersection Geometry – Alternatives A and C and Sub-Alternative A-1 6-2
Figure 6.2 2020 and 2035 Background Intersection Geometry – Alternative B 6-3
Figure 6.3 2020 and 2035 Background Intersection Geometry – Sub-Alternative C-1 6-4
Figure 6.4 Phase III, 2015 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1 6-5
Figure 6.5 Phase IV, 2018 PM Peak Hour Background Failing Roadways, Alternatives A, B and Sub-Alternatives A-1 and C-1 6-6
Figure 6.6 Short-term 2020 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1 6-8
Figure 6.7 Long-term 2035 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1 6-9
Figure 6.8 Phase III, 2015 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-15
Figure 6.9 Phase IV, 2018 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-16
Figure 6.10 2020 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-17
Figure 6-11 2020 PM Peak Hour Background Intersection Level of Service, Alternative B 6-18
Figure 6-12 2020 PM Peak Hour Background Intersection Level of Service, Sub-Alternative C-1 6-19

LIST OF FIGURES (continued)

Figures Page

Figure 6-13 2035 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-21
Figure 6.14 2035 PM Peak Hour Background Intersection Level of Service, Alternative B .. 6-22
Figure 6.15 2035 PM Peak Hour Intersection Level of Service, Sub-Alternative C-1 6-23
Figure 7.1 Phase III, 2015 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-4
Figure 7.2 Phase III, 2015 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-5
Figure 7.3 Phase IV 2018 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-7
Figure 7.4 Phase IV 2018 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-8
Figure 7.5 2020 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-9
Figure 7.6 2020 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-10
Figure 7.7 2035 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-12
Figure 7.8 2035 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-13

LIST OF TABLES

Tables Page

Table 2-1 Seminole Fee-To-Trust Parcel Sizes 2-4
Table 2-2 Project Components and Approximate Square Footages – Alternative A 2-6
Table 2-3 Phased Development of Primary Components – Alternative A 2-7
Table 2-4 Project Components and Approximate Square Footages – Sub-Alternative A-1 . 2-12
Table 2-5 Phased Development of Primary Components – Alternative A-1 2-13
Table 2-6 Project Components and Approximate Square Footages – Alternative B 2-14
Table 2-7 Phased Development of Primary Components – Alternative B 2-16
Table 2-8 Tract 65 Development, 2011 2-18
Table 2-9 Phased Development of Primary Components – Tract 65 Trust Land 2-19
Table 3-1 PM Peak Hour Intersection Peak Hour Factor (PHF) 3-8
Table 3-2 Existing PM II Peak Hour Traffic Directional Distribution 3-10
Table 3-3 Existing Seminole Property PM Peak Hour Trips 3-12
Table 3-4 ITE Derived Gross HHRC Non-Casino PM Peak Hour Trips 3-17

Table 3-5 Adjusted HHRC Non-Casino PM Peak Hour Trip Distribution by Land Use 3-17
Table 3-6 Additional Non-Casino Uses by Area 3-18
Table 3-7 ITE Gross Trips for Non-Casino Uses for Combined Trust and Non-Trust Properties 3-19

LIST OF TABLES (continued)

Tables Page

Table 3-8 Non-Casino Trips for Combined Trust and Non-Trust Lands 3-20
Table 3-9 2020 Fee-To-Trust and Tract 65 Non-Casino Trips 3-21
Table 3-10 PM Peak Hour Trips (Tract 65 + Fee-To-Trust Property) 3-22
Table 3-11 Non-Trust Land Trip Estimates per Development Alternative 3-22
Table 3-12 Proposed Project Development Phasing, 2012-2020 3-24
Table 3-13 Proposed Project Alternatives PM Peak Hour Trips for Phases III and IV 3-25
Table 3-14 Short-Term Growth Rate Estimation 3-25
Table 3-15 Projects from FDOT Five-Year Work Program 3-28
Table 3-16 Projects from Broward County Transportation Improvement Plan, FY 2011/12 – 2015/2016 3-28
Table 4-1 BCT Transit Ridership 4-6
Table 4-2 Community Bus Historical Ridership 4-7
Table 5-1 Existing 2011 Intersection LOS 5-4
Table 6-1 2015, 2018, 2020 and 2035 Background Traffic Intersection Level of Service Alternatives A and C and Sub-Alternative A-1 6-11
Table 6-2 2020 and 2035 Background Traffic Intersection Level of Service Alternative B 6-12
Table 6-3 2020 and 2035 Traffic Intersection Level of Service Sub-Alternative C-1 6-13
Table 7-1 Impacted Intersection Analysis – Alternatives A and C and Sub-Alternative A-1 7-17

APPENDICES
(Under Separate Cover)

Appendix A Mitigation Agreement
Appendix B Traffic Count Data
Appendix C Hollywood Hard Rock Casino Data
Appendix D Proposed Project Alternatives Phased Development Trip Estimation
Appendix E Growth Rates
Appendix F SERPM Model
Appendix G Committed Developments
Appendix H Significance and Link Analysis Tables
Appendix I Intersection Volumes
Appendix J Transit Information
Appendix K SYNCHRO and HCS Outputs

TABLE OF CONTENTS

Section Page

SECTION 1.0 INTRODUCTION 1-1

SECTION 2.0 SITE LOCATION, PROPOSED ACTION AND ALTERNATIVES 2-1
2.1 Introduction 2-1
2.2 Existing Site Location and Description 2-1
2.3 Alternative A – Proposed Project with Coconut Creek Agreements 2-4
2.3.1 Proposed Development 2-4
2.3.2 STOF/City of Coconut Creek Mitigation Agreement and PMDD 2-6
2.4 Sub-Alternative A-1 – Proposed Project with No Coconut Creek Agreements 2-10
2.5 Alternative B – Reduced Intensity Project 2-14
2.6 Alternative C – No-Action by Federal Government 2-17
2.7 Federal Trust Land (Tract 65) Development 2-17

SECTION 3.0 TRAFFIC ANALYSIS METHODOLOGY 3-1
3.1 Introduction 3-1
3.2 Analysis Years and Study Area 3-2
3.2.1 Analysis Years 3-2
3.2.2 Study Area 3.2
3.3 Existing Transportation Network 3-2
3.4 Traffic Data Collection, Phase I-2011 3-5
3.4.1 Arterial Roadway Link Volumes 3-5
3.4.2 Intersection Counts 3-6
3.4.3 Florida Department of Transportation (FDOT) 3-6
3.4.4 Traffic Factors 3-8
3.5 Trip Generation 3-11
3.5.1 Site Related Traffic Data 3-11
3.5.2 Seminole Coconut Creek Casino Trip Rate Estimation – Phase I (April 2011) 3-12
3.5.3 Phase II PM Peak Hour Trip Estimation – Current Conditions 3-12
3.5.4 Seminole Hollywood Hard Rock Casino Trip Rate 3-13
3.5.5 Estimation of HHRC Non-Casino Traffic 3-13
3.5.6 2020 STOF Trips 3-16
3.5.7 Coconut Creek STOF Tract 65 and Fee-To-Trust Proportioning 3-17
3.5.8 2020 STOF Non-Casino Trips 3-18
3.5.9 Segregation of Fee-To-Trust and Tract 65 Non-Casino Trips 3-20
3-5.10 Fee-To-Trust PM Peak Hour Trips 3-22
3.6 Phased Development, Alternatives A, B, and C and Sub-Alternative A-1 3-23
3.7 Traffic Forecast 3-23
3.7.1 Short-Term/Build-out Growth Rate 3-23
3.7.2 Planning Model Forecast – Long-Term/Cumulative Growth 3-23
3.7.3 Applied TPS Growth Rate 3-26

TABLE OF CONTENTS (continued)

Section Page

3.8 Programmed and Planned Roadway Improvements ... 3-26
3.8.1 FDOT District IV, Five-Year Work Program ... 3-26
3.8.2 Broward County TIP ... 3-28
3.8.3 MainStreet and Coconut Creek DRI ... 3-29
3.8.4 STOF PMDD Agreement Projects ... 3-30
3.9 Committed Developments ... 3-31
3.10 Trip Assignment ... 3-33
3.11 Short and Long Term Final Study Areas ... 3-33
3.12 Peak Hour Directional Volumes ... 3-38
3.13 Turning Movement Volumes ... 3-42
3.14 Operational Analysis Procedure ... 3-42

SECTION 4.0 TRANSIT ... 4-1
4.1 Current Transit Services ... 4-1
4.1.1 Broward County Transit ... 4-1
4.1.2 Community Bus Services ... 4-3
4.1.3 Regional Transit ... 4-5
4.2 Transit Ridership ... 4-6
4.2.1 Broward County Transit ... 4-6
4.2.2 Community Bus Routes ... 4-7
4.2.3 STOF Transit Ridership ... 4-7
4.3 Programmed Transit Improvements ... 4-8
4.3.1 BCT Planned Service Implementation Program ... 4-8
4.3.2 LRTP Transit Enhancement Plans ... 4-9
4.4 Proposed Seminole Coconut Casino Transportation Center ... 4-11
4.5 Other Multimodal Information ... 4-12
4.5.1 High-Occupancy Vehicle Lanes ... 4-12
4.5.2 Rail Transit Service ... 4-12
4.5.3 Multi-Use Trails ... 4-12
4.5.4 Bicycle Lanes ... 4-12
4.5.5 Sidewalks/Pedestrian Facilities ... 4-13

SECTION 5.0 EXISTING TRAFFIC CONDITIONS ANALYSIS ... 5-1
5.1 Existing Static Link Analysis ... 5-1
5.2 Existing Intersection Analysis ... 5-1

SECTION 6.0 BACKGROUND TRAFFIC CONDITIONS ANALYSIS ... 6-1
6.1 Background Static Link Analysis ... 6-1
6.2 Background Intersection Analysis ... 6-10

TABLE OF CONTENTS (continued)

Section Page

SECTION 7.0 ALTERNATIVES EVALUATED 7-1
7.1 Introduction 7-1
7.2 Programmed Roadway Improvements and Intersection Geometries 7-1
7.3 Site Access Configurations 7-2
7.4 Proposed Project Static Link Analysis 7-3
7.5 Significance Criteria 7-14
7.6 Significant and Failing Link 7-14
7.7 Intersection Analysis 7-15
7.7.1 Intersection Analysis: Alternatives A and C and Sub-Alternative A-1 7-16
7.7.2 Intersection Analysis: Alternative B 7-16
7.7.3 Intersection Analysis: Alternative C-1 7-16
7.8 Summary of Impacts and Mitigation 7-17
7.8.1 Alternative A: Proposed Project with City of Coconut Creek Agreements 7-17
7.8.2 Sub-Alternative A-1: No City of Coconut Creek Approvals or Agreements 7-18
7.8.3 Alternative B: Reduced Intensity Alternative with No City of Coconut Agreements 7-18
7.8.4 Alternative C: No Action by Federal Government and with Coconut Creek Approvals and Agreements 7-19
7.9 Construction Impacts 7-19

SECTION 8.0 SUMMARY OF FINDINGS 8-1
8.1 Project Alternatives 8-1
8.2 Analysis Timeframes 8-1
8.3 STOF Property Development Trip Generation 8-1
8.4 Significance Test and Study Area 8-2
8.5 Project Alternatives Impacts and Mitigations 8-2

LIST OF FIGURES

Figures Page

Figure 2.1 Seminole Coconut Creek Property 2-2
Figure 2.2 Existing and Proposed Trust Properties 2-3
Figure 2.3 Alternative A – Proposed Project with Coconut Creek Approval and Agreements 2-5
Figure 2.4 Exhibit 11 G, PMDD Improvements 2-9
Figure 2.5 Sub-Alternative A-1 – Proposed Project with No Coconut Creek Approval and Agreements 2-11

LIST OF FIGURES (continued)

Figures Page

Figure 2.6 Alternative B – Reduced Intensity Project 2-15
Figure 3.1 Existing 2012 Roadway System 3-3
Figure 3.2 Traffic Data Collection Locations 3-7
Figure 3.3 Existing 2011 Phase II PM Peak Hour Traffic 3-14
Figure 3.4 Existing 2011 Phase II PM Peak Hour Trip Distribution 3-15
Figure 3.5 Approved 2012-2015 Roadway Construction 3-27
Figure 3.6 2020 and 2035 PM Peak Hour Trip Distribution, Alternatives A and C and Sub-Alternative A-1 3-34
Figure 3.7 2020 and 2035 PM Peak Hour Trip Distribution, Alternative B 3-35
Figure 3.8 2020 and 2035 PM Peak Hour Trip Distribution, Alternative C-1 3-36
Figure 3.9 Regional Project Distribution Percentages, All Alternatives 3-37
Figure 3.10 Short Term Link Study Area 3-39
Figure 3.11 Long Term Link Study Area 3-40
Figure 4.1 Broward County Transit Routes 4-2
Figure 4.2 Community Bus Service 4-4
Figure 5.1 Existing Intersection Geometry 5-2
Figure 5.2 Existing 2011 PM Peak Hour Failing Roadways 5-3
Figure 5.3 Existing 2011 PM Peak Hour Intersection Level of Service 5-5
Figure 6.1 2020 and 2035 Background Intersection Geometry – Alternatives A and C and Sub-Alternative A-1 6-2
Figure 6.2 2020 and 2035 Background Intersection Geometry – Alternative B 6-3
Figure 6.3 2020 and 2035 Background Intersection Geometry – Sub-Alternative C-1 6-4
Figure 6.4 Phase III, 2015 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1 6-5
Figure 6.5 Phase IV, 2018 PM Peak Hour Background Failing Roadways, Alternatives A, B and Sub-Alternatives A-1 and C-1 6-6
Figure 6.6 Short-term 2020 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1 6-8
Figure 6.7 Long-term 2035 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1 6-9
Figure 6.8 Phase III, 2015 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-15
Figure 6.9 Phase IV, 2018 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-16
Figure 6.10 2020 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-17
Figure 6-11 2020 PM Peak Hour Background Intersection Level of Service, Alternative B 6-18
Figure 6-12 2020 PM Peak Hour Background Intersection Level of Service, Sub-Alternative C-1 6-19

LIST OF FIGURES (continued)

Figures Page

Figure 6-13 2035 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1 6-21
Figure 6.14 2035 PM Peak Hour Background Intersection Level of Service, Alternative B .. 6-22
Figure 6.15 2035 PM Peak Hour Intersection Level of Service, Sub-Alternative C-1 6-23
Figure 7.1 Phase III, 2015 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-4
Figure 7.2 Phase III, 2015 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-5
Figure 7.3 Phase IV 2018 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-7
Figure 7.4 Phase IV 2018 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-8
Figure 7.5 2020 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-9
Figure 7.6 2020 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-10
Figure 7.7 2035 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1 7-12
Figure 7.8 2035 PM Peak Hour Total Volume Failing Roadways, Alternative B 7-13

LIST OF TABLES

Tables Page

Table 2-1 Seminole Fee-To-Trust Parcel Sizes 2-4
Table 2-2 Project Components and Approximate Square Footages – Alternative A 2-6
Table 2-3 Phased Development of Primary Components – Alternative A 2-7
Table 2-4 Project Components and Approximate Square Footages – Sub-Alternative A-1 . 2-12
Table 2-5 Phased Development of Primary Components – Alternative A-1 2-13
Table 2-6 Project Components and Approximate Square Footages – Alternative B 2-14
Table 2-7 Phased Development of Primary Components – Alternative B 2-16
Table 2-8 Tract 65 Development, 2011 2-18
Table 2-9 Phased Development of Primary Components – Tract 65 Trust Land 2-19
Table 3-1 PM Peak Hour Intersection Peak Hour Factor (PHF) 3-8
Table 3-2 Existing PM II Peak Hour Traffic Directional Distribution 3-10
Table 3-3 Existing Seminole Property PM Peak Hour Trips 3-12
Table 3-4 ITE Derived Gross HHRC Non-Casino PM Peak Hour Trips 3-17

Table 3-5 Adjusted HHRC Non-Casino PM Peak Hour Trip Distribution by Land Use 3-17
Table 3-6 Additional Non-Casino Uses by Area 3-18
Table 3-7 ITE Gross Trips for Non-Casino Uses for Combined Trust and Non-Trust Properties 3-19

LIST OF TABLES (continued)

Tables Page

Table 3-8 Non-Casino Trips for Combined Trust and Non-Trust Lands 3-20
Table 3-9 2020 Fee-To-Trust and Tract 65 Non-Casino Trips 3-21
Table 3-10 PM Peak Hour Trips (Tract 65 + Fee-To-Trust Property) 3-22
Table 3-11 Non-Trust Land Trip Estimates per Development Alternative 3-22
Table 3-12 Proposed Project Development Phasing, 2012-2020 3-24
Table 3-13 Proposed Project Alternatives PM Peak Hour Trips for Phases III and IV 3-25
Table 3-14 Short-Term Growth Rate Estimation 3-25
Table 3-15 Projects from FDOT Five-Year Work Program 3-28
Table 3-16 Projects from Broward County Transportation Improvement Plan, FY 2011/12 – 2015/2016 3-28
Table 4-1 BCT Transit Ridership 4-6
Table 4-2 Community Bus Historical Ridership 4-7
Table 5-1 Existing 2011 Intersection LOS 5-4
Table 6-1 2015, 2018, 2020 and 2035 Background Traffic Intersection Level of Service Alternatives A and C and Sub-Alternative A-1 6-11
Table 6-2 2020 and 2035 Background Traffic Intersection Level of Service Alternative B 6-12
Table 6-3 2020 and 2035 Traffic Intersection Level of Service Sub-Alternative C-1 6-13
Table 7-1 Impacted Intersection Analysis – Alternatives A and C and Sub-Alternative A-1 7-17

APPENDICES
(Under Separate Cover)

Appendix A Mitigation Agreement
Appendix B Traffic Count Data
Appendix C Hollywood Hard Rock Casino Data
Appendix D Proposed Project Alternatives Phased Development Trip Estimation
Appendix E Growth Rates
Appendix F SERPM Model
Appendix G Committed Developments
Appendix H Significance and Link Analysis Tables
Appendix I Intersection Volumes
Appendix J Transit Information
Appendix K SYNCHRO and HCS Outputs

1.0 INTRODUCTION

This Transportation Planning Study (TPS) was prepared for the Seminole Fee-To-Trust Development Project in Coconut Creek, Broward County, Florida. The Proposed Action is to place approximately 45.64 acres of land into federal trust for the Seminole Tribe of Florida (STOF) and the subsequent development of the site for a resort hotel, retail, restaurant, convention center, a 2500-seat showroom, expanded parking facility, and associated facilities.

The TPS serves as a technical support document for the Environmental Impact Statement (EIS) being prepared by Analytical Environmental Services (AES) associated with the Proposed Project. The report provides an assessment of the anticipated roadway conditions from several build alternatives and no-build (No Action) alternative.

2.0 SITE LOCATION, PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This section presents a description of the project site and descriptions and comparison of the alternatives analyzed within this TPS. The alternatives include two development alternatives, as well as a No-Action Alternative identified as follows:

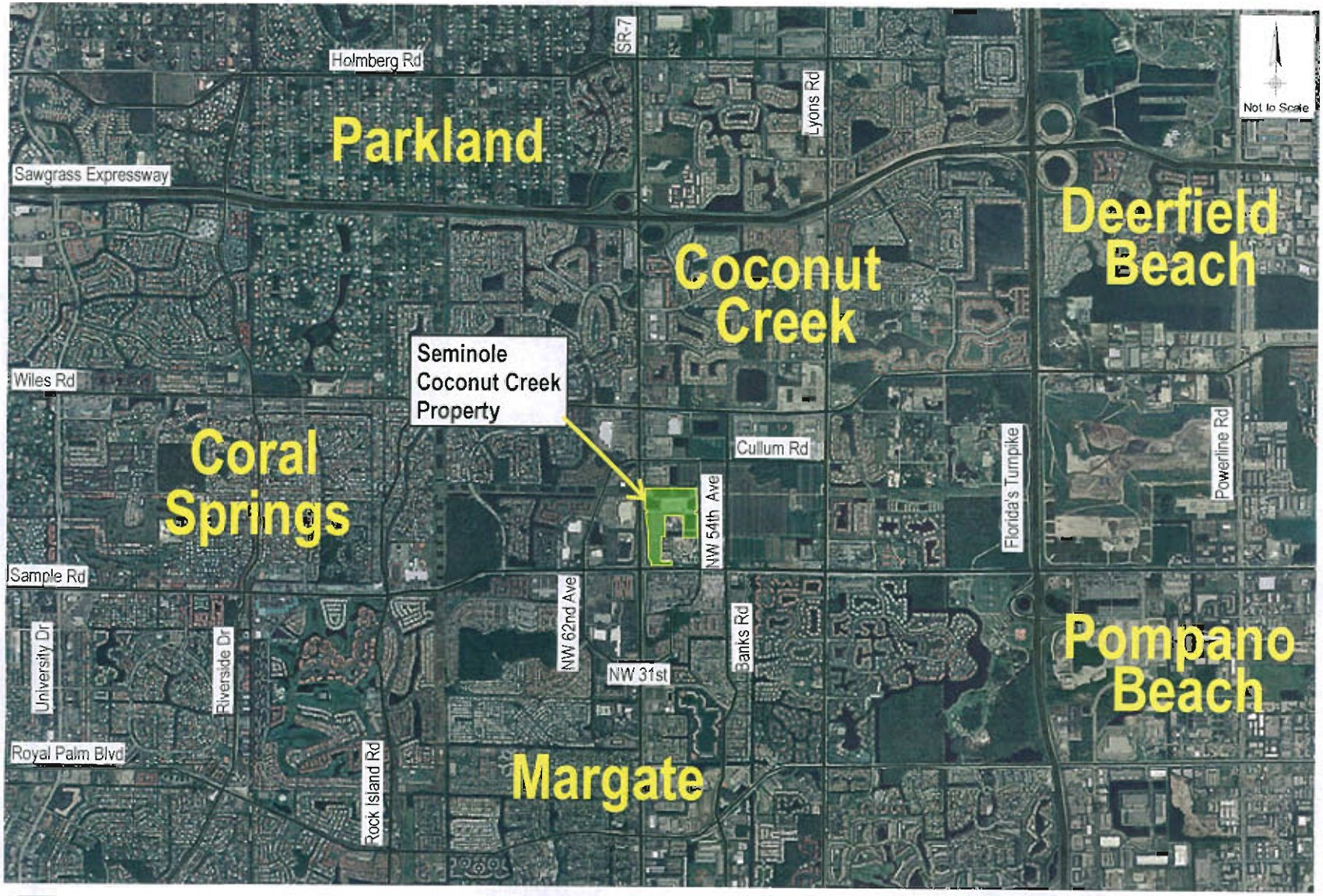
- **Alternative A:** Proposed Project with City of Coconut Creek Agreements;
  - **Sub-Alternative A-1:** No City of Coconut Creek Approvals or Agreements;
- **Alternative B:** Reduced Intensity Alternative with No City of Coconut Creek Agreements;
- **Alternative C:** No Action by Federal Government and with Coconut Creek Approvals and Agreements; and
  - **Sub-Alternative C-1:** No City of Coconut Creek Approvals or Agreements and no additional development beyond the existing facilities and land uses as of December 2011.

2.2 Existing Site Location and Description

The site of the Proposed Project lies within the north central sector of the City of Coconut Creek (City), Broward County (County), adjacent to its western city limits, and in the general vicinity of the northeastern quadrant of the intersection of two main thoroughfares, Sample Road (SR 834) and State Route 7 (SR 7), also known as US 441. **Figure 2.1** shows the location of the existing STOF property in Coconut Creek and **Figure 2.2** shows the location of the existing trust property (Tract 65) and the Proposed Project lands per tract. The site is generally bounded on the east by NW 54th Avenue (Wochna Boulevard); on the south by car dealerships fronting Sample Road (SR 834); on the west by SR 7/US 441; and on the north by a Florida Power and Light (FPL) high power transmission corridor.

The STOF currently owns approximately 51± acres within the 102-arce Commerce Center of Coconut Creek Development of Regional Impact (DRI).[1] Besides the STOF properties, this DRI includes parcels containing three auto dealerships, a parcel dedicated for up to 323,389 square feet of office use, and a FPL substation. Approximately 5.0 acres are currently in federal trust (Tract 65) and the total size of the STOF non-Trust property is approximately 45.64 acres. This TPS analyzes the impacts from development of these 45.64 acres. The combined STOF property is currently designated as the Seminole Coconut Creek Casino or the Seminole Coconut Creek Planned MainStreet Design District (Seminole PMDD). **Table 2-1** shows the approximate acreage of each project parcel.

[1] A development of regional impact (DRI) is a large-scale and complex development which affects more than one county; sometimes many jurisdictions. Pursuant to Chapter 380, Florida Statutes, Regional Planning Councils are charged with the coordination of multi-jurisdictional agency review of large-scale development projects. The Commerce Center of Coconut Creek is an approved DRI (DCA No. 11-86-076, Development Order 2006-47, Coconut Creek) originally approved February 1982 and amended up through January 2007. The approved PM Peak Hour Trips are 2,107. Development and trips associated with Tract 65 (Trust Land) are not included in the DRI.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Seminole Coconut Creek Property

Figure No. 2.1

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing and Proposed Trust Properties

Figure No. 2.2

Table 2-1 Seminole Fee-To-Trust Parcel Sizes

Tract	Acreage
B	7.46
C	7.14
D	7.37
G	7.37
H	12.81
I	3.49
Total	45.64

NOTE: [1]Data rounded to two decimal places. Acreages are approximate.
SOURCE: Broward County Property Appraiser. 2012

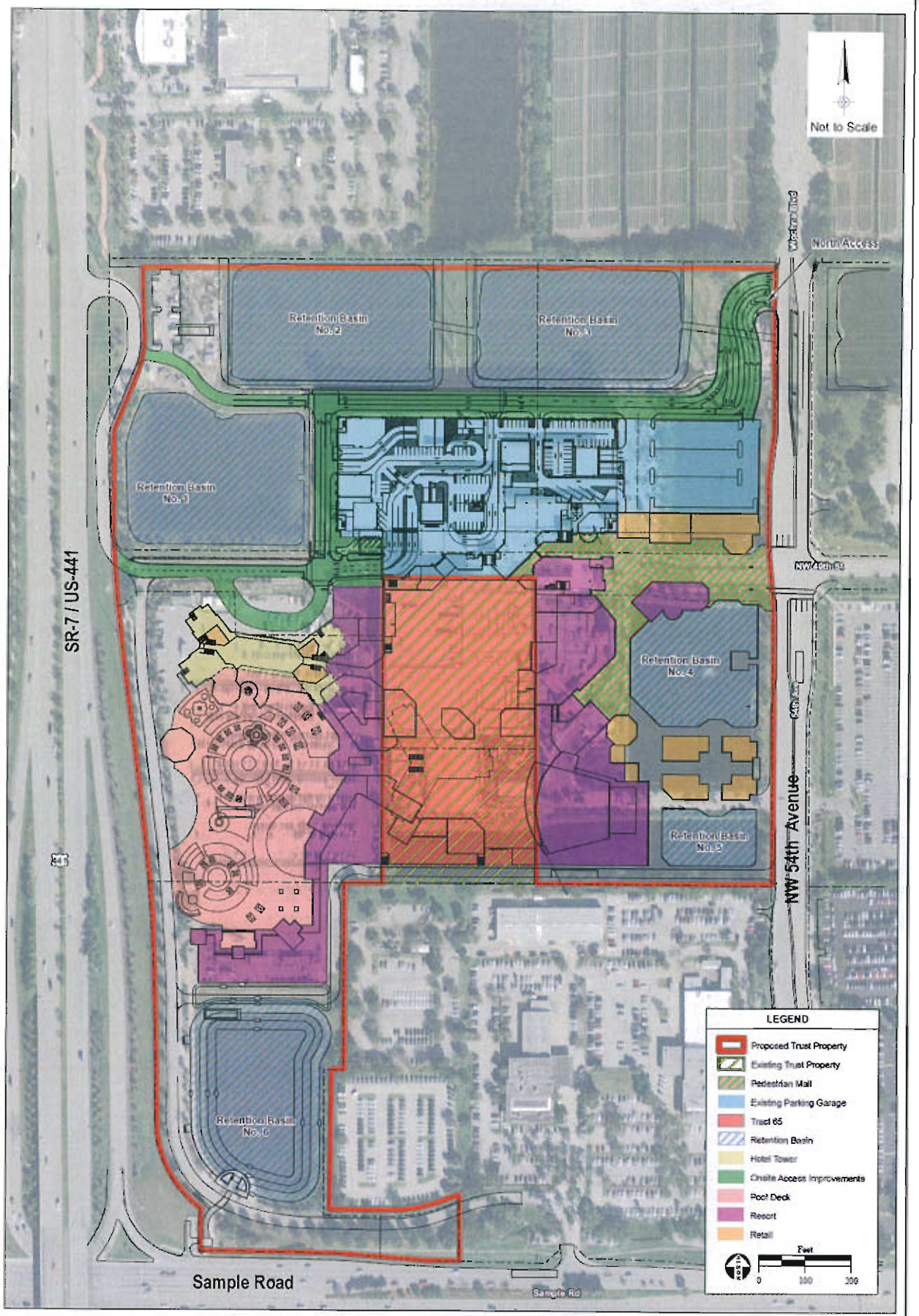
2.3 Alternative A – Proposed Project with Coconut Creek Agreements[2]

2.3.1 Proposed Development

Alternative A includes the transfer of approximately 45.64-acres of fee land currently owned by the STOF into Federal Trust. Under Alternative A, STOF would subsequently develop the property (Tracts C, D, G, H, I, and a portion of Tract B) for a resort hotel, retail, restaurant space, convention center, a 2,500 seat showroom, expanded parking structure, and associated facilities. Gaming would not take place on the property currently under consideration and is not part of the Proposed Project. **Figure 2.3** includes a site plan with both the development under Alternative A and the potential build-out on existing trust property (Tract 65) for purposes of showing complete resort build-out. The Proposed Project components for Alternative A are summarized in **Table 2-2**. The build-out on Tract 65 is not analyzed within the EIS as part of the Proposed Project, due to the absence of a required federal action. Therefore, the size and components of the build-out of Tract 65 are not indicated in **Table 2-2**.

Table 2-3 presents the development of the primary components of Alternative A by phase and cumulative growth. Construction of Alternative A is expected to occur in five phases until final build-out by 2020. The existing development (December 2011) represents the culmination of Phases I and II (see **Table 2-3**). Phase III is expected to be completed by 2015, Phase IV by 2018, and the final build-out Phase V by 2020.

[2] Alternative description obtained by AES.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Alternative A - Proposed Project with Coconut Creek Approval and Agreements

Figure No. 2.3

Table 2-2 Project Components and Approximate Square Footages – Alternative A

Project Component	Area (Square Feet – sf.) / Units
Hotel	1,000 rooms
Hotel Lobby	10,400 sf.
Dining	54,500 sf.
Retail	47,000 sf.
Back-of-House	51,308 sf.
Circulation	14,700 sf.
Spa	19,800 sf
Club/Lounge	15,300 sf.
Conference Facility	76,200 sf.
Showroom Facility	31,500 sf. / 2,500 seats
Restrooms	5,000 sf.
Outdoor Terrace	11,000 sf.
Expanded Parking Structure (7 levels)	1,365 spaces

Source: Friedmutter Group, 2011.

Alternative A is predicated on existence of zoning and site plan approvals, permits and other agreements with the City providing the STOF with public services and utilities to the new facility, and the Mitigation Agreement between STOF and the City for impacts associated with the property being placed into trust.

The Proposed Project includes improvements to site access points that would facilitate traffic flow to and from the proposed facility. Two access driveways are proposed to connect the parking structure located on the northern portion of the site to NW 54th Avenue and SR 7, respectively (see **Figure 2-3**). The existing access from the site to Sample road would be maintained. Approximately 1,365 parking spaces would be provided in an expanded seven-story parking structure located immediately east of the existing parking structure.

2.3.3 STOF/City of Coconut Creek Mitigation Agreement and PMDD

The Mitigation Agreement between the City and STOF (Coconut Creek Fee to Trust Lands Mitigation Agreement, dated January 27, 2011, adopted by City Resolution No. 2011-09), included as **Appendix A**, specifies public services and utilities to be provided by the City and compensation for such services to be paid by STOF. The Mitigation Agreement also states that although the project site would not be subject to City regulations after being brought into federal trust, STOF would comply with the MainStreet Design Standards of the City-approved Seminole PMDD. STOF would abide by height limits, development densities, off-site improvements, approved levels of service, and emergency vehicle access requirements, but would have the flexibility to modify design standards as necessary to meet constructability considerations. The City agrees to acquire all necessary right-of-way and/or easements to construct roadway and landscape improvements included in the approved PMDD. STOF would be responsible for construction of roadway and landscape improvements enumerated in the PMDD along public rights-of-way and/or easements.

Table 2-3 Phased Development of Primary Components – Alternative A

Phase	Final Year in Phase	Use	Alternative A Fee-To-Trust	Alternative A Cumulative Total
Existing/ Completed Phase II	2012	Restaurant (Sf.)	41,068	41,068
		Bar/Lounge (Sf.)	2,951	2,951
		Garage (Spaces)	2,407	2,407
		Retail (Sf.)	3,611	3,611
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase III	2015	Restaurant (Sf.)	0	41,068
		Bar/Lounge (Sf.)	0	2,951
		Garage (Spaces)	0	2,407
		Retail (Sf.)	0	3,611
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase IV	2018	Restaurant (Sf.)	54,532	95,600
		Bar/Lounge (Sf.)	15,255	18,206
		Garage (Spaces)	1,365	3,772
		Retail (Sf.)	46,989	50,600
		Showroom (Seats)	2,500	2,500
		Convention Center (Sf.)	76,200	76,200
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase V	2020	Restaurant (Sf.)	0	95,600
		Bar/Lounge (Sf.)	0	18,206
		Garage (Spaces)	0	3,772
		Retail (Sf.)	0	50,600
		Showroom (Seats)	0	2,500
		Convention Center (Sf.)	0	76,200
		Spa (Sf.)	19,800	19,800
		Hotel (Rooms)	1,000	1,000

The PMDD includes ten (originally eleven) roadway, signalization and landscaping improvements as featured in **Exhibit 11G** of the approved Seminole PMDD (see **Figure 2.4**). These improvements are:

1. The intersection of Sample Road and NW 54th Avenue would be reconfigured by adding second left-turn lanes on the eastbound and westbound approaches of Sample Road. Also the southbound NW 54th Avenue approach would be reconfigured by converting one of the two through lanes into a second left turn lane, thus creating dual left turn lanes. The current wire mounted signals would be replaced by mast arm mounted signals. [It must be noted that these improvements have been partially completed as of Spring 2012 as part of a FDOT resurfacing project along Sample Road between SR 7 and Florida's Turnpike. Whereas, the new signal infrastructure has been installed and the dual left-turn lanes have been implemented on the Sample Road approaches, the dual left turn configuration on the southbound NW 54th Avenue approach has not been implemented. The implementation will be made when warranted by traffic conditions;

2. Enhanced landscaping would be implemented along NW 54th Avenue between Sample Road and Cullum Road;

3. The existing four-way stop controlled intersection of NW 54th Avenue and NW 40th Street would be signalized and reconfigured to a three-legged intersection through the removal of the west leg (NW 40th Street) of the intersection. Signalization will be implemented when warranted by traffic conditions and permitted by the local agency;

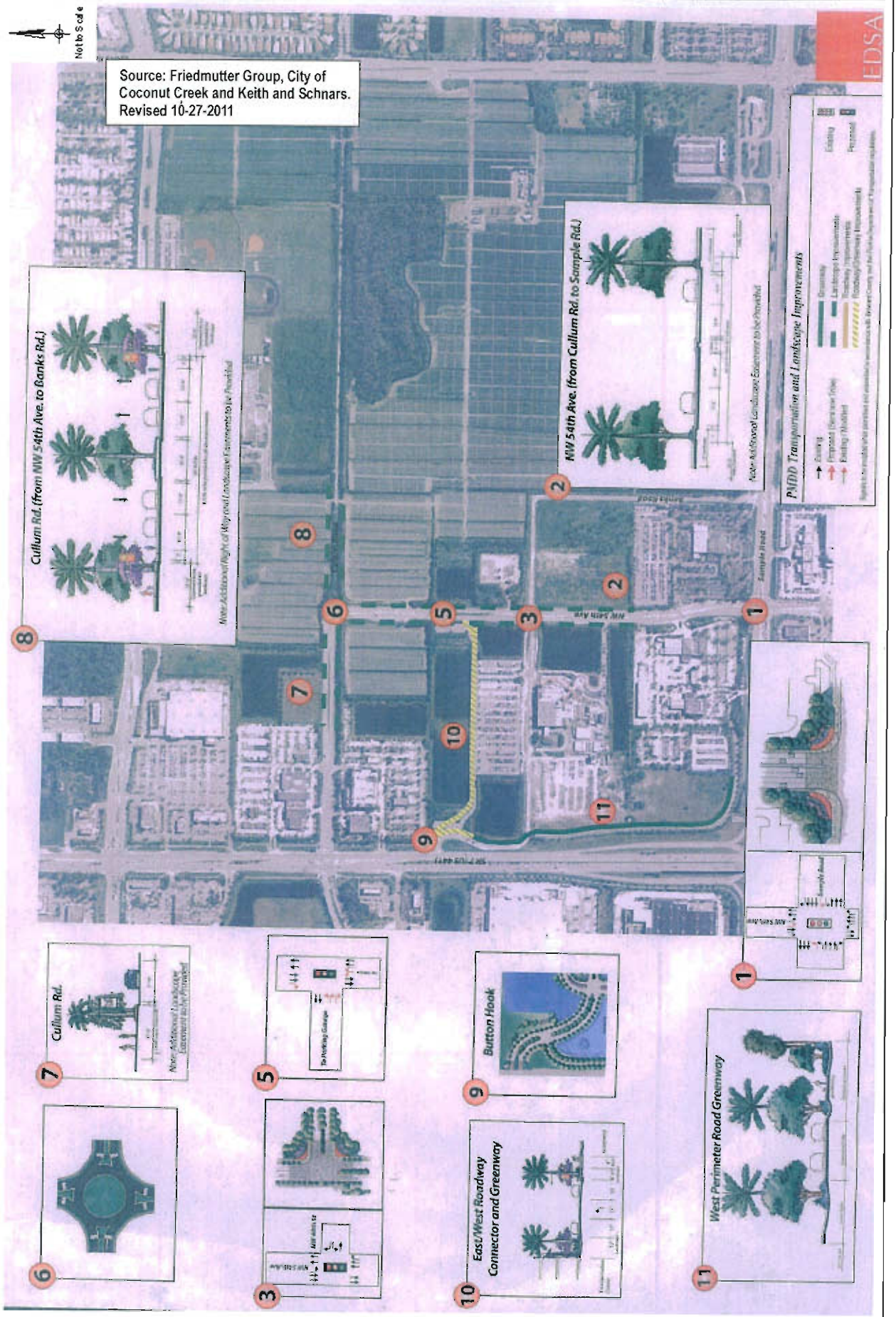
4. Item #4 removed from final **Exhibit 11G**;

5. The existing unsignalized and access limited "T" intersection of NW 54th Avenue and the North Access roadway would be reconfigured and signalized to allow full turning movements. This would include adding dual left-turn lanes on the northbound NW 54th Avenue approach, two through lanes on the northbound approach, a right-turn lane on the southbound approach, and a left-turn lane, a shared left-right-turn lane and a right-turn lane on the eastbound approach of the North Access;

6. A roundabout would be installed at the intersection of NW 54th Avenue and Cullum Road. [It must be noted that this action is also included as one of the committed roadway improvements for the approved MainStreet Coconut Creek Development of Regional Impact to be developed on the parcels east of NW 54th Avenue];

7. Enhanced sidewalk and landscape improvements would be implemented along Cullum Road;

8. Cullum Road would be extended as a two-lane roadway from NW 54th Avenue to Banks Road (including landscaping). [It must be noted that the extension of Cullum Road as a four-lane, divided road is a committed roadway improvement required for the approved MainStreet Coconut Creek DRI. The Agreement allows for the STOF to build the initial



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Exhibit 11G, PMDD Improvements

Figure No. 2.4

two-lane segment contingent upon the availability of right-of-way and future compensation from the adjacent property owner for the construction of the road];

9. Alignment and landscaping improvements would be made to the existing intersection and button-hook approach of NW 40th Street at SR 7.

10. The East-West Roadway Connector and Greenway between SR 7 and NW 54th Avenue (via the North Access) would be implemented [Note: This roadway segment has been built as part of the Phase II development of the STOF.]; and

11. The West Perimeter Road Greenway between Sample Road connection and NW 40th Street connection would be implemented. This action primarily involves enhanced landscaping along the existing two-lane road.

In a separate resolution by the City Commission in 2011, the segment of NW 40th Street between NW 54th Avenue on the east and the West Perimeter Road/FDOT right-of-way on the west was vacated and the property/right-of-way integrated into the STOF properties.

2.4 Sub-Alternative A-1 – Proposed Project with No Coconut Creek Agreements[3]

The same federal discretionary approvals would be required for Sub-Alternative A-1 as for Alternative A. Sub-Alternative A-1 assumes that the site will be brought into federal trust, but there would be no zoning or site plan approvals, permits or other agreements between the City and STOF and public services and utilities, provided by the City under Alternative A, would be provided by STOF on-site.

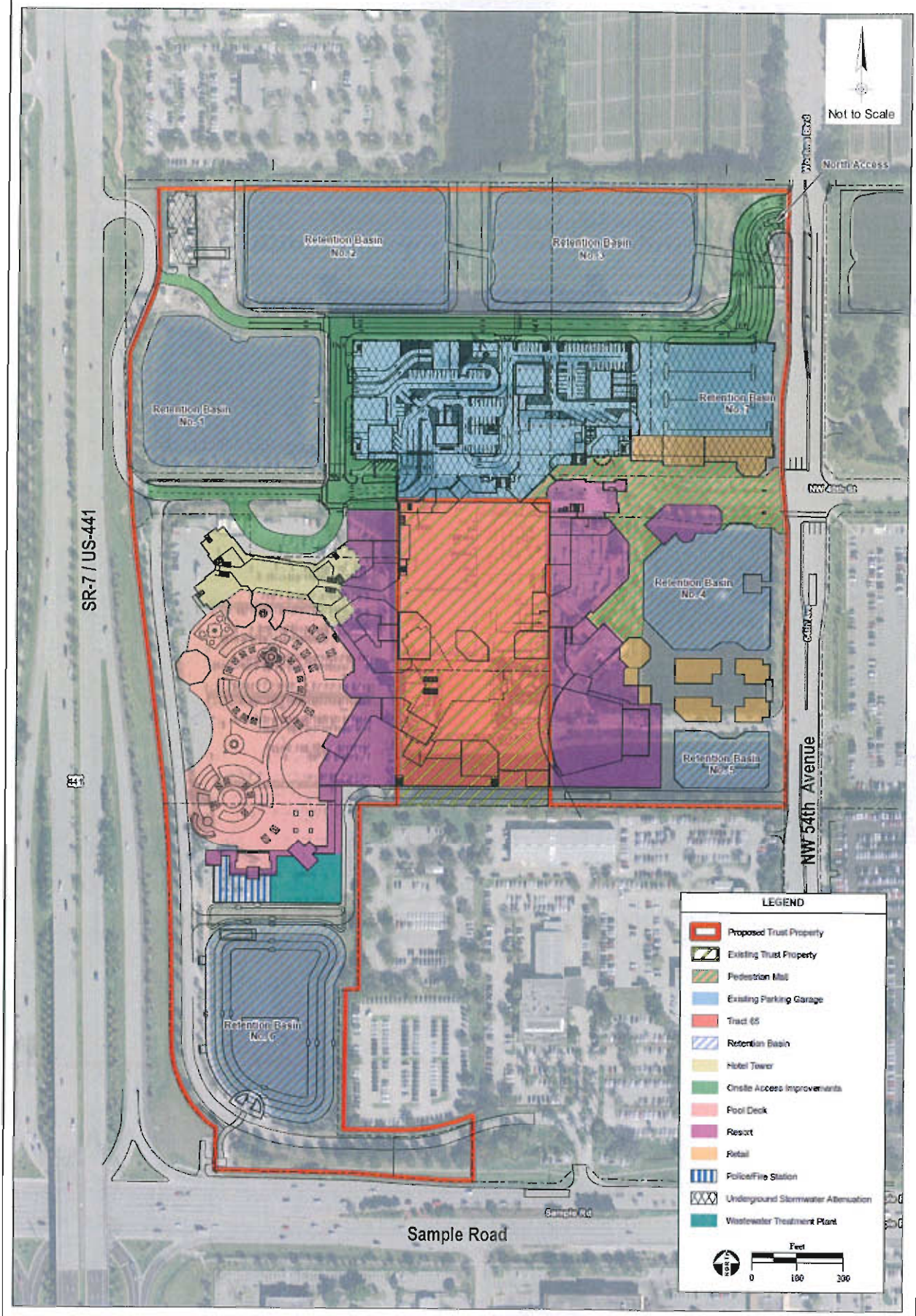
Sub-Alternative A-1 would include similar development features as those proposed under Alternative A, with the addition of an on-site water treatment facility, wastewater treatment plant (WWTP), and Tribal Fire/Police Department station to be developed in the southwestern portion of the project site on the ground floor of the parking structure. The traffic mitigation outlined in the PMDD would be implemented if warranted by traffic conditions.

Figure 2.5 shows the site plan for Sub-Alternative A-1; whereas, **Table 2-4** details the uses and square footages for the components of Sub-Alternative A-1 on the fee-to-trust property.

Table 2-5 presents the development of the primary components of Sub-Alternative A-1 by phase and cumulative growth. Similar to Alternative A, construction of Sub-Alternative A-1 is also expected to occur in five phases until final build-out by 2020.

Parking would be provided via the existing seven-story parking structure, which includes 2,407 spaces. Approximately 1,365 parking spaces would be provided in an expanded seven-story parking structure located immediately east of the existing parking structure. Project site access improvements would be constructed to facilitate traffic flow to and from the resort. Two access driveways are proposed to connect the parking structure to NW 54th Avenue and SR 7, respectively (see **Figure 2-4**). As in the case of Alternative A, NW 40th Street between NW 54th Avenue and SR 7 (except for a section of the approach to SR 7 which is FDOT right-of-way) is considered vacated and the right-of way property integrated into the STOF facility.

[3] Alternative description obtained from AES.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Sub-Alternative A-1 - Proposed Project
with no Coconut Creek Approval and Agreements

Figure No. 2.5

Table 2-4 Project Components and Approximate Square Footages – Sub-Alternative A-1

Project Component	Area (Square Feet – sf.)/ Units
Hotel	1,000 rooms
Hotel Lobby	10,400 sf.
Dining	54,500 sf.
Retail	47,000 sf.
Back-of-House	24,325 sf.
Circulation	14,700 sf.
Spa	19,800 sf.
Club / Lounge	15,300 sf.
Conference Facility	76,200 sf.
Showroom Facility	31,500 sf. / 2,500 seats
Restrooms	5,000 sf.
Outdoor Terrace	11,000 sf.
Water / Wastewater Treatment Plant	17,200 sf.
Fire / Police Station	9,800 sf.
Expanded Parking Structure (7 levels)	1,365 spaces

Source: Friedmutter Group, 2011.

[Remainder of this page intentionally left blank]

Table 2-5 Phased Development of Primary Components – Alternative A-1

Phase	Final Year in Phase	Use	Sub-Alternative A-1 Fee-To-Trust	Sub-Alternative A-1 Cumulative Total
Existing/ Completed Phase II	2012	Restaurant (Sf.)	41,068	41,068
		Bar/Lounge (Sf.)	2,951	2,951
		Garage (Spaces)	2,407	2,407
		Retail (Sf.)	3,611	3,611
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase III	2015	Restaurant (Sf.)	0	41,068
		Bar/Lounge (Sf.)	0	2,951
		Garage (Spaces)	0	2,407
		Retail (Sf.)	0	3,611
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase IV	2018	Restaurant (Sf.)	54,532	95,600
		Bar/Lounge (Sf.)	15,255	18,206
		Garage (Spaces)	1,365	3,772
		Retail (Sf.)	46,989	50,600
		Showroom (Seats)	2,500	2,500
		Convention Center (Sf.)	76,200	76,200
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase V	2020	Restaurant (Sf.)	0	95,600
		Bar/Lounge (Sf.)	0	18,206
		Garage (Spaces)	0	3,772
		Retail (Sf.)	0	50,600
		Showroom (Seats)	0	2,500
		Convention Center (Sf.)	0	76,200
		Spa (Sf.)	19,800	19,800
		Hotel (Rooms)	1,000	1,000

2.5 Alternative B – Reduced Intensity Project[4]

Alternative B proposes a reduction in fee-to-trust acreage from approximately 46-acres under Alternatives A and A-1 to approximately 25-acres. The same federal discretionary approvals would be required for Alternative B as for Alternative A. The fee-to-trust acreage within Alternative B would include 25-acres within Tracts C, D, I, and a portion of Tract B. Similar to Sub-Alternative A-1, Alternative B assumes that STOF would not reach a binding agreement with the City in regards to provision of public services and utilities including PMDD traffic mitigation. Under Alternative B, STOF would provide these utilities and services on-site through the creation of STOF operated facilities. The Reduced Intensity Project would include reduced development on Tracts B, C, D and I only. **Table 2-6** details the uses and square footages for the components of Alternative B. **Figure 2.6** shows the proposed Alternative B site plan, including assumed development on the existing trust parcel (Tract 65). **Table 2-7** presents the development of the primary components of Alternative B by phase and cumulative growth. Similar to Alternative A, construction of Alternative B is also expected to occur in five phases until final build-out by 2020.

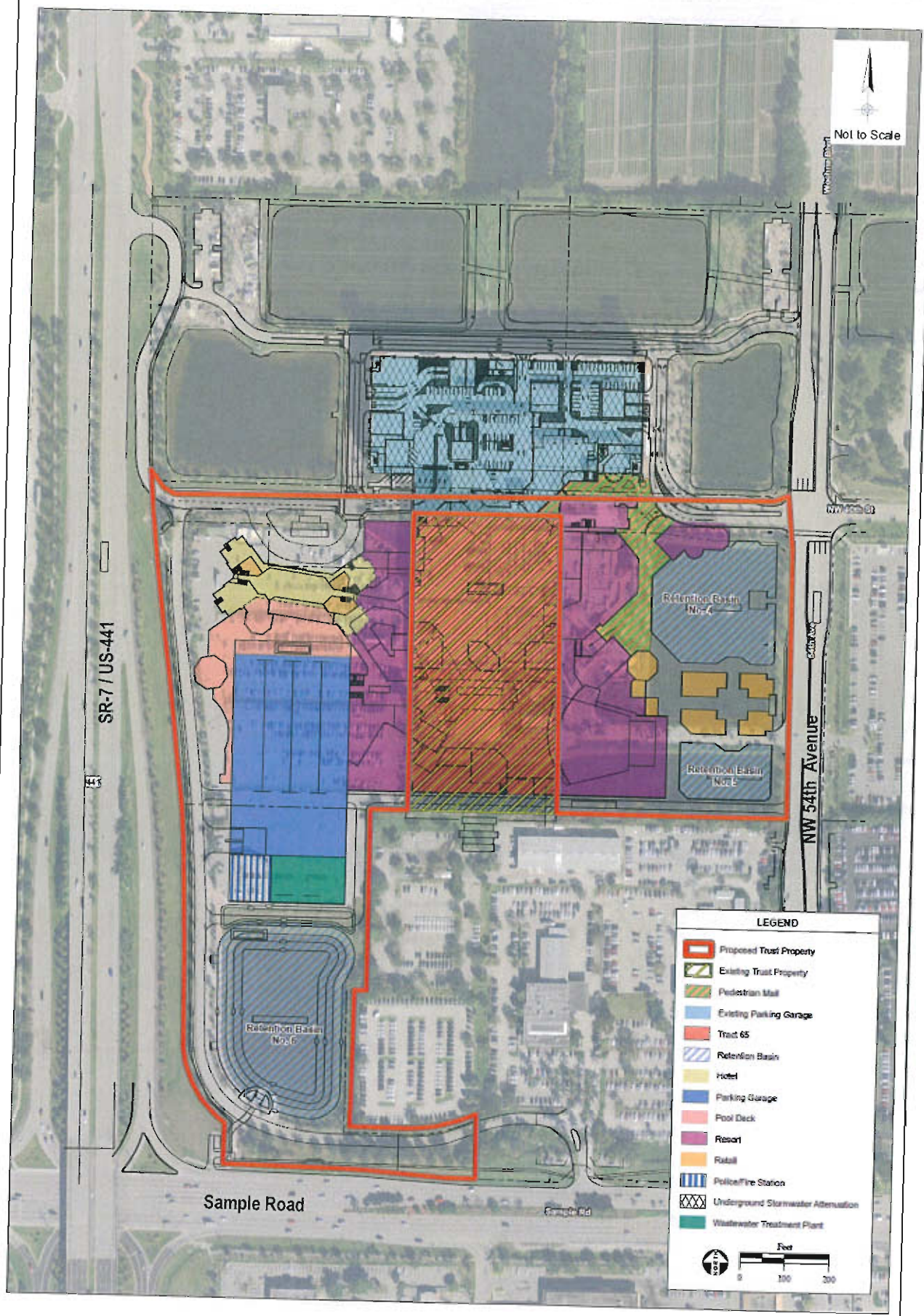
Table 2-6 Project Components and Approximate Square Footages – Alternative B

Project Component	Area (Square Feet – sf.) / Units
Hotel	500 rooms
Hotel Lobby	11,000 sf.
Restaurants	40,600 sf.
Back-of-House	37,500 sf.
Circulation	19,600 sf.
Spa	20,000 sf.
Club/ Lounge	14,462 sf.
Conference Facility	78,300 sf.
Showroom Facility	31,300 sf. / 2,500 seats
Restrooms	5,000 sf.
Retail	50,000 sf.
Water / Wastewater Treatment Plant	17,200 sf.
Fire / Police Station	9,800 sf.
Parking Structure (6 level)	2,425 spaces

Source: Friedmutter Group, 2010

Alternative B differs from Alternative A in that the hotel tower would be reduced to a ten-story, 500-room tower, and expanded parking would be provided within a smaller parking structure on the southwest corner of the project site. On-site roadway infrastructure improvements would be included within Alternative B to allow for improved access at SR 7 and two access points on NW 54th Avenue at NW 40th Street and the North Access.

[4] Alternative description obtained from AES.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Alternative B - Reduced Intensity Project

Figure No. 2.6

Table 2-7 Phased Development of Primary Components – Alternative B

Phase	Final Year in Phase	Use	Alternative B Fee-To-Trust	Alternative B Cumulative Total
Existing/ Completed Phase II	2012	Restaurant (Sf.)	41,068	41,068
		Bar/Lounge (Sf.)	2,951	2,951
		Garage (Spaces)	2,407	2,407
		Retail (Sf.)	3,611	3,611
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase III	2015	Restaurant (Sf.)	40,566	81,634
		Bar/Lounge (Sf.)	14,462	17,413
		Garage (Spaces)	2,426	4,833
		Retail (Sf.)	50,053	53,664
		Showroom (Seats)	2,500	2,500
		Convention Center (Sf.)	78,303	78,303
		Spa (Sf.)	0	0
		Hotel (Rooms)	500	500
Phase IV	2018	Restaurant (Sf.)	0	81,634
		Bar/Lounge (Sf.)	0	17,413
		Garage (Spaces)	0	4,833
		Retail (Sf.)	0	53,664
		Showroom (Seats)	0	2,500
		Convention Center (Sf.)	0	78,303
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	500
Phase V	2020	Restaurant (Sf.)	0	81,634
		Bar/Lounge (Sf.)	0	17,413
		Garage (Spaces)	0	4,833
		Retail (Sf.)	0	53,664
		Showroom (Seats)	0	2,500
		Convention Center (Sf.)	0	78,303
		Spa (Sf.)	20,000	20,000
		Hotel (Rooms)	0	500

2.6 Alternative C – No-Action by Federal Government

Under the No-Action by the Federal Government Alternative (Alternative C), non-trust STOF lands would not be brought into federal trust. For the purposes of this analysis, two potential scenarios could then occur. Under the first scenario, STOF would continue with plans to develop the project site in compliance with the current Seminole PMDD plan. This assumes that the Tribe can obtain all necessary permits and approvals from the City to construct the facility. The project components and environmental effects of the development of the PMDD plans (Alternative C – No Action by the Federal Government) would be similar in size and scope as those evaluated under Alternative A.

PMDD traffic mitigation would be implemented under Alternative C.

Under a second scenario, if STOF is unable to obtain zoning and site plan approvals, permits and other agreements, or if they are overturned, the project site would not be developed and would remain in its current condition (Phase II of the Seminole PMDD as of December 2011). This possibility is described as Sub-Alternative C-1-No Coconut Creek Approval and Agreements.

2.7 Federal Trust Land (Tract 65) Development

As previously mentioned, the existing federal trust land on Tract 65 (approximately five acres) is not part of the Proposed Project. The planned Tract 65 development and associated traffic, both current and future, are taken into consideration in the TPS as background or committed development traffic. **Table 2-8** summarizes the current development level on the federal trust land (Tract 65) between March 2011 (Phase I) and December 2011 (Phase II).

Table 2-9 presents the development of the primary components of the Tract 65 Trust Land by phase and cumulative growth. Similar to Alternative A, construction on Tract 65 is also expected to occur in five phases until final build-out by 2020. Development of Tract 65 is expected to be the same regardless which alternative is selected (except for Sub-Alternative C-1).

Table 2-8 Tract 65 Development, 2011

2011 Tract 65 Development	March 2010 Phase I (Square Feet)	December 2011 Phase II (Square Feet)
Back of House/Trailer (Support)	10,431	24,978
Cage	4,598	1,665 (1)
Casino	41,419	99,138
Circulation	458	6,767
Bar	572	10,299
Toilets	1,176	8,244
Smoke Shop	1,411	(included in Retail)
Restaurant	1,960	11,206
Retail	------	1,516

SOURCE: Friedmutter Group, December 5, 2011
Note: (1) Players' Club as Cage Component.

[Remainder of this page intentionally left blank]

Table 2-9 Phased Development of Primary Components – Tract 65 Trust Land

Phase	Final Year in Phase	Use	Trust Lands	Trust Land Cumulative Total
Existing/ Complete Phase II	2012	Restaurant (Sf.)	11,206	11,206
		Bar/Lounge (Sf.)	10,299	10,299
		Casino	99,138	99,138
		Garage (Spaces)	0	0
		Retail (Sf.)	1,516	1,516
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	0
Phase III	2015	Restaurant (Sf.)	0	11,206
		Bar/Lounge (Sf.)	0	10,299
		Casino	25,650	124,788
		Garage (Spaces)	0	0
		Retail (Sf.)	0	1,516
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	0
		Spa (Sf.)	0	0
		Hotel (Rooms)	500	500
Phase IV	2018	Restaurant (Sf.)	6,700	17,906
		Bar/Lounge (Sf.)	-6,054	4,245
		Casino	19,350	144,138
		Garage (Spaces)	0	0
		Retail (Sf.)	-1,516	0
		Showroom (Seats)	0	0
		Convention Center (Sf.)	93,466	93,466
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	500
Phase V	2020	Restaurant (Sf.)	0	17,906
		Bar/Lounge (Sf.)	0	4,245
		Casino	0	144,138
		Garage (Spaces)	0	0
		Retail (Sf.)	0	0
		Showroom (Seats)	0	0
		Convention Center (Sf.)	0	93,466
		Spa (Sf.)	0	0
		Hotel (Rooms)	0	500

3.0 TRAFFIC ANALYSIS METHODOLOGY

3.1 Introduction

The methodology and assumptions used in the TPS analysis are consistent with standard procedures and general guidelines applicable to traffic studies. The methodology has been developed according with the information and guidelines found in the following documentation and resources:

- Chapter 380.06 of the Florida Statutes, Development of Regional Impact[5];
- The State of Florida Department of Community Affairs (DCA) Rule 9J-2.045, Florida Administrative Code (F.A.C.), *Transportation Uniform Standard Rule,* approved in 1994;
- *2000 Highway Capacity Manual* (HCM 2000), Published by the Transportation Research Board;
- *Project Traffic Forecasting Handbook*, Topic No. 525-030-120 Published by the FDOT, October 2002;
- *2009 Quality/Level of Service Handbook,* Published by the FDOT;
- *Trip Generation, 8th Edition,* an informational report by the Institute of Transportation Engineers (ITE); and
- *2010 Florida Traffic Information (FTI) DVD*, published by the FDOT.

The general analysis procedure applied in this TPS is as follows:

- Establish analysis years and initial study area;
- Collect traffic data and gather supporting information;
- Determine trip generation rates of current STOF Phase I operations and application to determine Phase II traffic estimates;
- Use of a comparable site, Seminole Hollywood Hard Rock Casino, to determine relationships of mixed-use casino oriented land uses;
- Determine current and future STOF peak hour trips per alternative, segregated by Trust Land and fee-to-trust properties;
- Identify and apply trips for other major approved and committed development projects within the general study area;
- Determine the final study area through the implementation of the trip impact significance procedure on the major roadway links within the vicinity of the Proposed Project site; and
- Establish the operational analysis procedures for roadway segments and intersections within the final study area.

[5] "Developments of regional impact.—(1) *DEFINITION.—The term "development of regional impact," as used in this section, means any development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of more than one county.*" Chapter 380.06.

The Proposed Project properties currently lie within the approved Commerce Center of Coconut Creek DRI. Whereas the current fee-to-trust properties are subject to DRI conditions, the Federal Trust property, Tract 65, is exempt from the DRI and other local requirements, including traffic requirements and mitigations.

3.2 Analysis Years and Study Area

3.2.1 Analysis Years

The TPS analyses were performed for the STOF property under existing Phase II conditions (2011) and for the Proposed Project and alternatives to the Proposed Project at the following milestones:

- 2020 -- The Project build-out horizon year consistent with the STOF Master Plan including Phase V (2018-2020) of development; and
- 2035 -- Cumulative analysis year which corresponds to the current 2035 Broward County Long Range Transportation Plan (LRTP).

Additionally, the alternatives were analyzed for the following time periods and site development as per the STOF Master Plan:

- Phase III, 2013-2015; and
- Phase IV, 2016-2018.

3.2.2 Study Area

The preliminary sub-regional study area was defined as the roadways bounded by Holmberg Road to the north, Royal Palm Boulevard/Copans Road to the south, University Drive to the west and Powerline Road to the east as shown in **Figure 2.1**.

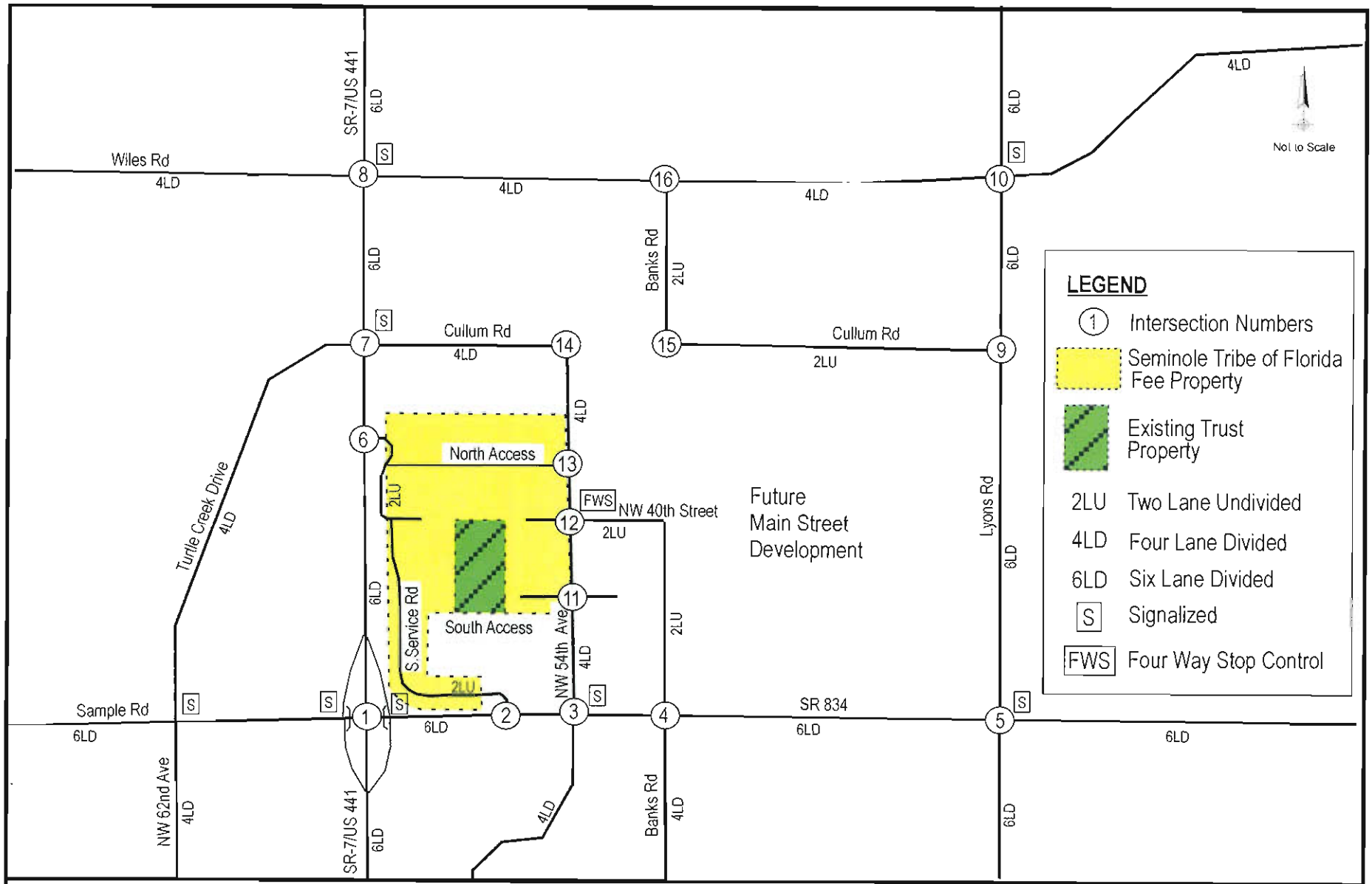
The final study area was defined through the application of the significance test of traffic associated with the Proposed Project during the PM peak hour. The significance procedures and establishment of the final study area are presented in Section 3.11.

3.3 Existing Transportation Network

Following is a description of the roadways within the general vicinity of the Proposed Project (see **Figure 3.1**):

- Sample Road (SR 834) between SR 7 and Lyons Road is a six-lane, divided state arterial facility with a posted speed limit of 45 miles per hour (mph). This road is a 12.8-mile-long east–west urban arterial serving northern Broward County, Florida. Its western terminus is the Sawgrass Expressway (SR 869) in Coral Springs and its eastern terminus is North Federal Highway (US 1-SR 5) in Pompano Beach.

  Resurfacing work by the FDOT was recently completed along Sample Road between Florida's Turnpike to the east and SR 7 to the west. This work included improvements at the Sample Road and NW 54th Avenue intersection that included the installation of dual left turn lanes on the eastbound and westbound approaches and the upgrading of the signal equipment.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing 2012 Roadway System

Figure No. 3.1

The project site has a frontage of approximately 700 feet along the north side of Sample Road, between SR 7 and NW 54th Avenue.

- Wiles Road between SR 7 and Lyons Road is a four-lane, divided local arterial facility with a posted speed limit of 45 mph. This road is an approximate 9-mile-long east–west urban arterial serving northern Broward County, Florida. Its western terminus is the Sawgrass Expressway (SR 869) in Coral Springs and its eastern terminus is Powerline Road (SR 845) in Deerfield Beach.

- SR 7 between Sample Road and Wiles Road is a six-lane, divided state arterial facility with a posted speed limit of 50 mph north of NW 31st Street. Within Broward County, SR 7 is a major north–south artery extending between the Miami-Dade and Palm Beach County lines. The STOF has a frontage of approximately one-third mile along the east side of SR 7, between Sample Road and NW 40th Street. SR 7 is elevated when it crosses Sample Road, but touches down before the at-grade intersection at NW 40th Street.

- Lyons Road between Sample Road and Wiles Road is a six-lane, divided local arterial facility with a posted speed limit of 45 mph. This road is an approximate 7.6-mile-long north-south urban arterial serving Coconut Creek and northern Broward County. Its southern terminus is the Florida's Turnpike and its northern terminus is the Palm Beach County line.

- Cullum Road between SR 7 and NW 54th Avenue is a four-lane, divided local collector facility. West of SR 7 the road is known as Turtle Creek Drive. East of NW 54th Avenue, the road is proposed to be extended to Banks Road. This action is proposed as a committed improvement project primarily associated with the MainStreet Coconut Creek DRI. Between Banks Road and Lyons Road, the existing Cullum Road is a two-lane local road.

- NW 54th Avenue between Sample Road and Cullum Road is a four-lane, divided local collector. This roadway (also known as Wochna Avenue) serves as the eastern boundary of the STOF properties. This road also functions as one of the segments of a loop road system that circumvents the general area of the SR 7 and Sample Road interchange. Besides NW 54th Avenue, the loop road system includes: Cullum Road, Turtle Creek Drive, NW 62nd Avenue, and NW 31st Street. The STOF property has a frontage of approximately one-quarter mile along the west side of NW 54th Avenue.

- NW 40th Street between SR 7 and Banks Road is a two-lane undivided local street. This road crosses the STOF in an east-west trajectory between NW 54th Avenue and SR 7. In early 2011, the segment of roadway and right-of-way of NW 40th Street between SR 7 and NW 54th Avenue, except for a small segment east of SR 7 to the South Access connection, was abandoned (vacated) by the City and the land integrated into the STOF property.

As of December 2011, access to the Proposed Project site is provided via five access points:

- South Access on NW 54th Avenue, leading to the Smoke Shop;
- NW 40th Street Access connecting directly to the new multi-level garage built on Tracts G and H;
- North Access: a right-turn in and right-turn out access at NW 54th Avenue, north of NW 40th Street and connecting directly to the new multi-level garage built on Tracts G and the new east-west internal road extending between SR 7 and NW 54th Avenue;
- Sample Road or South Service Road Access: a right-turn in and right-turn out access off westbound Sample Road, between NW 54th Avenue and SR 7; and
- NW 40th Street at SR 7, connecting directly to the new multi-level garage built on Tracts G and H and the new valet service area on the west side of the garage.

3.4 Traffic Data Collection, Phase I - 2011

Traffic data for trip generation determination and link analyses were obtained from various sources including current and historical link/machine counts, intersection turning movement counts, and traffic data inventory from the Florida Department of Transportation (FDOT), Broward County Metropolitan Planning Organization (MPO), and Broward County Traffic Division. Existing conditions traffic data (2011) was collected in April 2011 at intersections and roadway segments within the general vicinity of the STOF property (see **Figure 3.1**).

3.4.1 Arterial Roadway Link Volumes

Automated daily traffic count (ATC) volumes (96-hours) were obtained along a number of key arterial roadways within the immediate study area. These counts document hourly volume patterns and help to support the selection of the overall weekday peak hour impact period (5:00 – 6:00 PM). The ATC's were obtained during a period from April 14 through April 17, 2011 (Thursday through Sunday) at the following locations:

- M1 - Wiles Road east of Lyons Road;
- M2 - Wiles Road between Lyons Road and SR 7 (east of Monarch High School);
- M3 - SR 7 between Wiles Road and Cullum Road;
- M4 - Lyons Road between Wiles Road and Sample Road;
- M5 - Sample Road between Banks Road and Lyons Road;
- M6 - NW 54th Avenue (Wochna Avenue) north of Sample Road (between Hendrickson Toyota and Sample Road);
- M7 - NW 54th Avenue (Wochna Avenue) south of Cullum Road;
- M8 - SR 7 south of Cullum Road;
- M9 - Sample Road between SR 7 and NW 54th Avenue;
- S1 - NW 40th Street Connector and SR 7;
- S2 - NW 40th Street west of NW 54th Avenue;

- S3 - South Access off NW 54th Avenue (south of NW 40th Street);
- S4 - North Access off NW 54th Avenue (north of NW 40th Street)[6]; and
- S5 - West Access Road connector off Sample Road.

The ATC volumes and graphical hourly volume charts are provided in **Appendix B.**

3.4.2 Intersection Counts

In addition to the 96-hour link volumes, turning movement counts were also collected at major intersections within the study area. The following intersections were identified and counted from 4:00 PM through 6:00 PM on April 14 and 15, 2011, Thursday and Friday, to obtain the existing PM peak hour demands:

- Int-1 Sample Road and SR 7 (signalized - urban single-point interchange);
- Int-2 Sample Road and Southwest Service Road at Infiniti Dealer (not signalized, right-in, right-out only);
- Int-3 NW 54th Avenue and Sample Road (signalized);
- Int-4 Sample Road and Banks Road (not signalized);
- Int-5 Sample Road and Lyons Road (signalized);
- Int-6 NW 40th Street Connector and SR 7 (not signalized);
- Int-7 Cullum Road and SR 7 (signalized);
- Int-8 Wiles Road and SR 7 (signalized);
- Int-9 Lyons Road and Cullum Road (not signalized);
- Int-10 Wiles Road and Lyons Road (signalized);
- Int-11 NW 54th Avenue and South Access/East Temporary Parking Lot (not signalized);
- Int-12 NW 54th Avenue and NW 40th Street (not signalized, four-way stop control);
- Int-13 NW 54th Avenue and North Access (Closed and used only for construction traffic at time of counts); and
- Int-16 Banks Road and Wiles Road (not signalized).

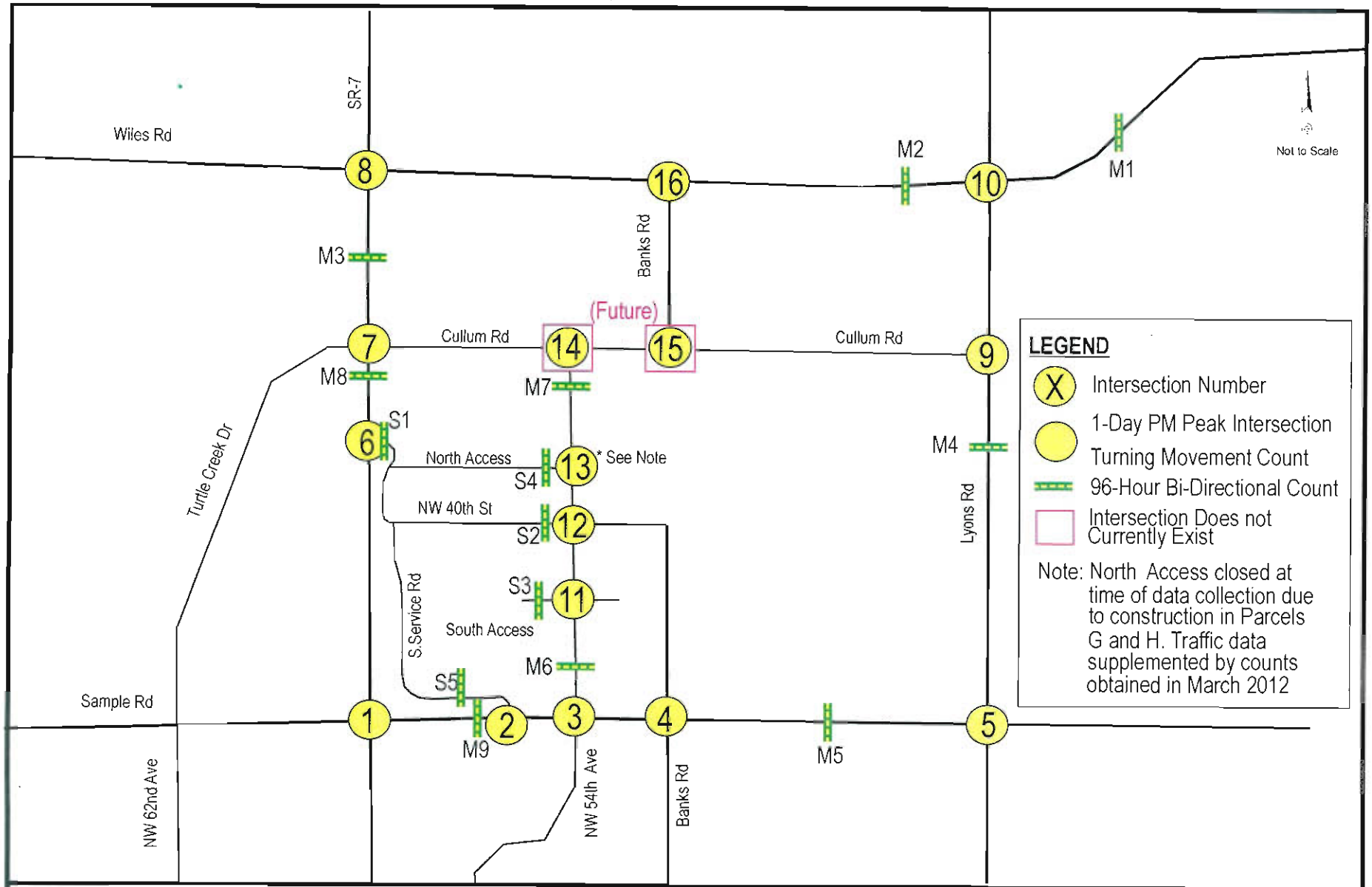
Intersection No. 14 (NW 54th Avenue and Cullum Road) and No. 15 (Banks Road and Cullum Road) are not currently full intersections. However, these intersections are slated for improvements as mitigation for growth in the area (see Sections 3.8 and 3.9). These intersections were, therefore, analyzed as full intersections at the future development milestones of 2015, 2018, 2020 and 2035. Traffic information for Intersection No. 13 was supplemented with PM peak period counts collected in March 2012.

The count data locations are shown in **Figure 3.2** and the data is provided in **Appendix B**.

3.4.3 Florida Department of Transportation (FDOT)

Annual Average Daily Traffic (AADT) volumes were obtained from the FDOT 2010 FTI Data DVD for the past ten (10) years (2001-2010). These AADT's were reviewed to calculate historical traffic growth trends in the area (see Section 3.6 and **Appendix B**).

[6] Access was temporally closed during April 2011 due to construction on Tracts G and H. Traffic information at this access was supplemented with intersection counts conducted March 2012.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Traffic Data Collection Locations

Figure No. 3.2

3.4.4 Traffic Factors

Seasonal Factor (SF), Peak Season Conversion Factor (PSCF), and Axle Factor (AF)

In Southeast Florida, traffic conditions can be greatly impacted by seasonal visitors. Seasonal traffic tends to peak during February and March and are reduced during the mid to late summer months. To account for this fluctuation in traffic volumes, the average daily traffic obtained from the machine counts April 14, 2011 (Thursday) is converted to average annual daily traffic (AADT) [7] by applying the SF and AF factors.[8]

A PSCF of 1.02 was applied to the peak hour volumes to develop 2011 peak season conditions for analysis purposes. The SF, PSCF and AF factors were obtained from the FDOT 2010 FTI Data DVD (see **Appendix B**).

Peak Hour Factor (PHF)

The intersection PHF was calculated based on the intersection data collected and used in the 2011 existing condition analysis.[9] The existing PHF's are presented in **Table 3-1.**

[7] Average Daily Traffic (ADT) is obtained by a short-term traffic count. Short-term traffic counts are commonly referred to as "raw counts" or simply "traffic counts." ADT is typically a 48-hour traffic count collected on Tuesday, Wednesday, and on Thursday. However, ADT can be based on the simple average of any short-term traffic count at least 24 hours long. 24-hour and 48-hour traffic counts are often taken to measure ADT and converted to AADT for traffic forecasting projects. For traffic forecasts, the Seasonal Adjustment Factor (SF) and Axle Correction Factor (AF) should be used to convert ADT to AADT. $AADT = ADT \times SF \times Axle\ Correction\ Factor$

When the ADT is multiplied by the Seasonal Factor and Axle Correction Factor assigned to that site, it will provide a statistically accurate count for the entire year at that site known as AADT.

PSCF PEAK SEASON CONVERSION FACTOR — Used to convert a 24-hour count representing the average weekday daily traffic to PSWADT. **1.02**
Source: Florida Department of Transportation Project Traffic Forecasting Handbook, January 2012.

[8] The 2010 seasonal factor (SF) for Central Broward County between US 1 and SR 7 is 0.98.
The axle correction factors (AF) are

- Sample Road (SR 834) = 0.98;
- SR 7 = 0.97; and
- Broward County Roads = 0.94.

Source: Florida Department of Transportation 2010 Florida Traffic Information (FTI) Data DVD (see **Appendix B**).

[9] PEAK HOUR FACTOR — The hourly volume during the analysis hour divided by the peak 15-min flow rate within the analysis hour; a measure of traffic demand fluctuation within the analysis hour. (HCM 2010)

Table 3-1 PM Peak Hour Intersection Peak Hour Factor (PHF)

Intersection	PM Peak Hour Factor Based on 2011 Intersection Counts [1]
1 Sample Road and SR-7	0.96
2 Sample Road and SW Service Road	0.71
3 Sample Road and NW 54th Avenue	0.95
4 Sample Road and Banks Road	0.93
5 Sample Road and Lyons Road	0.92
6 SR-7 and NW 40th Street	0.81
7 SR-7 and Cullum Road	0.94
8 SR-7 and Wiles Road	0.97
9 Lyons Rd and Cullum Road	0.90
10 Lyons Rd and Wiles Road	0.92
11 NW 54th Avenue and South Access	0.95
12 NW 54th Avenue and NW 40th Street	0.86
13 NW 54th Avenue and North Access	(0.92) [2]
14 NW 54th Avenue and Cullum Road	(0.92) [2]
15 Banks Road and Cullum Road	(0.92) [2]
16 Banks Road and Wiles Road	0.88

Notes:
[1] See Appendix B.
[2] Estimated default PHF applied to future conditions since intersection currently not fully developed.

Design Hour (K_{30}) and Directional Distribution (D_{30}) Factors

The K_{30} factor is the proportion of AADT occurring during the 30th highest hour of the design year and the D_{30} factor is the proportion of traffic in the 30th highest hour of the design year traveling in the peak direction. FDOT District 4 recommends the use of 9.0 percent as the K_{30} factor for arterials and highways.

The recommended urban arterial D_{30} factor ranges between 50.8 (low) and 67.1 (high) consistent with the *Project Traffic Forecasting handbook, dated October 2002*. The urban arterial D_{30} factor used in the analysis is 55.0 percent consistent with the overall average existing directional distribution within the final study area. This is within the recommended urban arterial D_{30} range. The overall existing directional distribution is summarized in **Table 3-2**.

Table 3-2 Existing Phase II PM Peak Hour Traffic Directional Distribution

Roadway From	Roadway To	2011 Peak Season, Peak Hour Volume NB/EB	2011 Peak Season, Peak Hour Volume SB/WB	Directional Distribution (D)
Sample Road (E/W)				
SR 7	NW 54th Avenue	1,600	2,363	59.6%
NW 54th Avenue	Banks Road	1,663	2,766	62.5%
Banks Road	Lyons Road	2,002	2,795	58.3%
		Roadway Average =		60.1%
Wiles Road (E/W)				
SR 7	Banks Road	1,414	1,345	51.3%
Banks Road	Lyons Road	1,414	1,345	51.3%
		Roadway Average =		51.3%
Cullum Road (E/W)				
SR7	NW 54th Avenue	198	229	53.6%
NW 54th Avenue	Banks Road	N/A	N/A	N/A
Banks Road	Lyons Road	198	229	53.6%
		Roadway Average =		53.6%
NW 54thAvenue (N/S)				
SR 7	Sample Road	477	449	51.5%
Sample Road	NW 40th Street	453	427	51.5%
NW 40th Street	Cullum Road	193	218	53.0%
		Roadway Average =		52.0%
SR 7 (N/S)				
Sample Road	NW 40 Street	1,614	1,530	51.3%
NW 40 Street	Cullum Road	1,639	1,491	52.4%
Cullum Road	Wiles Road	1,143	1,890	62.3%
		Roadway Average =		55.3%
Banks Road (N/S)				
Sample Road	Cullum Road	203	289	58.7%
Cullum Road	Wiles Road	203	289	58.7%
		Roadway Average =		58.7%
Lyons Road (N/S)				
Sample Road	Cullum Road	1,838	1,708	51.8%
Cullum Road	Wiles Road	1,838	1,708	51.8%
		Roadway Average =		51.8%
		OVERALL AVERAGE:		**54.9%**

Truck Percent Factors and Signal Timings

Existing PM peak hour intersection heavy vehicle percentages have been summarized in **Appendix B**. The existing PM peak hour percent heavy vehicle ranges from 0.8 to 2.8 percent. The minimum percent heavy vehicles used in the operations analysis is 2.0 percent.

Existing signal timing sheets were obtained from Broward County Traffic Engineering for use in the operational analysis. The signal timing sheets are provided in **Appendix B**.

3.5 Trip Generation

Because of the symbiotic relationship between the land uses proposed for the STOF fee-to-trust properties and the Seminole Coconut Creek Casino located on Trust 65, the trip generation for the proposed project was developed based on its relationship to the casino. The trip generation for the project alternatives was prepared based on:

- The current traffic volumes for the existing development (Phase II, 2011) as determined on the basis of the April 2011 traffic counts and adjusted to Phase II development conditions;
- Traffic data and land use development information from the Seminole Hollywood Hard Rock Casino (a similar site); and
- Trip generation rates and equations from the Institute of Transportation Engineers' Trip Generation, 8th Edition, applied where warranted.

3.5.1 Site Related Traffic Data

Traffic data obtained from the field counts, as previously described, were used as the basis to determine the trip generation value for the PM peak hour under existing conditions. From the machine counts, the PM peak hour was determined to be approximately 4:45 PM – 5:45 PM on Thursday. The intersection turning movement counts at the site access were collected on Thursday, April 14, 2011 and Friday, April 15, 2011. The Thursday PM peak hour volume was found to be greater than the Friday volume even when the anticipated traffic flow from the site is combined with existing volumes.

As shown in **Table 3-3**, the total estimated PM peak hour volumes for the entire existing STOF were determined to be the following:

Total 2011 Phase I

PM Peak Volume:	1,086 vehicles (Two-Way)
Inbound:	551 vehicles (Directional 50.7%)
Outbound:	535 vehicles (Directional 49.3%)[10]

[10] The volumes represent the vehicles at the four existing access points available in April 2011 plus the vehicles entering and exiting the temporary parking lot located on the east side of NW 54th Avenue across from the Smoke Shop entrance (South Access). The North Access was temporarily closed at the time due to construction in Parcels G and H. Estimates for the North Access were made based upon PM peak period counts conducted in March 2012,

3.5.2 Seminole Coconut Creek Casino Trip Rate Estimation-Phase I (April 2011)

In April 2011, Phase I of the STOF had approximately 1,700 gaming units in an estimated building area of 68,067 square feet. The casino was supplemented by a 34,900 square foot Market Place facility which housed a small food court and 9,020 square feet of casino offices. The trip generation for the Phase I condition assumed that the food and office facilities were not a primary trip generator, but rather a supporting or ancillary unit for the principal generator, the casino. Thus, the casino PM peak hour trip generation (vehicles per hour) was determined based on the number of casino trips (1,086) divided by the number of gaming units (1,700) to yield a peak hour trip rate of 0.6388 trips per gaming unit. This latter value represents a rate based solely on a casino facility practically devoid of other supporting facilities such as retail, major restaurants/food vendors, meeting facilities, showroom, convention center, ballroom, etc.

3.5.3 Phase II PM Peak Hour Trip Estimation – Current Conditions

The corresponding trips for the Phase II development (December 2011) were determined by applying the previously derived trip rate for Phase I (0.6388 trips per gaming unit) to the number of gaming units for Phase II (approximately 2,400 gaming units). As demonstrated in **Table 3-3**, the total estimated Phase II PM peak hour volume was determined to be the following:

Total 2011 Phase II

PM Peak Volume:	1,533 vehicles (Two-Way)
Inbound:	777 vehicles (Directional 50.7%)
Outbound:	756 vehicles (Directional 49.3%)

Table 3-3 Existing Seminole Property PM Peak Hour Trips

Existing Seminole Coconut Creek Casino Site	Total Site Trips	Inbound Trips	Percent (%) Inbound	Outbound Trips	Percent (%) Inbound
2011 Weekday PM Peak Hour Phase I STOF Traffic (1)	1,086	551	50.70%	535	49.30%
Adjusted 2011 Weekday PM Peak Hour with Phase II STOF Traffic. (2)	1,533	777	50.70%	756	49.30%

Notes:
(1) Traffic derived from April 14-15, 2011 intersection counts at intersections NW 54th Avenue and NW 40th Street, NW 54th Avenue and Smoke Shop/Temporary Lot, SR 7 and NW 40th Street, and South Access at Sample Road.
(2) Site trips estimated based on Phase I casino trip rate of 0.6388 applied to Phase II Casino/Tract 65 development growth and estimated 2,400 gaming units.

after the completion of Phase II and the reopening of the North Access road. The volumes were adjusted further by the application of a peak season conversion factor to reflect an approximate annual average weekday condition.

Figure 3.3 illustrates the estimated Phase II 2011 PM weekday peak hour volumes at the STOF access points. The directional trip distribution percentages are shown in **Figure 3.4**.

3.5.4 Seminole Hollywood Hard Rock Casino Trip Rate

The existing Seminole Hollywood Hard Rock Casino (HHRC) in Hollywood, Florida serves as an example of the build-out potential for the Coconut Creek facility. The HHRC is a composite of a large casino/gaming area (130,000 square feet), retail (over 60,000 square feet), hotel (500 rooms), restaurants and lounges (over 197,000 square feet), ballroom (about 40,000 square feet), convention center facilities, and showroom (with a maximum seating capacity of over 6,000). For purposes of this analysis, it was assumed that the full build-out of the combined Proposed Project and STOF would be very similar in scale to the existing HHRC. The principal difference is the scale of the proposed hotel (1,000 to 1,500 rooms) at the Coconut Creek site versus 500 rooms at the existing HHRC site. As such, the HHRC will serve as the basis for the Proposed Project development traffic. The ITE handbook does not include sufficient data for estimating casino resort traffic.

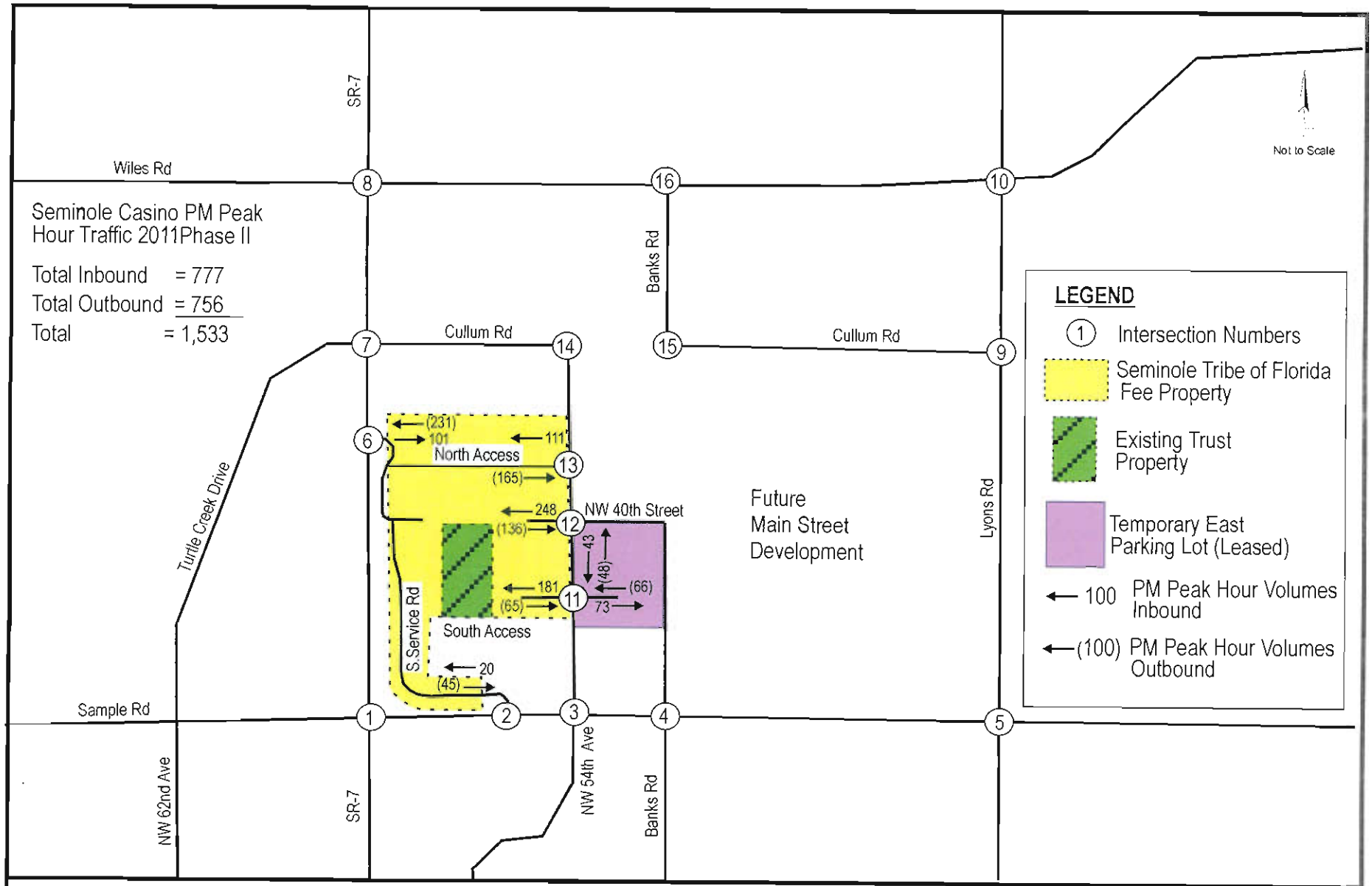
In order to determine the HHRC trip rate, it was assumed that a series of traffic counts obtained at the HHRC in January 2007 will establish the base for the trip rate determination. These counts were obtained during a full week (January 19-25, 2007), 24-hour per day continuous two-directional machine counts at each of the three access driveways at the HHRC. The 2007 HHRC count summary is provided in **Appendix C**.

A review of the HHRC traffic data revealed that the Thursday (January 27, 2007) traffic represents the peak weekday volume (24,974 vehicles) with a PM peak hour volume of 1,992 vehicles between 5 PM and 6 PM. Inbound trips were 1,352 (67.9 percent) and outbound trips were 640 trips (32.1 percent). Since no significant changes to the HHRC has been made since 2007, it is assumed that the 2007 PM peak hour volumes can be considered to be consistent to the full build-out of the Proposed Project plus STOF.

The corresponding weekday PM peak hour trip rate for the HHRC was derived by dividing the number of PM peak hour trips determined for the HHRC (1,992 trips) by the number of gaming units. The number of gaming units in January 2007 at the HHRC was approximately 2,118 gaming units. The resulting rate is 0.9405 trips per gaming unit (1,992 trips ÷ 2,118 units). The equivalent square footage per gaming unit is estimated at 61.4 square feet per unit (2,118 units ÷ 130,000 square feet of casino space). The estimated existing trip rate for the STOF Phase II development (0.6388 trips per gaming units) is approximately 32 percent less than the rate for the HHRC.

3.5.5 Estimation of HHRC Non-Casino *Traffic*

The trip rate derived for the HHRC in the previous section illustrates a combined or "blended" rate which includes all of the uses, both gaming and non-gaming, on the HHRC site. If the trip rate were to be determined solely on the trip rates and/or formulae for retail, hotel, and restaurant/lounge uses presented in the Institute of Transportation Engineers Trip Generation, 8th Edition, the estimated trips would be significantly higher overall and not representative of the actual conditions of the casino resort which exhibits a large degree of internalization of trips

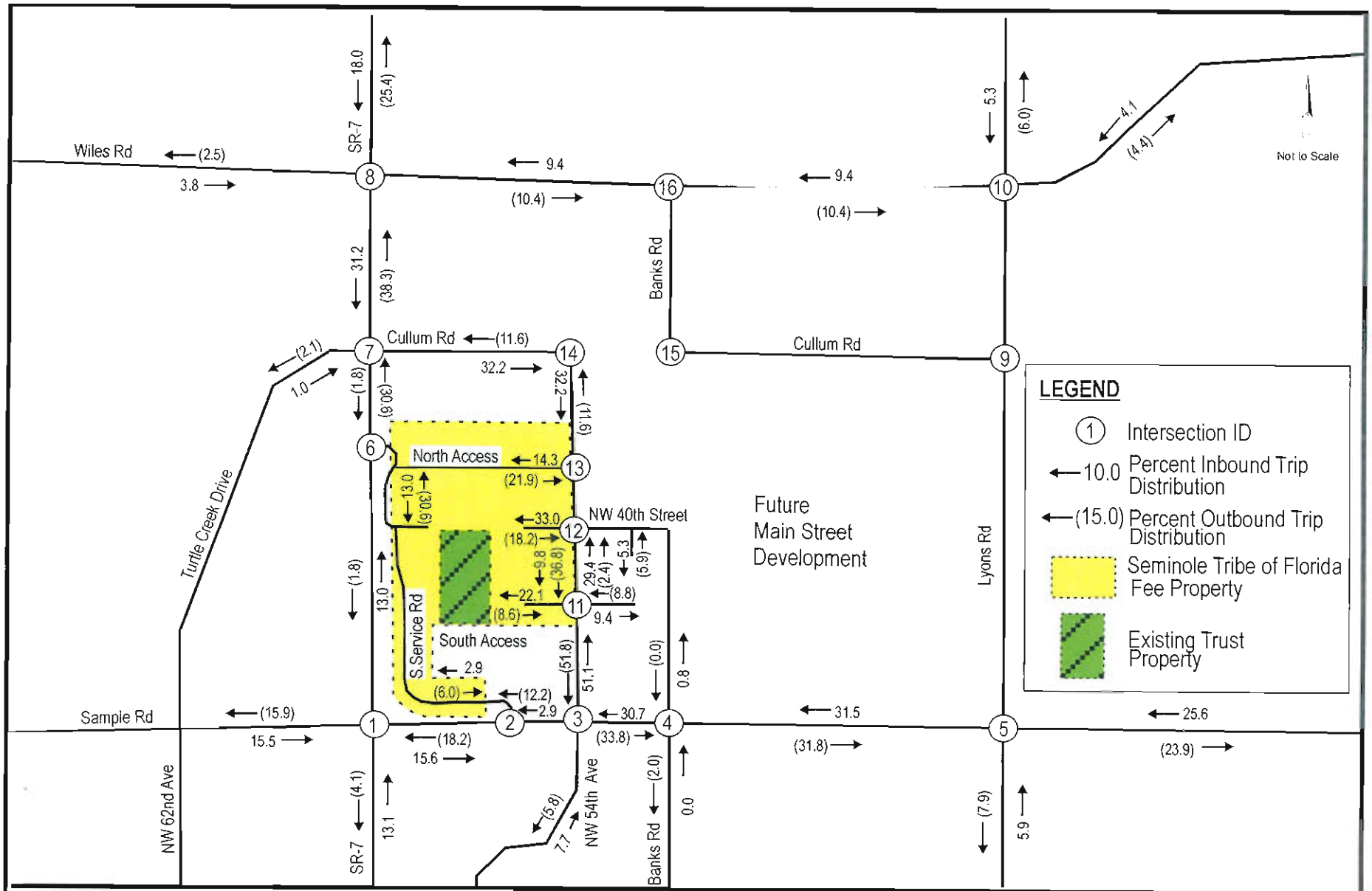


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing 2011 Phase II PM Peak Hour Traffic

Figure No. 3.3



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing 2011 Phase II PM Peak Hour Trip Distribution

Figure No. 3-4

between uses on site. Nonetheless, a general rate for the non-casino land uses can be estimated by assuming that the gaming units are the over-riding prime trip generators (over 67 percent) and that the balance of the PM peak hour trips is attributed to the non-gaming land uses which provide ancillary support.

Under these assumptions, the HHRC casino based trips were determined by applying the current STOF trip rate (0.6388 trips per gaming unit) to the number of HHRC gaming units (2,118) yielding a total of 1,353 PM peak hour trips. The non-casino, non-gaming land use based trips were determined by subtracting the HHRC trips based on the gaming units (1,353 trips) from the total HHRC PM peak-hour volume (1,992). This results in a total estimated 639 external non-casino trips for the HHRC. The 639 trips represent 32.0 percent of the total external HHRC weekday PM peak hour trips.

It should be noted that the 639 trips comprise all of the non-casino uses including retail, hotel, restaurants, lounges, showroom, etc. However, for analysis purposes and due in part to the lack of applicable trip rates for uses such as convention center, meeting rooms, ballroom, showroom, other miscellaneous uses, the trips were assumed to relate to the proportion of retail, hotel, and restaurant/lounge uses which make up the bulk of trip generation potential during a typical PM peak period.

The allocation of the non-casino trips was determined based on the total gross ITE derived trips. Retail and other land use space information provided by the architectural consultants for the HHRC formed the basis for calculating the gross number of trips.[12] As shown in **Table 3-4**, the estimated gross PM peak hour trips for the HHRC non-casino uses is 2,746 trips (1,532 trips inbound and 1,214 outbound). Of the 2,746 gross non-casino trips, the restaurant/lounge use accounts for 73.05 percent (2,006 trips) of the total estimated gross trips. When applying this percentage to the total 639 external non-casino trips, the restaurant/lounge use accounts for 467 trips or 73.1 percent of the total non-casino trips. Similarly, the retail area accounts for 115 trips or 18.0 percent, and the hotel makes up the remaining 57 trips or 8.9 percent (see **Table 3-5**).

3.5.6 2020 STOF Trips

An estimate of the 2020 STOF PM peak-hour trips was made by applying the current STOF trip rate of 0.6388 trips per gaming unit to the proposed 2020 Tract 65 casino build-out condition, approximately 147,863 square feet of gaming area. Based on the STOF Phase II game unit density of 42.0 square feet per gaming unit, the total estimated 2020 gaming units is 3,520 units. Further applying the current STOF trip rate of 0.6388 trips per gaming unit to the projected 3,521 units yields a total of 2,250 PM peak hour trips for the 2020 build-out. The directional volumes are 1,140 inbound and 1,110 outbound (based on Phase II directional rates).

[12] Primary land use (Hotel, Retail, Restaurant/Lounge) dimensions derived from Seminole Hard Rock Casino Hollywood building operations plans prepared by Klai Juba, Architects, Las Vegas, Nevada, September 8, 2008 and June 25, 2010. Estimated units or square footage for primary non-casino land use type and applicable to Institute of Transportation Engineers, Trip Generation, 8th Edition:

- Hotel – 500 rooms;
- Retail – 68,713 square feet; and
- Restaurant/Lounge – 179,894 square feet.

Table 3-4 ITE Derived Gross HHRC Non-Casino PM Peak Hour Trips

Land Use	Densities (1)	ITE Land Use Code	Trip Rate or Equation (2)	Two-Way Trips	Inbound		Outbound		Percent Trips by Land Use
					%	Trips	%	Trips	
Hotel	500 Rooms	330	T = 1.13 Ln(Rooms) - 1.52	245	43%	105	57%	140	8.92%
Retail	68,713 SF	820	T = 0.67 Ln(X) + 3.37 (X = 1000 Square Feet)	495	49%	243	51%	252	18.03%
Restaurant / Lounge	179,894 SF	932	T = 11.15 (X) (X = 1000 Square Feet)	2,006	59%	1,184	41%	822	73.05%
			GROSS TRIPS =	**2,746**	56%	**1,532**	44%	**1,214**	**100.00%**

Notes:
(1) Information derived from Seminole Hard Rock Casino Hollywood operations plans by KLAI JUBA, Architects, Las Vegas Nevada, 9-8-08 and 6-25-10.
(2) Institute of Transportation Engineers, Trip Generation, 8th Edition

Table 3-5 Adjusted HHRC Non-Casino PM Peak Hour Trip Distribution by Land Use

Major Land Use	Percent Proportion (Table 3-4)	Two-Way Trips (Percent Proportion x Non-Casino Trips)
Hotel (500 rooms)	8.9%	57
Retail (68,713 SF)	18.0%	115
Restaurant/Lounge (179,894 SF)	73.1%	467
Total HHRC Non-Casino Trips =		**639**

Source: Keith and Schnars, P. A., 2012

3.5.7 Coconut Creek STOF Tract 65 and Fee-To-Trust Proportioning

As previously described in this report, there are several build alternatives for the Proposed Project site. Each of the scenarios assumes a fixed activity and spatial level of development on Tract 65 and on the fee-to-trust parcels. Although Tract 65 will bear the entirety of the gaming units and casino, there are other non-casino uses (hotel, retail, and restaurants/lounges) that will be located on Tract 65 and will contribute to the overall trips, but are not part of the proposed action.

Table 3-6 presents a breakdown of the alternatives by the corresponding uses for the Tract 65 and the fee-to-trust parcels. Only the main land uses (retail, hotel, and restaurants/lounges) were represented in this analysis. The table shows for each scenario, the proportion of the total land use that will be dedicated to the Tract 65 and fee-to-trust uses, respectively. The percentages of the fee-to-trust parcels uses per scenario will be used to determine the total peak-hour trip estimates for the project alternatives.

Table 3-6 Additional Non-Casino Uses by Area

Alternative A	Density Tract 65	Density Fee-To-Trust	Density Non-Trust Land	Total Tract 65 and Fee-To-Trust	Percent (%) Tract 65	Percent (%) Non-Tract 65
Hotel	500 Rooms	1,000 Rooms	N/A	1,500 Rooms	33.3%	66.7%
Retail	0 SF	50,600 SF		50,600 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF	113,806 SF		135,957 SF	16.3%	83.7%
Sub-Alternative A-1	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	1,000 Rooms	N/A	1,500 Rooms	33.3%	66.7%
Retail	0 SF	50,600 SF		50,600 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF	113,806 SF		135,957 SF	16.3%	83.7%
Alternative B	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	500 Rooms	N/A (1)	1,000 Rooms	50.0%	50.0%
Retail	0 SF	53,664 SF		53,664 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF	98,777 SF		120,928 SF	18.3%	81.7%
Alternative C	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	N/A	1,000 Rooms	1,500 Rooms	33.3%	66.7%
Retail	0 SF		50,600 SF	50,600 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF		113,806 SF	135,957 SF	16.3%	83.7%
Sub-Alternative C-1	Alternative C-1 assumes no additional development on either Tract 65 or Non-Trust Parcels.					

3.5.8 2020 STOF Non-Casino Trips

For each build alternative scenario, an estimate of the 2020 STOF Non-Casino PM peak-hour trips was made for the combined Tract 65 and fee-to-trust properties by first determining the ITE gross trips per alternative (limited to hotel, retail, and restaurant/lounge), and the percentage of the trips by land use (see **Table 3-7**).

With respect to gross PM peak hour trip generation, Alternatives A and C and Sub-Alternative A-1 generate an estimated 2,768 gross weekday trips; whereas, Alternative B generates approximately 2,304 gross trips. Since Sub-Alternative C-1 assumes no further development beyond Phase II (December 2011), it is assumed that the 2020 gross PM peak hour trips will be the same as determined for Phase II: 1,533 vehicle trips

Table 3-8 presents the estimated STOF non-casino trips for the combined Tract 65 and fee-to-trust properties for each alternative. As shown in the table, the combined non-casino trips for Alternatives A and C and Sub-Alternative A-1 are 644 trips each; for Alternative B the number of trips is 536 trips.

Table 3-7 ITE Gross Trips for Non-Casino Uses for Combined Trust and Non-Trust Properties

	Land Uses	Densities	ITE Based Trips	Percent Trips of Alternative A Gross Trips
Alternative A	Hotel	1,500 Rooms	849	30.67%
	Retail	50,600 SF	403	14.55%
	Lounge/ Restaurant	135,957 SF	1,516	54.78%
	Alternative A Gross Trips =		**2,768**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative A-1 Gross Trips**
Sub-Alternative A-1	Hotel	1,500 Rooms	849	30.67%
	Retail	50,600 SF	403	14.55%
	Lounge/ Restaurant	135,957 SF	1,516	54.78%
	Alternative A-1 Gross Trips =		**2,768**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative B Gross Trips**
Alternative B	Hotel	1,000 Rooms	537	23.31%
	Retail	53,664 SF	419	18.19%
	Lounge/ Restaurant	120,928 SF	1,348	58.50%
	Alternative B Gross Trips =		**2,304**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative C Gross Trips**
Alternative C	Hotel	1,500 Rooms	849	30.67%
	Retail	50,600 SF	403	14.55%
	Lounge/ Restaurant	135,957 SF	1,516	54.78%
	Alternative C Gross Trips =		**2,768**	**100.00%**
Sub-Alternative C-1	Sub-Alternative C-1 assumes no further development beyond Phase II (December 2011). The baseline 2011 two-way PM peak hour volume (Phase II) of 1,533 vehicle trips was determined based upon the Phase I traffic (1,086 PM peak hour trips) and a trip adjustment based on an increase of approximately 700 gaming units installed between March 2011 (Phase I) and December 2011 (Phase II).			

Table 3-8 Non-Casino Trips for Combined Trust and Non-Trust Lands

Proposed Project Alternative Action	ITE Gross Trips	HHRC Gross Trips	Percent Alternative Gross of HHRC Gross	HHRC Non-Casino Trips	STOF Non-Casino Trips
Alternative A	2,768	2,746	100.8%	639	644
Sub-Alternative A-1	2,768	2,746	100.8%	639	644
Alternative B	2,304	2,746	83.9%	639	536
Alternative C	2,768	2,746	100.8%	639	644
Sub-Alternative C-1	Sub-Alternative C-1 assumes no further development beyond Phase II (December 2011). The 2011 Phase II PM peak hour volume is 1,533 vehicles.				

As noted in *Section 3.4.5 Estimation of HHRC Non-Casino Traffic*, it was determined that the non-casino trip portion of the PM peak-hour volume for the HHRC was 639 trips. It has been assumed that the maximum build-out of the STOF development will be similar to that of the HHRC. Thus, the STOF non-casino trips were estimated by taking the estimated gross peak-hour trips in each alternative scenario as shown in **Table 3-8** and comparing them to the corresponding HHRC value (639 trips).

A comparison of the Coconut Creek STOF ITE gross trips for Alternatives A, A-1 and C at full build-out with the estimated HHRC gross trips demonstrates a very close similarity in trips (+22 trips or 0.8 percent difference). Since both facilities will be similar in size and scope of development, this finding provides a level of confidence with respect to the impacts related to the Coconut Creek STOF properties at full build-out.

3.5.9 Segregation of Fee-To-Trust and Tract 65 Non-Casino Trips

In the overall traffic evaluation, generated trips that are associated with Tract 65 (Existing Trust Land) are treated as committed traffic. These trips would be combined with the background (non-STOF) traffic and added to the roadway system. In order to segregate the Tract 65 trips from the overall Project related trips, the combined STOF non-casino trips (**Table 3-8**) were adjusted by applying the Fee-To-Trust versus Tract 65 land use distribution percentages presented in **Table 3-6,** and the ITE land-use based trip distribution percentages presented in **Table 3-7**. The resulting Fee-To-Trust trips and Tract 65 Non-Casino trips are shown in **Table 3-9**.

Table 3-9 2020 Fee-To-Trust and Tract 65 Non-Casino Trips

Proposed Project Alternative	STOF Non-casino Trips (1)	Land Use	Percent Trips Not in Tract 65 (2)	Percent of ITE based Trips (3)	Proposed Action Fee-To-Trust Trips	Non-Fee-To-Trust Non-Casino Trips	Tract 65 Non-Casino Trips
Alternative A	644	Hotel	66.67%	30.67%	132	N/A	123
		Retail	100.00%	14.55%	94		
		Restaurant/Lounge	83.71%	54.78%	295		
			Total Non-Tract 65 Trips =		**521**		
Sub-Alternative A-1	644	Hotel	66.67%	30.67%	132	N/A	123
		Retail	100.00%	14.55%	94		
		Restaurant/Lounge	83.71%	54.78%	295		
			Total Non-Tract 65 Trips =		**521**		
Alternative B	536	Hotel	50.00%	23.31%	62	N/A	120
		Retail	100.00%	18.19%	98		
		Restaurant/Lounge	81.68%	58.50%	256		
			Total Non-Tract 65 Trips =		**416**		
Alternative C	644	Hotel	66.67%	30.67%	N/A	132	123
		Retail	100.00%	14.55%		94	
		Restaurant/Lounge	83.71%	54.78%		295	
			Total Non-Tract 65 Trips =			**521**	
Sub-Alternative C-1	Sub-Alternative C-1 assumes no further development beyond what exists in 2011. The 2011 PM peak hour volume is 979 vehicles.						

Notes:
(1) From Table 3-8.
(2) From Table 3-6.
(3) From Table 3-7.

3.5.10 Fee-To-Trust PM Peak Hour Trips

The PM peak-hour trips for each Alternative and Tract 65 were determined by combining the 2020 STOF trips, the Tract 65 non-casino trips and the fee-to-trust trips as demonstrated in **Table 3-10**. **Table 3-11** provides a summary of the resulting estimated non-Trust land trips by alternative and the corresponding directional distribution.

Table 3-10 PM Peak Hour Trips (Tract 65 + Fee-to-Trust Property)

Trip Element	Alternative A	Sub-Alternative A-1	Alternative B	Alternative C	Sub-Alternative C-1
2020 STOF PM Peak Hour Trips (Casino Related)	2,250	2,250	2,250	2,250	1,533
Tract 65 Non-Casino Trips	123	123	120	123	N/A
Total Tract 65 Trips	**2,373**	**2,373**	**2,370**	**2,373**	**1,533**
Fee-To-Trust Parcels	**521**	**521**	**416**	**0**	**0**
STOF Owned Parcels	**0**	**0**	**0**	**521**	**0**

Table 3-11 Non-Trust Land Trip Estimates per Development Alternative

Proposed Project Alternative	PM Peak Hour Volume		
	Total Two-Way Volume	In	Out
Alternative A: Proposed Project Fee-To-Trust with Coconut Creek Approvals or Agreements	521	264	257
Sub-Alternative A-1: Proposed Project with No Coconut Creek Agreements	521	264	257
Alternative B: Reduced Intensity Project	416	211	205
Alternative C: Proposed Project with No Coconut Creek Agreements [No Fee-To-Trust]	521	264	257
Sub-Alternative C-1: No Further Development Beyond Phase II (December 2011) (1)	0	0	0

(1) Includes existing Marketplace on Non-Trust land as ancillary to casino facility.

3.6 Phased Development, Alternatives A, B, and C and Sub-Alternative A-1

As previously stated in Chapter 2, the proposed alternatives have been developed for implementation in Phases. Phase II has been recently completed (December 2011) and is used as the base conditions for this TPS. Phase III is expected to be completed by 2015; whereas, Phase IV has a 2018 completion forecast. Phase V represents the full build-out for all alternatives for 2020. **Table 3-12** presents the development programs for each of the alternatives by Phase.

A trip estimation table series for the two development phase periods for all of the alternatives except for Sub-Alternative C-1 is provided in **Appendix D**. Sub-Alternative C-1 assumes no growth beyond the existing Phase II.

The PM peak-hour trips for each Alternative and Tract 65, Phases III and IV, were determined by combining the 2020 STOF trips, the Tract 65 non-casino trips and the fee-to-trust trips as demonstrated in **Table 3-13**. The more detailed trip tables and process are provided in **Appendix D.**

3.7 Traffic Forecast

3.7.1 Short-Term/Build-out Growth Rate

For the short-term periods (2015-2020), annual growth rates were determined along roadways in the final study area based on historic AADT volumes over the past ten years (2001 – 2010) at FDOT count stations. Historic growth rates were derived using linear regression and are summarized in **Table 3-14** (see also **Appendix E**). Although some individual roadway segments had historic growth rates above 1.0 percent per year, the overall average adjusted historic growth rate for the roadways within the study area vicinity (**Figure 3.1**) was 0.77 percent per year.

3.7.2 Planning Model Forecasts – Long-Term/Cumulative Growth

The adopted Cost Feasible 2035 Southeast Florida Regional Planning Model (SERPM) was used to estimate the long-term growth rates to derive the 2035 traffic volumes used in the cumulative effects analysis. Committed developments (if applicable) were added to the model and the socio-economic data adjusted.

The original and adjusted socio-economic data for the appropriate Traffic Analysis Zones (TAZ) are presented in **Appendix F**. The socio-economic data for the MainStreet Coconut Creek DRI and the Proposed Project were removed from the 2035 SERPM model and manually layered on to the background volumes. The 2005 and 2035 SERPM model volume plots and project distribution are included in **Appendix F**. The 2035 Proposed Project distribution percentage was manually adjusted as discussed in *Section 3.10 Trip Assignment.*

Table 3-12 Proposed Project Development Phasings, 2012 - 2020

Phase	Final Year in Phase	Use	Trust Lands	Trust Land Cumulative Total	Alternative A Fee-To-Trust	Alternative A Cumulative Total	Sub-Alternative A-1 Fee-To-Trust	Sub-Alternative A-1 Cumulative Total	Alternative B Fee-To-Trust	Alternative B Cumulative Total
Existing/ Complete Phase II	2012	Restaurant [1]	11,206	11,206	41,068	41,068	41,068	41,068	41,068	41,068
		Bar/Lounge [1]	10,299	10,299	2,951	2,951	2,951	2,951	2,951	2,951
		Casino [1]	99,138	99,138	0	0	0	0	0	0
		Garage [2]	0	0	2,407	2,407	2,407	2,407	2,407	2,407
		Retail [1]	1,516	1,516	3,611	3,611	3,611	3,611	3,611	3,611
		Showroom [2]	0	0	0	0	0	0	0	0
		Convention Center [1]	0	0	0	0	0	0	0	0
		Spa [1]	0	0	0	0	0	0	0	0
		Hotel [3]	0	0	0	0	0	0	0	0
Phase III	2015	Restaurant [1]	0	11,206	0	41,068	0	41,068	40,566	81,634
		Bar/Lounge [1]	0	10,299	0	2,951	0	2,951	14,462	17,413
		Casino [1]	25,650	124,788	0	0	0	0	0	0
		Garage [2]	0	0	0	2,407	0	2,407	2,426	4,833
		Retail [1]	0	1,516	0	3,611	0	3,611	50,053	53,664
		Showroom [2]	*0*	*0*	*0*	*0*	*0*	*0*	*2,500*	*2,500*
		Convention Center [1]	*0*	*0*	*0*	*0*	*0*	*0*	*78,303*	*78,303*
		Spa [1]	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
		Hotel [3]	500	500	0	0	0	0	500	500
Phase IV	2018	Restaurant [1]	6,700	17,906	54,532	95,600	54,532	95,600	0	81,634
		Bar/Lounge [1]	-6,054	4,245	15,255	18,206	15,255	18,206	0	17,413
		Casino [1]	19,350	144,138	0	0	0	0	0	0
		Garage [2]	0	0	1,365	3,772	1,365	3,772	0	4,833
		Retail [1]	-1,516	0	46,989	50,600	46,989	50,600	0	53,664
		Showroom [2]	*0*	*0*	*2,500*	*2,500*	*2,500*	*2,500*	*0*	*2,500*
		Convention Center [1]	*93,466*	*93,466*	*76,200*	*76,200*	*76,200*	*76,200*	*0*	*78,303*
		Spa [1]	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
		Hotel [3]	0	500	0	0	0	0	0	500
Phase V	2020	Restaurant [1]	0	17,906	0	95,600	0	95,600	0	81,634
		Bar/Lounge [1]	0	4,245	0	18,206	0	18,206	0	17,413
		Casino [1]	0	144,138	0	0	0	0	0	0
		Garage [2]	0	0	0	3,772	0	3,772	0	4,833
		Retail [1]	0	0	0	50,600	0	50,600	0	53,664
		Showroom [2]	*0*	*0*	*0*	*2,500*	*0*	*2,500*	*0*	*2,500*
		Convention Center [1]	*0*	*93,466*	*0*	*76,200*	*0*	*76,200*	*0*	*78,303*
		Spa [1]	*0*	*0*	*19,800*	*19,800*	*19,800*	*19,800*	*20,000*	*20,000*
		Hotel [3]	0	500	1,000	1,000	1,000	1,000	0	500

Table 3-13 Proposed Project Alternatives PM Peak Hour Trips for Phases III and IV

STOF Tracts/Parcels	Alternative A and Sub-Alternative A-1		Alternative B		Alternative C	
	Phase III 2015	Phase IV 2018	Phase III 2015	Phase IV 2018	Phase III 2015	Phase IV 2018
Tract 65 Casino Trips	1,898	2,250	1,898	1,898	1,898	2,250
Tract 65 Non-Casino Trips	119	114	121	121	119	114
Total Tract 65	2,017	2,364	2,019	2,019	2,017	2,364
Fee-To Trust Parcels	**128**	**390**	**416**	**416**	**0**	**0**
STOF Owned Parcels	0	0	0	0	128	390

Table 3-14 Short-Term Growth Rate Estimation

Roadway	Count Station (1)	Trend Annual Historic Growth Rate (2)	Adjusted Trend Annual Historical Growth Rates (3)
SAMPLE ROAD			
East of SR 7/US 441	FDOT-0467	0.09%	0.50%
West of SR 7/US 441	FDOT-0123	-0.49%	0.50%
West of SR 91/Florida's Turnpike	FDOT-0053	2.51%	2.51%
Average Annual Growth Rate		**0.70%**	**1.17%**
NW 31 STREET			
EAST OF SR 7/US 441	FDOT-9769	-9.17%	0.50%
Average Annual Growth Rate		**-9.17%**	**0.50%**
WILES ROAD			
East of SR 7/US 441	FDOT-9581	1.52%	1.52%
West of SR 7/US 441	FDOT-7116	-2.76%	0.50%
East of Lyons Road	FDOT-9694	-3.22%	0.50%
Average Annual Growth Rate		**-1.49%**	**0.84%**
US 441/SR7			
North of SR 834/Sample Road	FDOT-5112	-0.73%	0.50%
South of SR 834/Sample Road	FDOT-0427	1.71%	1.71%
Ramp from SB SR7/US 441 to SR 834 Sample Road	FDOT-4506	-2.16%	0.50%
Ramp from SR 834 Sample Road to NB SR7/US 441	FDOT-4505	-2.03%	0.50%
Average Annual Growth Rate		**-0.80%**	**0.80%**
BANKS ROAD			
South of SR 834/Sample Road	FDOT-9108	-5.54%	0.50%
Average Annual Growth Rate		**-5.54%**	**0.50%**
TURTLE CREEK DRIVE			
North of SR 834/Sample Road	FDOT-9768	-1.11%	0.50%
Average Annual Growth Rate		**-1.11%**	**0.50%**
LYONS ROAD			
South of Sawgrass Expressway	FDOT-9145	-4.75%	0.50%
North of SR 834/Sample Road	FDOT-8054 [3]	0.00%	0.50%
North of Copans Road	FDOT-9143	-1.06%	0.50%
Average Annual Growth Rate		**-1.94%**	**0.50%**
TOTAL AVERAGE GROWTH RATE =		**-1.70%**	**0.77%**

Notes:
(1) Count Station identification and data obtained from 2010 TRAFFIC INFORMATION AND HIGHWAY DATA DVD Published by FDOT.
(2) Growth rates based on 10-year historic AADT data for each count station.
(3) If historic growth rate trend is less than 0.5 percent (0.5%), minimum growth rate of 0.5% was applied.

The model growth rates were derived by comparing volumes from the 2005 base year and 2035 horizon year Cost Feasible SERPM (Version 6.5 Sub-area 24-hour Highway Only). Committed developments from Coral Springs, City of Margate, City of Tamarac, City of Parkland, and City of North Lauderdale (see Section 3.9 Committed Developments) were obtained, and added to the model, where applicable. The socio-economic data for the MainStreet Coconut Creek DRI were removed from the 2035 model and the approved DRI trips were manually added to the background volumes.

As summarized in **Table F-1** in **Appendix F**, the average annual growth rate per roadway based on model volumes ranges from 0.61 to 1.15 percent with an overall area wide annual growth rate of 0.82 percent.

3.7.3 Applied TPS Growth Rate

As demonstrated in the two previous sections, both the short-term and long-term average adjusted growth rates are less than 1.0 percent per year (0.77 percent per year and 0.82 percent per year, respectively). Therefore, a conservative 1.0 percent per year growth rate has been used in the TPS analysis to ensure growth has been adequately addressed.

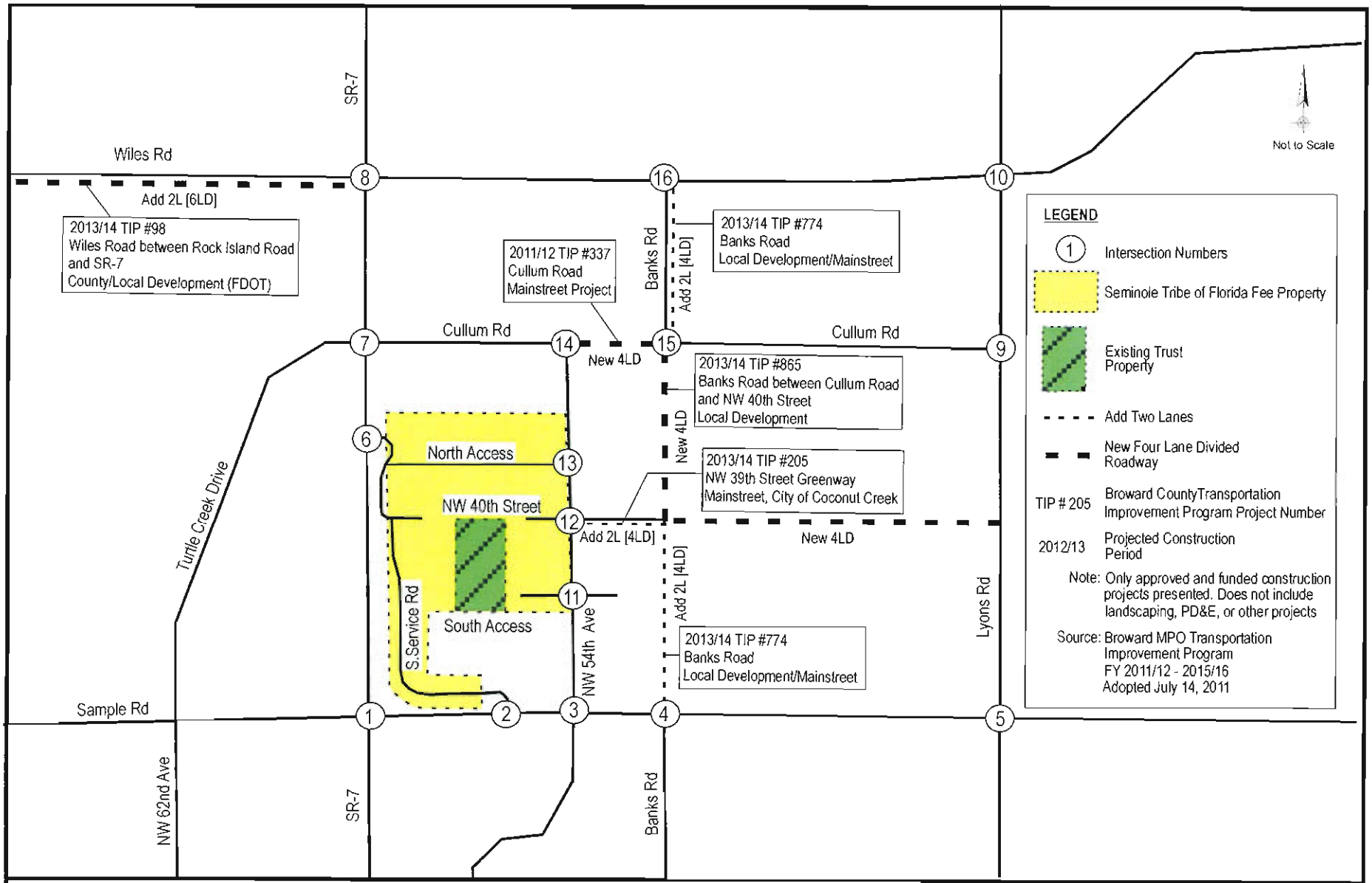
3.8 Programmed and Planned Roadway Improvements

The 2011 Existing Year transportation network shown in **Figure 3.1** was field verified. Programmed or planned transportation improvements within the study area have been reviewed from the following documents:

- FDOT District IV, Five-Year Work Program, 2012-2017 (As of February 2012);
- Broward County Transportation Improvement Program (TIP), 2011-2015;
- The committed roadway improvements from the MainStreet Coconut Creek DRI; and
- The PMDD improvements as presented in *Section 2.3.2 STOF/City of Coconut Creek Mitigation Agreement and PMDD.*

3.8.1 FDOT District IV, Five-Year Work Program

The FDOT programmed roadway projects are shown in **Figure 3.5** and summarized in **Table 3-15.** This roadway improvement is not a required improvement for the STOF developments, the MainStreet at Coconut Creek DRI, or any other development project in the area. For purposes of the TPS analysis, the programmed improvement is assumed to be completed by the end of 2015.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Approved 2012-2015 Roadway Construction

Figure No. 3.5

Table 3-15 Projects from FDOT Five-Year Work Program

From	To	Financial Management Number	Construction Year	Description	Length (Miles)
Wiles Road					
Rock Island Road	SR 7	425859-1	2014	Add 2L (6LD)	1.1

3.8.2 Broward County TIP

The Broward County TIP programmed roadway projects are shown in **Figure 3.5** and summarized in **Table 3-16.** As presented in **Table 3-16**, the three Banks Road projects (773, 774, and 865), the Cullum Road project (337), and the NW 39th Street Greenway project (205), are committed roadway projects for the MainStreet at Coconut Creek DRI.

For TPS analysis purposes, it is assumed that all of the Broward County TIP projects will be implemented and operational by the end of 2015.

Table 3-16 Projects from Broward County Transportation Improvement Plan, FY 2011/12 – 2015/2016

From	To	Project Number	Construction Year	Description	Length (Miles)	Funding Source
Banks Road						
Wiles Road	Cullum Road	773	2013/14	Add 2L (4LD)	0.2	MainStreet DRI
NW 40th Street	Sample Road	774	2013/14	Add 2L (4LD)	0.2	MainStreet DRI
Cullum Road	NW 40th Street	865	2013/14	New (4LD)	0.2	MainStreet DRI
Cullum Road						
NW 54 Avenue	Banks Road	337	2011/12	New (4LD)	0.4	MainStreet DRI
Johnson Road						
SR 7	Lyons Road	790	2014/15	Add 2L (4LD)	1.0	Developer
NW 39th Street Greenway						
NW 54 Avenue	Lyons Road	205	2012/13	Add 2L (4LD)	0.7	MainStreet DRI
Wiles Road						
SR 7	Rock Island Road	98	2013/14	Add 2L (6LD)	3.0	State /County

3.8.3 MainStreet at Coconut Creek DRI

In 2010, the South Florida Regional Planning Council reviewed and approved the Development Order for the MainStreet at Coconut Creek DRI. Subsequently, the City of Coconut Creek adopted the Development Order (Ordinance No. 2010-0006.

As stipulated in the approved Development Order, the committed transportation improvements included the following:

1. Prior to the issuance of the first Certificate of Occupancy, the segment of Banks Road between Wiles road and Sample Road shall be constructed as a two (2)-lane undivided roadway. Further development conditions with respect to peak hour shall determine the widening to four (4)-lanes with median;

2. A 100-foot segment of Banks Road north of sample Road shall be constructed as four (4)-lane divided facility;

3. Construct or cause the construction of Cullum Road as a two-lane undivided facility between Banks Road and Lyons Road.

   Note: This segment of Cullum Road currently is configured as a two-lane undivided roadway. This road was implemented as a requirement for the Promenade at Coconut Creek Shopping Center at the southwest corner of the intersection of Wiles road and Lyons Road. The MainStreet at Coconut Creek DRI requirement will subsequently convert this segment into a four (4)-lane section);

4. Construct or cause the construction of Cullum Road as a four (4)-lane divided facility between SR 7 and Banks Road;

5. The signalization of the intersection of Banks Road and Wiles Road;

6. The signalization and lane expansions of the intersection of Banks Road and Sample Road;

7. Apply eastbound/westbound right-turn lane overlap phases at the intersection of Lyons Road and Sample Road;

8. Eastbound signalization at the intersection of NW 54th Avenue and Downtown Access Road (NW 40th Street).

   Note: The DRI assumes that this intersection will be maintained as a four-leg configuration;

9. Northbound triple left-turn lanes of Florida's Turnpike at Sample Road;

10. Signalization of the intersection of Cullum Road and Lyons Road;

11. Construct a roundabout at the intersection of Cullum Road and NW 54th Avenue.

    Note: This project is also a PMDD project;

12. Construct a roundabout at the intersection of Cullum Road and Banks Road;

13. Signalization of the future intersection at Lyons Road and Jardin Driveway;

14. Signalization and southbound right-turn lane at the future intersection of Lyons Road and Uptown Driveway; and

15. Signalization, westbound right-turn lane, and eastbound left-turn lane at the future intersection of Sample Road and Fisherman's Landing Driveway.

All aforementioned signalization and roadway improvements shall be constructed when warranted, approved and permitted by the pertinent local agencies.

To date, none of the aforementioned MainStreet at Coconut Creek DRI improvements has been implemented. Nonetheless, several are programmed for construction beginning fiscal years 2011/2012 and 2014/2015 (see **Table 3-16**).

3.8.4 STOF PMDD Agreement Projects

The PMDD agreement transportation projects applicable to Alternatives A and C were presented in *Section 2.3.3 STOF/City of Coconut Creek Mitigation Agreement and PMDD.* These included ten roadway, signalization and landscaping improvements as featured in **Exhibit 11G** of the approved Seminole PMDD (see **Figure 2.4**). These improvements are:

1. Part 1 - The intersection of Sample Road and NW 54th Avenue would be reconfigured by adding second left-turn lanes on the eastbound and westbound approaches of Sample Road. This improvement has been implemented and is currently operational.

   Part 2 - The southbound NW 54th Avenue approach would be reconfigured by converting one of the two through lanes into a second left turn lane, thus creating dual left turn lanes. This improvement has not been implemented. It will be implemented warranted by traffic conditions

   Part 3 - The current wire mounted signals would be replaced by mast arm mounted signals. This improvement has been implemented and is currently operational.

2. The existing four-way stop controlled intersection of NW 54th Avenue and NW 40th Street would be signalized and reconfigured to a three-legged intersection through the removal of the west leg (NW 40th Street) of the intersection. Signalization will be implemented when warranted by traffic conditions and permitted by the local agency;

3. The existing unsignalized and access limited "T" intersection of NW 54th Avenue and the North Access roadway would be reconfigured and signalized to allow full turning movements. This would include adding dual left-turn lanes on the northbound NW 54th Avenue approach, two through lanes on the northbound approach, a right-turn lane on the southbound approach, and a left-turn lane, a shared left-right-turn lane and a right-turn lane on the eastbound approach of the North Access;

4. A roundabout would be installed at the intersection of NW 54th Avenue and Cullum Road.

   Note: This project is also included as one of the committed roadway improvements for the approved MainStreet at Coconut Creek DRI;

5. Cullum Road would be extended as a two-lane roadway from NW 54th Avenue to Banks Road (including landscaping).

   Note: The extension of Cullum Road as a four-lane, divided road is a committed roadway improvement required for the approved MainStreet Coconut Creek DRI. The PMDD Agreement allows for the STOF to build an initial two-lane segment contingent upon the availability of right-of-way and future compensation from the adjacent property owner for the construction of the road;

6. Alignment and landscaping improvements would be made to the existing intersection and button-hook approach of NW 40th Street at SR 7.

7. The East-West Roadway Connector and Greenway between SR 7 and NW 54th Avenue (via the North Access) would be implemented

   Note: This roadway segment has been built as part of the Phase II development of the STOF.

3.9 Committed Developments

Municipalities in the area were contacted to identify committed (approved, but not yet built) developments which could impact roadways (Coral Springs, City of Margate, City of Tamarac, City of Parkland, and City of North Lauderdale).

The following approved projects have been identified as major developments in the general vicinity of the Proposed Project:

1. MainStreet at Coconut Creek DRI:

   This approved project is an one-phase project that was originally anticipated to commence construction in 2010 and to achieve absorption in 2020. The project consists of approximately 157 acres immediately east of the STOF and Proposed Project. The DRI generally covers an area that lies between Sample Road in the south, Lyons Road in

the east, Cullum Road in the north, and NW 54th Avenue in the west. The project was approved as a DRI in 2009 and is proposed to contain a mix of land uses that will promote a compact, diverse, mixed-use downtown environment. A mix of 3,750 residential dwelling units, 525,000 GSF of office and 1,625,000 GSF of commercial uses are proposed. The plan also includes open space including greenways, water, squares and pedestrian paths throughout the project. The City's MainStreet Design Standards and the existing policies in the City's Comprehensive Plan provide for interconnected street networks and a safe and attractive pedestrian environment, as well as multi-modal transit connections, a significant commitment to streetscapes and attention to pedestrian, and bicycle traffic.

The total projected 2020 PM peak hour trips for the DRI is estimated at 3,929 trips (1,833 inbound trips and 2,096 outbound trips).

Although originally intended to commence construction in 2010, as of March 2012, no construction on the site has been initiated.

The MainStreet Coconut Creek DRI also calls for the construction of several roadways which have been included in the currently approved Broward TIP as presented in **Table 3-16**. For purposes of this TPS analysis, it is assumed that these roadways will be in place by 2015, corresponding with the Phase III development of the Project (2015).

2. Celebration Pointe:

   Located at the site of the former Rancho Margate Mobile Home Park on Rancho Boulevard east of SR 7 in the City of Margate (less than a mile south of the Project site), this residential development consists of 580 garden apartments. An extension of the Developer's Agreement and development expiration dates were granted by the City Commission on January 19, 2011. The total projected 2020 PM peak hour trips for this project is estimated at 360 trips (234 inbound trips and 126 outbound trips).

3. The Village of Marbella at Creek Commons:

   This approved (2007) mixed-use project is located on a 20 acre site in the southeastern sector of the new Mainstreet/Town Center development. The site is generally fronted by Sample Road between Lyons Road in the east and near Banks Road in the west. The project consists of 764 residential units, a 150 Room Hotel, 300,000 square feet of commercial/retail, and structured parking to facilitate the development. Overall the development will include approximately 2,000 parking spaces for the above uses, and total more than 2,000,000 square feet of development. The total projected 2020 PM peak hour trips for this project is estimated at 980 trips (430 inbound trips and 550 outbound trips). As of March 2012, no construction has been initiated on the site.

Other approved projects which are in advanced completion status included:

1. Downtown Coral Springs DRI;
2. Sawgrass Exchange DRI;
3. Pompano Industrial Park; and
4. Commerce Center of Coconut Creek DRI, Parcel E (Office).

Excerpts from available traffic reports for these developments are included in **Appendix G**.

3.10 Trip Assignment

In order to (1) determine the final study area based on project trip significance and (2) evaluate the traffic impacts of each alternative development, the estimated net trips for each alternative were assigned to the local roadway network. The primary basis for the trip assignment are the basic distribution patterns from the traffic counts conducted in 2011 at the STOF site and surrounding roadways supplemented by the distribution outputs of the 2035 SERPM model.

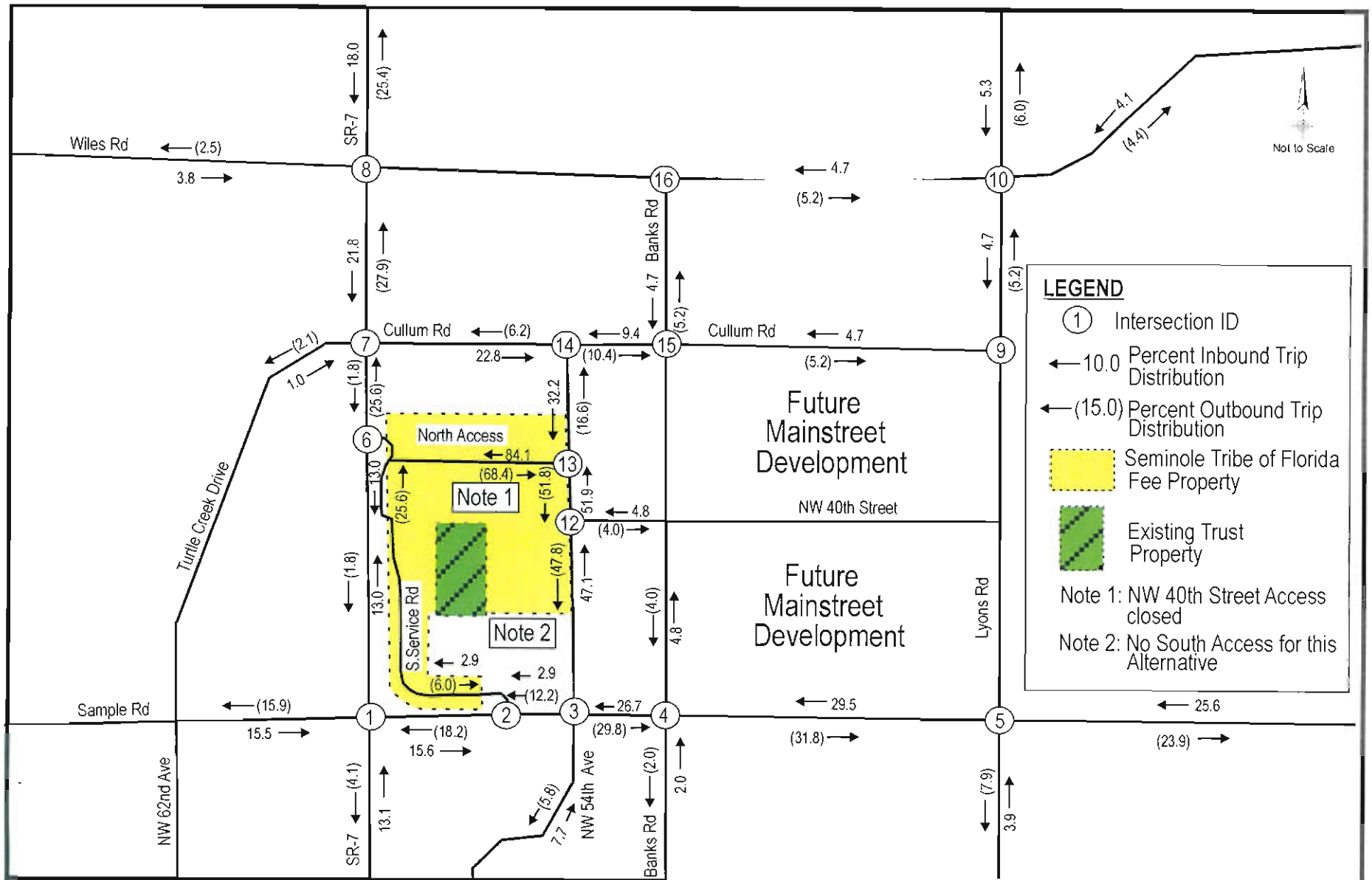
The 2035 SERPM model was used to provide the basis for trip assignment beyond the immediate access area e.g. north to Palm Beach County, along the Sawgrass Expressway, and along Florida's Turnpike. In this process, a base trip assignment pattern was obtained through the application of a "select zone" analysis. A model run was performed isolating the traffic from the TAZ where the project is located. The select zone analysis produced a basic trip assignment map showing the percentage of trips from the zone throughout the network. The special generator data information (ZDATA-3) for the project TAZ was modified to reflect 10 percent home-based work trips, 20 percent home-based shopping trips, and 70 percent home-based socio-recreational trips. This was done in order to more closely reflect the nature of the STOF uses within the TAZ. The resulting model trip assignments were then used to supplement the overall assignment for the 2020 and 2035 development timeframes.

Project trip distributions for each of the Proposed Project Alternatives are illustrated in the following figures:

- **Figure 3.6:** 2020 and 2035 PM Peak Hour Trip Distribution, Alternatives A and C and Sub-Alternative A-1;
- **Figure 3.7**: 2020 and 2035 PM Peak Hour Trip Distribution, Alternative B;
- **Figure 3.8**: 2020 and 2035 PM Peak Hour Trip Distribution, Sub-Alternative C-1; and
- **Figure 3.9**: Regional Project Distribution, All Alternatives.

3.11 Short and Long Term Final Study Areas

The roadways and intersections within the final study area were based on the volume or level of traffic associated with the Proposed Project during the PM peak hour. Within the state of Florida, DRI are regulated under Chapter 380.06 of the Florida Statutes and are defined as "any development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of more than one county". Under this DRI process, study area limits are established by Rule 9J-2.045 to assure the regional traffic impact is

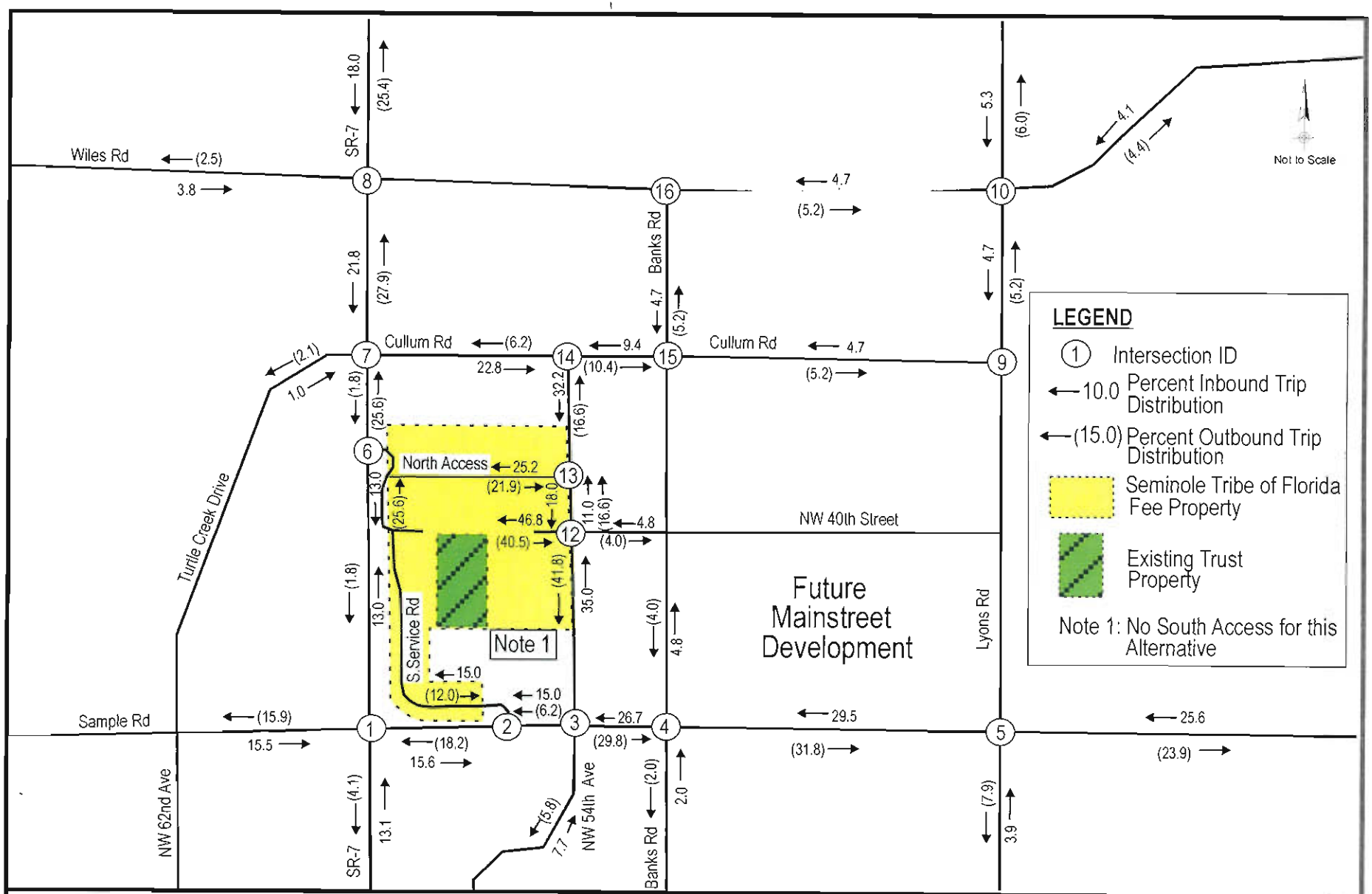


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 and 2035 PM Peak Hour Trip Distribution Alternatives A and C and Sub-Alternative A-1

Figure No. 3.6

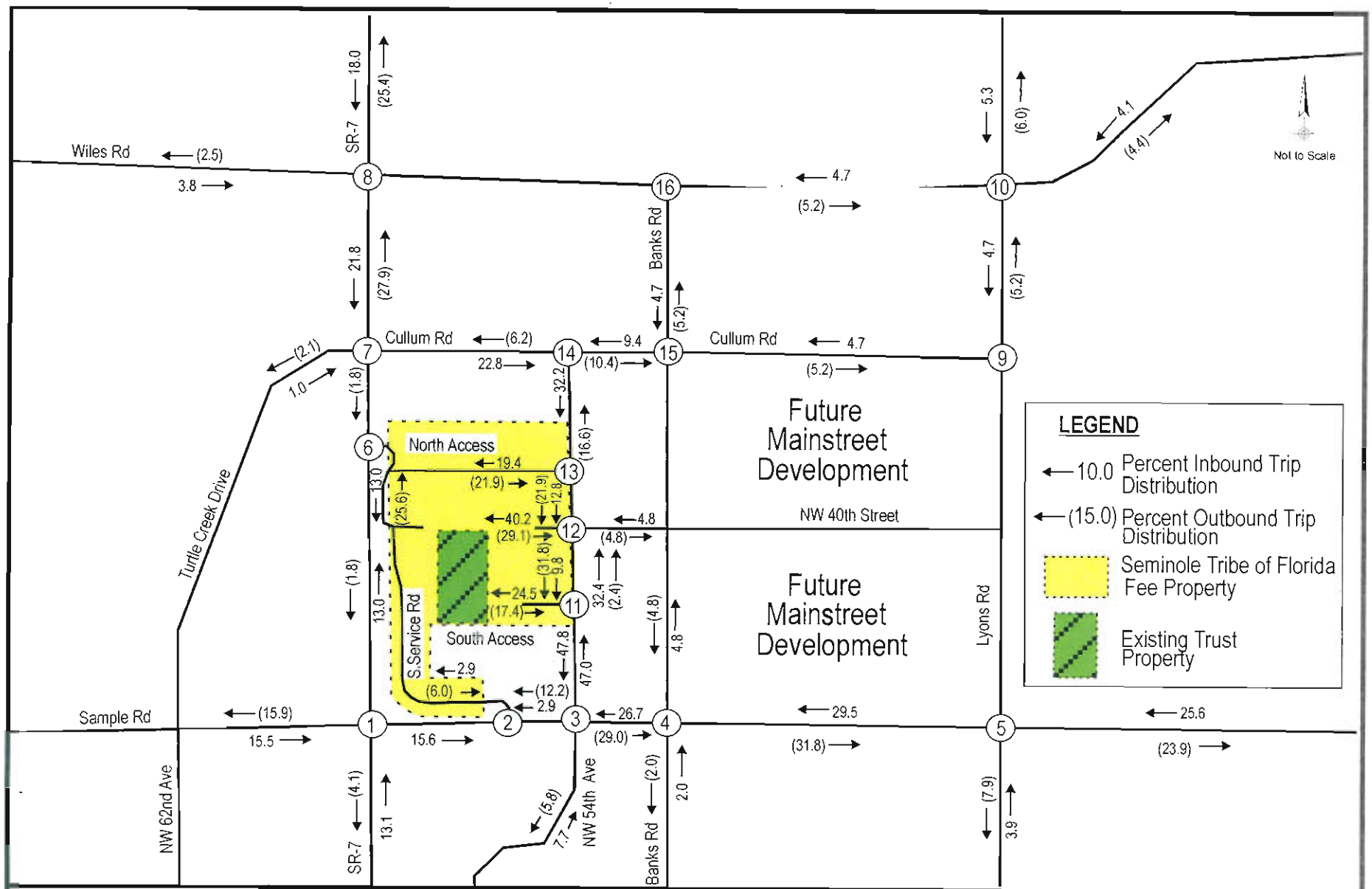


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

2020 and 2035 PM Peak Hour Trip Distribution, Alternative B

Figure No. 3.7

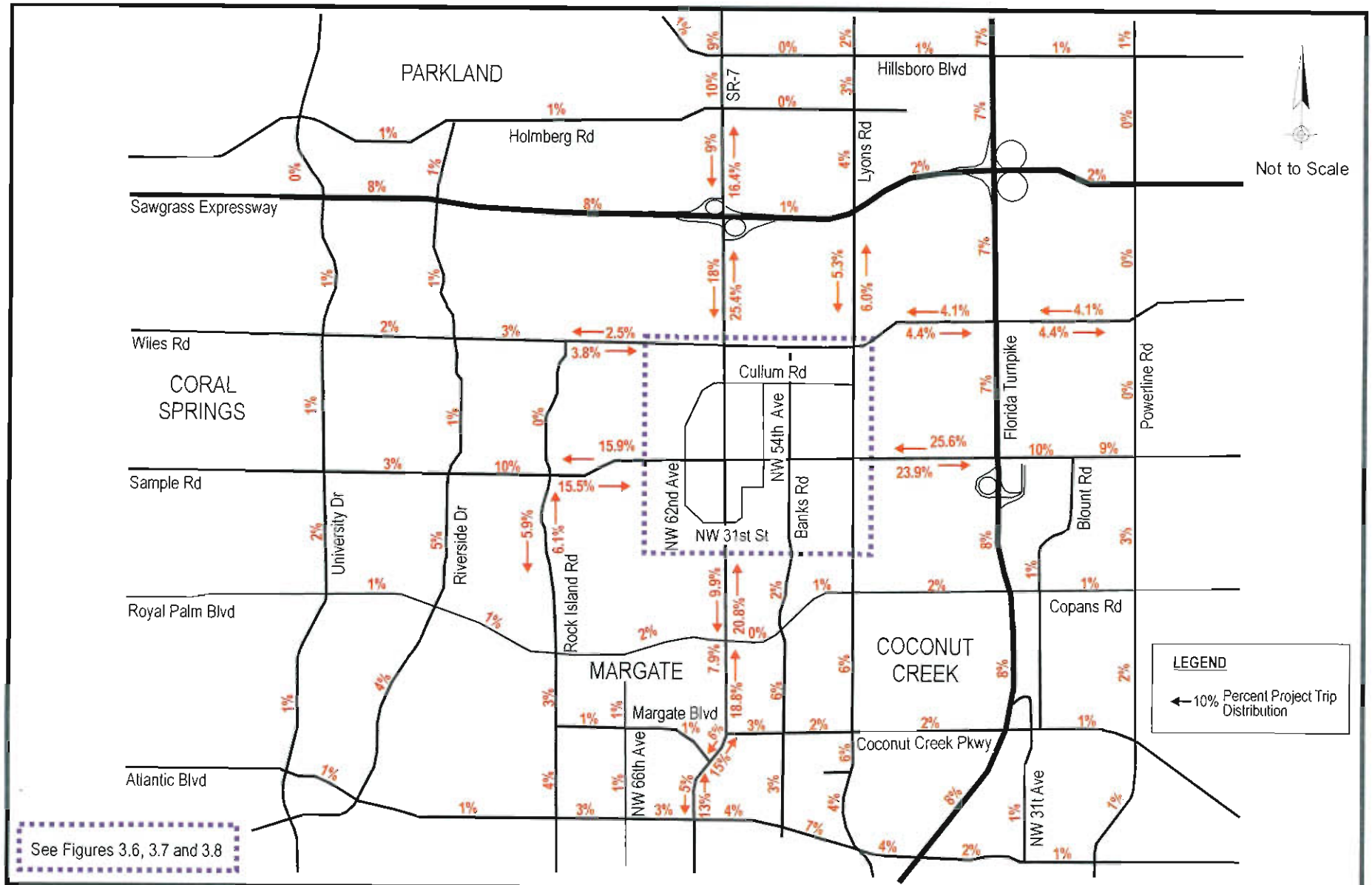


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave.• Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

2020 and 2035 PM Peak Hour Trip Distribution, Alternative C-1

Figure No. 3.8



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 and 2035 Regional Project Trip Distribution Percentages, All Alternatives

Figure No. 3.9

fully addressed. The limit is based on including any roadway where PM peak-hour peak-directional project trips equal or exceed five (5) percent of the peak-directional adopted level of service (LOS) standard. This definition was applied here since it has been universally applied statewide to large development such as regional malls, airports, sports stadia, and very large scale residential and commercial developments.

The regional roadway segments where project trips equal or exceed five (5) percent of the adopted peak-hour directional maximum service volume define the extent of the final study area. The short-term final study area with significance impact is described as follows and shown in **Figure 3.10**:

- Cullum Road between SR 7 and NW 54th Avenue; and
- NW 54th Avenue between Sample Road and Cullum Road.

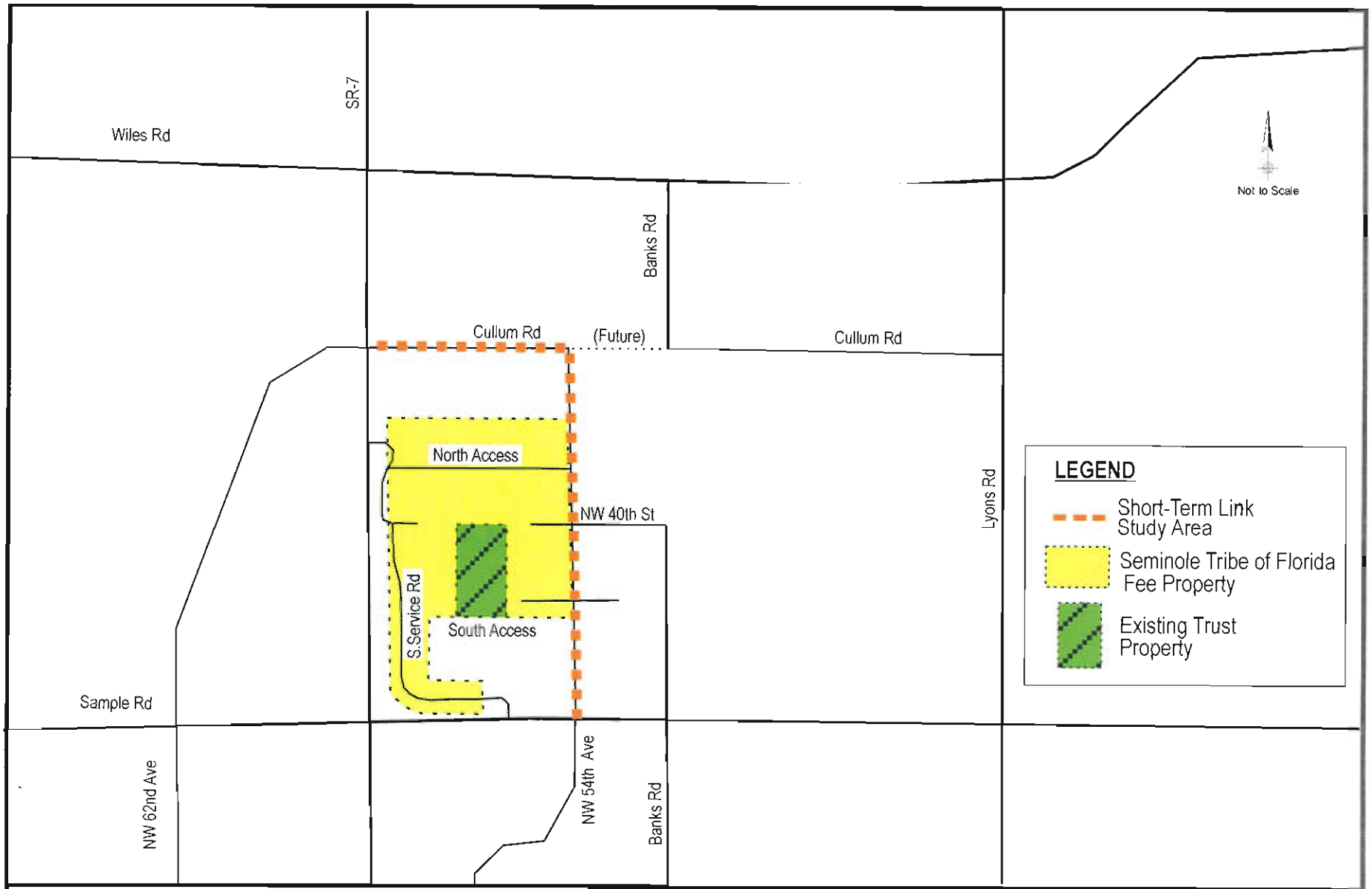
For the long-term cumulative analysis (2035), the final study area was extended to include the geographic area bounded by roads that serve as the primary boundary and/or access roadways to the project site. The cumulative area is larger than the final study area, to assess whether the proposed action has an impact away from the study area that causes the primary regional roadways to fail when considered with other traffic growth. The 2035 final study area is described as follows and is shown in **Figure 3.11**:

- North: Wiles Road (four lanes, divided arterial) between SR 7/US 441 and Lyons Road;
- East: Lyons Road (six lanes, divided arterial) between Sample Road and Wiles Road;
- South: Sample Road (six lanes, divided State principal arterial) between SR 7/US 441 and Lyons Road; and
- West: SR 7/US 441 (six lanes, divided State principal arterial) between Wiles Road and Sample Road.

The project significance for determination of the short-term study area is presented in **Table H-1** in **Appendix H.** This table summarizes the project trips as a percent of the adopted LOS, based upon the project trip assignments described in Section 3.10 – Trip Assignment, and the segments of roadway where the project trips are significant. **Table H-1** also presents the number of lanes and functional classification of the roadways within the final study area.

3.12 Peak Hour Directional Volumes

The 2020 background directional volumes were derived by extrapolating existing (2011) volumes using a one percent per year growth rate. The 2011 traffic was first reduced by extracting the basic STOF traffic from the link and intersection turning movement volumes. The resultant traffic was increased through the application of the yearly growth rate for the corresponding years (9 years to 2020 and 24 years for 2035). At each milestone year, the estimated STOF Tract 65 development traffic and the committed development traffic were added to derive 2020 and 2035 background volumes. Finally, the Proposed Project traffic was added to the background traffic to derive the total 2020 and 2035 volumes used in the analysis associated

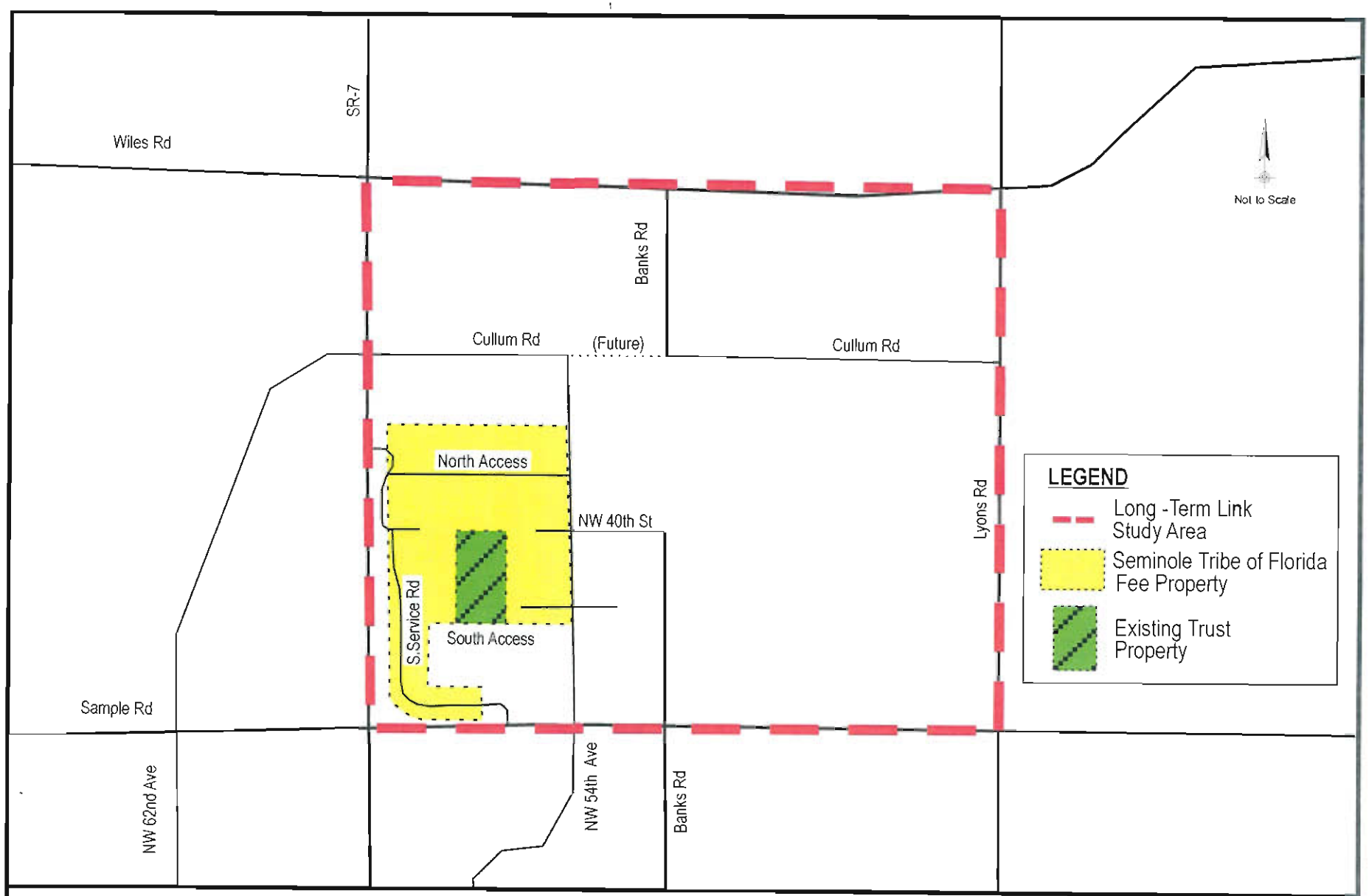


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Short Term Link Study Area

Figure No. 3.10



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Long -Term Link Study Area

Figure No. 3.11

with Alternatives A, B, and C and Sub-Alternative A-1. For Sub-Alternative C-1, there were no additional Proposed Project volumes since there will be no development growth beyond the existing 2011 Phase II development.

The 2035 background directional volumes were developed by applying K_{30} and D_{30} factors to the model derived AADT, consistent with the FDOT *Project Traffic Forecasting Handbook,* dated October 2002. The 2035 resulting directional volumes have been compared with historic trends in the study area to ensure reasonableness, and were manually adjusted where necessary and appropriate.

Tables H-2 through **H-14,** located in **Appendix H,** summarize the existing, background, and total directional volumes:

- **Table H-2** – Existing 2011 Phase II Conditions Analysis – Volumes and Level of Service;
- **Table H-3** – Year 2015 Phase III Background Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-4** – Year 2018 Phase IV Background Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-5** – Year 2020 Background Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-6** – Year 2035 Background Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-7** – Year 2015 Phase III Total Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-8** – Year 2018 Phase IV Total Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-9** – Year 2020 Total Volume and Level of Service – Alternatives A and C and Sub-Alternative A-1;
- **Table H-10** – Year 2035 Total Volume and Level of Service - Alternatives A and C and Sub-Alternative A-1;
- **Table H-11** – Year 2015 Phase II Background Volume and Level of Service – Alternative B;
- **Table H-12** – Year 2018 Phase IV Background Volume and Level of Service – Alternative B;
- **Table H-13** – Year 2020 Background Volume and Level of Service - Alternative B;
- **Table H-14** – Year 2035 Background Volume and Level of Service - Alternative B;
- **Table H-15** – Year 2015 Phase III Total Volume and Level of Service – Alternative B;
- **Table H-16** – Year 2018 Phase IV Total Volume and Level of Service – Alternatives B;
- **Table H-17** – Year 2020 Total Volume and Level of Service - Alternative B;
- **Table H-18** – Year 2035 Total Volume and Level of Service - Alternative B;
- **Table H-19** – Year 2015 Phase III Volume and Level of Service - Alternative C-1;
- **Table H-20** – Year 2020 Phase IV Volume and Level of Service - Alternative C-1;
- **Table H-21** – Year 2020 Volume and Level of Service - Alternative C-1; and
- **Table H-22** – Year 2035 Volume and Level of Service - Alternative C-1.

3.13 Turning Movement Volumes

The 2020 and 2035 intersection turning movement volumes were derived by extrapolating existing (2011) volumes using a one percent per year growth rate to develop background conditions. Traffic from committed developments and Tract 65 (existing trust land) was added to derive total 2020 and 2035 background volumes. Finally, the traffic from the Proposed Project was added to derive total 2020 and 2035 volumes.

Tables I-1 through **I-6,** presented in **Appendix I,** summarize the existing, background, and total turning movement volumes for key intersections within the final study area.

- **Table I-1** – Existing Phases I and II (2011) PM Peak Hour Intersection Volumes;
- **Table I-2** – 2015 Phase III Background and Total PM Peak Hour Intersection Volumes, Alternatives A and C and Sub-Alternative A-1:
- **Table I-3** – 2018 Phase IV Background and Total PM Peak Hour Intersection Volumes, Alternatives A and C and Sub-Alternative A-1:
- **Table I-4** – 2020 And 2035 Background and Total PM Peak Hour Intersection Volumes, Alternatives A and C and Sub-Alternative A-1:
- **Table I-5** – 2020 And 2035 Background and Total PM Peak Hour Intersection Volumes, Alternative B; and
- **Table I-6** – 2020 And 2035 Background and Total PM Peak Hour Intersection Volumes, Sub-Alternative C-1.

3.14 Operational Analysis Procedure

Operational analysis was performed for the existing (2011), short-term (2020), and long-term (2035) years. Two software packages were used in the operational analysis:

1. SYNCHRO 7.0 HCM module was used to optimize the operation of the signalized intersections in coordination; and
2. Highway Capacity Software (HCS) was used for the operations of un-signalized intersections.

The intersection timing splits and offsets used for coordination were developed by SYNCHRO without manual manipulation for all intersections in the study area. Pedestrian clearances were not included for the intersection operations analysis along Sample Road, SR 7, Lyons Road, and Wiles Road since there are no significant pedestrian activity during the PM peak hours along these facilities. Pedestrian clearances will only activate when there is a pedestrian call (push button). In the absence of a pedestrian call in an actuated signal operation, the effective green will be based on the vehicular demand fluctuating between the minimum initial and maximum green. However, pedestrian intersection timing clearances were used at NW 54th Street and NW 40th Avenue; and NW 54th Street and North Access intersections due to their proximity to the project site and expected pedestrian activity.

4.0 TRANSIT

As described in detail below, the Proposed Project site is served by three Broward County Transit (BCT) routes and two community bus services. These services provide alternate travel modes for residents in the cities of Coral Springs, Margate and Coconut Creek, as well as the rest of Broward County. The nearby intersection of Sample Road and NW 62nd Avenue/Turtle Creek Drive serves as an important local and sub-regional transit transfer point. Transit service to the STOF and the proposed MainStreet at Coconut Creek DRI will be a key element to managing traffic in and around the area.

Following is information on transit service accessible to the Proposed Project site. Additional information including route maps, frequency, and ridership is included in **Appendix J.**

4.1 Current Transit Services

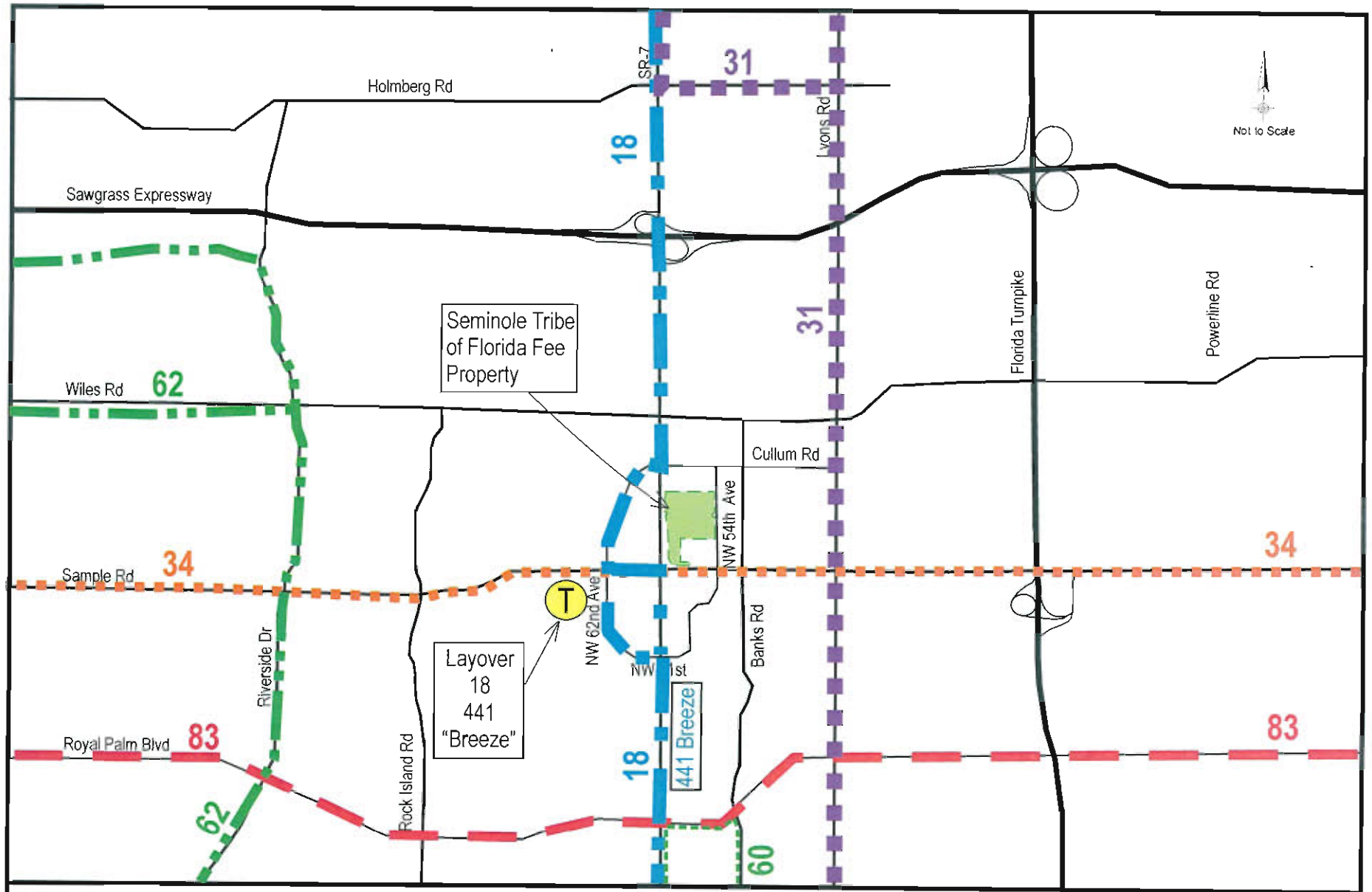
4.1.1 Broward County Transit (BCT)

Figure 4.1 illustrates the Broward County Transit (BCT) fixed bus routes serving the project area. **Appendix J** contains the current route maps and schedules. The following is a brief description of the BCT routes serving the immediate Proposed Project site area:

- **BCT Route 18** (*Golden Glades Park & Ride to Sandalfoot Cove Boulevard and Highway 441*): This route is one of Broward County's primary, high ridership routes which serves the SR 7/US 441 corridor from south Palm Beach County to northern Miami-Dade County. Within the immediate project area, this route operates along SR 7/US 441, NW 62nd Avenue, Turtle Creek Drive, and West Sample Road.

  The closest stops to the Project site are located on SR 7 and Cullum Road (approximately 3,100 feet) and on NW 62nd Avenue/Turtle Creek Drive and Sample Road (approximately 4,700 feet). The latter stops on SR 7 provide transfer connection to the City of Coconut Creek Community Bus Route "N" which directly serves the STOOF properties (see *Section 4.1.2.1*).

  Route 18 operates seven days a week. Headways are kept at 15 minutes during weekday peak hours, 20 minutes on Saturdays, and 30 minutes on Sundays. No service to Palm Beach County is provided on Sundays. During typical scheduled weekday operations, the route operates a 15-minute headway service, with every other bus run extending northward past the layover at NW 62nd Avenue/Turtle Creek Drive and Sample Road via Turtle Creek Drive and SR 7/US 441 to Palm Beach County.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Broward County Transit Routes

Figure No. 4.1

- **BCT Route 31** (*Broward Central Terminal, Broward College North Campus, and Hillsboro Boulevard and Lyons Road*). This north-south route offers service primarily along NW 31st Avenue/Lyons Road between Broward Central Terminal and Hillsboro Boulevard. Route 31 operates seven days a week with headways at 20 minutes during weekday peak hours and 45 minutes on Saturdays and Sundays.
  The closest stops to the Project site are located on Lyons Road south of Sample Road (approximately 5,300 feet).

- **BCT Route 34** (*Coral Springs, Federal Highway-Pompano Beach via West Sample Road*): This route operates along the entire length of Sample Road from Coral Springs (Coral Ridge Drive) in the west to Pompano Beach in the east (Federal Highway/US 1). Route 34 operates seven days a week with headways at 20 minutes during weekday peak hours, 40 minutes on Saturdays, and 60 minutes on Sundays.

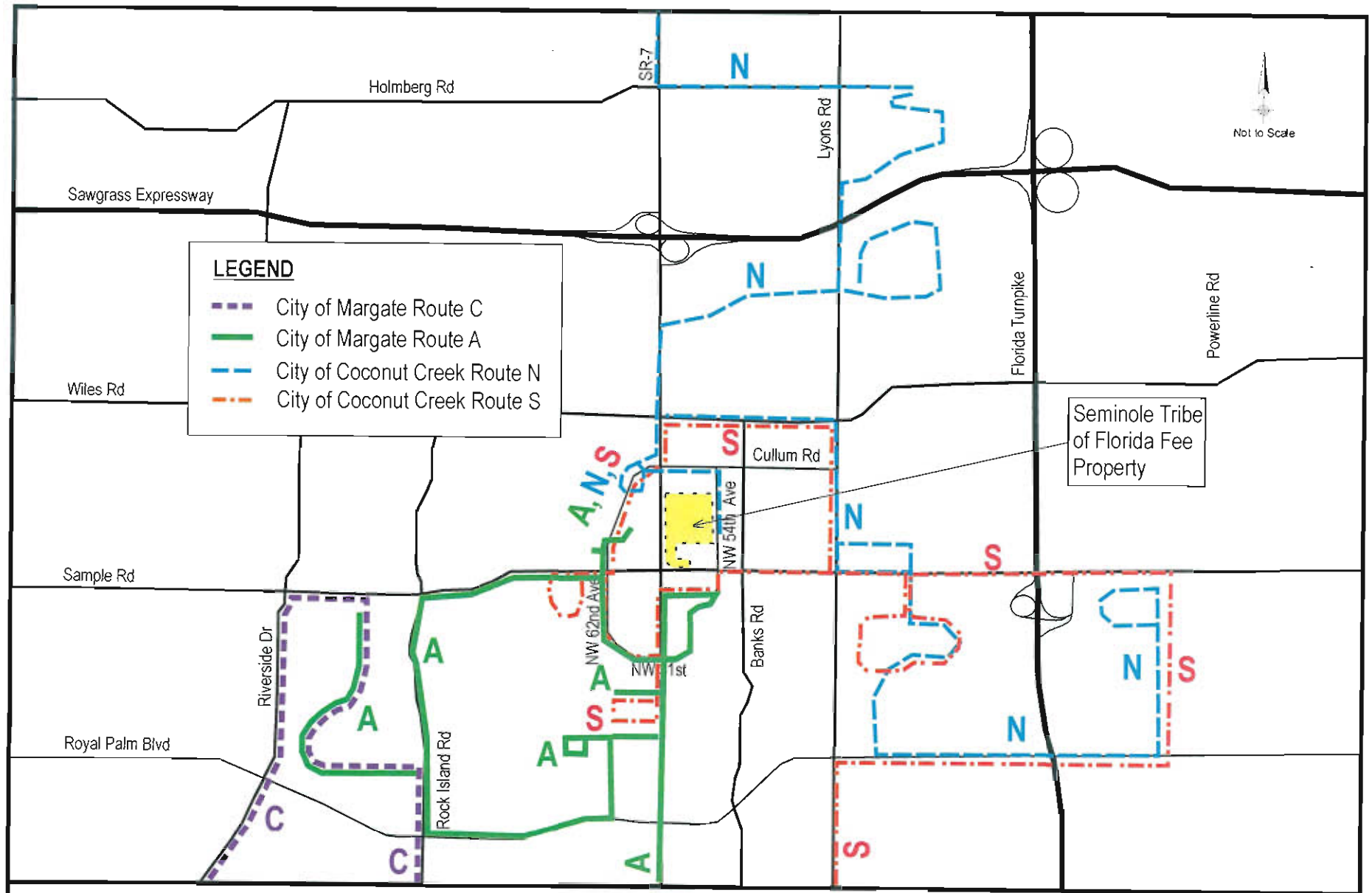
  The closest stops to the Project site are located on Sample Road west of NW 54th Avenue (approximately 1,600 feet) and on Sample Road east of NW 54th Avenue (approximately 2,100 feet).

- **BCT Route 441 Breeze** (*Sample Road – Golden Glades Park & Ride, Tri-Rail*): This route is an express service that extends from Sample Road northward along SR 7/US 441 to the Golden Glades Park-n-Ride facility in northern Miami-Dade County. The route operates during the AM and PM peak periods with 30 minute headways and has limited stops along the SR 7/US 441 corridor. Its point of origin is the bus stop/layover point at NW 62nd Avenue/Turtle Creek Drive and West Sample Road.

  The closest stops to the Project site are located on SR 7 and Cullum Road (approximately 3,100 feet) and on NW 62nd Avenue/Turtle Creek Drive and Sample Road (approximately 4,700 feet).

4.1.2 Community Bus Services

The cities of Coconut Creek and Margate, in coordination with BCT, provide local community bus services for residents. All community buses connect to BCT fixed routes and are air conditioned, wheelchair accessible, Americans with Disabilities Act (ADA) compliant, and equipped with bike racks. Since the community service buses are smaller than Broward County Transit buses, they are able to provide better access to city neighborhoods and services. **Figure 4.2** illustrates the local community bus routes serving the Proposed Project area. **Appendix J** contains the current route maps and schedules.



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study
Community Bus Service
Figure No. 4.2

4.1.2.1 City of Coconut Creek Community Bus Service[13]

The City of Coconut Creek, in coordination with BCT, operates four buses on two local circulation community bus routes for its residents. These routes are designated "N" and "S" routes. Although both routes provide service in the vicinity of the Seminole Coconut Creek site, as of April 2012, only Route "N" actually provides service to the STOF site via Cullum Road and NW 54th Avenue (see **Figure 4.2**).

The hours of service for Route "S" are from 6:30 A.M. to 6:00 P.M., Monday through Saturday, with 60-minute headways. The hours of service for Route "N" are from 7:00 A.M. to 6:00 P.M., Monday through Saturday, with 60-minute headways. The bus fare is free. No service is currently available on Sundays.

The community buses are oriented to destinations within the City with connecting stops to BCT and City of Margate Inner-City Transit. Route "N" connects with BCT's routes 14, 18, 31, 34, 83, and 441 Breeze. Route "S" connects with BCT's routes 18, 31, 34, 42, 60, 83 and 441 Breeze.

4.1.2.2 City of Margate Inner-City Transit[14]

The City of Margate, in coordination with BCT, operates three buses on a three-route, local circulation bus system (Routes A, C and D). The system's operating hours are 7:30 A.M. to 4:30 P.M. on Monday through Friday, with no weekend operations. All of the buses are oriented to major destinations within Margate with a minor extension into southeastern Coral Springs. The city bus routes also connect to BCT, City of Coconut Creek community bus services, and City of Coral Springs community bus services. Only one of the routes (Route A) provides service nearest the STOF, at the Peppertree Plaza, south of Sample Road at NW 54th Avenue.

Route A serves the Wal-Mart Center to the west of SR 7/US 441 and Peppertree Plaza immediately to the south of the area. Route C serves the Holiday Springs, Palm Lakes Plaza and Coral Square Mall (Coral Springs) areas. Route D serves the southern sectors of the city.

The system operates in conjunction with BCT's routes 18, 31, 34, 42, 60, 62, 83 and 441 Breeze. Headways are kept at 60 minutes and the fare is $0.75 per one-way trip. The City monitors ridership on the routes monthly and continuously evaluates potential methods to improve upon the service provided to not only ensure the most efficient use of City financial resources, but also to enhance the service provided by both Broward County and the City of Coconut Creek.

4.1.3 Regional Transit

BCT bus service is integrated with South Florida Regional Transportation Authority's (SFRTA) Tri-Rail service, which provides commuter rail service within the Tri-County area of Palm Beach County, Broward County, and Miami-Dade County. BCT Route 34, which primarily serves the

[13] Coconut Creek Community Bus information as of April 2012.
[14] City of Margate bus information effective August 2011.

Sample Road corridor and runs adjacent to the Proposed Project site, connects to Tri-Rail's Pompano Beach Station near Sample Road. The transit providers of both Palm Beach County (Palm-Tran) and Miami-Dade County (Miami-Dade Transit) also provide transit connections to Tri-Rail stations allowing travel among locations throughout all three counties.

BCT also provides transit service to Fort Lauderdale-Hollywood International Airport via Route 1. Route 1 primarily serves the US 1/Federal Highway corridor south of Broward Boulevard. Transfers from many bus routes to Route 1 occur at the Broward Central Terminal. Multiple routes to/from the proposed site connect to Route 1 via the Broward Central Terminal. Route 34, serving near the Proposed Project site and the Sample Road corridor, connects to Route 14 at Powerline Road. Route 14 serves the Powerline Road corridor and connects to Route 1 at the Broward Central Terminal.

4.2 Transit Ridership

4.2.1 Broward County Transit

Based upon annual route ridership data provided by BCT, BCT Route 18 ranks as the number one route of the system with respect to ridership; whereas, Routes 31 and 34 rank within the middle five of all 36 routes. Routes are ranked on a combination of several factors including: ridership, annual revenue miles, and allocated costs. The current level of BCT ridership of the routes operating in the vicinity of the Proposed Project is shown in **Table 4-1**. Specific route ridership for the STOF is not available.

Table 4-1 BCT Transit Ridership

Route	June 2009 – May 2010	June 2010 – May 2011	Percent Change
BCT 18	4,498,835	4,492,184	-0.15%
BCT 31	1,086,055	1,098,333	1.13%
BCT 34	827,882	839,200	1.37%
BCT 441 Breeze	461,348	498,514	8.06%
Total Four Routes	6,874,120	6,928,231	0.79%
Total BCT System	36,550,988	35,967,758	-1.60%
Percent Four Routes of Total System	18.81%	19.26%	

Source: Broward County Transit (BCT) FY 2012 Transit Development Plan (TDP) Annual Update, 2011

4.2.2 Community Bus Routes

Ridership information for the City of Coconut Creek and City of Margate community buses is presented in **Table 4-2**. As shown in **Table 4-2**, the Coconut Creek routes demonstrated positive growth since 2010; whereas, the Margate routes have experienced a decline in ridership.

Table 4-2 Community Bus Historical Ridership

Route	June 2009 – May 2010	June 2010 – May 2011	Percent Change
Coconut Creek Route "N"	77,247	79,150	2.46%
Coconut Creek Route "S"	61,259	80,187	30.90%
Margate Route "A"	29,077	26,451	-9.03%
Margate Route "C"	27,666	22,587	-18.36%
Total Four Routes	195,249	208,375	6.72%
Total Community Bus System	2,066,395	2,282,057	-1.60%
Percent Four Routes of Total System	9.45%	9.13%	

Source: Broward County Transit (BCT) FY 2012 Transit Development Plan (TDP) Annual Update, 2011

4.2.3 STOF Transit Ridership

A general estimate of the current and future STOF transit customers can be made assuming a two-percent (2%) share of transit trips during the PM peak hour as approved for the Commerce Center at Coconut Creek and MainStreet Coconut Creek DRI's. Based on this percent share and the STOF PM peak hour volumes as estimated in Chapter 3.0, the estimated number of PM peak hour transit trips for Phase II and projected 2020 build-outs per alternative is as follows:

Existing Phase II (2011) – 31 trips;
2020 Built-out:

Alternative A:	59 trips
Sub-Alternative A-1:	59 trips
Alternative B:	57 trips
Alternative C:	59 trips
Sub-Alternative C-1:	31 trips.

4.3 Programmed Transit Improvements

Priorities in the 2035 LRTP and the FY 2012 Transit Development Plan (TDP) are to enhance existing BCT fixed route local bus service and to identify new premium transit routes for commuter service. There are several improvements that are targeted by BCT to better serve the Proposed Project site. These projects have been identified in (1) BCT TPD, FY 2012 – 2021 and (2) Transit Element of the MPO's 2035 LRTP.

4.3.1 BCT Planned Service Implementation Program

The FY 2012 TDP Annual Update provides an update on BCT's implementation progress for FY 2011 (10/1/10 – 9/30/11), what is planned to be implemented in FY 2012 (10/01/11 – 9/30/12) and what is planned for the new tenth year of FY 2021. The accomplishments realized for FY 2011 that served the STOF study area included;

- Service: Implementation of a 20-minute AM and PM Peak service (previously 30-minutes) on Route 34, providing more service to and/from Tri-Rail Station and other destinations; and
- Capital Projects: Several bus stop improvements on SR 7, Sample Road and Turtle Creek Drive to meet the Americans with Disabilities Act of 1990 (ADA) to provide enhanced accessibility for all pedestrians and transit users.

BCT has developed revisions to its transit service and capital programs for the coming year (FY 2012). While these changes differ slightly from the service and capital plans of the FY 2011 TDP, they ultimately reflect the original FY 2009-18 TDP's focus on transit service and capital expansion.

A review of the BCT Service Plan for FY 2012-21 revealed that there are no service plan improvements or specific capital program improvements for any of the BCT or community bus routes serving the STOF study area.

BCT is adding some revisions and recommendations for planned transit service and capital programs for the new tenth year (FY 2021). A review of the BCT Service Plan for FY 2021 shows that other than system-wide improvements such as running time adjustments, there are no changes panned to the routes serving the STOF Study area.

The BCT FY 2012 TDP Annual Update proposes a few revisions to its transit service and capital needs lists. The BCT Revised Service Needs Plan for FY 2012-21 has a number of local, rapid bus and express bus service needs. The following projects have been identified:

- FY 2017: New Rapid Bus Transit service along the SR 7 Corridor between Golden Glades and West Boca Raton, including route operational improvements to Route 18:
- FY 2019: Route 31 service frequency increases for weekday and weekend operations;
- FY 2020: Route 34 service frequency increases for weekday weekend operations.

A Gateway Hub at SR 7 and Sample Road is programmed for implementation for FY 2016-2020 (see *Section 4.3.2.3*).

The BCT has identified a number of Strategic Transit Initiatives Projects for FY 2015-21. These projects were originally developed in 2008 for the FY 2009-18 TDP as a way to strategically identify more immediate and long-term premium transit needs in an unconstrained cost environment. A review of these strategic transit initiative projects shows that the BRT Enhancements along the SR 7/US 441 Corridor between Golden Glades (Miami-Dade County) and West Boca (Palm Beach County) is programmed for FY 2018. Service along this corridor would be augmented by 21 buses and enhanced to operate Monday through Sunday with 10-minute peak frequency and 15-minute off-peak frequency.

4.3.2 LRTP Transit Enhancement Plans

4.3.2.1 Bus Rapid Transit

Bus rapid transit (BRT) is a term applied to a variety of public transportation systems using buses to provide faster, more efficient service than an ordinary bus line. Often this is achieved by making improvements to existing infrastructure, vehicles and scheduling. BRT generally operates in its own lane for a majority of its route, allowing it to travel at the same speed or faster than automobile traffic; may also receive signal priority, real time travel information, and advanced fare collection. The goal of these systems is to approach the service quality of rail transit while still enjoying the cost savings and flexibility of bus transit. BRT service is not currently provided within the study area. However, Broward County's 2035 LRTP includes the implementation and operation of a BRT route along the SR 7 Corridor, along the west boundary of the Proposed Project site.

Rapid or Fast service - an express bus that provides frequent service with limited stops and may receive signal priority - is currently provided along the SR 7 corridor up to Sample Road (BCT Route 441 – The Breeze).

4.3.2.2 Premium Transit Service

Two types of Premium Transit service were defined during the 2035 LRTP process to prioritize investments based on exhibited future demand for service–Premium High Capacity and Premium Rapid Bus. Both offer high frequencies, modern vehicles, streamlined ticketing, and passenger information services. Premium Transit investments provide a balanced approach to more widespread and timely improvements to address different levels of mobility solutions, and to enhance the supporting local bus network.

Premium High Capacity transit service includes Light Rail Transit (LRT), Streetcar, People Mover, BRT and/or Commuter Rail Transit (CRT) technologies with all or part of the alignment operating in a fixed guideway (dedicated transit lanes) requiring more costly construction of new infrastructure.

The 2035 LRTP does not include Premium High Capacity corridors adjacent to the Proposed Project site.

Premium Rapid Bus transit service with the addition of traffic signal priority, would operate high frequency service with modern, distinctive vehicles in mixed traffic, and would enhance the supporting bus network to provide connections to Premium High Capacity transit.

Some of the specific features of Premium Rapid Bus are as follows:

- Operates in mixed traffic;
- Peak/Off-peak headway is 10/15 minutes;
- Includes transit signal priority;
- Off-board fare collection system;
- Articulated low-floor transit vehicles; and
- Real-time passenger information.

The 2035 LRTP has identified two Premium Rapid Bus corridors adjacent to the Proposed Project site:

- The Sample Road Corridor between US 1 and University Drive; and
- The SR 7 corridor between the Golden Glades Park-N-Ride (Miami-Dade County) and Glades Road (Palm Beach County) – This corridor is programmed for FY 2017 in the Broward County TDP.

Both of the aforementioned systems are expected to be completed by FY 2030.

4.3.2.3 Mobility Hubs

Mobility Hubs have been identified in the 2035 LRTP as places where a majority of people would interact with the proposed multi-modal transportation system. A Mobility Hub is defined as a transit access point with frequent transit service, high development potential, and a critical point for trip generation or transfers within the transit system. These hubs are places of connection for walking, biking, park-n-ride, transit, carpooling, and, depending on the type of Mobility Hub, can also provide direct connections to concentrated activities. Three types of Mobility Hubs were developed for the 2035 LRTP: (1) Gateway Hub; (2) Anchor Hub; and (3) Community Hub.

Gateway Hubs

Gateway Hubs are defined as facilities that exhibit the following characteristics:

- Projected high forecast boarding and alighting (greater than 2,200) within the future 2035 transit network;
- Surrounded by higher density mixed use developments including downtown areas or special developments such as the proposed Main Street Project adjacent to the Proposed Project site;

- Located along designated transit oriented corridors (TOCs) and transit oriented developments (TODs) defined in the Broward County Future Land Use Plan; and
- Provide connections for two or more high capacity (BRT, Rail) lines.

The 2035 LRTP has identified the intersection of Sample Road and SR 7 as one of the 2035 Cost Feasible Gateway Mobility Hubs. This Hub will serve the proposed SR 7 and Sample Road High Capacity Transit lines. The Hub is programmed for implementation for FY 2016-2020.

Community Hubs

Community Hubs are defined as facilities that exhibit the following characteristics:

- Area served by Rapid Bus services; and
- Attract more local trips than regional trips.

The 2035 LRTP has identified the intersections of (1) SR 7 and Wiles Road and (2) Sample Road and Lyons Road as two of the 2035 Cost Feasible Community Hubs. These Hubs will serve the proposed SR 7 and Sample Road High Capacity Transit lines, respectively. Both of these Community Hubs are programmed for construction in FY 2014-2015.

Anchor Hubs

The 2035 LRTP does not identify any Anchor Mobility Hub within the general vicinity of the Proposed Project site.

4.4 Proposed Seminole Coconut Creek Transportation Center

As part of its on-going development (Phase II), the STOF recently completed the construction of a new 7-level, 2,400-plus space parking garage. This garage, which is positioned off existing trust property but adjacent to the existing casino facilities, includes a valet service area and an internal transportation hub. The transportation hub is able to accommodate private touring buses. This facility may have the potential to facilitate future public transit service vehicles as the need and capacity arises.

At the present time, there are no proposed BCT or local transit service changes that may take advantage of the garage facilities; although, the City of Coconut Creek recently reconfigured its Route "N" Community Bus route to service the STOF as part of its overall route service. Future assessment of the transit services and needs may provide the justification for the BCT and the Cities of Margate, Coconut Creek, and Coral Springs to expand services to the Proposed Project site.

Previous consultation with BCT representatives indicated no immediate need to reroute the current BCT routes onto the STOF site (including its garage) or its immediate vicinity. The major concern was the increase in travel time off the main route corridors (SR 7 and Sample Road), resulting in the need for additional buses and personnel, requiring an increase in operating

budget. This concern is understandable given the current local and regional economic conditions. Nonetheless, as the process for the implementation of the mobility hubs and the BRT corridor advances, the STOF garage or other adjacent property, may be reassessed as one of the elements for a Gateway Hub and/or for the regional and local transit service improvements.

All of the Proposed Project alternatives, except Sub-Alternative C-1, can be expected to increase trips, both vehicular and transit, to the Proposed Project site. However, the STOF has and can continue to operate without any direct transit services which may or may not require major changes in BCT and local Community Bus services. Whereas changes in the BCT route operations can be very costly, more modest changes in the community or local neighborhood services, connecting to the mainline BCT services and future mobility hubs, can be more cost effective and amenable to the varying current and future needs.

4.5 Other Multimodal Information

4.5.1 High-Occupancy Vehicle Lanes

High-Occupancy Vehicle (HOV) lanes are not currently provided on any of the corridors adjacent to or near the Proposed Project site. However, HOV facilities are provided on Interstate 95 east of the Proposed Project site with interchanges at Sample Road and SW 10th Street to the north.

4.5.2 Rail Transit service

There is no Heavy Rail service provided within or adjacent the Proposed Project site. However, a Tri-Rail Station is located on Sample Road approximately 4-miles to the east of the Proposed Project site. This station, Pompano Beach Station, can be accessed via BCT Route 34 from the Proposed Project site.

4.5.3 Multi-Use Trails

According to Broward County's Greenway System information, no major multi-use trails exist within the vicinity of the Proposed Project site. However, both the 2035 LRTP and the Broward County Conceptual Greenways Master Plan include the Creek/Springs FPL Right-of-Way (ROW) Trail that will extend along the north boundary of the Proposed Project site between SR 7 and Lyons Road. Other Greenways in the general vicinity of the Proposed Project site are, Rock Island FPL ROW Trail, Turnpike Greenway, and the Riverside Drive Canal Trail.

4.5.4 Bicycle Lanes

Several roadways within the study area have bicycle facilities. Facilities range from marked bike lanes to wide curb shoulders. The following facilities were noted:

Marked Bicycle Lane

- Wiles Road from SR 7 to Florida's Turnpike;
- Sample Road from University Drive to Rock Island Road;
- Powerline Road from Coconut Creek Parkway to SW 10th Street;
- Blount Road from Copans Road to Sample Road; and
- Hillsboro Boulevard from State Road 7 to Powerline Road.

Paved Shoulders

- Sample Road from Lyons Road to Florida's Turnpike; and
- NW 31st Avenue from Atlantic Boulevard to Coconut Creek Parkway.

Non-Standard (3-foot) designated Bicycle Lane

- Powerline Road from Atlantic Boulevard to Coconut Creek Parkway

Wide Curb Lane

- State Road 7 from Sample Road to Wiles Road;
- Sample Road from State Road 7 to Lyons Road; and
- Riverside Drive from Sample Road to Wiles Road.

The 2035 LRTP has identified a number of cost feasible bicycle projects within the general area of the Proposed Project site (2021-2025). These include:

- Wiles Road between Rock Island Road and SR 7;
- Wiles Road between Lyons Road and Florida's Turnpike;
- Lyons Road between the Sawgrass Expressway and Copans Road;
- Banks Road between Sample Road and Copans Road; and
- SR 7 between Sample Road and Copans Road.

4.5.5 Sidewalks/Pedestrian Facilities

All of the major roadways, including NW 54th Avenue and Cullum Road have sidewalks and pedestrian crossing facilities, where warranted. The applicable design and construction standards for both FDOT and Broward County were the basis of the design and construction of these sidewalks in the area.

The 2035 LRTP has identified a number of cost feasible sidewalk projects within the general area of the Proposed Project site (FY 2021-2025). These include:

- SR 7 between NW 40th Street Connector and Cullum Road; and
- West Sample Road between Turtle Creek Drive and Lyons Road.

5.0 EXISTING TRAFFIC CONDITIONS ANALYSIS

The Existing (2011) year traffic analysis consisted of collecting traffic counts, adjusting them for peak season conditions and for heavy vehicle composition. Existing geometric conditions were also collected based on field observations. The existing (2011) intersection geometries for each intersection in the final study area are represented in **Figure 5.1**.

5.1 Existing Static Link Analysis

Static link analysis consists of comparing existing (2011) year AADT and PM peak hour (adjusted to peak season) directional roadway volumes to FDOT generalized LOS tables. Existing (2011) year AADT corresponding LOS for the roadway segments within the final study area are summarized in **Table H-2** located in **Appendix H**. The roadways operating below the adopted LOS "D" on a daily basis are:

- Sample Road between SR 7 and NW 54th Avenue (LOS E);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Existing (2011) year PM peak hour corresponding LOS for the roadway segments within the final study area are summarized in **Table H-2** located in **Appendix H** and illustrated in **Figure 5.2**. The roadways operating below the adopted LOS "D" in the PM peak hour are:

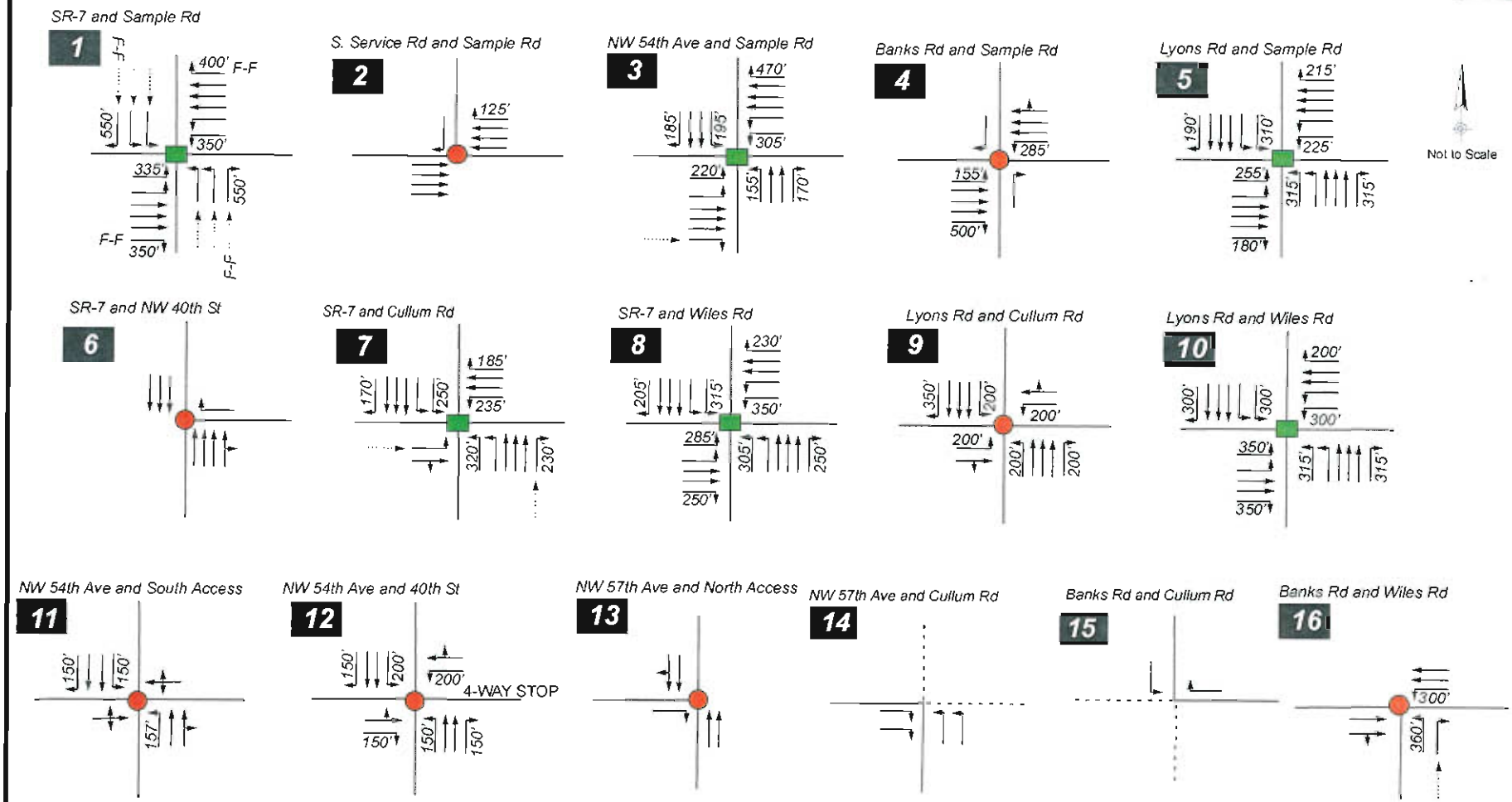
- Sample Road between NW 54th Avenue and Banks Road (LOS E); and
- Sample Road between Banks Road and Lyons Road (LOS E).

5.2 Existing Intersection Analysis

The intersection analysis was performed using SYNCHRO HCM module for signalized and HCS for un-signalized intersections. The analysis also accounted for truck percentages as previously discussed. The existing (2011) year PM peak hour intersection analysis results are summarized in **Table 5-1** and graphically represented in **Figure 5.3.** The SYNCHRO HCM module and HCS output sheets are located in **Appendix I**. The maximum LOS "D" threshold for signalized and un-signalized intersections are 55.0 seconds per vehicle and 35 seconds per vehicle, respectively, consistent with the *2000 Highway Capacity Manual.*

The operational analysis identified the following intersections to have delays at LOS E or F during the PM peak hour:

- Sample Road and Lyons Road (79.2 seconds/vehicle) – LOS E (signalized);
- SR 7 and Wiles Road (72.0 seconds/vehicle) – LOS E (signalized); and
- Lyons Road and Wiles Road (76.6 seconds/vehicle) – LOS E (signalized).



NOTE: Intersections Nos.14 (NW 54th Avenue/Cullum Road) and 15 (Banks Road /Cullum Road) are incomplete intersections at present time

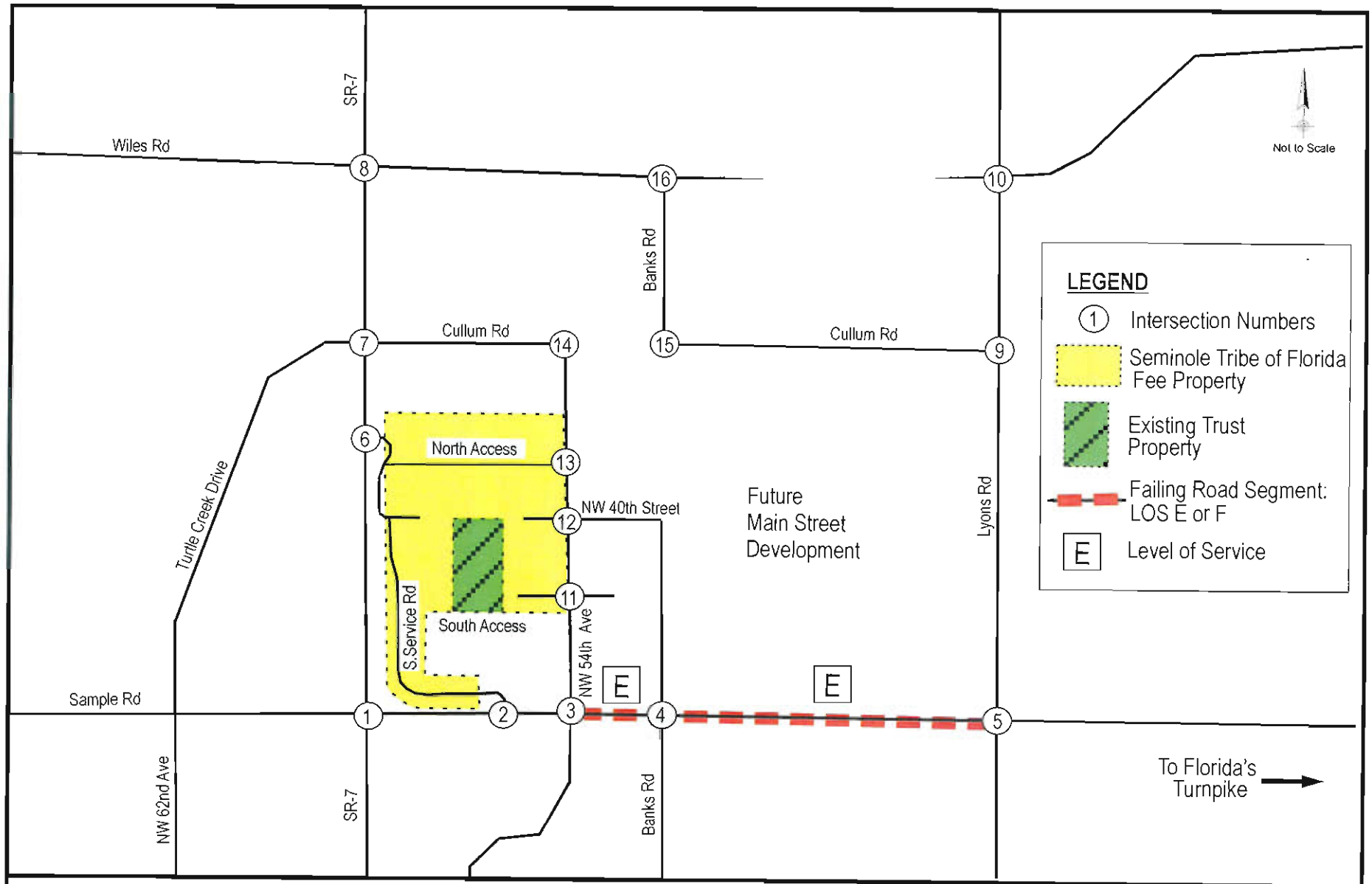
LEGEND
- Signalized Intersection
- Unsignalized Intersection
- Through lane drops as a turn lane
- 150' Turn Lane Storage length in feet

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing Intersection Geometry

Figure No. 5.1



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

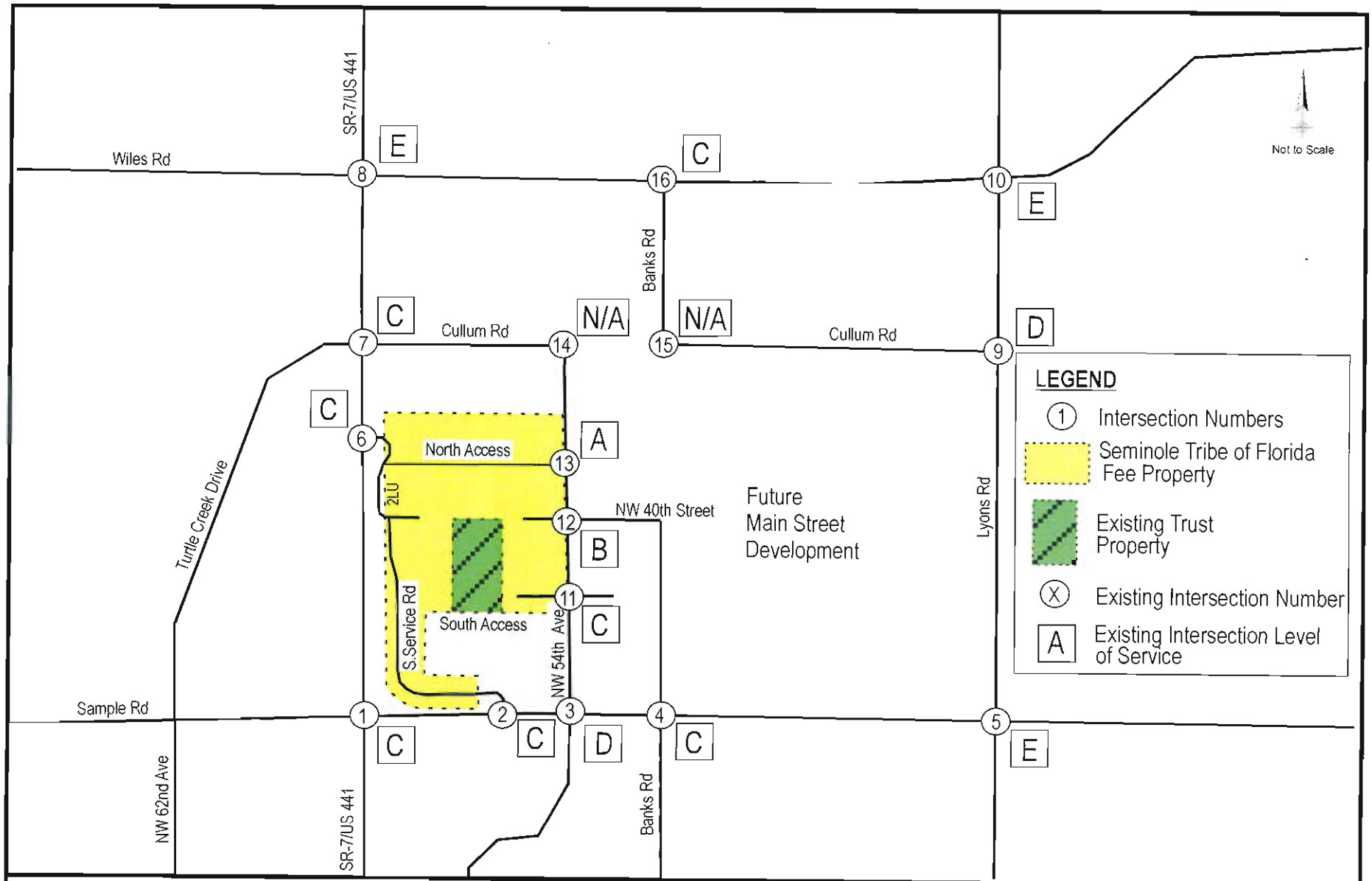
Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing 2011 PM Peak Hour Failing Roadways

Figure No. 5.2

Table 5-1 Existing 2011 Intersection LOS

Intersection		Year 2011 Existing Conditions	
		Total Delay (sec/veh)	Level of Service (LOS)
1	Sample Rd and SR-7	Signalized	
		23.5	C
2	Sample Rd and SW Service Rd	Unsignalized	
		15.1 (SBR)	C
3	Sample Rd and NW 54th Ave	Signalized	
		38.9	D
4	Sample Rd and Banks Rd	Unsignalized	
		18.6 (NBR)	C
5	Sample Rd and Lyons	Signalized	
		79.2	E
6	SR-7 and NW 40th St	Unsignalized	
		18.3 (WBR)	C
7	SR-7 and Cullum Rd	Signalized	
		28.9	C
8	SR-7 and Wiles Rd	Signalized	
		72.0	E
9	Lyons Rd and Cullum Rd	Unsignalized	
		25.5 (WBL)	D
10	Lyons Rd and Wiles Rd	Signalized	
		76.6	E
11	NW 54th Ave and South Access	Unsignalized	
		16.9 (WBLTR)	C
12	NW 54th Ave and NW 40th St	Unsignalized (4-Way Stop)	
		12.4	B
13	NW 54th Ave and North Access	Unsignalized	
		9.9 (EBR)	A
14	NW 54th Ave and Cullum Rd (1)	N/A	N/A
15	Banks Rd and Cullum Rd (1)	N/A	N/A
16	Banks Rd and Wiles Rd	Unsignalized	
		20.5 NB Approach	C



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

Existing 2011 PM Peak Hour Intersection Level of Service

Figure No. 5.3

6.0 BACKGROUND TRAFFIC CONDITIONS ANALYSIS

The Phase III (2015), Phase IV (2018), Build-out (2020), and Cumulative (2035) background traffic analysis for all of the alternatives consisted of both link and intersection analyses. There are different background volumes per alternative due to Tract 65 (existing federal land) having different land use intensities during the phased development periods and differing access patterns as previously described in Chapter 2. Background geometric conditions for each intersection in the final study area are represented in **Figures 6.1** (Alternatives A and C and Sub-Alternative A-1), **Figure 6.2** (Alternative B), and **Figure 6.3** (Sub-Alternative C-1).

6.1 Background Static Link Analysis

Static link analysis consists of comparing the Phase III, Phase IV, Build-out (2020) and Cumulative (2035) background year PM peak hour directional roadway volumes to FDOT generalized LOS tables. The PM peak hour Phase III, Phase IV, Build-out (2020) and Cumulative (2035) year corresponding background LOS for the roadway segments within the final study area are summarized in **Appendix H**. The roadways operating below the adopted LOS "D" in the PM peak hour are:

<u>Phase III - 2015</u>

Alternatives A and C and Sub-Alternative A-1 (See **Table H-3** and **Figure 6.4**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Alternative B (See **Table H-11** and **Figure 6.4**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

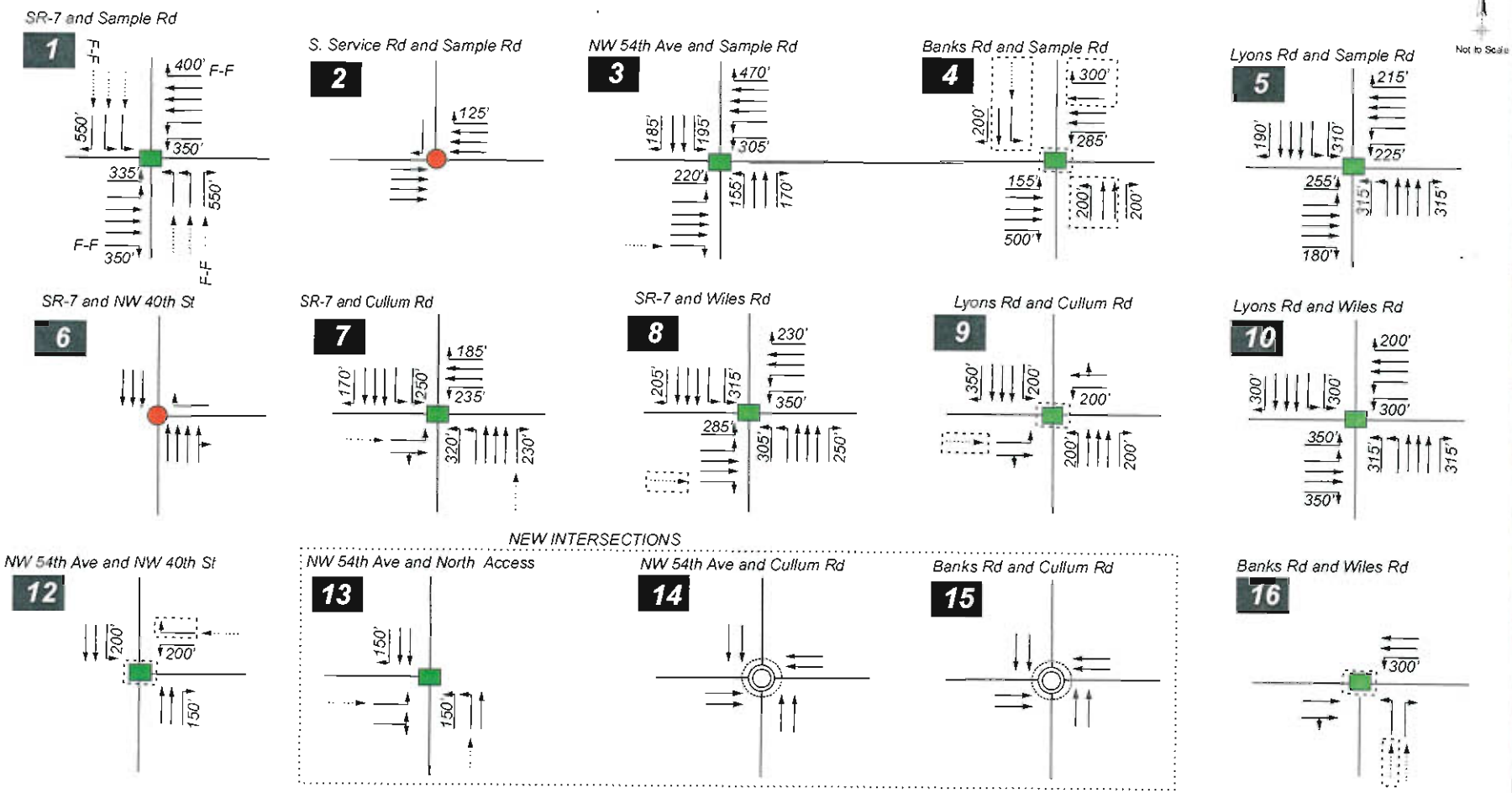
Sub-Alternative C-1 (See **Table H-19** and **Figure 6.4**)

- Sample Road between SR 7 and NW 54th Avenue (LOS E);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

<u>Phase IV - 2018</u>

Alternatives A and C and Sub-Alternative A-1 (See **Table H-4** and **Figure 6.5**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).



NOTE: Intersection No.11 (NW 54th Avenue and South Access) is not applicable to these Alternatives.

LEGEND

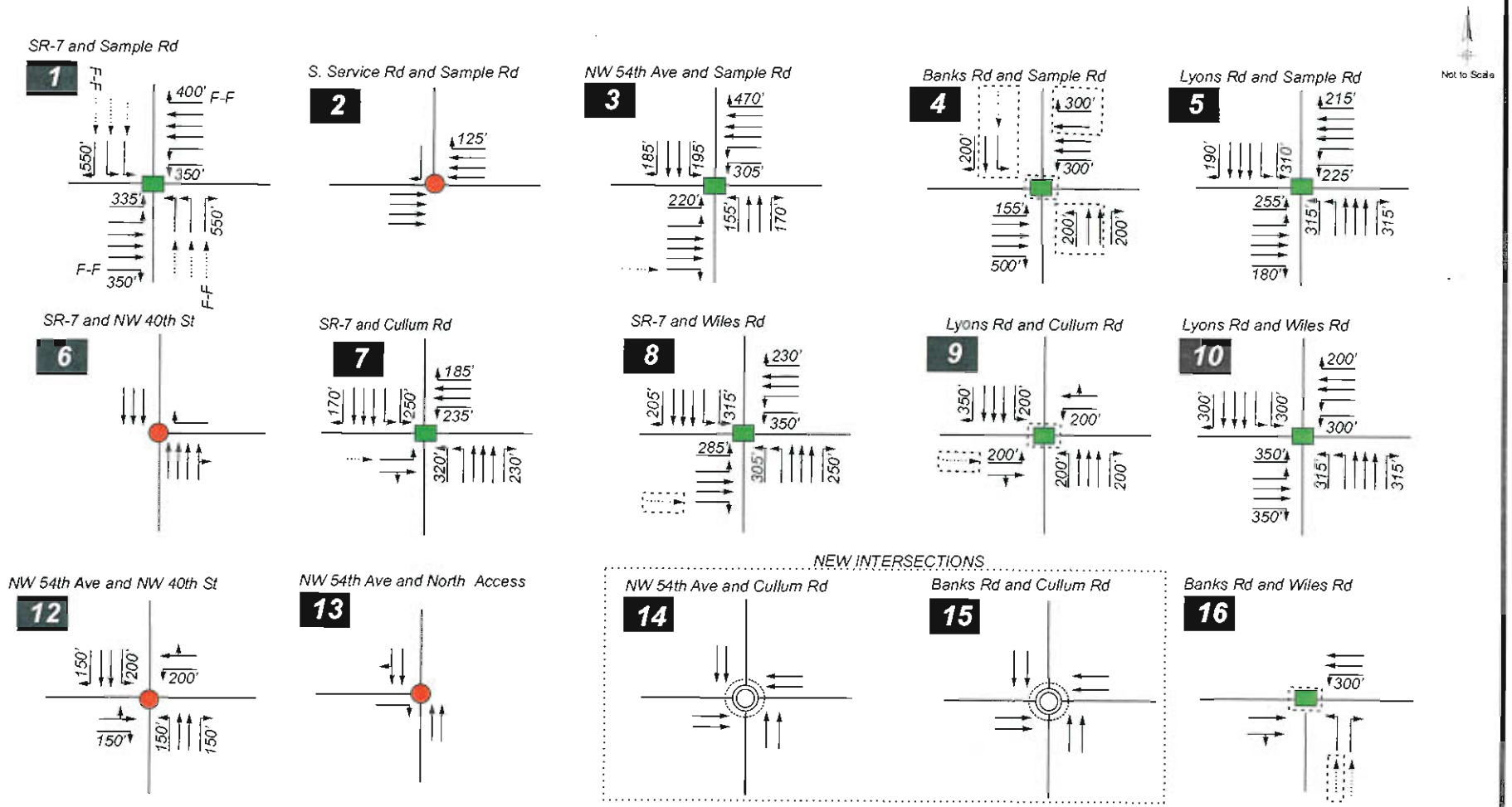
- Signalized Intersection
- Unsignalized Intersection
- Through lane drops as a turn lane
- 150' Turn Lane Storage length in feet
- New Signalized Intersection
- Committed/Programmed Improvement
- Two Lane Roundabout

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 and 2035 Background Intersection Geometry
Alternatives A and C and Sub-Alternative A-1

Figure No. 6.1



NOTE: Intersection No.11 (NW 54th Avenue and South Access) is not applicable to this Alternative.

LEGEND

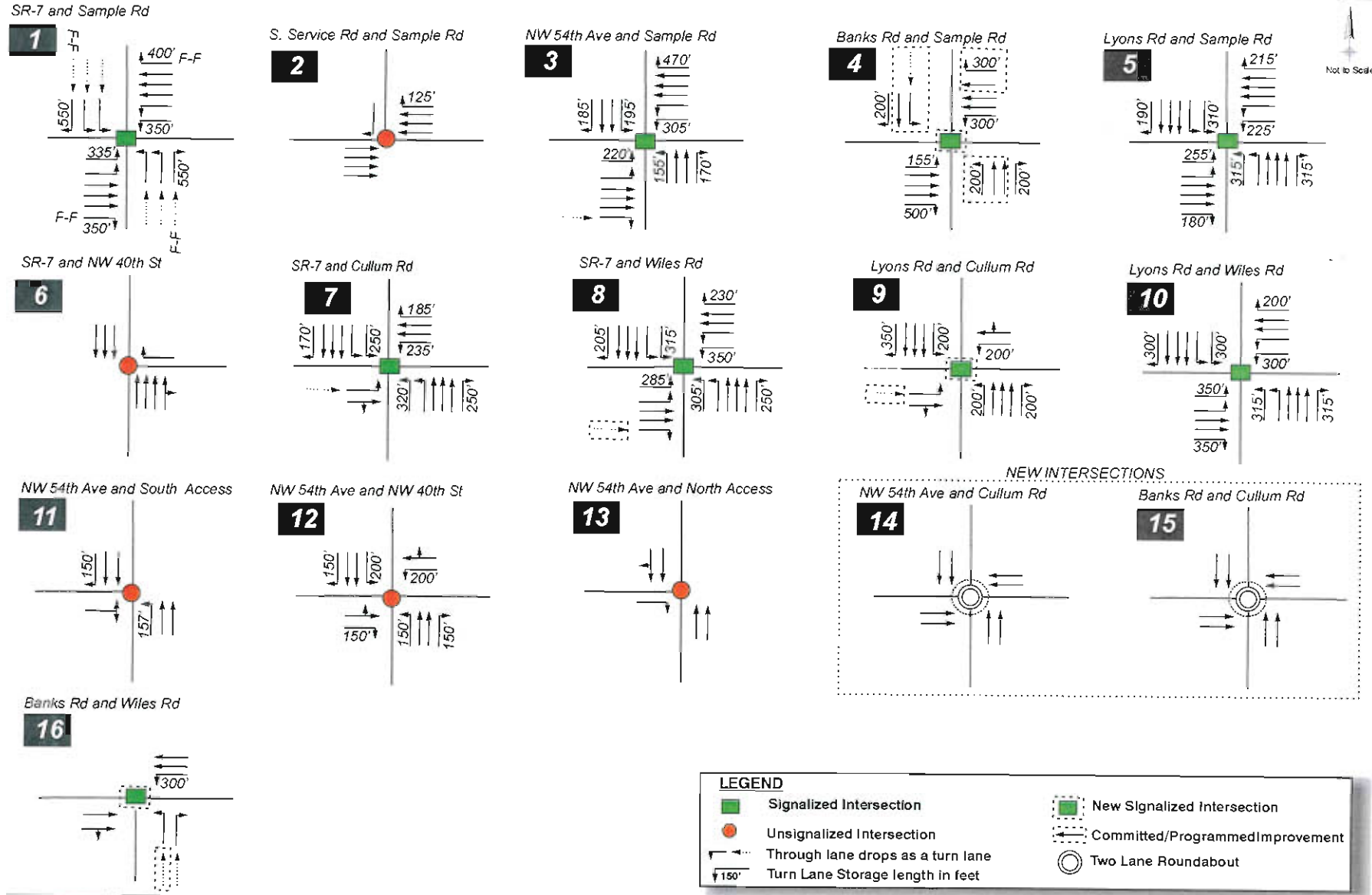
- Signalized Intersection
- Unsignalized Intersection
- Through lane drops as a turn lane
- 150' Turn Lane Storage length in feet
- New Signalized Intersection
- Committed/ProgrammedImprovement
- Two Lane Roundabout

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

2020 and 2035 Background Intersection Geometry - Alternative B

Figure No. 6.2

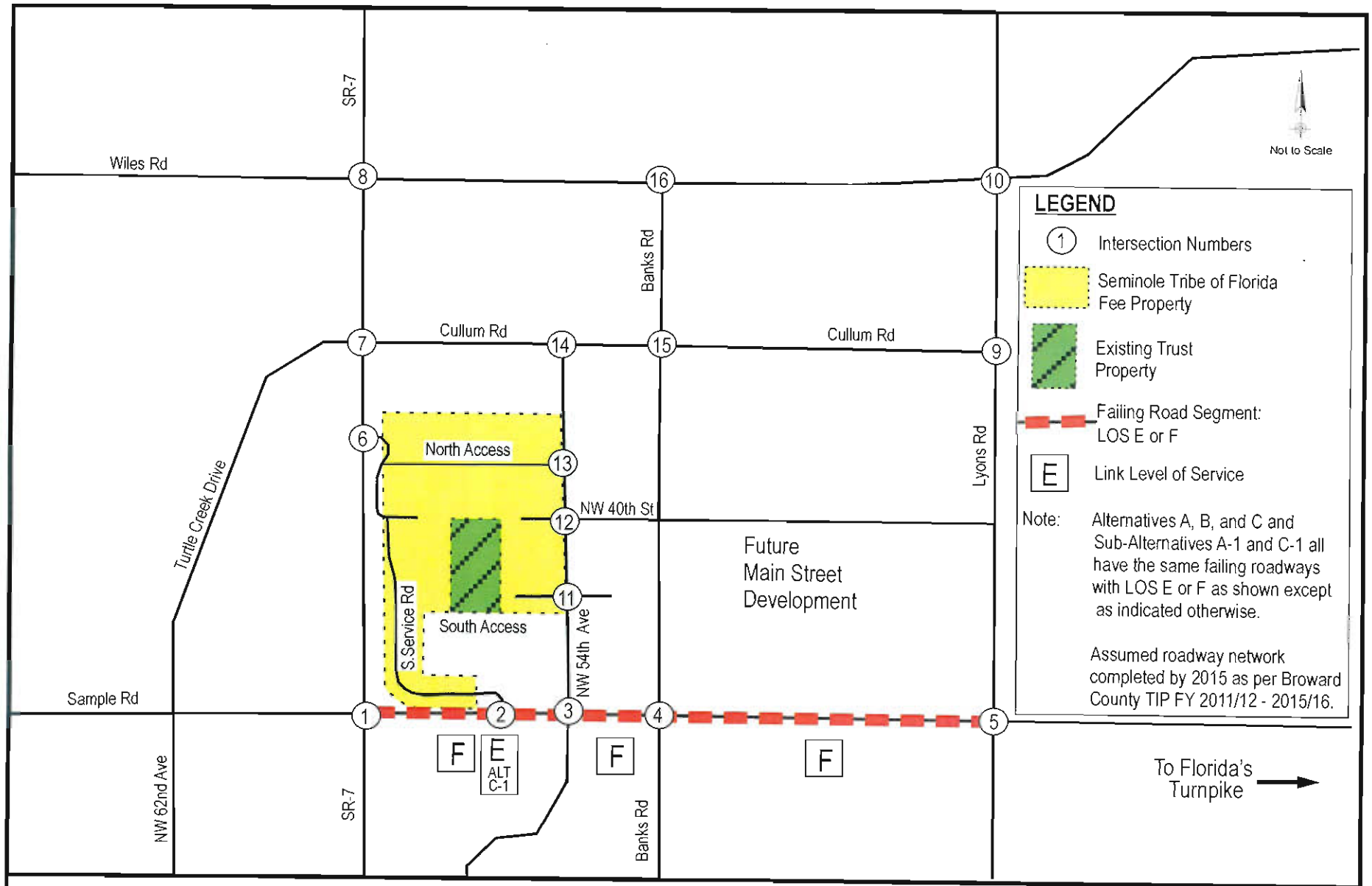


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

2020 and 2035 Background Intersection Geometry - Sub-Alternative C-1

Figure No. 6.3

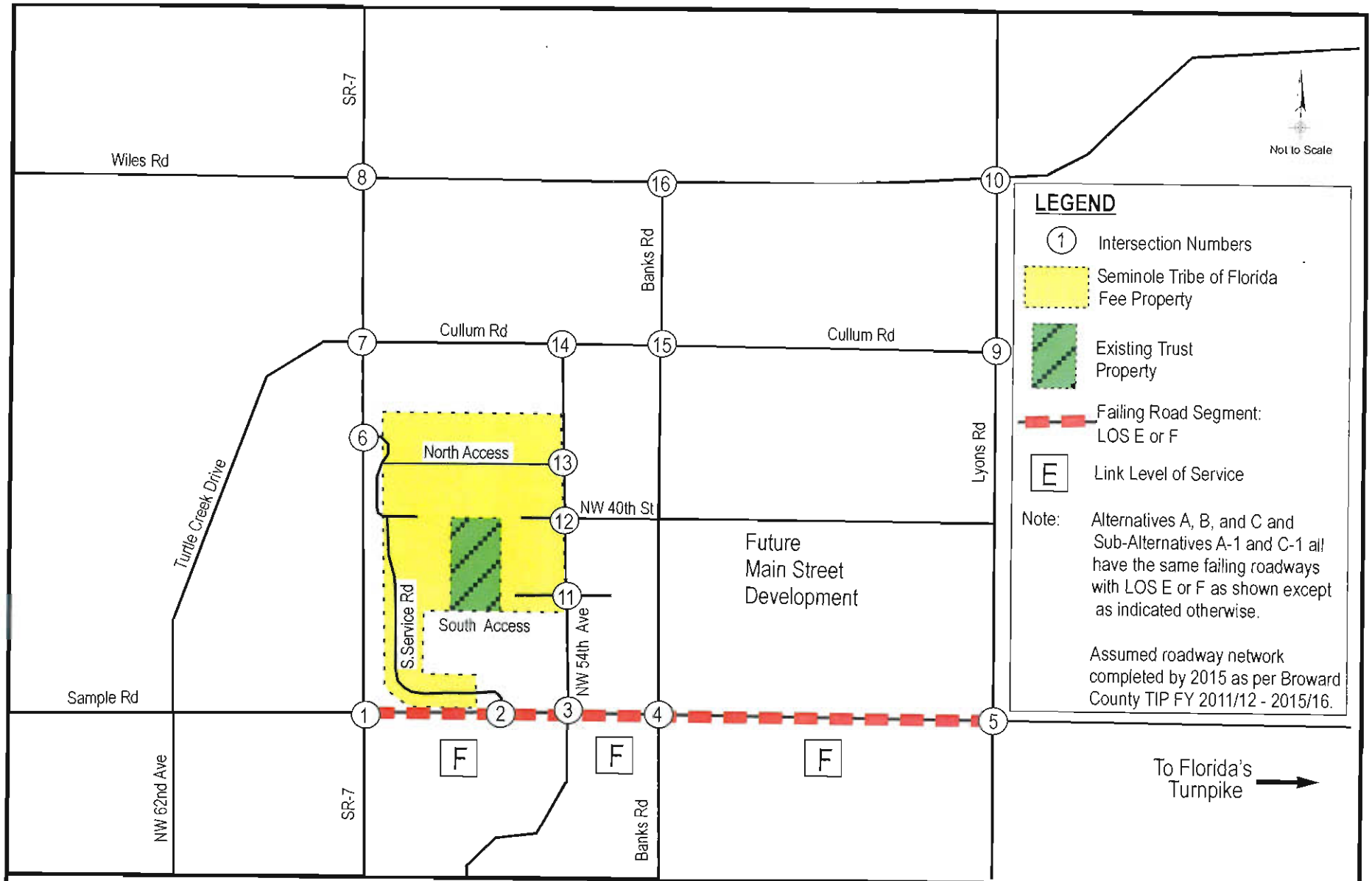


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase III, 2015 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1

Figure No. 6.4



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase IV 2018 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1

Figure No. 6.5

Alternative B (See **Table H-12** and **Figure 6.5**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Sub-Alternative C-1 (See **Table H-20** and **Figure 6.5**)

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Build-out 2020

Alternatives A and C and Sub-Alternative A-1 (See **Table H-5** and **Figure 6.6**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Alternative B (See **Table H-13** and **Figure 6.6**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

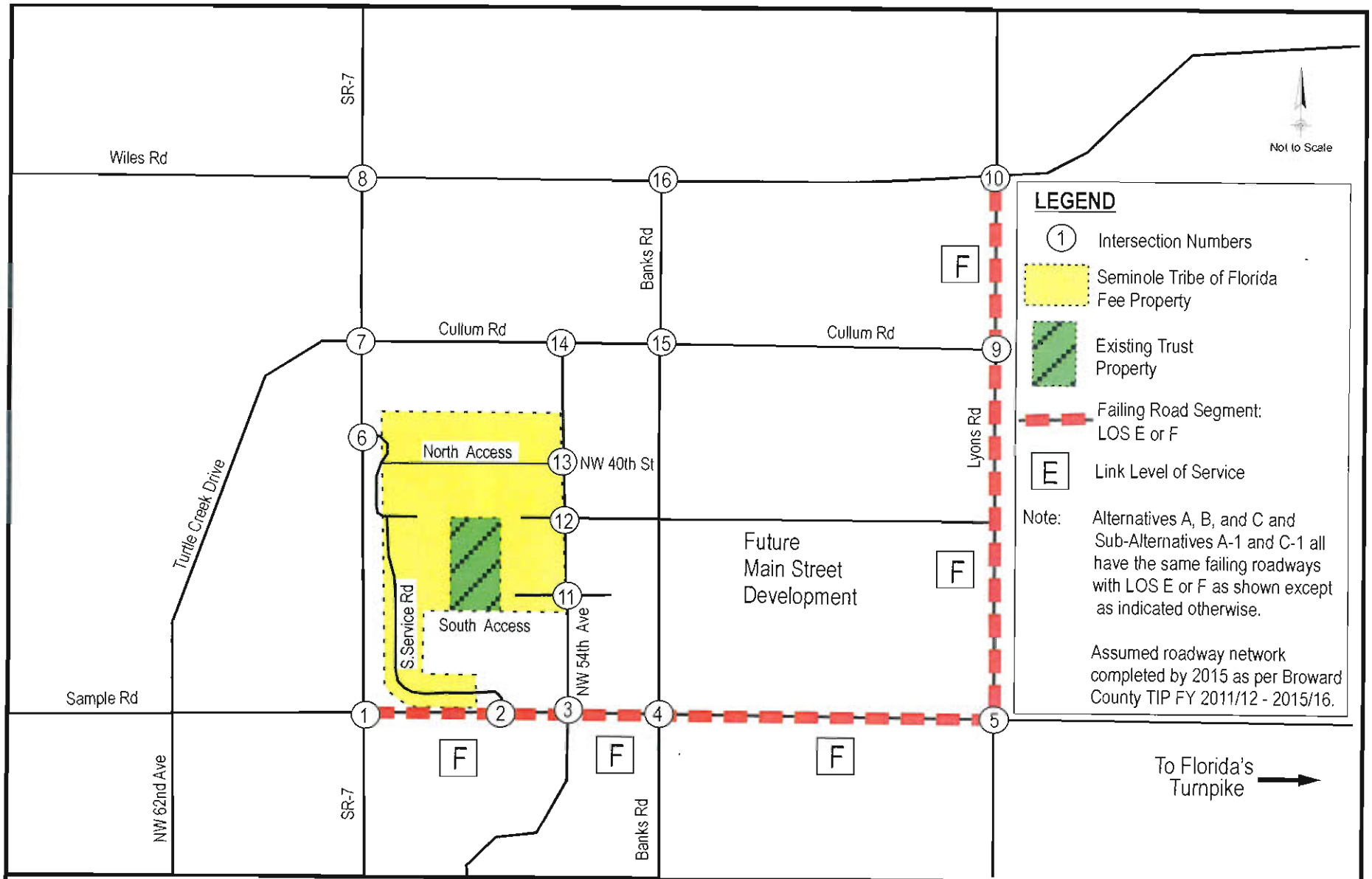
Alternative C-1 (See **Table H-21** and **Figure 6.6**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Cumulative 2035

Alternatives A and C and Sub-Alternative A-1 (See **Table H-6** and **Figure 6.7**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between SR 7 and Banks Road (LOS F)
- Wiles Road between Banks Road and Lyons Road (LOS F);
- SR 7 between Sample Road and NW 40th Street (LOS E);
- SR 7 between NW 40th Street and Cullum Road (LOS F);
- SR 7 between Cullum Road and Wiles Road (LOS E);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

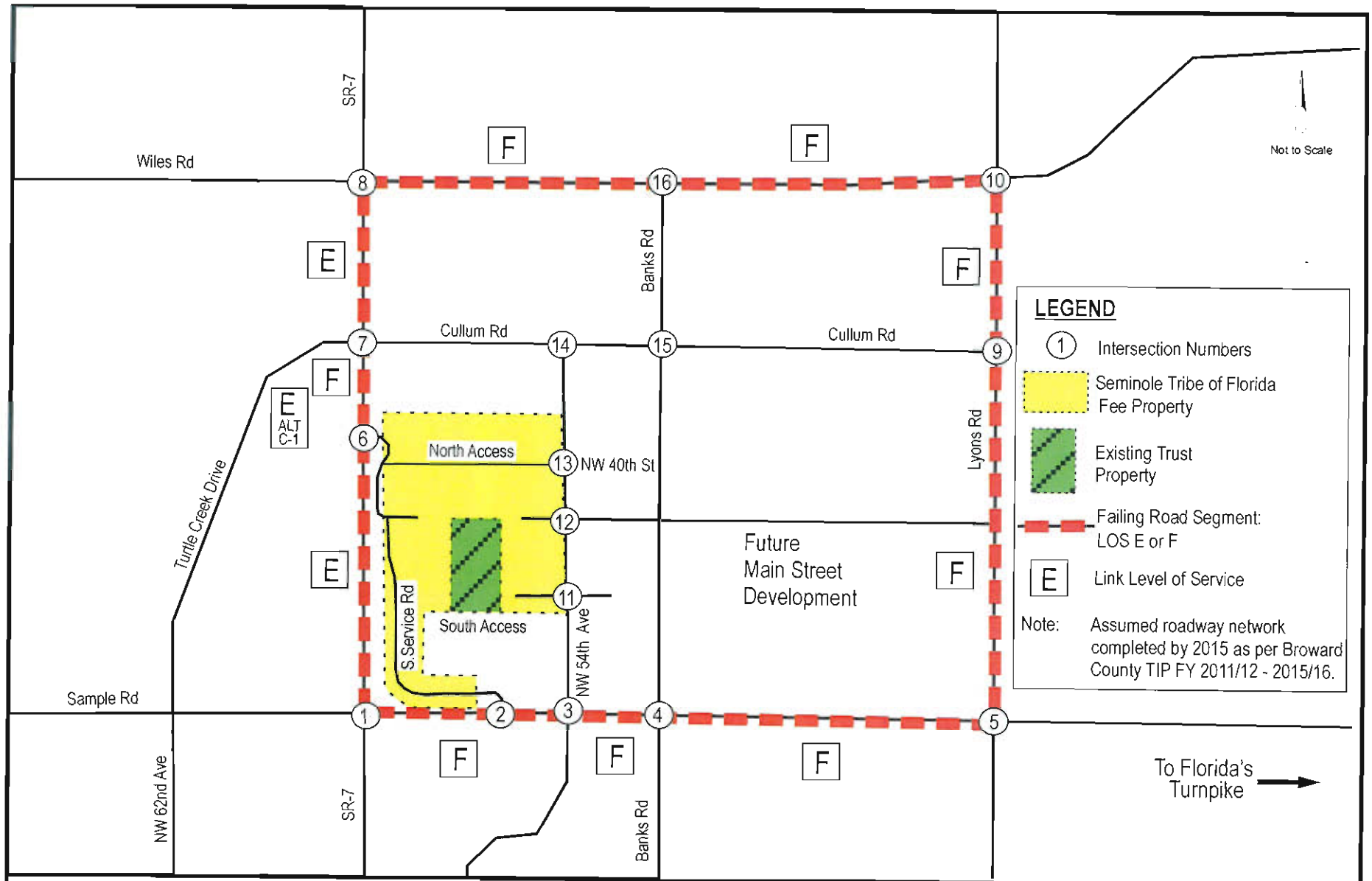


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Short-term 2020 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1

Figure No. 6.6



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Long-term 2035 PM Peak Hour Background Failing Roadways, Alternatives A, B and C and Sub-Alternatives A-1 and C-1

Figure No. 6.7

Alternative B (See **Table H-14** and **Figure 6.7**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between SR 7 and Banks Road (LOS F)
- Wiles Road between Banks Road and Lyons Road (LOS F);
- SR 7 between Sample Road and NW 40th Street (LOS E);
- SR 7 between NW 40th Street and Cullum Road (LOS F);
- SR 7 between Cullum Road and Wiles Road (LOS E);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Alternative C-1 (See **Table H-22** and **Figure 6.7**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between SR 7 and Banks Road (LOS F)
- Wiles Road between Banks Road and Lyons Road (LOS F);
- SR 7 between Sample Road and NW 40th Street (LOS E);
- SR 7 between NW 40th Street and Cullum Road (LOS E);
- SR 7 between Cullum Road and Wiles Road (LOS E);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

6.2 Background Intersection Analysis

The intersection analysis for Alternatives A and C and Sub-Alternative A-1 (Phases III and IV, Build-out (2020), and Cumulative (2035)) was performed using the SYNCHRO HCM module for signalized intersections and HCS for un-signalized intersections. The analysis also accounted for truck percentages as previously discussed. The SYNCHRO HCM module and HCS output sheets are presented in **Appendix K**.

The maximum LOS "D" average delay threshold for signalized and un-signalized intersections are 55.0 seconds per vehicle and 35 seconds per vehicle, respectively, consistent with the *2000 Highway Capacity Manual*. The FDOT has not yet adopted the new *2010 Highway Capacity Manual*; which is anticipated by 2012. The operational analysis identified the intersections where delays are equivalent to LOS E or F during the PM peak hour.

The PM peak hour Phase III (2015), Phase IV (2018), Build-out (2020) and Cumulative (2035) background intersection analysis results for Alternatives A and C and Sub-Alternative A-1 are summarized in **Table 6-1.** The PM peak hour Build-out (2020) and Cumulative (2035) background intersection analysis results for Alternative B and Sub-Alternative C-1 are summarized in **Tables 6-2** and **6-3**, respectively.

Table 6-1 2015, 2018, 2020 and 2035 Background Traffic Intersection Level of Service Alternatives A and C and Sub-Alternative A-1

Intersectiou	Year 2015 Phase III Background Alternatives A & C & Sub-Alternative A-1		Year 2018 Phase IV Background Alternatives A & C & Sub-Alternative A-1		Year 2020 Background Alternatives A & C & Sub-Alternative A-1		Year 2035 Background Alternatives A & C & Sub-Alternative A-1	
	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Serviee LOS
1 Sample Rd and SR-7	Signalized		Signalized		Signalized		Signalized	
	26.5	C	28.0	C	29.0	C	30.1	C
2 Sample Rd and SW Service Rd	Unsignalized		Unsignalized		Unsignalized		Unsignalized	
	14.0 (SBR)	B	14.0 (SBR)	B	15.2 (SBR)	C	23.1 (SBR)	C
3 Sample Rd and NW 54th Ave	Signalized		Signalized		Signalized		Signalized	
	56.0	E	90.4	F	115.5	F	154.5	F
4 Sample Rd and Banks Rd	Signalized		Signalized		Signalized		Signalized	
	22.1	C	56.3	E	92.8	F	130.7	F
5 Sample Rd and Lyons	Signalized		Signalized		Signalized		Signalized	
	108.2	F	136.3	F	160.0	F	219.5	F
6 SR-7 and NW 40th St	Unsignalized		Unsignalized		Unsignalized		Unsignalized	
	24.9 (WBR)	C	42.7 (WBR)	E	55.9 (WBR)	F	83.4 (WBR)	F
7 SR-7 and Cullum Rd	Signalized		Signalized		Signalized		Signalized	
	39.0	D	54.4	D	76.1	E	95.6	F
8 SR-7 and Wiles Rd	Signalized		Signalized		Signalized		Signalized	
	85.5	F	101.9	F	116.1	F	172.8	F
9 Lyons Rd and Cullum Rd	Signalized		Signalized		Signalized		Signalized	
	15.8	B	19.2	B	19.6	B	18.1	B
10 Lyons Rd and Wiles Rd	Signalized		Signalized		Signalized		Signalized	
	65.3	E	81.0	F	100.0	F	150.7	F
11 NW 54th Ave and South Access	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
12 NW 54th Ave and NW 40th St	Signalized		Signalized		Signalized		Signalized	
	9.5	A	12.0	B	15.5	B	15.9	B
13 NW 54th Ave and North Access	Signalized		Signalized		Signalized		Signalized	
	21.3	C	26.0	C	27.4	C	27.4	C
14 NW 54th Ave and Cullum Rd [1]	Roundabont		Roundabout		Roundabout		Roundabout	
	0.49	A	0.72	B	1.00	D	1.00	D
15 Banks Rd and Cullum Rd [1]	Roundabout		Roundabout		Roundabout		Roundabout	
	0.23	A	0.42	A	0.62	B	0.62	B
16 Banks Rd and Wiles Rd	Signalized		Signalized		Signalized		Signalized	
	9.6	A	15.4	B	21.0	C	26.2	C

Note: Signalized intersections analyzed with SYNCHRO and unsignalized intersections analyzed with HCS.
[1] Roundabout los based on the maximum v/c (low) and intersection capacity utilization using SYNCHRO.

Table 6-2 2020 and 2035 Background Traffic Intersection Level of Service Alternative B

INTERSECTION	Year 2020 Background Alternative B		Year 2035 Background Alternative B	
	Total Delay (sec/veh)	Level of Service (LOS)	Total Delay (sec/veh)	Level of Service (LOS)
1 Sample Rd and SR-7	Signalized		Signalized	
	29.4	C	30.3	C
2 Sample Rd and SW Service Rd	Unsignalized		Unsignalized	
	15.3 (SBR)	C	26.8 (SBR)	D
3 Sample Rd and NW 54th Ave	Signalized		Signalized	
	115.1	F	159.8	F
4 Sample Rd and Banks Rd	Signalized		Signalized	
	85.3	F	125.0	F
5 Sample Rd and Lyons	Signalized		Signalized	
	160.0	F	214.8	F
6 SR-7 and NW 40th St	Unsignalized		Unsignalized	
	56.9 (WBR)	F	84.1 (WBR)	F
7 SR-7 and Cullum Rd	Signalized		Signalized	
	76.3	E	97.1	F
8 SR-7 and Wiles Rd	Signalized		Signalized	
	116.3	F	172.9	F
9 Lyons Rd and Cullum Rd	Signalized		Signalized	
	19.4	B	17.9	B
10 Lyons Rd and Wiles Rd	Signalized		151.0	
	100.2	F	150.9	F
11 NW 54th Ave and South Access	N/A	N/A	N/A	N/A
12 NW 54th Ave and NW 40th St	Signalized		Signalized	
	21.2	C	21.4	C
13 NW 54th Ave and North Access	Unsignalized		Unsignalized	
	13.4 (EBR)	B	13.4 (EBR)	B
14 NW 54th Ave and Cullum Rd [1]	Roundabout		Roundabout	
	1.00	D	1.00	D
15 Banks Rd and Cullum Rd [1]	Roundabout		Roundabout	
	0.62	B	0.62	B
16 Banks Rd and Wiles Rd	Signalized		Signalized	
	21.0	C	26.2	C

Note: Signalized intersections analyzed with SYNCHRO and unsignalized intersections analyzed with HCS.

[1] Roundabout los based on the maximum v/c (low) and intersection capacity utilization using SYNCHRO.

Table 6-3 2020 and 2035 Traffic Intersection Level of Service Sub-Alternative C-1

INTERSECTION	Year 2020 Sub-Alternative C-1		Year 2035 Sub-Alternative C-1	
	Total Delay (sec/veh)	Level of Service (LOS)	Total Delay (sec/veh)	Level of Service (LOS)
1 Sample Rd and SR-7	Signalized		Signalized	
	29.5	C	31	C
2 Sample Rd and SW Service Rd	Unsignalized		Unsignalized	
	14.5 (SBR)	B	15.1 (SBR)	C
3 Sample Rd and NW 54th Ave	Signalized		Signalized	
	76.0	E	116.4	F
4 Sample Rd and Banks Rd	Signalized		Signalized	
	80.3	F	121.6	F
5 Sample Rd and Lyons	Signalized		Signalized	
	155.3	F	204.8	F
6 SR-7 and NW 40th St	Unsignalized		Unsignalized	
	23.6 (WBR)	C	28.8 (WBR)	D
7 SR-7 and Cullum Rd	Signalized		Signalized	
	67.5	E	85.0	F
8 SR-7 and Wiles Rd	Signalized		Signalized	
	110.4	F	165.4	F
9 Lyons Rd and Cullum Rd	Signalized		Signalized	
	18.2	B	17.1	B
10 Lyons Rd and Wiles Rd	Signalized		Signalized	
	95.1	F	149.0	F
11 NW 54th Ave and South Access	Unsignalized		Unsignalized	
	10.6 (EBLR)	B	10.6 (EBLR)	B
12 NW 54th Ave and NW 40th St	Signalized		Signalized	
	17.0	B	17.1	B
13 NW 54th Ave and North Access	Unsignalized		Unsignalized	
	11.4 (EBR)	B	11.4 (EBR)	B
14 NW 54th Ave and Cullum Rd [1]	Roundabout		Roundabout	
	0.87	C	0.90	C
15 Banks Rd and Cullum Rd [1]	Roundabout		Roundabout	
	0.56	A	0.56	A
16 Banks Rd and Wiles Rd	Signalized		Signalized	
	20.0	C	24.5	C

Note: Signalized intersections analyzed with SYNCHRO and unsignalized intersections analyzed with HCS.

[1] Roundabout los based on the maximum v/c (low) and intersection capacity utilization using SYNCHRO.

The following is a summary of the intersections estimated to operate at LOS E or F:

Phase III – 2015

Alternatives A and C and Sub-Alternative A-1 (See **Table 6-1 and Figure 6.8**):

- Sample Road and NW 54th Avenue (56.0 seconds/vehicle) – LOS E;
- Sample Road and Lyons Road (108.2 seconds/vehicle – LOS F);
- SR 7 and Wiles Road (85.5 seconds/vehicle) -- LOS F (un-signalized); and
- Lyons Road and Wiles Road (65.3 seconds/vehicle) – LOS E

Phase IV – 2018

Alternatives A and C and Sub-Alternative A-1 (See **Table 6-1 and Figure 6.9**):

- Sample Road and NW 54th Avenue (90.4 seconds/vehicle) – LOS F;
- Sample Road and Banks Road (56.3 seconds/vehicle) – LOS E (signalized);
- Sample Road and Lyons Road (136.3 seconds/vehicle – LOS F);
- SR 7 and NW 40th Street (42.7 seconds/vehicle) -- LOS E (un-signalized);
- SR 7 and Wiles Road (101.5 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (81.0 seconds/vehicle) – LOS F.

Build-out 2020

Alternatives A and C and Sub-Alternative A-1 (See **Table 6-1 and Figure 6.10**):

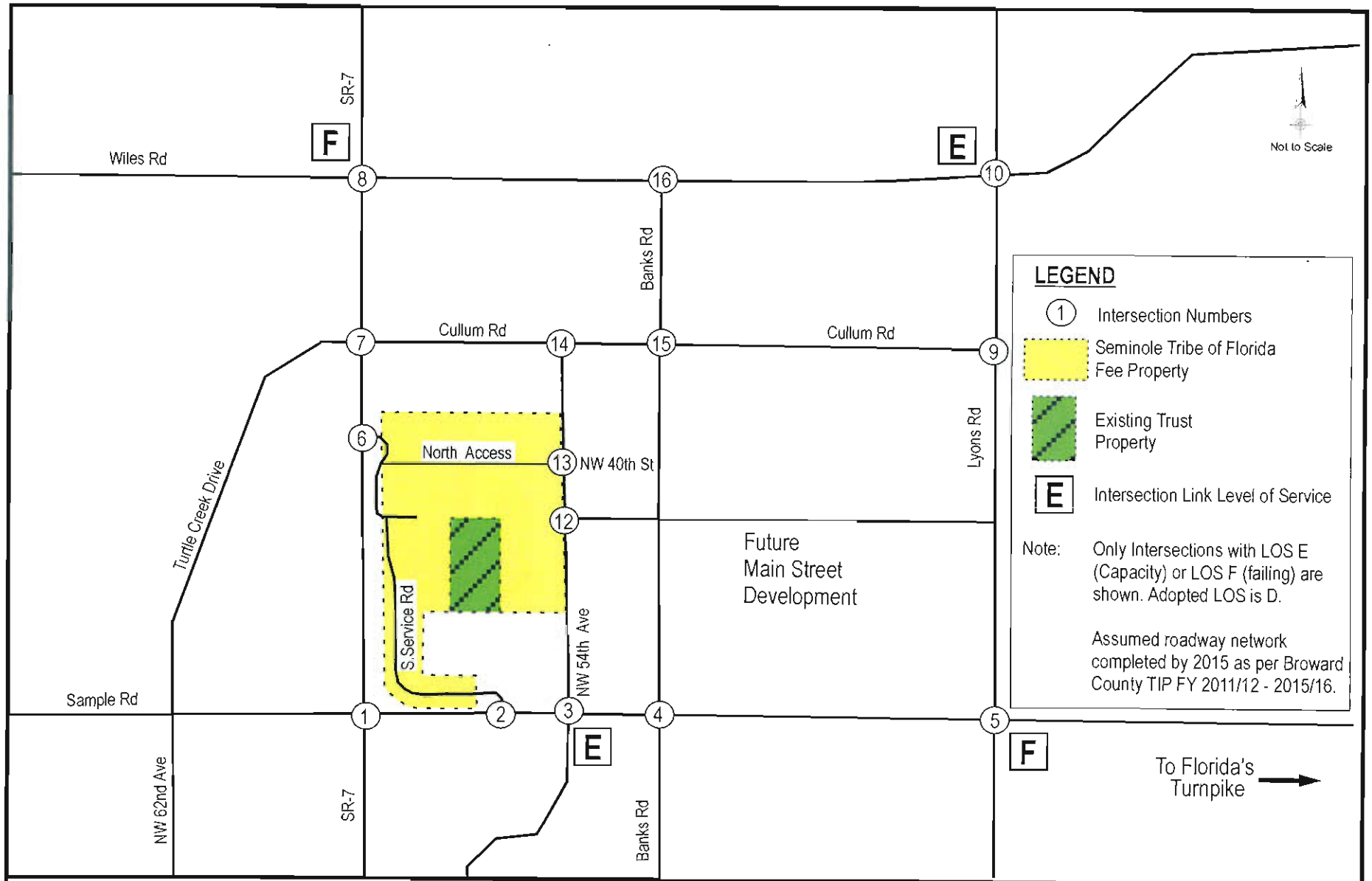
- Sample Road and NW 54th Avenue (115.1 seconds/vehicle) – LOS F;
- Sample Road and Banks Road (92.8 seconds/vehicle) – LOS F (signalized);
- Sample Road and Lyons Road (160.0 seconds/vehicle – LOS F;
- SR 7 and NW 40th Street (55.9 seconds/vehicle) -- LOS F (un-signalized);
- SR 7 and Cullum Road (76.1 seconds/vehicle) -- LOS E;
- SR 7 and Wiles Road (116.1 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (100.0 seconds/vehicle) – LOS F.

Alternative B (See **Table 6-2 and Figure 6.11**):

- Sample Road and NW 54th Avenue (115.5 seconds/vehicle) – LOS F;
- Sample Road and Banks Road (85.3 seconds/vehicle) – LOS F (signalized);
- Sample Road and Lyons Road (160.0 seconds/vehicle – LOS F;
- SR 7 and NW 40th Street (56.9 seconds/vehicle) -- LOS F (un-signalized);
- SR 7 and Cullum Road (76.3 seconds/vehicle) -- LOS E;
- SR 7 and Wiles Road (116.3 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (100.2 seconds/vehicle) – LOS F.

Alternative C-1 (See **Table 6-3 and Figure 6.12**):

- Sample Road and NW 54th Avenue (76.0 seconds/vehicle) – LOS E;
- Sample Road and Banks Road (80.3 seconds/vehicle) – LOS F (signalized);
- Sample Road and Lyons Road (155.3 seconds/vehicle – LOS F;
- SR 7 and Cullum Road (65.7 seconds/vehicle) -- LOS E;
- SR 7 and Wiles Road (110.4 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (95.1 seconds/vehicle) – LOS F.

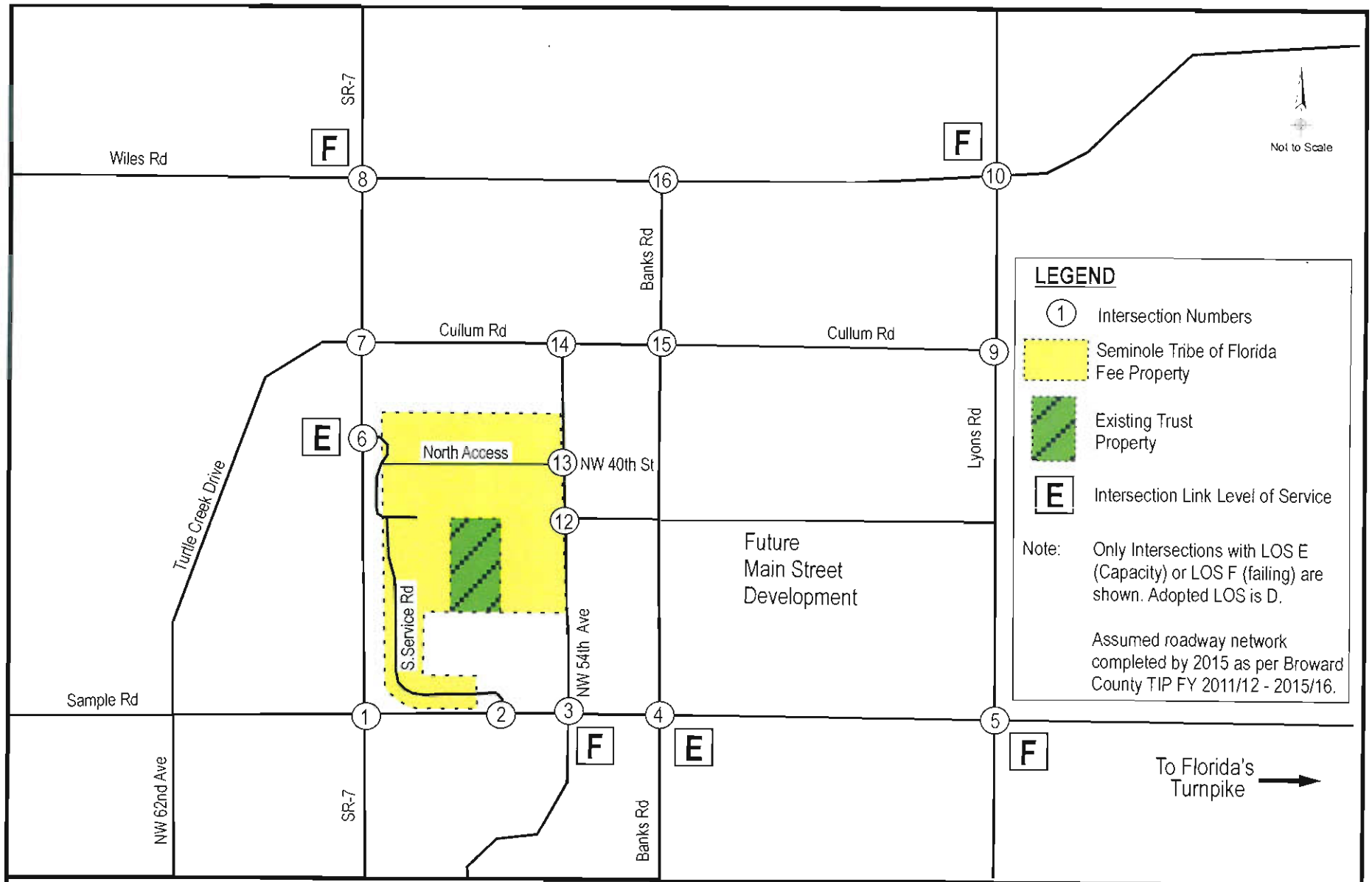


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave.• Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase III 2015 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1

Figure No. 6.8

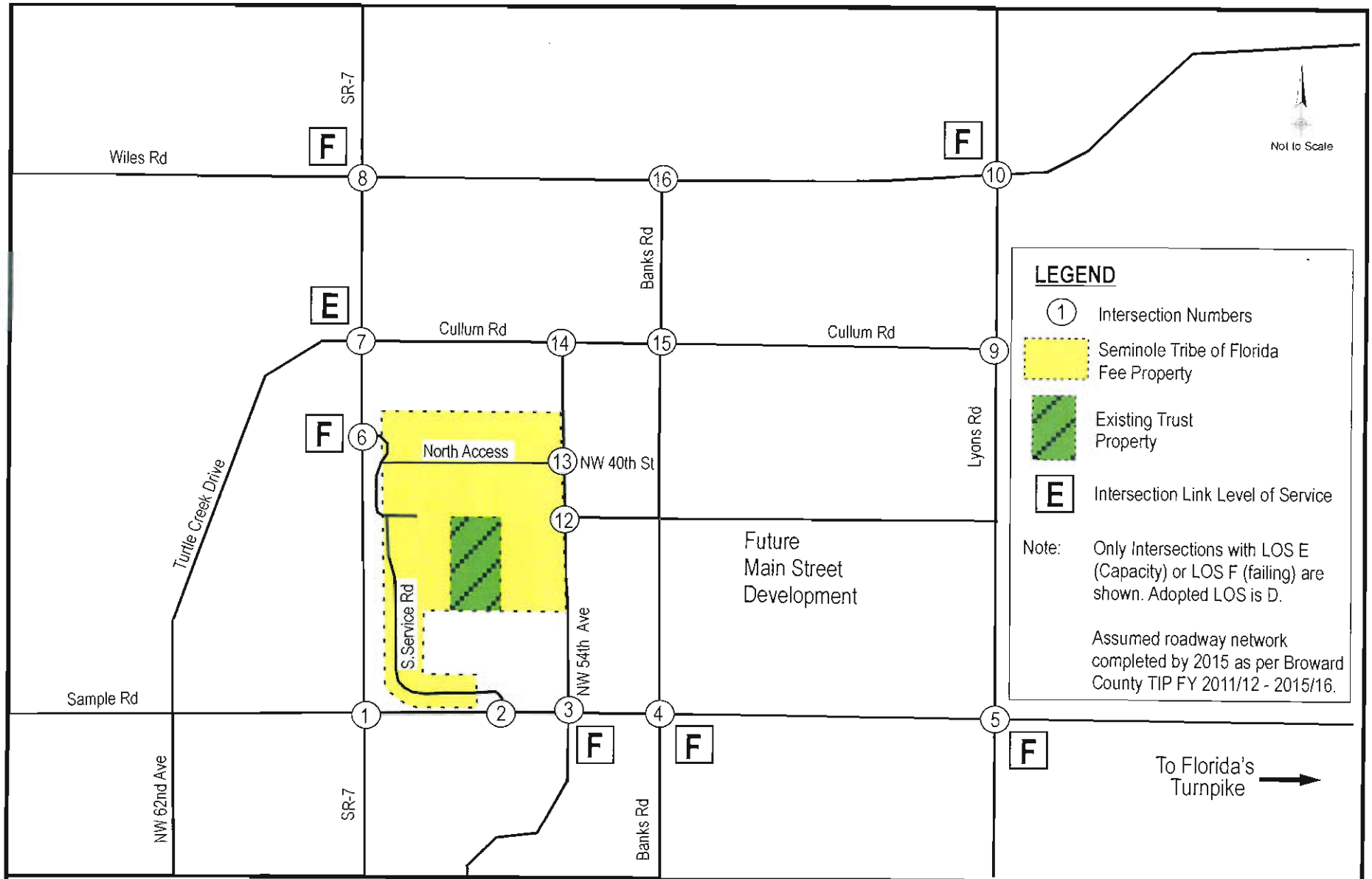


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase IV 2018 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1

Figure No. 6.9

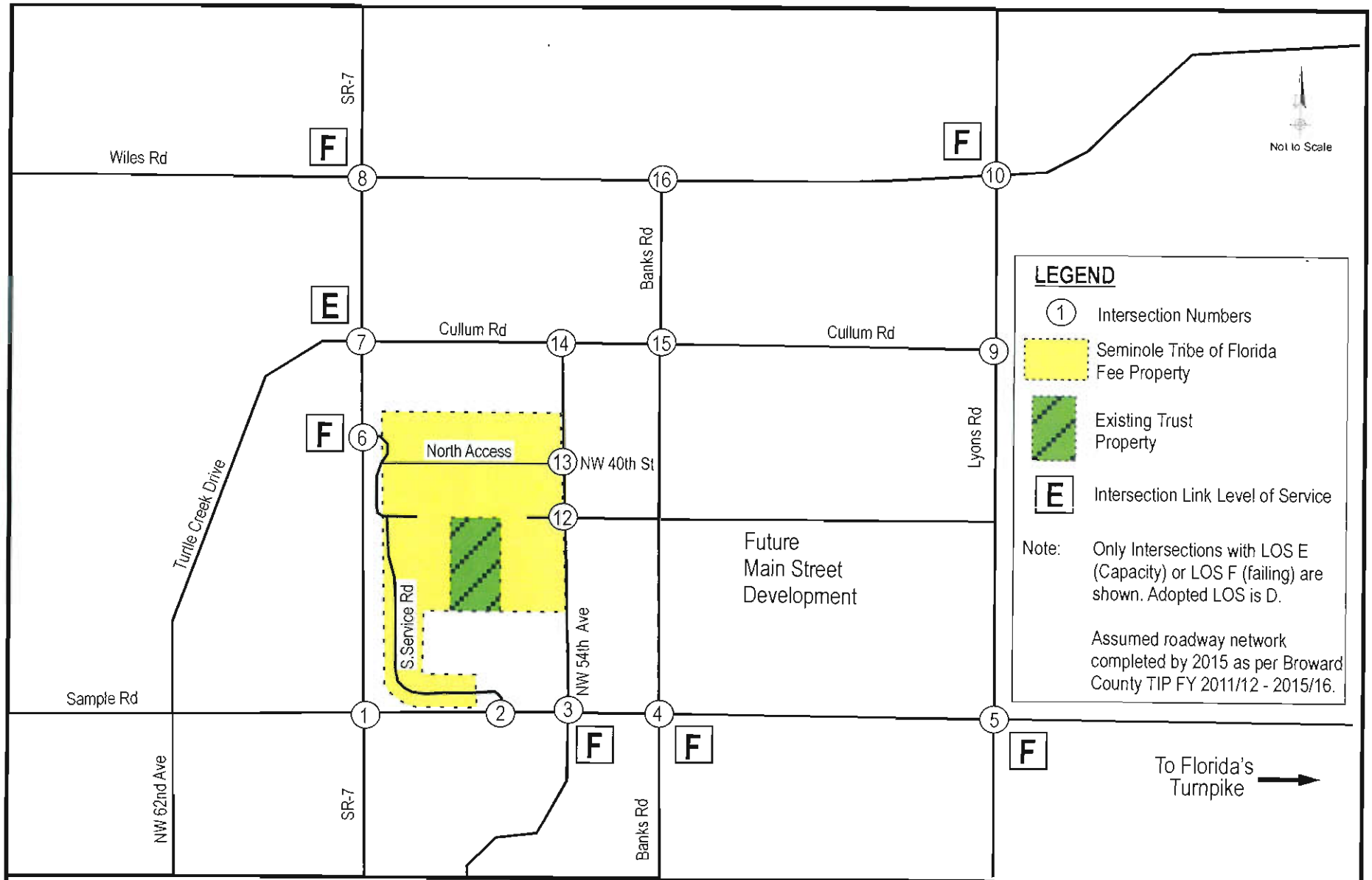


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1

Figure No. 6.10

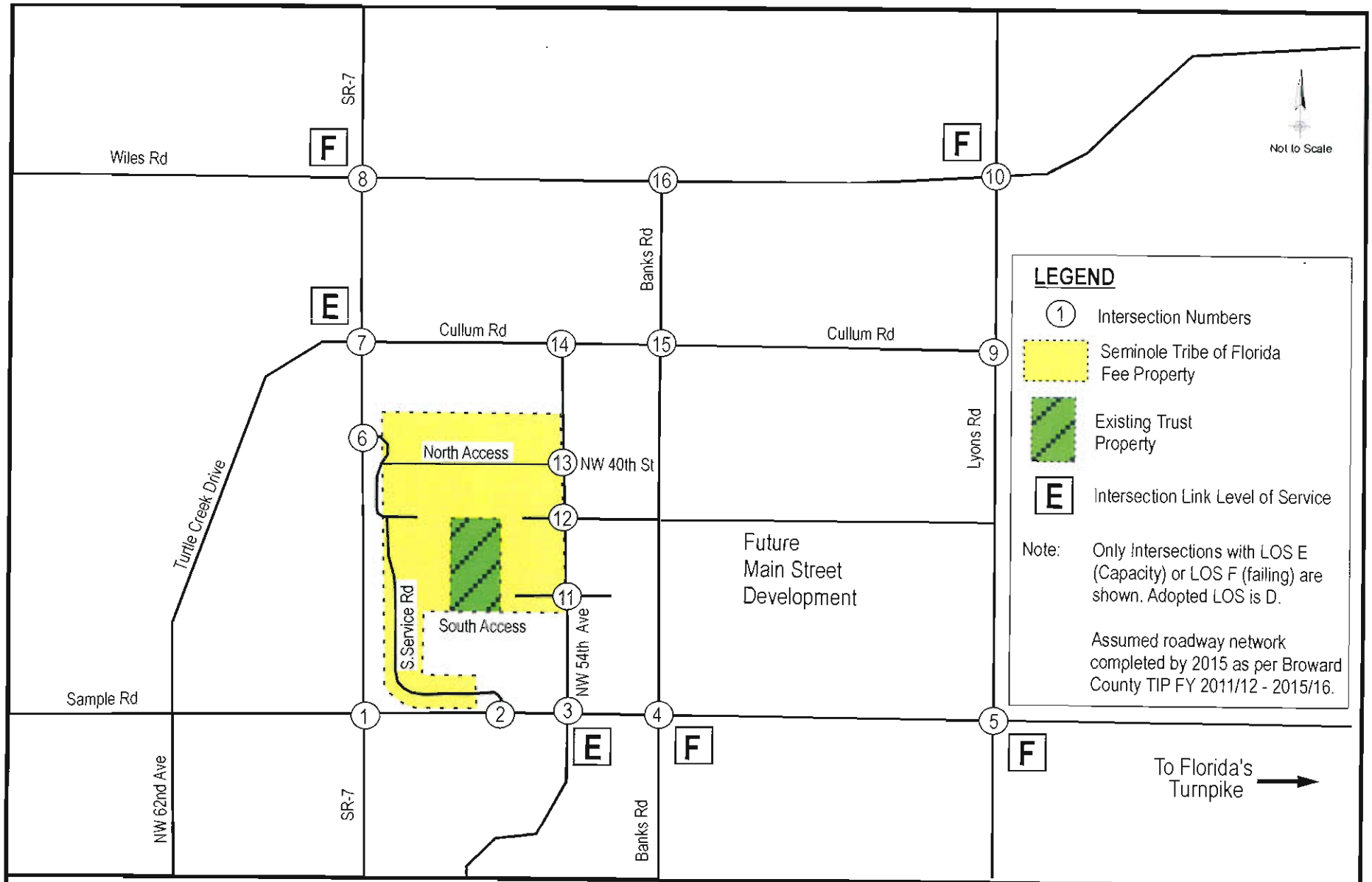


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 PM Peak Hour Background Intersection Level of Service, Alternative B

Figure No. 6.11



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 PM Peak Hour Background Intersection Level of Service, Sub-Alternative C-1

Figure No. 6.12

Cumulative 2035

Alternatives A and C and Sub-Alternative A-1 (See **Table 6-1 and Figure 6.13**):

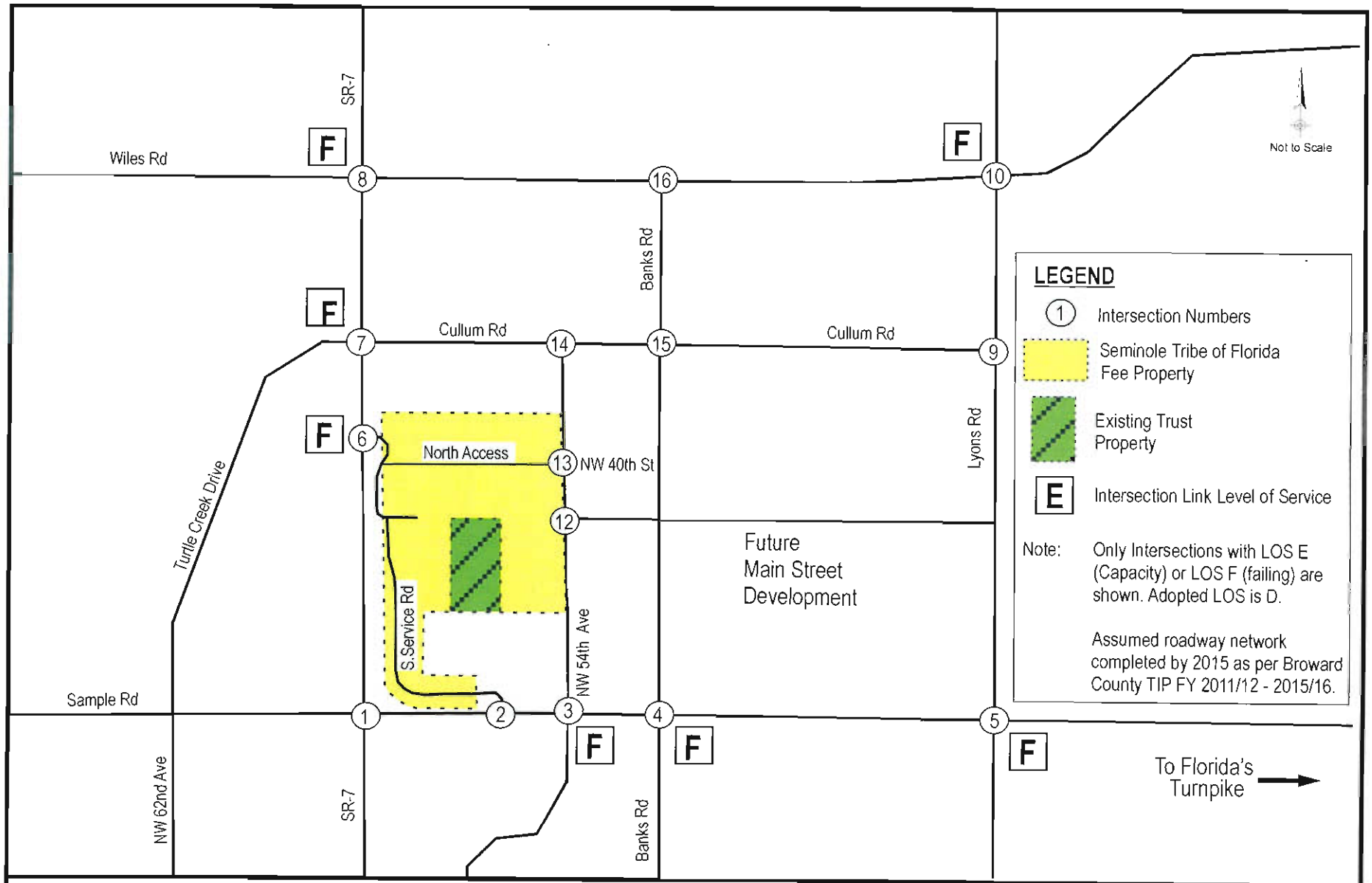
- Sample Road and NW 54th Avenue (154.5 seconds/vehicle) – LOS F;
- Sample Road and Banks Road (130.7 seconds/vehicle) – LOS F (signalized);
- Sample Road and Lyons Road (219.5 seconds/vehicle – LOS F;
- SR 7 and NW 40th Street (83.4 seconds/vehicle) -- LOS F (un-signalized);
- SR 7 and Cullum Road (95.6 seconds/vehicle) -- LOS F;
- SR 7 and Wiles Road (172.8 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (150.7 seconds/vehicle) – LOS F.

Alternative B (See **Table 6-2 and Figure 6.14**):

- Sample Road and NW 54th Avenue (159.8 seconds/vehicle) – LOS F;
- Sample Road and Banks Road (125.0 seconds/vehicle) – LOS F (signalized);
- Sample Road and Lyons Road (214.8 seconds/vehicle – LOS F;
- SR 7 and NW 40th Street (84.1 seconds/vehicle) -- LOS F (un-signalized);
- SR 7 and Cullum Road (97.1 seconds/vehicle) -- LOS F;
- SR 7 and Wiles Road (172.9 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (151.0 seconds/vehicle) – LOS F.

Alternative C-1 (See **Table 6-3 and Figure 6.15**):

- Sample Road and NW 54th Avenue (116.4 seconds/vehicle) – LOS E;
- Sample Road and Banks Road (121.6 seconds/vehicle) – LOS F (signalized);
- Sample Road and Lyons Road (204.8 seconds/vehicle – LOS F;
- SR 7 and Cullum Road (85.0 seconds/vehicle) -- LOS F;
- SR 7 and Wiles Road (165.4 seconds/vehicle) -- LOS F; and
- Lyons Road and Wiles Road (149.0 seconds/vehicle) – LOS F.

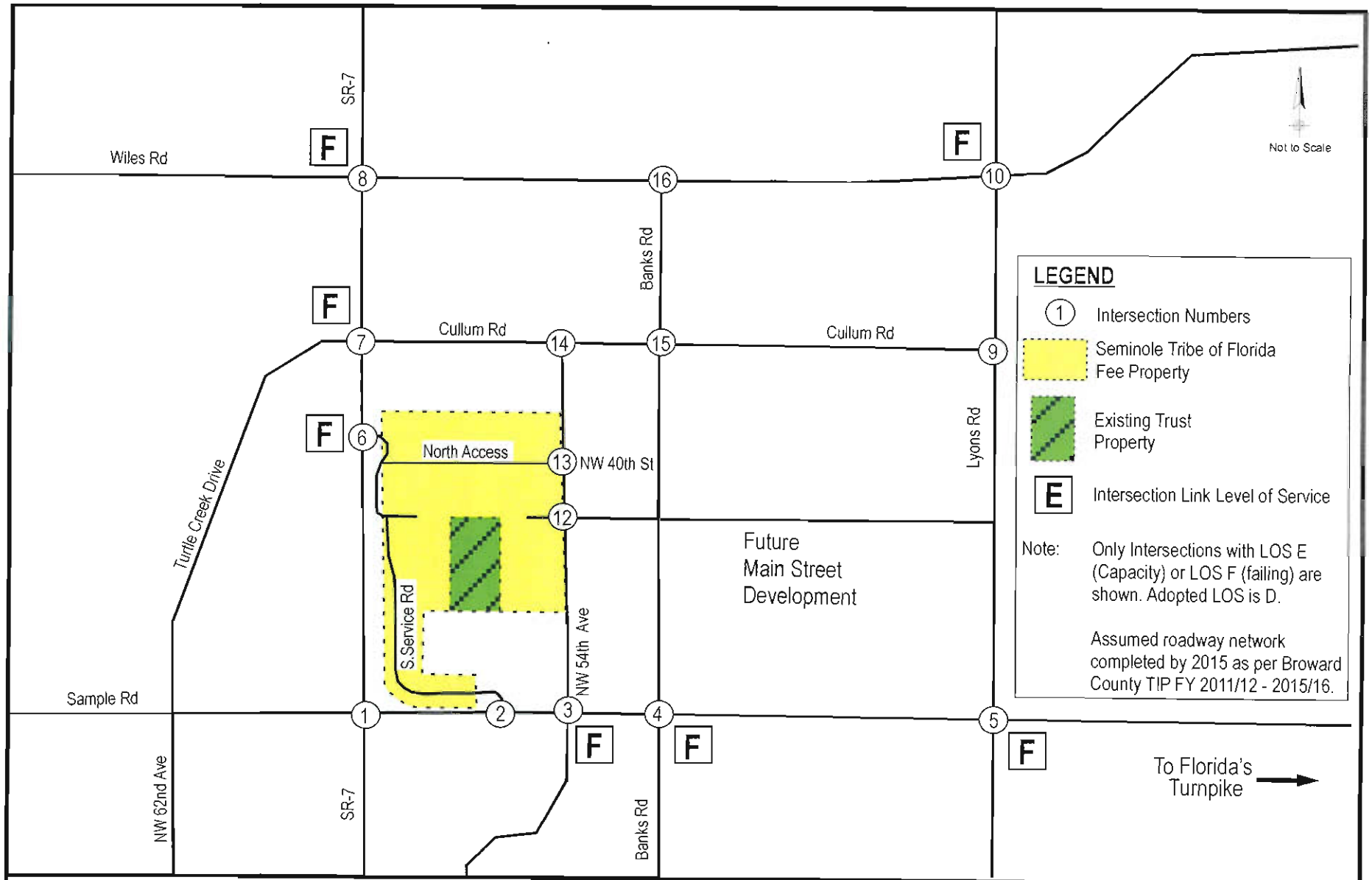


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2035 PM Peak Hour Background Intersection Level of Service, Alternatives A and C and Sub-Alternative A-1

Figure No. 6.13

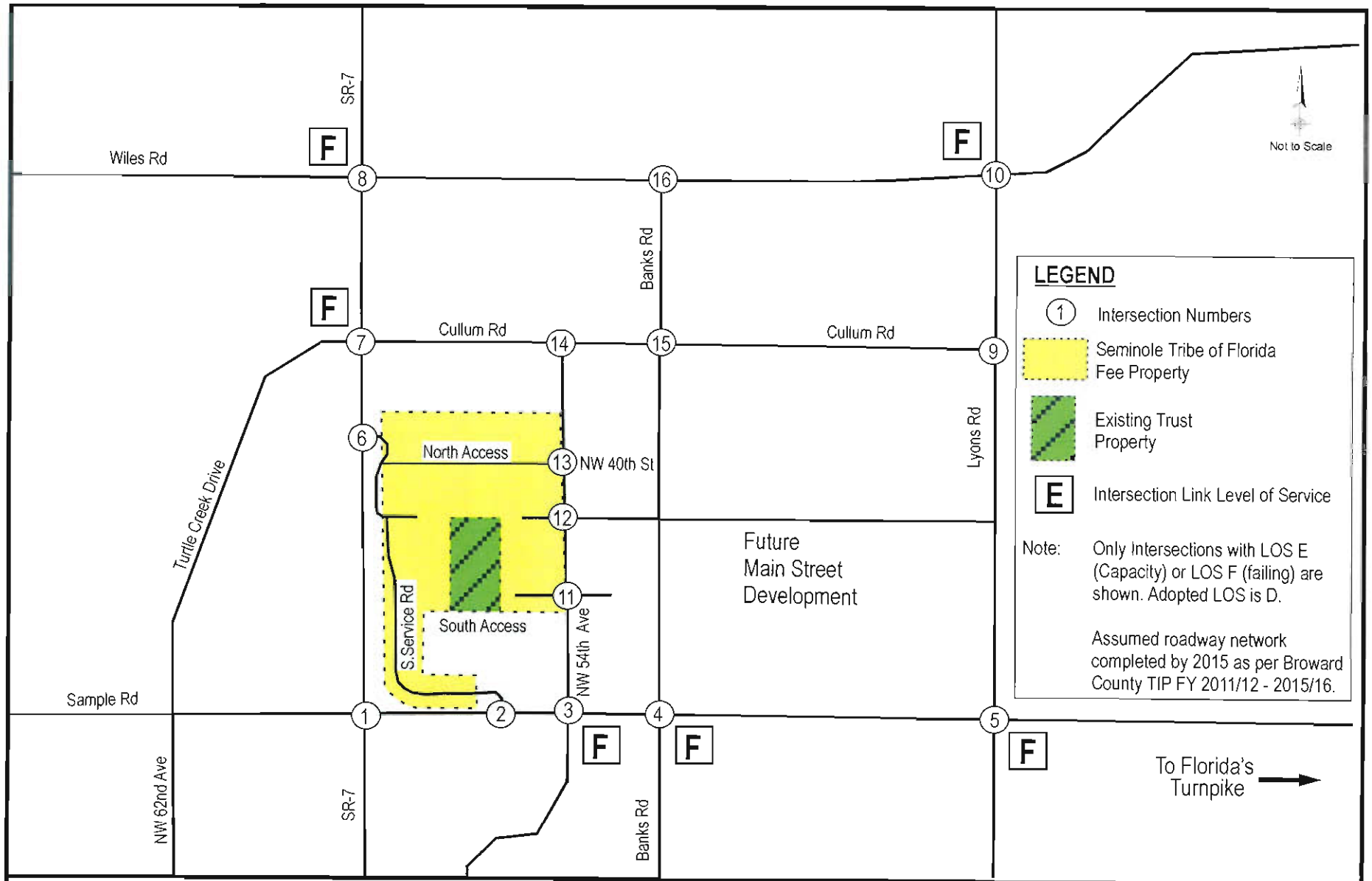


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2035 PM Peak Hour Background Intersection Level of Service, Alternative B

Figure No. 6.14



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2035 PM Peak Hour Intersection Level of Service, Sub-Alternative C-1

Figure No. 6.15

7.0 ALTERNATIVES EVALUATED

7.1 Introduction

The project alternatives were evaluated based on the projected fee-to-trust land traffic as determined in Chapter 3. The total project PM peak hour volume for each alternative is comprised of the background traffic (non-project) plus the project traffic generated by the fee-to-trust lands (STOF properties) as presented in **Tables 3-11** and **3-13**. Although Alternative C-1 assumes no additional development than what exists today, and thus, no significant traffic increase, this alternative was included in the evaluation.

Four time frames were analyzed to assess the cumulative impacts of the proposed action with surrounding development activity and to ascertain at what point project development might become significant. The four time frames were:

- Phase III, 2012-2015;
- Phase IV, 2015-2018;
- Build-out, 2020; and
- Cumulative, 2035.

7.2 Programmed Roadway Improvements and Intersection Geometries

The approved FDOT Five-Year Work Program and Broward County Transportation Improvement Program (TIP) FY 2011/12 – FY 2015/16 (see **Tables 3-14** and **3-15,** respectively and **Figure 3.5**) indicate that all of the major roadway improvements in the immediate study area are programmed for construction by FY 2013/2014. It is anticipated that these projects will be operational by the end of 2015. These projects include:

1. Widening of Wiles Road from four-lanes divided to six-lanes divided between Rock Island Road and SR 7;
2. Widening existing roadway and/or construction of new segment of Banks Road as a four-lane divided road between Sample Road and Wiles Road;
3. Construction of a new segment of Cullum Road as a four-lane divided road between NW 54th Avenue and Banks Road; and
4. Construction of the NW 39th Street Greenway as a four-lane divided road between NW 54th Avenue and Lyons Road.

Whereas the Wiles Road project is a County/State funded project, the Banks Road and Cullum Road projects are committed actions as per the approved development order for the MainStreet at Coconut Creek DRI. Although future changes in the FDOT and/or Broward County work programs may occur, it has been assumed for analysis purposes that the programmed projects will be implemented as scheduled.

In addition to the above mentioned programmed roadway improvements, other improvements associated with the MainStreet at Coconut Creek DRI. Some of these projects, such as the

Cullum Road, Banks Road, and NW 39th Street Greenway are included in the Broward County TIP. The improvements include:

1. Widening of Cullum Road to four-lanes divided between Banks Road and Lyons Road;
2. Signalization of the intersection of Banks Road and Wiles Road;
3. Signalization and lane expansions of the intersection of Banks Road and Sample Road;
4. Eastbound signalization at the intersection of NW 54th Avenue and Downtown Access Road (NW 40th Street).
5. Signalization of the intersection of Cullum Road and Lyons Road;
6. Construct a roundabout at the intersection of Cullum Road and NW 54th Avenue; and
7. Construct a roundabout at the intersection of Cullum Road and Banks Road.[15]

For purposes of this analysis, it was assumed that these improvements will be in place by 2015 (Phase III) for all of the alternatives and that the corresponding intersection geometries as illustrated in **Figures 6.1, 6.2**, and **6.3,** which describe the geometries for the Build-out 2020 and Cumulative 2035 conditions for the project alternatives, will also be in place by 2015.

7.3 Site Access Configurations

Each of the project alternatives assumes an access scheme commensurate with its development program. Alternatives A and C and Sub-Alternative A-1 have main access points at the following locations:

1. NW 54th Avenue at North Access;
2. SR 7 at NW 40th Street Connector; and
3. South Access at Sample Road.

The access improvements at NW 54th Avenue and North Access are the same for the three alternatives (see Section 6.0, **Figure 6.1**). However, the improvements are committed under the PMDD agreement applicable to Alternatives A and C. Under Sub-Alternative A-1, there is no PMDD agreement or other agreement and as such the final access configuration may vary from the one proposed under the PMDD. For analysis purposes, it was assumed that for Sub-Alternative A-1 the intersection configuration would be similar to that of Alternatives A and C.

The access at SR 7 and NW 40th Street is also the same for Alternatives A and C and Sub-Alternative A-1. The improvements are limited to widening the access road and adding landscape enhancements. These are also committed under the PMDD agreement under Alternatives A and C but not for Sub-Alternative A-1. The same assumptions that were made with respect to the NW 54th Avenue and North Access for Sub-Alternative A-1 were similarly applied to the SR 7 and NW 40th Street Connector Access.

No changes at the South Access at Sample Road are anticipated for any of the alternatives.

[15] Both roundabouts are configured as two-lane roundabout facilities.

Alternative B, which is assumed with no PMDD agreement, has main access points at the following locations:

1. NW 54th Avenue at North Access;
2. NW 54th Avenue at NW 40th Street
3. SR 7 at NW 40th Street Connector; and
4. South Access at Sample Road.

Both accesses on NW 54th Avenue the North Access and NW 40th Street will be maintained as currently configured. The North Access has limited accessibility providing only for right-turns in and right-turns out only on the southbound segment. No signalization is proposed.

The existing access at NW 54th Avenue and NW 40th Street would be maintained. However, signalization has been assumed for 2015 and beyond. The access at SR 7 and NW 40th Street is the same as for the other alternatives except that there is no PMDD agreement involved.

Ultimately, all site access improvements, permits, and signalization will require coordination with FDOT (SR 7 and Sample Road) and/or City of Coconut Creek (NW 54th Avenue) regardless of project alternative.

7.4 Proposed Project Static Link Analysis

Static link analysis consists of comparing the total year PM peak hour directional project volumes per alternative to the FDOT generalized LOS tables. The PM peak hour LOS for the roadway segments within the final study area are summarized by alternative in **Appendix H**.

The roadways operating below the adopted LOS "D" during the PM peak hour per phase are:

<u>Phase III - 2015</u>

Alternatives A and C and Sub-Alternative A-1 (See **Table H-7** and **Figure 7.1**):

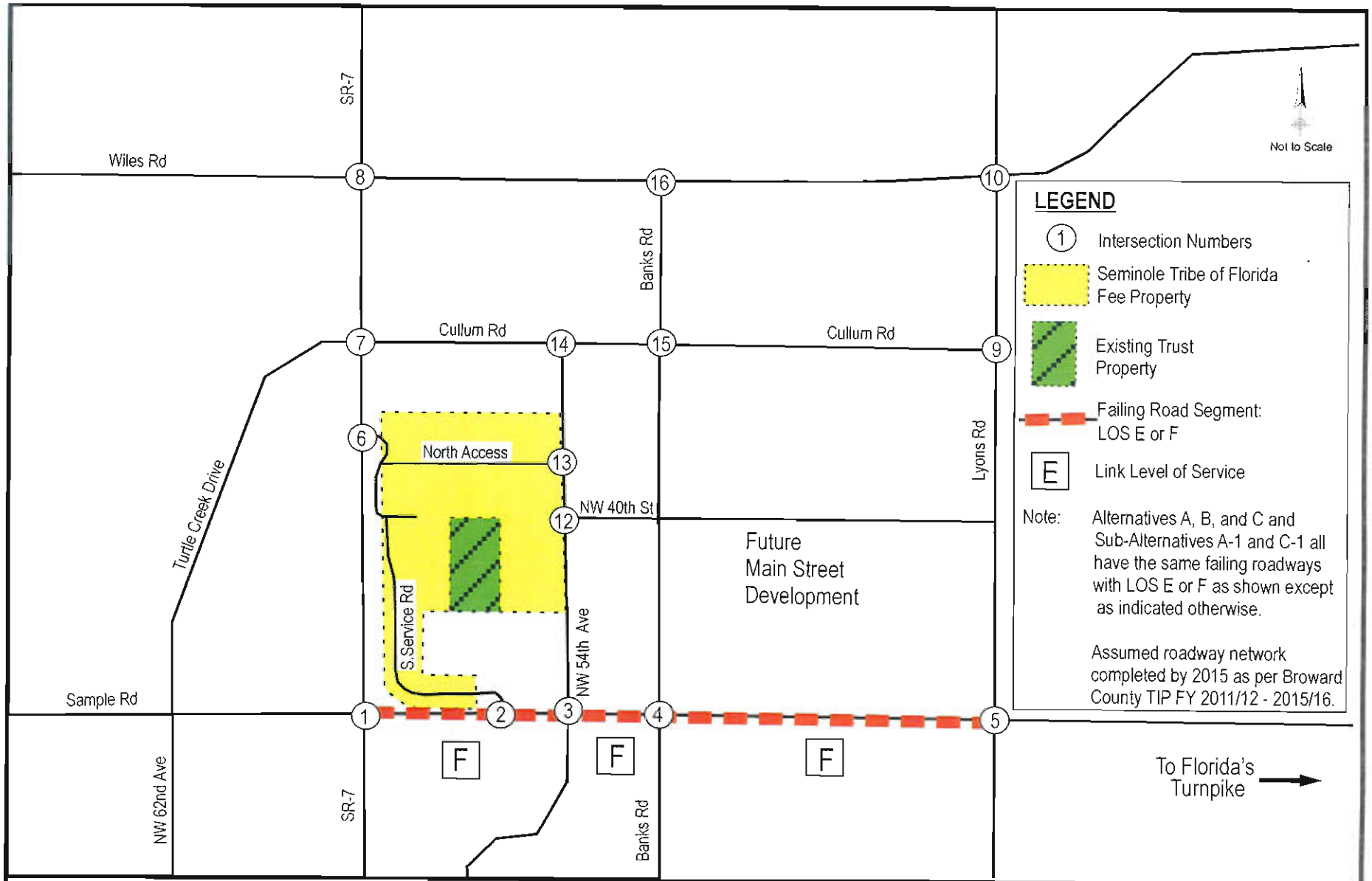
- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Alternative B (See **Table H-15** and **Figure 7.2**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Sub-Alternative C-1 (See **Table H-19** and **Figure 6.4**)

- Sample Road between SR 7 and NW 54th Avenue (LOS E);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

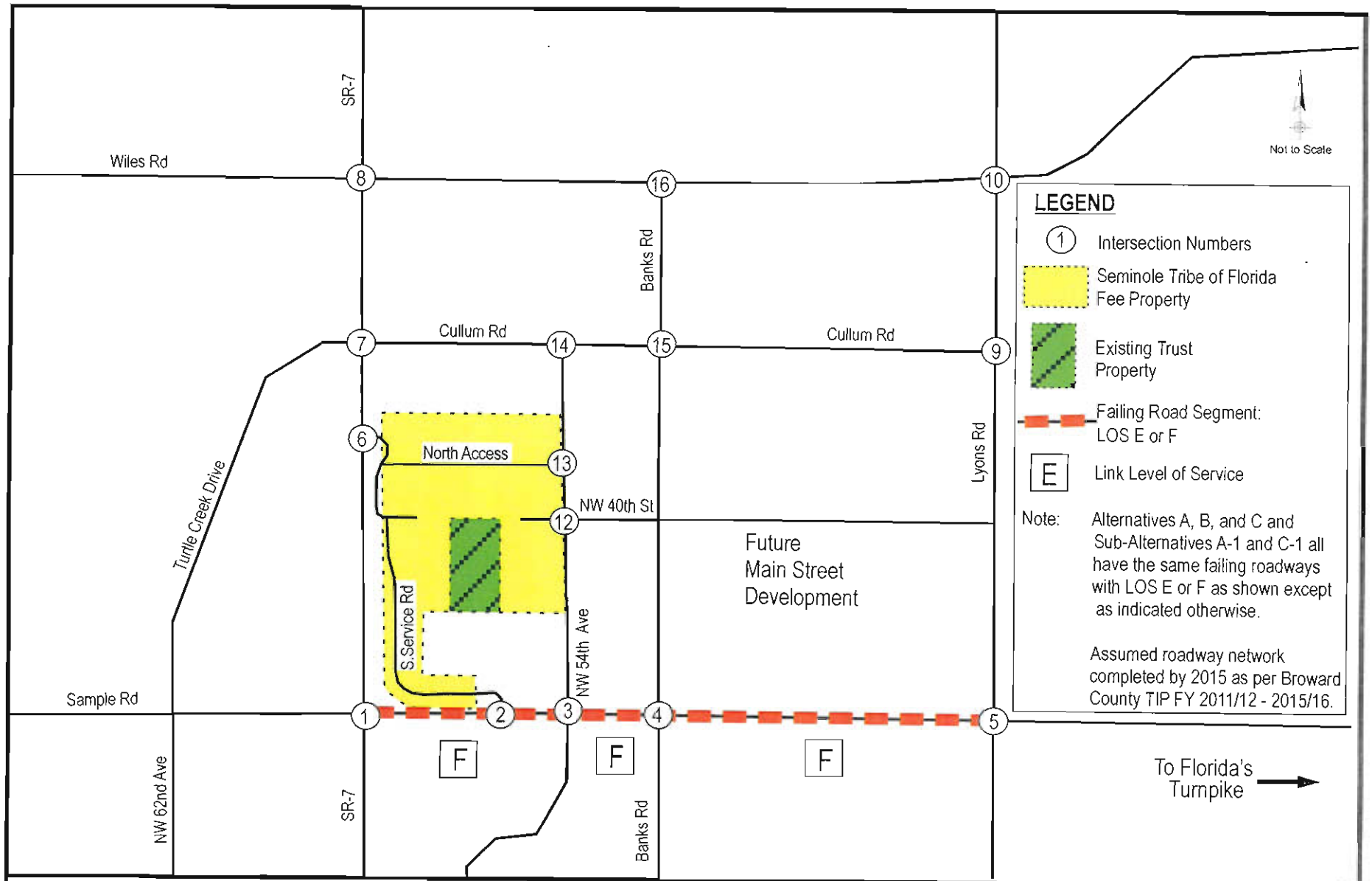


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase III 2015 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1

Figure No. 7.1



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase III 2015 PM Peak Hour Total Volume
Failing Roadways, Alternative B

Figure No. 7.2

Phase IV - 2018

Alternatives A and C and Sub-Alternative A-1 (See **Table H-8** and **Figure 7.3**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Alternative B (See **Table H-16** and **Figure 7.4**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Sub-Alternative C-1 (See **Table H-20** and **Figure 6.5**)

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F); and
- Sample Road between Banks Road and Lyons Road (LOS F).

Build-out 2020

Alternatives A and C and Sub-Alternative A-1 (See **Table H-9** and **Figure 7.5**):

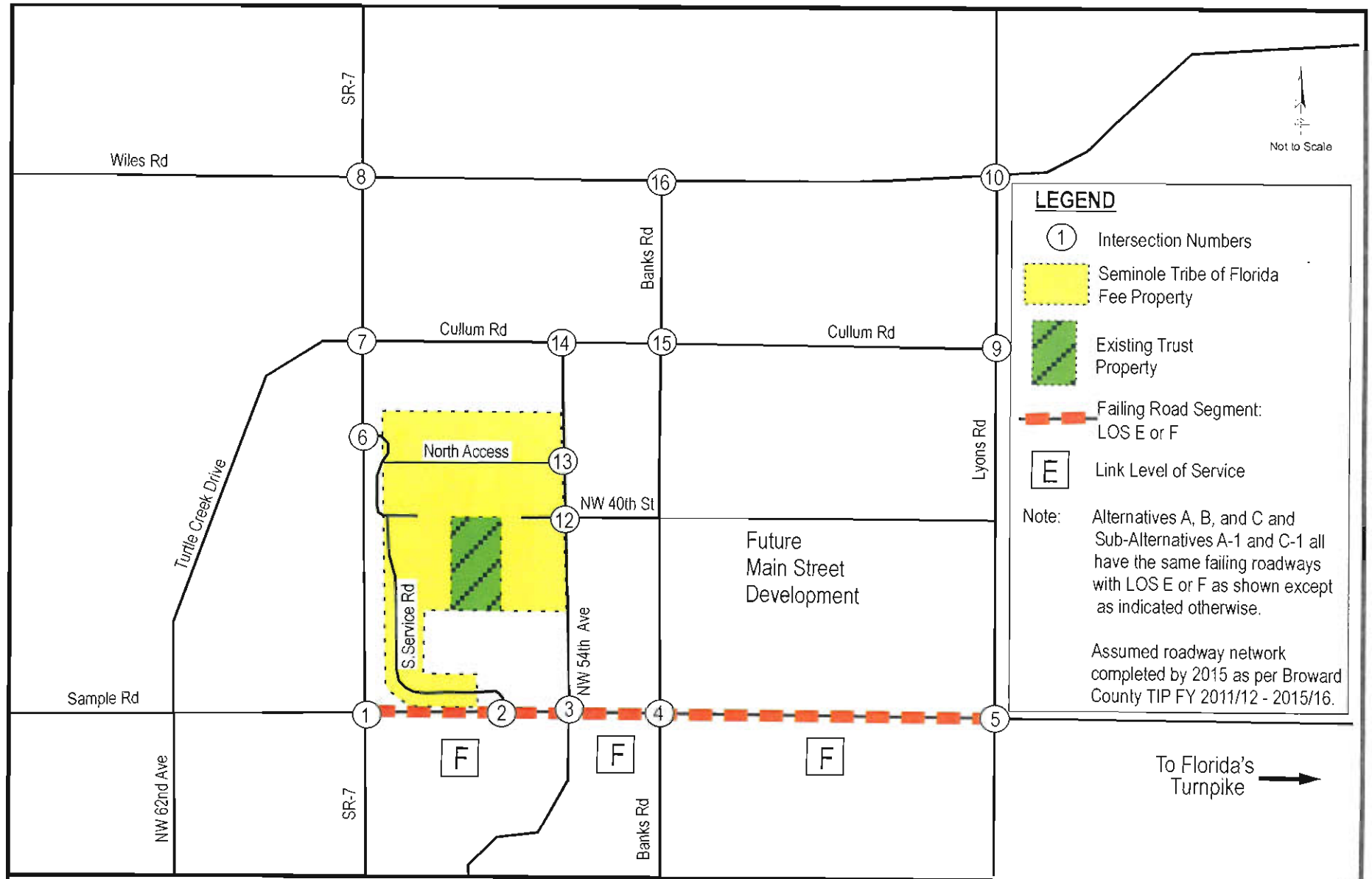
- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between Banks Road and Lyons Road (LOS E);
- SR 7 between NW 40th Street and Cullum Road (LOS E);
- NW 54th Avenue between NW 40th Street and Cullum Road (LOS F) (Segment Significant and Failing);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Alternative B (See **Table H-17** and **Figure 7.6**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between Banks Road and Lyons Road (LOS E);
- SR 7 between NW 40th Street and Cullum Road (LOS E);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Alternative C-1 (See **Table H-21** and **Figure 6.6**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

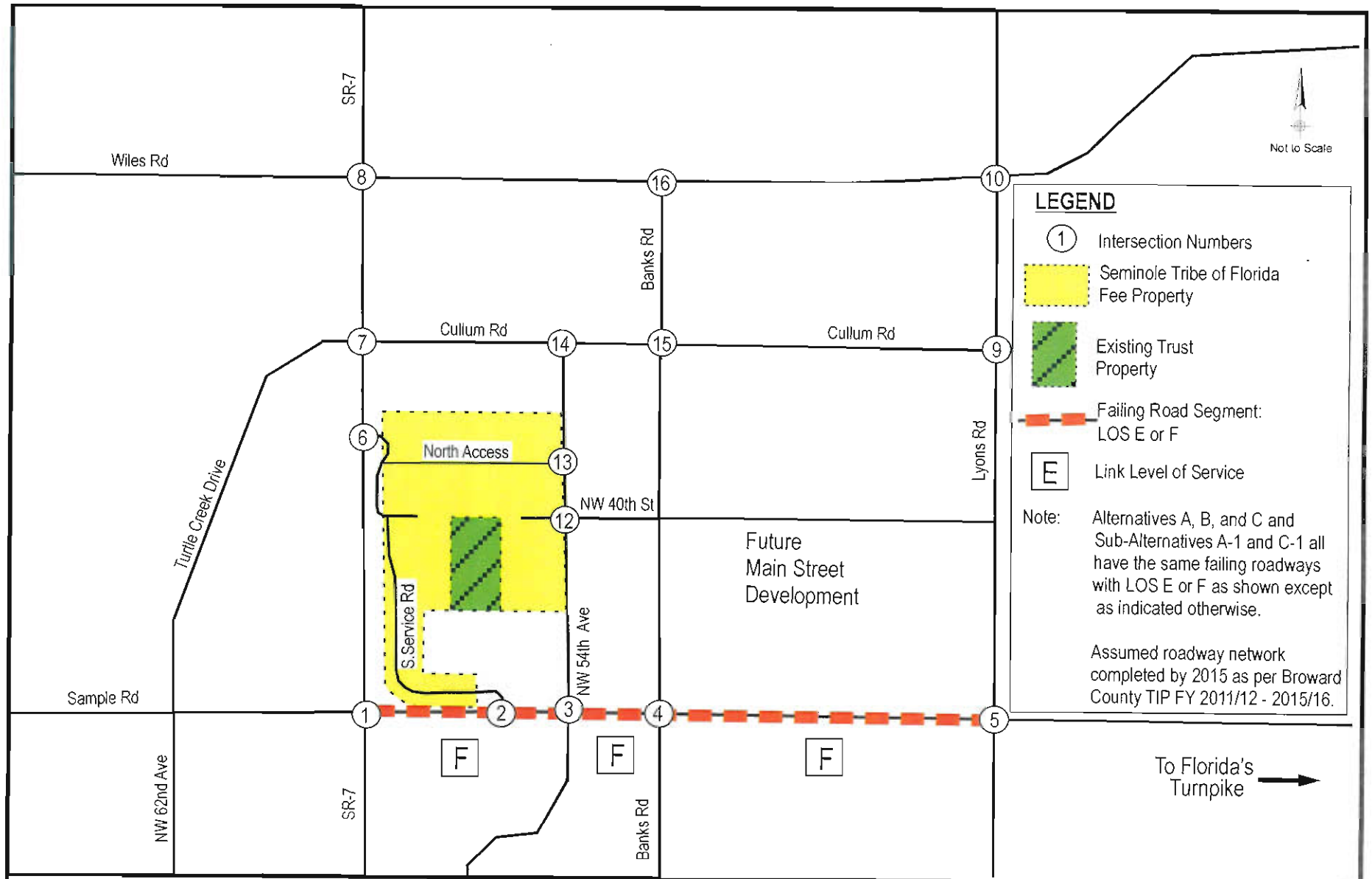


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase IV 2018 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1

Figure No. 7.3

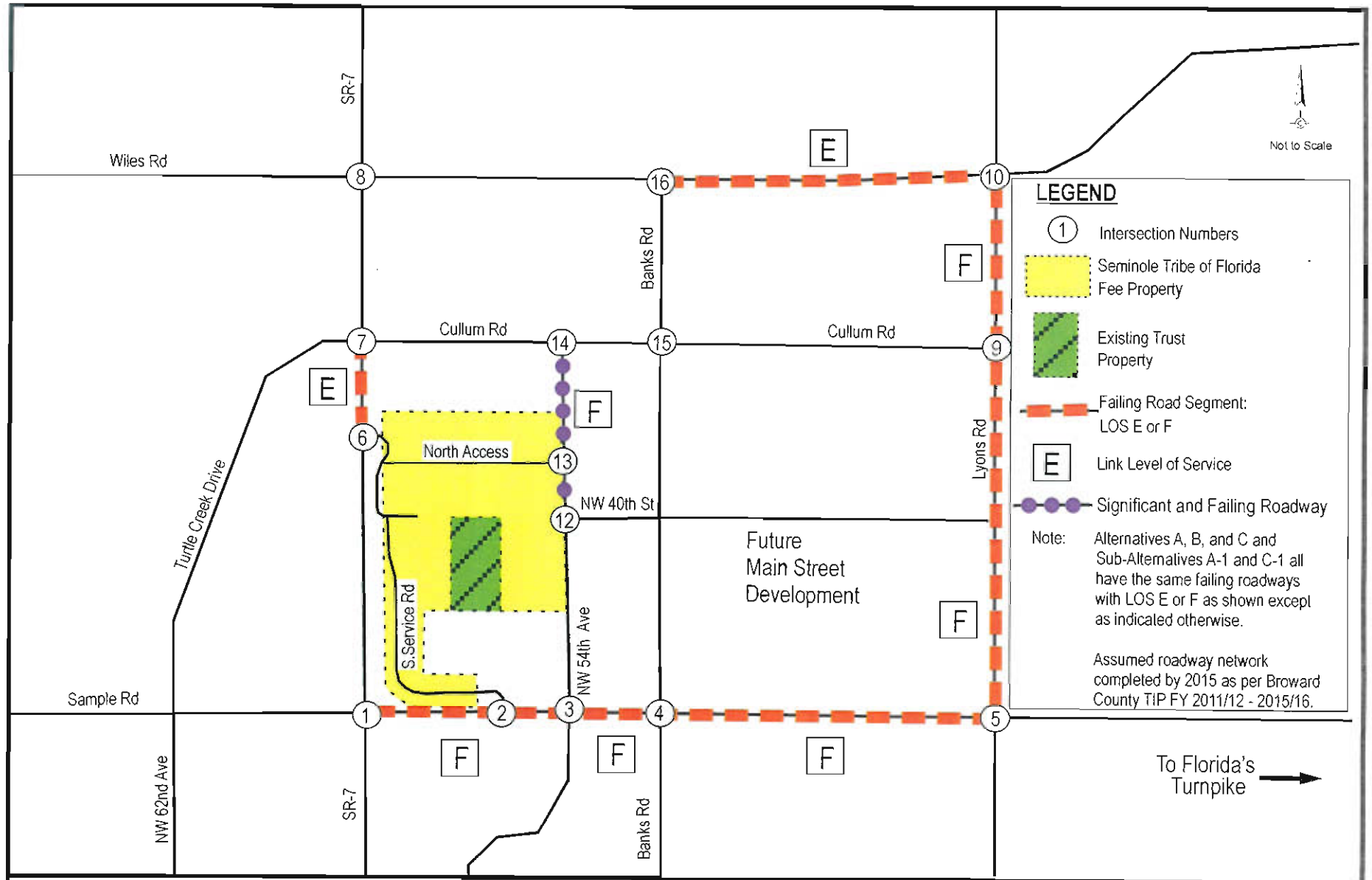


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

Phase IV 2018 PM Peak Hour Total Volume
Failing Roadways, Alternative B

Figure No. 7.4

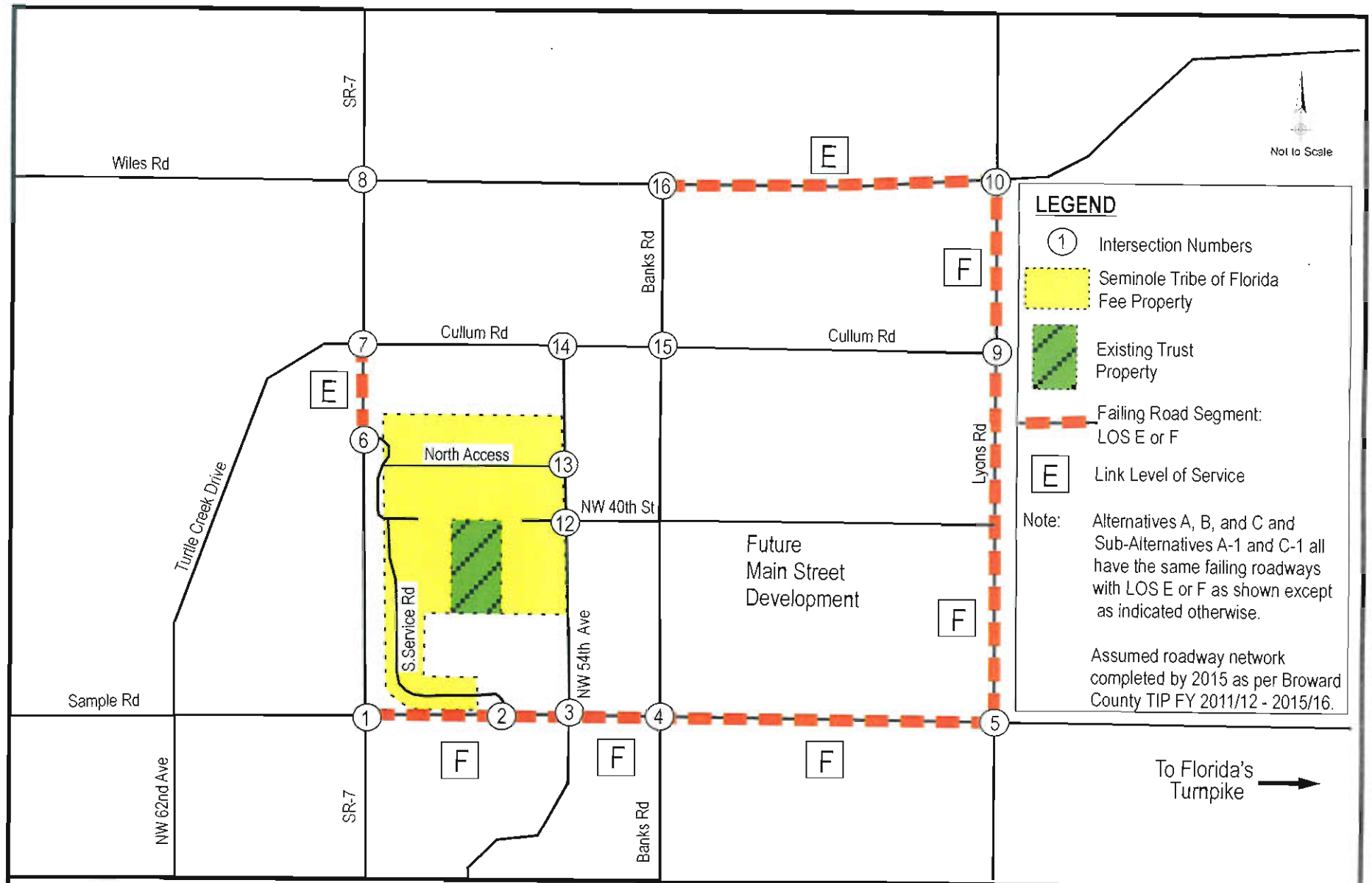


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2020 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1

Figure No. 7.5



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

2020 PM Peak Hour Total Volume Failing Roadways, Alternative B

Figure No. 7.6

Cumulative 2035

Alternatives A and C and Sub-Alternative A-1 (See **Table H-10** and **Figure 7.7**):

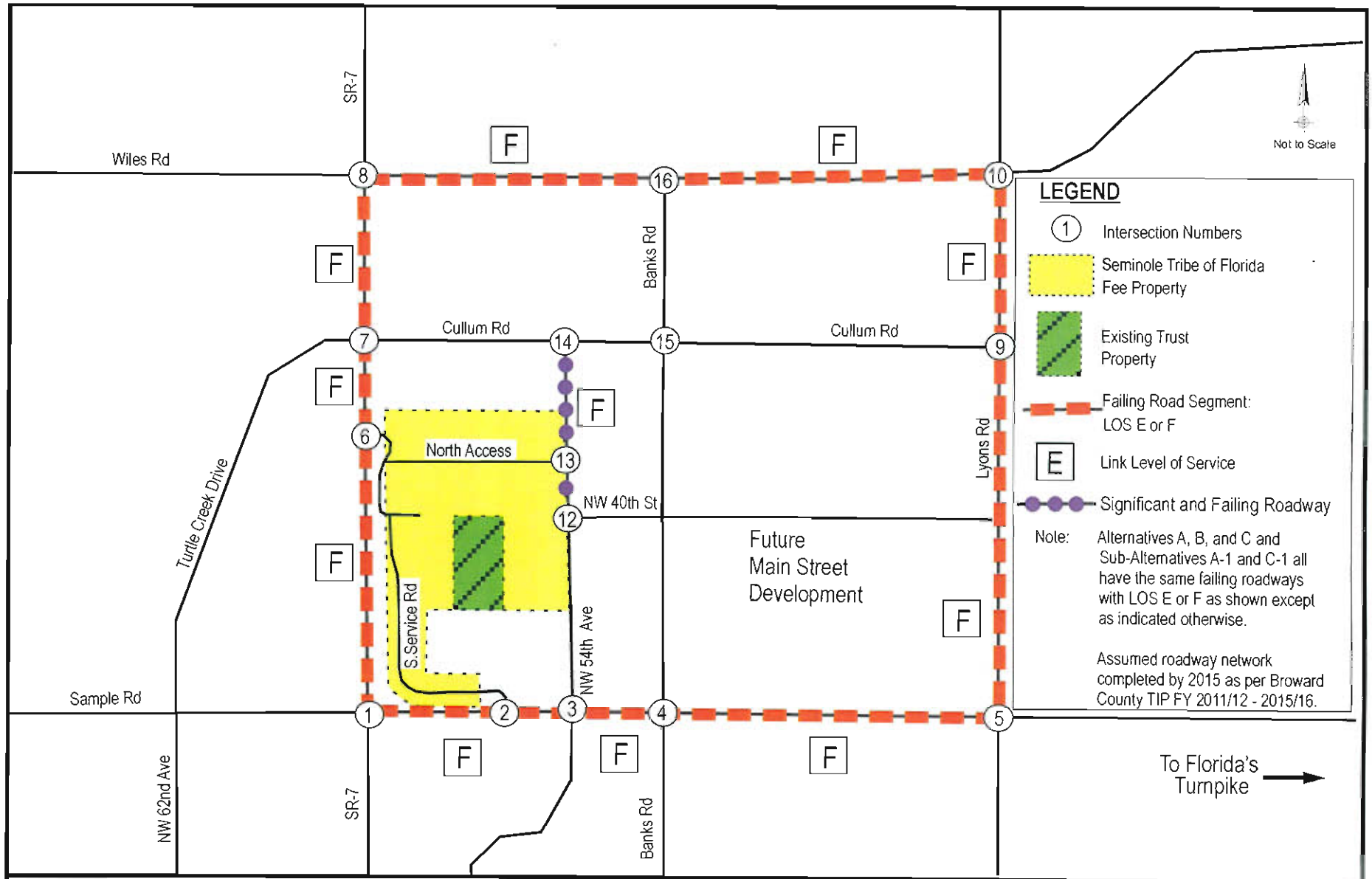
- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between SR 7 and Banks Road (LOS F)
- Wiles Road between Banks Road and Lyons Road (LOS F);
- SR 7 between Sample Road and NW 40th Street (LOS F);
- SR 7 between NW 40th Street and Cullum Road (LOS F);
- SR 7 between Cullum Road and Wiles Road (LOS F);
- NW 54th Avenue between NW 40th Street and Cullum Road (LOS F) (Segment Significant and Failing);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Alternative B (See **Table H-18** and **Figure 7.8**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between SR 7 and Banks Road (LOS F)
- Wiles Road between Banks Road and Lyons Road (LOS F);
- SR 7 between Sample Road and NW 40th Street (LOS F);
- SR 7 between NW 40th Street and Cullum Road (LOS F);
- SR 7 between Cullum Road and Wiles Road (LOS F);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

Alternative C-1 (See **Table H-22** and **Figure 6.7**):

- Sample Road between SR 7 and NW 54th Avenue (LOS F);
- Sample Road between NW 54th Avenue and Banks Road (LOS F);
- Sample Road between Banks Road and Lyons Road (LOS F);
- Wiles Road between SR 7 and Banks Road (LOS F)
- Wiles Road between Banks Road and Lyons Road (LOS F);
- SR 7 between Sample Road and NW 40th Street (LOS E);
- SR 7 between NW 40th Street and Cullum Road (LOS E);
- SR 7 between Cullum Road and Wiles Road (LOS E);
- Lyons Road between Sample Road and Cullum Road (LOS F); and
- Lyons Road between Cullum Road and Wiles Road (LOS F).

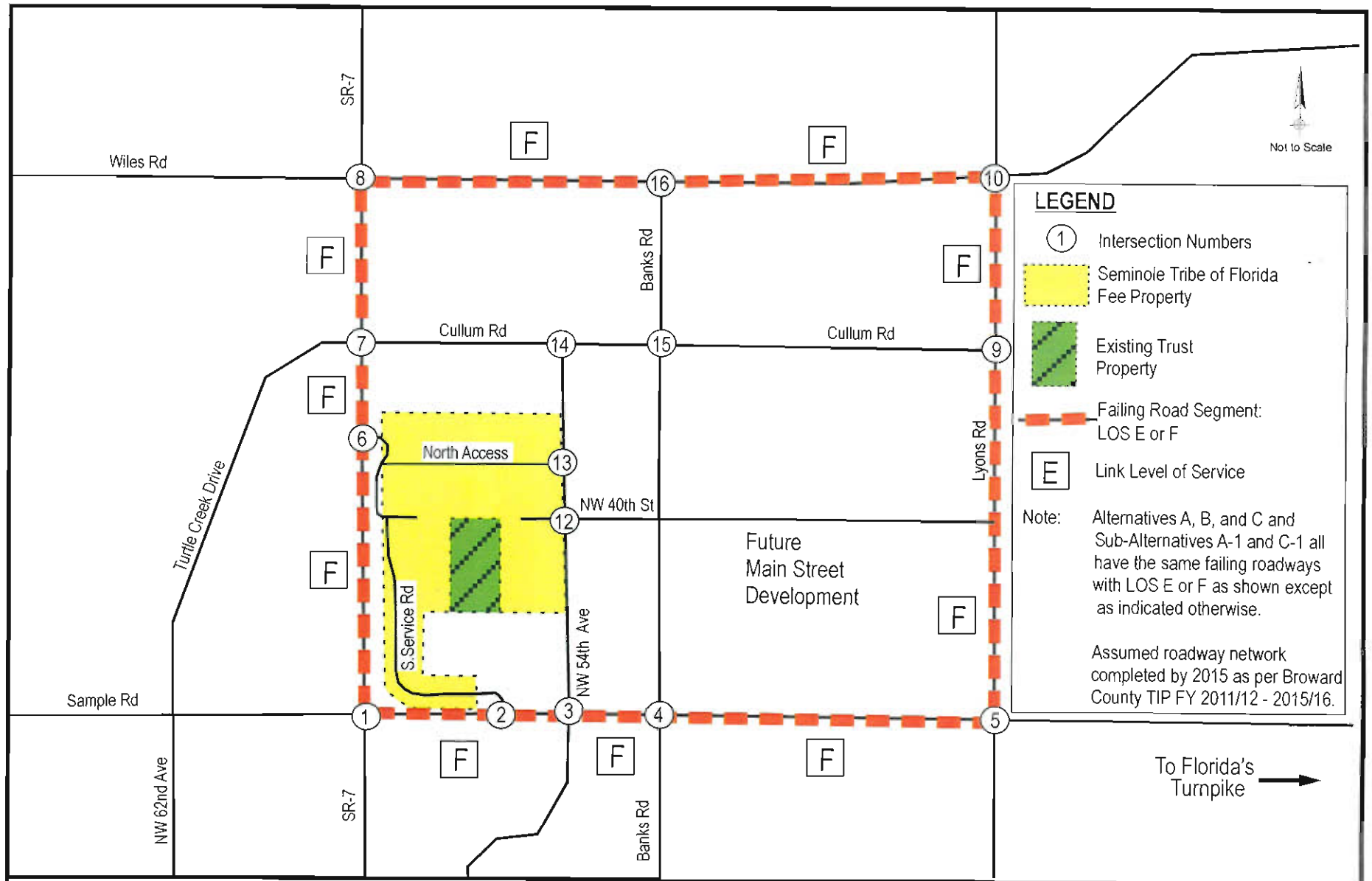


KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project Transportation Planning Study

2035 PM Peak Hour Total Volume Failing Roadways, Alternatives A and C and Sub-Alternative A-1

Figure No. 7.7



KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N.Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Seminole Fee-to-Trust Development Project
Transportation Planning Study

2035 PM Peak Hour Total Volume Failing Roadways, Alternative B

Figure No. 7.8

7.5 Significance Criteria

Consistent with current traffic engineering practice in Florida for large scale projects (DRI's), a roadway segment is determined to be significantly impacted by a proposed project only if both of the following criteria are met:

1. The project trips equal or exceed five (5) percent of the adopted peak-hour directional maximum service volume (significantly impacted); and
2. The PM peak hour directional volume exceeds the adopted LOS "D" standard (roadway link fails).

An important caveat to these criteria is that if an impacted roadway can be improved such that it operates equal to or better than it would without the project, impacts are considered to be mitigated.

7.6 Significant and Failing Links

The following is a summary of the findings for significant and failing roadways based only on fee-to-trust land volumes regardless of proposed project alternative:

Phase III – (2012-2015)

- Alternatives A and C and Sub-Alternative A-1
  NO significant and failing link (**Table H-7**).

- Alternative B
  NO significant and failing link (**Table H-15**).

- Sub-Alternative C-1
  Not applicable since no development beyond Phase II (December 2011).

Phase IV – (2015-2018)

- Alternatives A and C and Sub-Alternative A-1
  NO significant and failing link (**Table H-8**).

- Alternative B
  NO significant and failing link (**Table H-16**).

- Sub-Alternative C-1
  Not applicable since no development beyond Phase II (December 2011).

Build-out (2020)

- Alternatives A and C and Sub-Alternative A-1
  Significant and failing link: NW 54th Avenue between NW 40th Street and Cullum Road (**Table H-9** and **Figure 7.5**).

- Alternative B
  NO significant and failing link (**Table H-17**).

- Sub-Alternative C-1
  Not applicable since no development beyond Phase II (December 2011).

Cumulative (2035)

- Alternatives A and C and Sub-Alternative A-1
  Significant and failing link: NW 54th Avenue between NW 40th Street and Cullum Road (**Table H-10** and **Figure 7.7**).

- Alternative B
  NO significant and failing link (**Table H-18**).

- Sub-Alternative C-1
  Not applicable since no development beyond Phase II (December 2011).

As indicated above, no roadway links are failing and significantly impacted in Phases III (2015) and IV (2018) for any of the alternatives because project traffic is less than 5% of the adopted standard.

One roadway, NW 54th Avenue between NW 40th Street and Cullum Road is designated as a significantly impacted and failing link under Alternatives A and C and Sub-Alternative A-1 for the Build-out (2020) and Cumulative (2035) milestones (See **Figures 7.5 and 7.7**).

There are no failing and significantly impacted roadways under Alternative B.

The significance and failing criteria is not applicable to Sub-Alternative C-1 since there is no development beyond Phase II (December 2011).

7.7 Intersection Analysis

Only those intersections located along the significantly impacted and failing roadway link identified in the previous section (NW 54th Avenue between NW 40th Street and Cullum Road) are considered to be significantly impacted intersections. In addition, any site access that has a failing LOS, regardless of roadway link conditions, is considered a significantly impacted intersection. Consequently, the following intersections were identified as significantly impacted under Alternatives A and C and Sub-Alternative A-1:

- NW 54th Avenue and Cullum Road;
- NW 54th Avenue and North Access;
- NW 54th Avenue and NW 40th Street; and
- SR 7 and NW 40th Street.

The first three intersections are located along the significant and failing NW 54th Avenue link; whereas, the last intersection (SR 7 and NW 40th Street) is the main site access point along SR 7.

Intersection analysis was performed using the SYNCHRO HCM module for signalized intersections and HCS for un-signalized intersections. The analysis also accounted for truck percentages as previously discussed in Section 3. The SYNCHRO HCM module and HCS output sheets are located in **Appendix K**. The maximum LOS "D" thresholds for signalized and un-signalized intersections are 55.0 seconds per vehicle and 35 seconds per vehicle, respectively, consistent with the 2000 Highway Capacity Manual.

7.7.1 Intersection Analysis: Alternatives A and C and Sub-Alternative A-1

Table 7.1 presents the analysis results for the intersections on the significantly impacted and failing link and the impacted major access driveways for Alternatives A and C and Sub-Alternative A-1.

The three intersections along the impacted segment of NW 54th Avenue are expected to operate at acceptable LOS D or better for years Build-out 2020 and Cumulative 2035.

On the other hand, the un-signalized access at SR 7 and NW 40th Street is projected to operate at LOS F by 2018 (Phase IV) and continuing through Build-out 2020 and Cumulative 2035.

7.7.2 Intersection Analysis: Alternative B

Under Alternative B, the access intersection at SR 7 and NW 40th Street is projected to operate at LOS F by Build-out 2020 and continue through Cumulative 2035 (see **Table 6-2**).

7.7.3 Intersection Analysis: Alternative C-1

Under Alternative C-1, all of the site access intersections are expected to operate at acceptable LOS D or better for years Build-out 2020 and Cumulative 2035.

Table 7-1 Impacted Intersection Analysis – Alternatives A and C and Sub-Alternative A-1

Intersection	Year 2011 Phase II Existing Conditions		Year 2012-2015 Phase III		Year 2015-2018 Phase IV		Build-out Year 2020		Cumulative Year 2035	
	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Service LOS	Total Delay (veh/sec)	Level of Service LOS
6 SR-7 and NW 40th St	Unsignalized		Unsignalized		Unsignalized		Unsignalized		Unsignalized	
	18.3 (WBR)	C	27.5 (WBR)	D	72.9 (WBR)	F	119.3 (WBR)	F	172.0 (WBR)	F
12 NW 54th Ave and NW 40th St	Unsignalized (4-Way)		Signalized		Signalized		Signalized		Signalized	
	12.4 (SBL)	B	9.6	A	12.9	B	17.0	B	17.3	B
13 NW 54th Ave and North Access	Unsignalized		Signalized		Signalized		Signalized		Signalized	
	9.9 (EBR)	A	22.4	C	33.0	C	42.6	D	42.5	D
14 NW 54th Ave and Cullum Rd [1]			Roundabout		Roundabout		Roundabout		Roundabout	
	N/A	N/A	0.50	A	0.79	C	1.11	D	1.11	D

Note: Signalized intersections analyzed with SYNCHRO and unsignalized intersections analyzed with HCS.
[1] Roundabout los based on the maximum v/c (low) and intersection capacity utilization using SYNCHRO.

7.8 Summary of Impacts and Mitigation

7.8.1 Alternative A: Proposed Project with City of Coconut Creek Agreements

The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. However, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) based on the committed improvements under the PMDD. As such, the impacts of the significant link would be mitigated with the committed PMDD improvements at the intersections. Since NW 54th Avenue is under jurisdiction of the City of Coconut Creek, new or modified access connections and intersections require review and approval by the City.

Based on the analyses presented in the preceding sections, Alternative A, which assumes pre-mitigation agreements such as the PMDD improvements (see Chapter 2.0 and **Figure 2.4**), will require the following additional mitigation:

- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

As shown in **Table 7-1**, this access is projected to operate at LOS F by 2018 (Phase IV). This intersection, which currently (2011) handles approximately 30 percent of the STOF site traffic, consists of a right-turn in and right-turn access on the northbound lanes of SR 7.

Signalization coupled with the widening of the NW 40th Street approach to two-lanes outbound would be required by 2018 (Phase IV). New or modified STOF site accesses require review and approval/permitting by the pertinent agencies. The west access at SR 7 and NW 40th Street lies partially within a FDOT right-of-way.

The improvement option evaluated consists of adding a second right-turn lane on the NW 40th Street westbound approach and signalizing the intersection to include only the northbound approach of SR 7 and the westbound approach of NW 40th Street. The operational analysis under this scenario yielded acceptable LOS D and better through Cumulative 2035 analysis period (see analysis outputs in **Appendix K**).

Any changes to this access at SR 7 will require a revised FDOT connection permit.[16]

7.8.2 Sub-Alternative A-1: No City of Coconut Creek Approvals or Agreements

As with Alternative A, the link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. Also, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) assuming intersection improvements similar to those described under the under the PMDD. Unlike the PMDD, this alternative does not have pre-approved committed improvements. As such, the impacts of the significant link would require mitigation as follows:

- Construct a two-lane roundabout or implement signalization at the intersection of NW 54th Avenue and Cullum;
- Construct the main site access at NW 54th Avenue and North Access;
- Close the site access and signalize the intersection at NW 54th Avenue and NW 40th Street; and
- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

Since NW 54th Avenue is under jurisdiction of the City of Coconut Creek, new or modified access connections and intersections require review and approval by the City. The west access at SR 7 and NW 40th Street lies partially within a FDOT right-of-way. Any changes to this access at SR 7 will require a revised FDOT connection permit.

7.8.3 Alternative B: Reduced Intensity Alternative with No City of Coconut Creek Agreements;

The link analysis for this alternative demonstrated that no significantly impacted links (failing and significant) through Cumulative 2035 would occur. This alternative assumed the signalization of the intersection of NW54th Avenue and NW 40th Street. The access conditions at the North Access (right-turns in and out only, as per existing conditions) will not be altered.

Nonetheless, the intersection of SR7 and NW 40th Street Connector will experience a LOS of F by build-out 2020 through Cumulative 2035. Mitigation to obtain acceptable level of service can consist of

[16] The State Highway System Access Management Act regulates and controls vehicular access and connection points of ingress to, and egress from, the State Highway System, and other transportation facilities under the Department's jurisdiction except for limited access facilities. Permitting is exercised under Rules 14-96 and 14-97.

- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

This mitigation will require a revised FDOT connection permit.

7.8.4 Alternative C: No Action by Federal Government and with Coconut Creek Approvals and Agreements

As with Alternative A, the link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. However, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) based on the committed improvements under the PMDD. As such, the impacts of the significant link would be mitigated with the committed PMDD improvements at the intersections. Since NW 54th Avenue is under jurisdiction of the City of Coconut Creek, new or modified access connections and intersections require review and approval by the City.

Based on the analyses presented in the preceding sections, Alternative C, which assumes pre-mitigation agreements such as the PMDD improvements (see Chapter 2.0 and **Figure 2.4**), will not require further mitigation except for:

- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

This signalization coupled with the widening of the NW 40th Street approach to two-lanes outbound would be required by 2018 (Phase IV). Any changes to this access at SR 7 will require a revised FDOT connection permit.

7.8.5 Sub-Alternative C-1: Maintain Current Level of Development.

Since under this alternative no further development on the STOF site is projected, there are no projected traffic impacts and, thus, no traffic mitigation required.

7.9 Construction Impacts

Construction activities for the proposed fee-to-trust development project will have potential traffic flow impacts for those residents, workers, visitors and other travelers within the immediate vicinity of the project. The temporary construction activities will be limited primarily to the project site and adjacent roadways. Depending on the alternative's magnitude and phasing, construction activities could occur intermittently over several years. The build-out for all the alternatives is expected to be 2020.

Maintenance of traffic (MOT) and sequence of construction would be planned and scheduled so as to minimize traffic delays throughout the project area. The primary areas for MOT will be at the main access points located along NW 54th Avenue and SR 7. If necessary, signing would be used for construction-related activities which could excessively inconvenience the community so that motorists, residents, and business persons can plan travel routes in advance. Signs would be used as appropriate to provide notice of pertinent information to the travelling public.

The present traffic conditions may be impacted to a greater degree during stages of construction when workers, trucks or equipment enter or leave the site. Traffic delays would be controlled to the extent possible where many construction operations are in progress at the same time. All MOT on external roads will be coordinated with the pertinent agencies including FDOT, Broward County and the City of Coconut Creek.

Construction of the proposed alternatives would require truck trips for the import of materials and equipment, and daily construction workers trips. Traffic impacts resulting from construction activities would be temporary and intermittent in nature and would generally occur during off-peak traffic hours (5:00 AM to 6:00 AM and 10:00 AM to 4:00 PM). As stated above, construction activity impacts would be concentrated on NW 54th Avenue and SR-7 in the immediate vicinity of the project site.

Traffic-related construction impacts may include traffic delays, one-way traffic control, temporary road closures, and traffic detours. Since construction traffic is temporary in nature, significant adverse effects associated with construction traffic would not occur.

8.0 SUMMARY OF FINDINGS

This Transportation Planning Study (TPS) was prepared for the Seminole Fee-To-Trust Development Project (Proposed Project) in Coconut Creek, Broward County, Florida. The TPS is a technical support document for the Environmental Impact Statement (EIS) being prepared by Analytical Environmental Services (AES) associated with the Proposed Project. The proposed action is to place 45.64± acres of land into federal trust for the Seminole Tribe of Florida (STOF).

8.1 Project Alternatives

The Proposed Project Potential traffic impacts have been determined and evaluated for the following Proposed Project alternatives:

- **Alternative A:** Proposed Project with City of Coconut Creek Agreements;
    - **Sub-Alternative A-1:** No City of Coconut Creek Approvals or Agreements;
- **Alternative B:** Reduced Intensity Alternative;
- **Alternative C:** No Action by Federal Government and with Coconut Creek Approvals and Agreements; and
    - **Sub-Alternative C-1:** No City of Coconut Creek Approvals or Agreements and no additional development beyond the existing facilities and land uses as of December 2011.

8.2 Analysis Timeframes

The TPS analyses were performed for the STOF property under existing Phase II conditions (2011) and for the Proposed Project and alternatives to the Proposed Project at the following milestones:

- Build-out 2020 -- The Project build-out horizon year consistent with the STOF Master Plan including Phase V (2018-2020) of development; and
- Cumulative 2035 -- Cumulative analysis year which corresponds to the current 2035 Broward County Long Range Transportation Plan (LRTP).

Additionally, the alternatives were analyzed for the following time periods and site development as per the STOF Master Plan:

- Phase III, 2013-2015; and
- Phase IV, 2016-2018.

8.3 STOF Property Development Trip Generation

The trip generation for the project alternatives was prepared based on:

- The current traffic volumes for the existing development (Phase II, 2011) as determined on the basis of the April 2011 traffic counts and adjusted to Phase II development conditions;
- Traffic data and land use development information from the Seminole Hollywood Hard Rock Casino (a similar site); and
- Trip generation rates and equations from the Institute of Transportation Engineers' Trip Generation, 8th Edition, applied where warranted.

8.4 Significance Test and Study Area

Based on the procedure where project trips on regional roadway segments equal or exceed five (5) percent of the adopted peak-hour directional maximum service volume define the extent of the short-term (Build-out 2020) and long-term (Cumulative 2035) final study areas with significance impact were identified as the following:

Short-Term: Build-out 2020

- Cullum Road between SR 7 and NW 54th Avenue; and
- NW 54th Avenue between Sample Road and Cullum Road.

Long-term: Cumulative 2035

- North Boundary: Wiles Road (four lanes, divided arterial) between SR 7/US 441 and Lyons Road;
- East Boundary: Lyons Road (six lanes, divided arterial) between Sample Road and Wiles Road;
- South Boundary: Sample Road (six lanes, divided State principal arterial) between SR 7/US 441 and Lyons Road; and
- West Boundary: SR 7/US 441 (six lanes, divided State principal arterial) between Wiles Road and Sample Road.

8.5 Project Alternatives Impacts and Mitigations

- Alternative A: Proposed Project with City of Coconut Creek Agreements

  The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. However, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) based on the committed improvements under the PMDD. As such, the impacts of the significant link would be mitigated with the committed PMDD improvements at the intersections.

  Nonetheless, Alternative A will require the following access mitigation by Phase IV (2015-2018):

- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Sub-Alternative A-1: No City of Coconut Creek Approvals or Agreements

  The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. Also, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) assuming intersection improvements similar to those described under the under the PMDD. Unlike the PMDD, this alternative does not have pre-approved committed improvements. As such, the impacts of the significant link would require mitigation as follows:

  - Construct a two-lane roundabout or implement signalization at the intersection of NW 54th Avenue and Cullum;
  - Construct the main site access at NW 54th Avenue and North Access;
  - Close the site access and signalize the intersection at NW 54th Avenue and NW 40th Street; and
  - Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Alternative B: Reduced Intensity Alternative with No City of Coconut Creek Agreements;

  The link analysis for this alternative demonstrated that no significantly impacted links (failing and significant) through Cumulative 2035 would occur.

  Nonetheless, Alternative B will require the following access mitigation by Phase IV (2015-2018):

  - Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Alternative C: No Action by Federal Government and with Coconut Creek Approvals and Agreements

  The link analysis for this alternative demonstrated that the segment of NW 54th Avenue between Cullum Road and NW 40th Street would be significantly impacted (failing and significant) by build-out year 2020 and Cumulative 2035. However, the intersection analyses indicated that the intersections along this impacted roadway segment would operate at acceptable levels of service (LOS D or better) based on the committed improvements under the PMDD. As such, the impacts of the significant link would be mitigated with the committed PMDD improvements at the intersections.

Nonetheless, Alternative C will require the following access mitigation by Phase IV (2015-2018):

- Signalization of the West Access, specifically of the northbound SR 7 approach and NW 40th Street Connector.

- Sub-Alternative C-1: Maintain Current Level of Development.

  Since under this alternative no further development on the STOF site is projected, there are no projected traffic impacts and, thus, no traffic mitigation is required.

N:\TRANPLAN\Projects\17000s\17996.00 STOF EIS\17996.00 STOF EIS-AES-Final Revised June-2012\Revised FINAL REPORT STOF-TPS-June-2012-jlr.doc

Transportation Planning

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Certificate of Authorization #1337
Project No. 17996.00

Transportation Planning

Seminole Fee-To-Trust Development Project

APPENDICES

Final Transportation Planning Study

Prepared for:

Analytical Environmental Services
1801 7th Street, Suite 100
Sacramento, California 95811

June 20, 2012

Prepared by

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS
6500 N. Andrews Ave. • Fort Lauderdale, FL 33309
(954) 776-1616 • (954)771-7690 Fax

Certificate of Authorization #1337
Project No. 17996.00

List of Appendices

Appendix A	Mitigation Agreement
Appendix B	Traffic Count Data
Appendix C	Hollywood Hard Rock Casino Data
Appendix D	Proposed Project Alternatives Phased Development Trip Estimation
Appendix E	Growth Rates
Appendix F	SERPM Model
Appendix G	Committed Developments
Appendix H	Significance and Link Analysis Tables
Appendix I	Intersection Volumes
Appendix J	Transit Information
Appendix K	SYNCHRO and HCS Outputs

Appendix A

Mitigation Agreement

COCONUT CREEK FEE TO TRUST LANDS MITIGATION AGREEMENT

THIS Coconut Creek Fee To Trust Lands Mitigation Agreement, (hereinafter "Agreement") made and entered into this c•17 day of January, 2011, by and between the CITY OF COCONUT CREEK, a municipal corporation of the St .'e of Florida (hereinafter "CITY"), and the SEMINOLE TRIBE OF FLORIDA, a federally:recognized Indian tribe organized pursuant to Section 16 of the Indian Reorganization Act of 1934 (hereinafter "STOF"):

WHEREAS, CITY and STOF are concerned with the health and general welfare of the residents of the CITY and the STOF tribal members; and

WHEREAS, STOF filed an application for a Planned MainStreet Development District (PMDD) with CITY, detailing its future development plans for the properties within the CITY that are owned or controlled by STOF as more fully described in Exhibit A, which CITY has approved (Coconut Creek Lands); and

WHEREAS, as part of its PMDD application, STOF has requested abandonment of N. W. 40th Street, which CITY has approved; and

WHEREAS, the lands owned or controlled by STOF and N. W. 40th Street constitute the "Coconut Creek Fee to Trust Lands" as more fully described in Exhibit B; and

WHEREAS, as part of the approved PMDD, STOF has proposed various improvements designed to ameliorate the impacts of its proposed development plans for the Coconut Creek Fee to Trust Lands on CITY and the impacts upon the residents of the CITY; and

WHEREAS, STOF also has applied to the U. S. Department of the Interior, Bureau of Indian Affairs ("BIA") to take the Coconut Creek Fee to Trust Lands identified in Exhibit B into trust for the use and benefit of the STOF; and

WHEREAS, CITY has objected to STOF's application for trust status for the Coconut Creek Fee to Trust Lands; and

WHEREAS, if the BIA takes the Coconut Creek Fee to Trust Lands into trust for the use and benefit of the STOF, said lands will no longer be subject to the jurisdiction of the CITY; and

WHEREAS, on April 7, 2010, the State of Florida and the STOF entered into a **Gaming Compact Between the Seminole Tribe of Florida and the State of Florida (Gaming Compact),** with respect to the operation of Covered Games, as defined therein, on the STOF's Indian Lands as defined by the Indian Gaming Regulatory Act, 25 U.S.C., ss. 2701 *et seq.,* which was affirmatively approved by the Secretary of the Interior and published in the Federal Register on July 6, 2010; and

WHEREAS, STOF, as a responsible sovereign government doing business in the CITY, recognizes that STOF's long-term governmental and business interests are best served by accommodating and resolving the legitimate needs and concerns of residents of the CITY as evidenced by its commitments in the approved PMDD; and

WHEREAS, STOF desires to assure CITY that STOF will honor its commitments evidenced in the approved PMDD as outlined in this Agreement even if the Coconut Creek Fee to Trust Lands are ultimately taken into trust;

WHEREAS, this Agreement represents a good faith concerted and negotiated effort on the part of CITY and STOF to achieve a positive and constructive resolution of significant issues that

could have otherwise negatively impacted the goals and obligations as between CITY and STOF to the detriment of both parties and the residents of the CITY and STOF tribal members; and

WHEREAS, this Agreement reflects an enhancement of the relationship between the CITY and STOP, and a continuing desire by CITY and STOF to take a proactive approach to resolve issues for the benefit of the residents of the CITY and STOF tribal members;

NOW THEREFORE, each party hereto agrees that good and valuable consideration has been given and received by such party as consideration for entering into this Agreement, the adequacy and sufficiency of which the parties hereby acknowledge, and further in consideration of the mutual terms, conditions, promises, covenants, and payments hereinafter set forth, CITY and STOF agree as follows:

DEFINITIONS

"Baseline Net Win" means the average Net Win for the previous three (3) years that the payment is first made to the City of Coconut Creek under Paragraph A. 3 (a) of this Agreement.

"Class HI Gaming Activities" means the forms of Class III gaming defined in 25 U.S.C. s. 2703(8) and by the regulations of the National Indian Gaming Commission.

"Coconut Creek Casino" means the existing casino and accessory uses on STOF Trust Land, on the south side of N. W. 40th Street, and not a part of the Seminole PMDD.

"Covered Games" or "Covered Gaming Activity" means the Class III gaming activities included in the definitions in the *Gaming Compact.*

"DR!" means the Commerce Center of Coconut Creek Development of Regional Impact.

"Fee **to Trust Lands"** means the approximately 47 acres for which the STOF has a pending Application for Trust Status, including tracts B, C, D, *G,* H, portions of Tract 66 and a portion of NW 40th Street.

"Gaming Compact" means the Gaming Compact Between the Seminole Tribe of Florida and the State of Florida, executed April 7, 2010.

"MainStreet Design Standards" means the MainStreet Design Standards adopted by the City of Coconut Creek, dated December 9, 2004, and amended November 13, 2008.

"Municipal Service Provider Agreement" means the Intergovernmental Agreement ("IGA") entered into between the City of Coconut Creek and the STOF dated September 10, 1999, as interlineated on April 19, 2000, and May 11, 2000, and amended on October 12, 2006.

"Net Win" means the total receipts from the play of all Covered Games less all prize payouts and free play or promotional credits issued by the Tribe at the Coconut Creek Casino or any gaming facility operated by STOF located within the municipal boundaries of the City of Coconut Creek.

"PMDD" means the Seminole Planned -t Development District for the Seminole Tribe of Florida dated 1/27/2011, over property Owned or controlled by the STOF, generally described as a portion of Tract 66, Block 89 of the Palm Beach Farms Plat, Tracts C, D, G, H and a portion of Tract B of the Commerce Center of Coconutige lat lat Book 131, Page 30, Broward County)'consisting of approximately.44416 acr

Apb A pok-rloo d F N.o,)•

`1 5. 65

"Secretary" means the Secretary of the Interior

"Tract 65" means Tract 65, Block 89 of the Palm Beach Farms Plat No. 3 as recorded in Plat Book 2, Pages 45-54, of the Public Records of Palm Beach County.

"Trust Lands" means property held in trust by the Bureau of Indian Affairs for the benefit of the STOF.

A. STOF OBLIGATIONS AND COMMITMENTS

1. Until the Coconut Creek Fee to Trust Lands are taken into trust, STOP agrees to comply with the approved PMDD, other development approvals, and other CITY rules and regulations applicable to the Coconut Creek Fee to Trust Lands.

2. Once the Coconut Creek Fee to Trust Lands are taken into trust, and all opportunities to challenge same have expired, and any challenges thereto have been resolved in favor of STOF, STOF agrees to:

a. **PMDD Related Obligations**

Comply with the MainStreet Design Standards as modified by the approved PMDD including specifically the height limitations, development densities, off-site improvements, approved levels of service, and emergency vehicle access requirements as set forth in the approved PMDD. The STOF shall have the flexibility to otherwise modify its plans, phasing or scope to meet economic and constructability considerations provided that such modifications do not exceed the height limitations, development densities, offsite improvements, approved levels of service, and compromise emergency vehicle access requirements as set forth in the approved PMDD. However, further modifications to the MainStreet Design Standards, as modified by the approved PMDD, shall be limited to those necessary to meet constructability considerations and shall be approved in writing by CITY prior to becoming effective, which approval shall not be unreasonably withheld.

b. <u>Emergency Services Operations</u>

Plan for and install as part of the construction of the hotel authorized in the PMDD, Emergency Communications infrastructure consisting of antennas, repeaters, or other communications equipment. Specifications shall be recognized industry standards, as approved by the CITY Manager and STOF. At a minimum, STOF shall provide an 8 foot x 8 foot space on the roof area of the hotel, or other mutually agreed upon location with a line of sight to City Hall, to install antennas, and a 10 foot x 10 foot EDF space or separate room on one of the very top floors to hold the electronics cabinets. CITY will be required to obtain a permit from STOF before actual installation of Emergency Communications infrastructure. Said permit shall not be unreasonably withheld. Further, the City acknowledges that said permit may require approval from the BIA pursuant to 25 CFR Part 169. The STOF shall undertake reasonable good faith efforts to secure said approval or a determination that such approval is not required as part of the trust application and approval of trust status for the Coconut Creek Fee to Trust Lands, or as otherwise upon the Effective Date or as soon thereafter as possible.

STOF shall establish an Emergency Management Plan with the CITY to facilitate return to normal operations of the CITY after a declared emergency. The hotel shall be considered an alternate Emergency Operations Center (FOC) should the CITY's Primary and Secondary EOCs become inoperable as a result of the declared emergency. STOP shall make the first floor of rooms in the hotel available, as may be practical, for the CITY to conduct Emergency Operations. STOF shall make hotel rooms available, as may be practical, to house CITY employees during recovery efforts. The STOP shall have a right to reasonable reimbursement for such costs and expenses. The Primary EOC is currently located at the CITY Hall at 4800 W. Copan Road, Coconut Creek,

Florida. The Secondary EOC is currently located at the Community Center, 1100 Lyons Road, Coconut Creek, Florida.

c. Ensure that any proposed development on the existing Trust Land (Tract 65) does not cause development on the Coconut Creek Fee to Trust Lands to become inconsistent with the provisions of Paragraph A.1. or A.2.a of this Agreement.. In addition, STOF agrees to limit the number of customer parking spaces on the existing Trust Land (Tract 65) to no more than 10 spaces.

3. **Annual Tribal Contribution.** To assist the CITY in defraying the costs and expenses which the CITY will incur as a result of the Coconut Creek Fee to Trust Lands being taken into trust and the anticipated impacts of the development to occur thereon, the Seminole Tribe shall make an Annual Tribal Contribution to the CITY for so long as gaming is conducted on any of STOF's trust lands within the boundaries of CITY, pursuant to the terms set forth in sections a. through c. below,

a. Payments

The STOF shall pay the CITY a pro-rated annual amount of $2,750,000.00 payable in twelve (12) equal monthly installments. Twelve months after commencement of the Annual Tribal Contribution of $2,750,000.00, the payment shall be adjusted annually based on the then current Consumer Price Index, U.S. Department of Labor, All Urban Consumers, Miami/Fort Lauderdale area ("CPI") which shall be calculated in accordance with Exhibit "C" attached hereto.

b. Commencement of Payments.

The first payment will be due the first day of the month after the Coconut Creek Fee to Trust Lands have been taken into trust and all opportunities to challenge same have expired, and all challenges have been resolved in favor of the STOF.

c. Reduction of Payment

Payments to the CITY shall be reduced corresponding to a reduction in Net Win. For purposes of this Agreement, "Net Win" is defined to mean the total receipts from the play of all Covered Games less all prize payouts and free play or promotional credits issued by the Tribe at the Coconut Creek Casino or any gaming facility operated by STOF located within the municipal boundaries of CITY. "Covered Games" or "Covered Gaming Activity" means the Class III gaming activities included in the definitions in the *Gaming Compact.*

If Net Win drops ten percent (10%) **or** more below Baseline Net Win, payments to the CITY shall be reduced by two (2) times the percentage that the Net Win drops below the Baseline Net Win. If Net Win drops fifty percent (50%) or more below Baseline Net Win, payments to the CITY shall be reduced to zero. "Baseline Net Win" is defined as average Net Win for the previous three (3) years that the payment is first made to the CITY under Paragraph A.3 a. above.

As long as the Net Win remains ten percent (10%) or more below the Baseline Net Win, calculations will be performed every year to determine the payment for the following year. If the STOF's annual Net Win subsequently equals or exceeds the Baseline Net Win, then the STOF's payments due to the CITY shall return to the CPI adjusted amount and be paid without any reduction, but may be reduced again under the provisions set forth above.

4. **One Time Payment.**

However, if the Annual Tribal Contribution described in Paragraph A.3.a. and A.3.b. is not paid to CITY by STOF within three (3) years from the date of the execution of this Agreement, then the STOF agrees within thirty (30) days of the third (3 rd) anniversary of the execution of this Agreement to pay to the CITY a one-time payment in the amount of Three Million

Dollars **($3,000,000.00)** in consideration for the CITY's performance of its obligations pursuant to this Agreement to that date and in consideration for the CITY's release of the STOF's obligation to purchase a minimum five acre parcel for the CITY as set forth in Paragraph 3.2. of the Municipal Service Provider Agreement between the parties hereto dated September 10, 1999, as interlineated on April 19, 2000 and May 11, 2000 and as amended on October 12 2006. In the event the Coconut Creek Fee to Trust Lands are subsequently taken into Trust by the BIA after the three (3) year period set forth above, and the other provisions contained in Paragraph A.3.b. have been met, the payment provisions set forth in Paragraph A.3. above shall commence.

5. **Educational Foundation or Trust Fund.**

a. STOF and CITY shall sponsor an educational foundation or trust fund for the benefit of Coconut Creek residents, students of Coconut Creek public schools, or children of employees of the City. The STOF and the City agree that one eleventh of the Annual Tribal Contribution required under Paragraph A.3. above shall be paid directly to the foundation or trust fund. The purposes of the foundation or trust fund shall be to provide after school tutoring programs for elementary students, college test preparation courses for high school students, college academic and leadership scholarships and/or any other educational programs that the Board of Trustees of the foundation or trust decide that benefit the residents, students of Coconut Creek public schools, or children of employees of the City. The foundation or trust fund Board of Directors will consist of two (2) members designated by STOF, two (2) members designated by the Coconut Creek City Commission, and one (1) appointed educator, who shall be selected by the four appointed Board members. Such educator shall be employed by an educational institution located within the City of Coconut Creek.

b. In addition, STOF may, in its sole discretion, hold an annual fund-raising event for the foundation or trust fund at the Casino at no cost to the foundation or trust fund.

B. CITY OBLIGATIONS AND COMMITMENTS

1. In addition to all the other obligations and commitments set forth in this Agreement, and as consideration for the STOF Obligations and Commitments, CITY agrees to provide to the Coconut Creek Fee to Trust Lands the same services under the same terms and conditions as it provides to Tract 65, pursuant to the Municipal Service Provider Agreement, dated September 10, 1999, as interlineated on April 19, 2000, and May 11, 2000, and amended on October 12, 2006. Theses services are specifically those enumerated in Sections 1.1 of said Agreement, entitled "Water and Wastewater Services", Section 1.2 of said Agreement, entitled "Fire, Fire Rescue and Emergency Medical Services", Section 1.3 of said Agreement as amended, entitled "Police Services", and Section 1.4 of said Agreement, entitled "Garbage, Recycling and Construction and Demolition Debris".

2. CITY and STOF acknowledge that STOF has pending an Application for Trust Status (Trust Application") for approximately 47 acres (Coconut Creek Fee to Trust Lands) with the BIA. In specific consideration for the mutual terms, conditions, promises, covenants, payments, and improvements set forth in this Agreement, the CITY within thirty (30) days after the execution of this agreement agrees to formally withdraw all of its negative comments and objections to the STOF Trust Application and the proposed development plans and execute a letter to the BIA supporting the STOF Trust Application and proposed development plans as subject to the terms and

conditions of this Agreement. Furthermore, the CITY shall submit to the BIA a Resolution supporting the STOF Trust Application as subject to the terms and conditions of this Agreement and agrees to attend any meetings with BIA as reasonably requested by the STOF. The CITY agrees to execute in a timely manner any agreement and documents required by BIA that fulfill the goals and objectives of this Agreement. The CITY agrees to act in good faith in support of and further agrees to do nothing that would delay or impede in any way, the timely processing of the STOF Trust Application as subject to the terms and conditions of this Agreement.

3. CITY shall agree to reasonable use by STOF of City's rights of way for stormwater drainage from the Commerce Center of Coconut Creek, including the Coconut Creek Fee to Trust Lands subject to the CITY's reasonable requirements.

4. CITY acknowledges that all necessary rights-of-way and/or easements to construct the roadway and landscape improvements and enhancements enumerated in the approved PMDD are not currently in public ownership. CITY agrees that it shall have the sole responsibility to acquire such rights-of-way and easements, and shall not look to STOF for right-of-way/easement acquisition. The CITY further agrees that STOF shall not be responsible to construct the roadway and landscape improvements and enhancements in the approved PMDD unless the right-of-way/easement for such roadway and landscape improvements and enhancements has been dedicated by the property owner to the CITY or acquired by CITY or is otherwise available for construction. In the event all of the required right-of-way/easements have not come into public ownership, at the direction of the CITY, STOF shall be required to construct only that portion of the roadway and landscape improvements and enhancements on the available public right-of-way/easement. The CITY further agrees that STOF shall not be responsible for the permitting application fees for:

i. the roadway and landscape improvements and enhancements

ii. the relocation of any canals or wetland mitigation for potential wetland impacts associated with the construction of roadway and landscape improvements and enhancements. CITY recognizes that adjoining property owners are obligated to dedicate right-of-way for roadway and landscape improvements, pursuant to Ordinance No. 2010-006 approving the MainStreet Development of Regional Impact (DRI).

5. CITY agrees to the renaming of streets and to allow off-site and on-site directional signage and identifying signage for the STOF property on U.S. 441/SR 7, Lyons Road, Sample Road, Banks Road, Cullum Road, and Wochna Boulevard at time of construction of improvements on these roads as permitted by County or State agencies. STOF shall be permitted to place signs directing traffic to U.S. 441/SR 7, Lyons Road, Sample Road, Banks Road, Cullum Road, and Wochna Boulevard on STOF property.

6. The CITY agrees to support the STOF's application for abandonment of 40 th Street with Broward County.

7. Prior to the Coconut Creek Fee to Trust lands going into trust, the CITY agrees to timely respond to all permitting requests by the STOF for the PMDD and related Site Plans within applicable Florida Statutes and CITY ordinances.

8. The CITY agrees that payments received from the STOF under the terms of this Agreement will be used for improvements within the MainStreet Regional Activity Center and any other expenses or improvements to mitigate the impacts of the lands going into Trust to the extent permitted by applicable law.

C. VALIDITY OF MUNICIPAL SERVICE PROVIDER AGREEMENT BETWEEN THE CITY OF COCONUT CREEK AND THE SEMINOLE TRIBE OF FLORIDA

1. The CITY and STOF hereby recognize an Intergovernmental Agreement (IGA) titled as a Municipal Service Provider Agreement, entered into between the CITY of Coconut Creek and the Seminole Tribe of Florida, dated September 10, 1999, as interlineated on April 19, 2000, and May 11, 2000, and amended on October 12, 2006. The CITY and STOF hereby acknowledge and agree that the IGA known as the Municipal Service Provider Agreement, as interlineated and amended remains in full force and effect between the parties thereto, and is not amended, repealed, replaced, altered, adjusted, modified, superseded, or revised by any term or condition of this Agreement. Notwithstanding the foregoing, upon receipt by the CITY of the first payment of the initial Tribal Annual Contribution under Paragraph A.3.or the onetime payment under Paragraph A.4, the CITY shall release STOF from its obligation to purchase a minimum five acre parcel for the CITY as set forth in Paragraph 3.2. of the Municipal Service Provider Agreement between the parties hereto dated September 10, 1999, as interlineated on April 19, 2000 and May 11, 2000 and as amended on October 12 2006.

D. MISCELLANEOUS

1. Limited Waiver of Sovereign Immunity.

a. Pursuant to Tribal Council Resolution No. C- /5 1.1 a,spteh tuap.t to Tribal Ordinance C-01-95 a copy of which is attached hereto as Exhibit 1) Ltlef STOF agrees to a limited waiver of its sovereign immunity as follows:

i) The limited waiver shall be based solely upon a claim by the CITY that the STOP has materially breached its obligations under the terms and conditions of this Agreement.

ii) The limited waiver may only be asserted by the CITY. It shall not be assignable.

iii) The limited waiver shall not be effective unless and until the parties have first exhausted the dispute resolution procedures hereinafter *set* forth in Paragraph D.1.b.

iv) The limited waiver shall be limited to declaratory and injunctive relief, as well as actual damages that have been incurred through the date of any claim asserted including without limitation any Annual Tribal Contribution owed by STOF to CITY. The limited waiver of sovereign immunity shall not pertain to any claim for punitive damages nor shall it pertain to any claim in excess of those set forth in Florida state law for the state and its agencies and subdivisions.

b. The limited waiver of sovereign immunity hereunder shall be conditioned upon the following procedures designated to encourage dispute resolution. The parties shall attempt to resolve their dispute by negotiating in good faith for a period not to exceed thirty (30) days with each other with a view towards resolving their dispute voluntarily. If the voluntary efforts of the parties at direct negotiations fail, the parties shall then submit the dispute to mediation by a mediator to be approved by both parties. Any individual appearing on the mediator list of both parties shall be deemed acceptable for the purpose of mediation; otherwise, the parties shall negotiate with one another in good faith in an effort to select a mediator with consent to the selection of the mediator not to be unreasonably withheld. Such mediation shall take place within

thirty (30) days after written notice from one party to the other of the failure of voluntary negotiations between the parties. **Under no circumstances will the mediation operate as a waiver of tribal sovereign immunity.**

c. In the event that the STOF is charged with a breach of this Agreement, and all other conditions precedent to the assertion of a claim or the filing of suit have been met in full, the complaint or charging document filed by the CITY shall set forth each and every fact and shall include, by way of attachment, each and every document upon which its allegations of breach are predicated. Each and every allegation contained in the complaint or charging document must be verified under oath. For this purpose, the STOP hereby expressly and unequivocally waives the sovereign immunity of the STOF for the limited purpose of enforcing and/or resolving disputes arising under this Agreement, and as specifically limited and set forth in this Agre ement, all in accordance with the provisions set forth in Tribal Council Resolution No. (–ICY-I/and Ordinance No. C-01-95 enacted by the Tribal Council of the STOF, and consents to the jurisdiction of the United States District Court for the Southern District of Florida and the courts of the Seventeenth Judicial Circuit in and for Broward County, Florida, and the federal an • arts having appellate jurisdiction thereover, (collectively the "Courts") or agrees to bitration in the event such courts are unable or unwilling to accept jurisdiction with respect to any dispute, enforcement or collection matter arising thereunder, and further waives any requirement for exhaustion of remedies in any court or forum of the STOF. Any such binding arbitration shall be enforced in the Courts. The STOF hereby expressly agrees not to plead in any legal proceeding or use the defense or defenses/affirmative defenses of immunity in any legal proceeding or arbitration

involving the STOF or the CITY, brought by the CITY to enforce the terms and conditions of this Agreement.

d. The law governing this Agreement shall be the applicable laws of the United States of America.

e. Under no circumstances will an award of damages make available to the CITY access to any tribal assets which are not otherwise available as a matter of applicable federal law. Additionally, nothing contained herein shall be read to constitute a pledge of assets or an agreement to allow levy and execution against any specific asset of the Seminole Tribe of Florida in the event that a judgment is rendered against the Seminole Tribe of Florida.

f. Nothing in this Section is intended to expand the STOF's tort liability beyond that set forth in the *Gaming Compact*.

2. ***Notices.*** All notices or other communications provided for by this Agreement shall be made in writing and shall be deemed properly delivered by the mailing of such notices to the parties entitled thereto, via certified mail, return receipt requested, postage prepaid to the parties at the following addresses (or to such other addresses designated in writing by one party to the other):

Seminole Tribe
Chairman
Seminole Tribe of Florida
6300 Stirling Road
Hollywood, FL 33024

With copy to:

Casino Manager
Seminole Casino Coconut Creek
5550 NW 40th Street
Coconut Creek, FL 33073

With copy to:

Coconut Creek
Mayor
City of Coconut Creek
4800 West Copans Road
Coconut Creek, FL 33063

With copy to:

City Manager
City of Coconut Creek
4800 West Copans Road
Coconut Creek, FL 33063

With copy to:

General Counsel
Seminole Tribe of Florida
6300 Stirling Road
Hollywood, FL 33024

City Attorney
City of Coconut Creek
4800 West Copans Road
Coconut Creek, FL 33063

3. Waivers. A waiver of any breach of any provision of this Agreement shall not constitute or operate as a waiver of any other breach of such provision or of any other provisions, nor shall any failure to enforce any provision hereof operate as a waiver of such provision or of any other provisions.

4. Negotiations and Drafting. This Agreement has been negotiated and drafted by all parties hereto and shall not be more strictly construed against any party because of such party's preparation of this Agreement. All parties to this Agreement have been represented by their respective counsel. The parties hereto acknowledge having read this Agreement and discussed the terms of this Agreement with their respective counsel and that the approval and execution of this Agreement has been made freely and voluntarily with full knowledge of its legal effect. In the event it becomes necessary for any reason to construe this Agreement as permitted by the rules of evidence or the appropriate court, this Agreement will be construed as being jointly prepared and drafted by all parties hereto.

5. Survivability and Assignment All of the terms, conditions, provisions, and representations contained in this Agreement shall survive and transcend the execution of this Agreement. The CITY and the STOF, their officers, agents and employees, hereby agree to abide by the terms of this Agreement.

6. Incorporation of Whereas clauses. The CITY and the STOF agree that the Whereas clauses at the beginning of this Agreement are true and correct, and are hereby incorporated by reference into this Agreement.

7. Total Agreement and Amendment& The herein Agreement including all Whereas clauses and exhibits referenced therein constitutes and contains the entire Agreement as between the parties. There are no representations, premises or undertakings between the parties other than expressly set forth herein. The parties agree that no amendments or modifications of any of the terms of this Agreement shall be valid unless in writing and executed with the same formalities as this Agreement.

8. Execution. This Agreement shall be executed in quadruple and each such executed Agreement shall be deemed to be an original.

9. Severability. Should any part, term or provision of this Agreement, or any document required herein to be executed, be declared invalid, void or unenforceable, by the Secretary of the Interior and a state or federal court of competent jurisdiction, all remaining parts, terms and provisions thereof shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby provided that severing the invalidated part, term or provisions does not undermine the overall intent of the parties in entering this Agreement.

10. Final Effective Date of Agreement

a. Except as set forth in Paragraph D.11. below, this Agreement shall become effective (the "Final Effective Date") upon the date the Secretary of the Interior approves this Agreement pursuant to 25 USC §81 and its_implementing regulations or advises STOF that such approval is not

required, either for reason that the Agreement is not "covered" by § 81 because it does not provide for "encumbrances" as defined by 25 CFR § 84.002 or for any other reasons.

b. The STOF shall undertake reasonable efforts, in consultation with the CITY, to secure said approval or in the absence of said approval, to secure a written determination from the Secretary of the reasons he has determined that said approval is not required. Such reasons may include a determination that the Agreement is not "covered" by §81, as well as a statement that, because of that determination approval under § 81 is not required. In addition, in the event of a determination by the Secretary that § 81 approval of this Agreements is not required, the STOF shall undertake reasonable efforts, in consultation with the CITY, to have included in any written determination from the Secretary a statement that the provisions of § 81 will not affect the validity of the provisions of this Agreement from that time forward, including the time after the land is taken into trust. If the Secretary determines that §81 approval is required, but objects to provisions of this Agreement or disapproves this Agreement, the CITY and STOF will negotiate in good faith to resolve the objections and resubmit this Agreement for approval. In that event, the STOF shall not transfer title to the Coconut Creek Fee to Trust Lands to the United States of America until such time as § 81 approval is obtained.

11. ***Initial Effective Date of Agreement.*** Notwithstanding the provisions of Paragraph 10 above, Paragraphs A.1, A.3, A.4, B.2, B.3, B.4, B.5, B.6, B.7 C.1 and D with the exception of D.10.a of this Agreement shall be effective ("Initial Effective Date") on the date this Agreement is fully executed by both parties. None of the provisions referenced in this Paragraph D.11. constitute an "encumbrance" as defined by 25 CFR § 84.002. Further, the provisions of this Paragraph D.11.

shall constitute an enforceable agreement between the parties hereto separate and apart from this Agreement and shall not be affected in any manner by any disapproval of this Agreement by the Secretary pursuant to 25 U.S.C. § 81 or otherwise.

12. Titles to Paragraphs. The title of each paragraph in this Agreement is for purposes of clarity and ease of reading only.

13. Prevailing Party. The non-prevailing party shall be liable to the prevailing party for all costs, expenses, attorneys' fees and damages at the trial and appellate level, up to and including the U.S. Supreme Court, which may be incurred or sustained by the prevailing party by reason of the non-prevailing party's breach of any of the provisions of this Agreement.

14. Authorization. The STOF and the CITY represent and warrant that each has the full power and authority to execute this Agreement and perform its obligations in accordance with the terms and conditions hereof, and that the representatives executing this Agreement on behalf of each party are duly and fully authorized to so execute and deliver this Agreement.

a. The STOF its to ecute this Agreement by the adoption of Resol 'on C 514- if ted //c) 1 1//1 a py of which is attached hereto as Exhibit v\I\NO-

The CITY has ed its officers, e&te this Agreement by the adoption of RR ,.solution 611 opted /A7//; a copy of which is attached hereto as Exhibit

15. Best Efforts. The parties agree that they shall devote their best efforts to the fulfillment of their respective duties and obligations hereunder in accordance with the provisions of this Agreement.

16. ***Law to Govern,*** This Agreement shall be governed by the applicable laws of the United States of America and Tribal Ordinance C-01-95.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their authorized representatives and delivered as of the day and year first above written.

(REMAINDER OF PAGE INTENTIONALLY BLANK)

SEMINOLE TRIBE OF FLORIDA.

BY: _____ *Date:* 2/11,
Mitchell Cypress, as its Chairman
Of the Tribal Council

Attest: _____
_____, *Secretary*

THE CITY OF COCONUT CREEK, FLORIDA:

BY: _____ *Date:* ot 7, .1.,011
David Riu 7, Ci anager

Attest: _____ Ag. _____
Barbara S. Price, MMC
City Clerk

Approved as to legal form:

"-eeeV-F A;,,k, *Date:*
S. Stu City Attorney

NANCY A. COUSINS

4114pdctdarn4Citv AffornevWCausinsiDocuments1City ManeveriSentinole TribeiTraist Ston.ts Negonnionstkfitigation Agreement 01-20-11 Clenn

United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Regional Office
545 Marriott Drive, Suite 700
Nashville, TN 37214

Trust Services
Environmental Management

APR 2 2 2011

r4so 4W%
cs7 '.:41 C.?
1. AttV 'wax i

MAY -2 2011

CM Y
ciry

Mary
Paul
Nancy
Sheila

Honorable Mitchell Cypress
Chairman, Seminole Tribe of Florida
6300 Stirling Road
Hollywood, Florida 33024

Mr, David J. Rivera
City Manager, City of Coconut Creek
4800 West Copans Road
Coconut Creek, Florida 33063

Dear Chairman Cypress and Mr. Rivera:

You requested a review of the Coconut Creek Fee to Trust Lands Mitigation Agreement between the Seminole Tribe of Florida (Tribe) and the City of Coconut Creek (City) for approval by the' Secretary of the Interior (Secretary) in compliance with 25 U.S.C. 81. The pupose of the agreement is to resolve issues involving the Tribe's fee-to-trust land acquisition request for land located within the municipal boundaries of the City.

As implemented in 25 C.F.R. Part 84, the Indian Tribal Economic Development and Contract Encouragement Act of 2000 (Public Law 106-179) only requires Secretarial approval for agreements that encumber tribal lands for a period of seven or more years. 25 C.F.R. 84.005. In *Gasplus LLC v. U.S. D.0.1,* 510 F. Supp. 2d 18 (D. D.C. 2007), the D.C. District recently explained that an agreement encumbers tribal lands when it "deprives a tribe of exclusive or nearly exclusive proprietary control over its land." 510 F. Supp. 2d at 31. Nothing in the agreement grants the City such a level of dominion over the Tribe's land at issue. Therefore, the agreement does not fall within the statute and Secretarial approval of the agreement is not required. Accordingly, the agreement is returned pursuant to 25 C.F.R. Part 84.005.

If you have any questions, please do not hesitate to contact Mr. Kurt .0. Chandler, Regional Environmental Scientist, at (615) 564-6832.

Sincerely,

Franklin Keel

Director, Eastern Region

Enclosure

EXHIBIT A

PMDD LEGAL DESCRIPTION:

ALL OF TRACT "C", TRACT "D" AND TRACT "G", COMMERCE CENTER OF COCONUT CREEK, PLAT BOOK 131, PAGE 30, BROWARD COUNTY RECORDS, FLORIDA. CONTAINING 22.409 ACRES MORE OR LESS.

TOGETHER WITH:
TRACT "H", COMMERCE CENTER OF COCONUT CREEK, PLAT BOOK 131, PAGE 30, BROWARD COUNTY RECORDS, FLORIDA. LESS FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY, PARCEL 118 AS SHOWN ON FDOT SECTION MAP #86100-2531, DESCRIBED AS FOLLOWS:

LESS AND EXCEPTING:
THAT PART OF TRACT "H" COMMERCE CENTER OF COCONUT CREEK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 131, PAGE 30 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, LYING IN SECTION 18, TOWNSHIP 48 SOUTH, RANGE 42 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID TRACT "H"; THENCE RUN SOUTH 00° 50'59" EAST ALONG A NON-VEHICULAR ACCESS LINE AND THE WEST LINE OF SAID TRACT "H", A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°30'20" EAST ALONG A LINE 20.00 FEET SOUTH OF AND PARRALLEL WITH THE NORTH LINE OF SAID TRACT "H", A DISTANCE OF 72.17 FEET; THENCE SOUTH 01°57'54" EAST, A DISTANCE OF 159.66 FEET TO A POINT ON A CURVE CONCAVE WESTERLY, HAVING A CHORD BEARING OF SOUTH 09°51'32" WEST; THENCE SOUTHWESTERLY ALONG SAID CURVE, HAVING A RADIUS OF 136.00 FEET, THROUGH A CENTRAL ANGLE OF 23°38'52", AN ARC DISTANCE OF 56.13 FEET TO THE END OF SAID CURVE; THENCE SOUTH 21°40'58" WEST, A DISTANCE OF 130.76 FEET TO A POINT ON A CURVE CONCAVE EASTERLY, HAVING A CHORD BEARING OF SOUTH 09°39'02" WEST; THENCE SOUTHERLY ALONG SAID CURVE, HAVING A RADIUS OF 128.00 FEET, THROUGH A CENTRAL ANGLE OF 24°03'53", AN ARC DISTANCE OF 53.76 FEET TO THE END OF SAID CURVE; THENCE SOUTH 02°22'55" EAST, A DISTANCE OF 183.48 FEET TO A POINT ON A CURVE CONCAVE NORTHEASTERLY, HAVING A CHORD BEARING OF SOUTH 19°32'41" EAST; THENCE SOUTHERLY AND EASTERLY ALONG SAID CURVE, HAVING A RADIUS OF 60.00 FEET, THROUGH A CENTRAL ANGLE OF 34°19'32", AN ARC DISTANCE OF 35.94 FEET TO THE END OF SAID CURVE; AND A POINT ON SAID NON-VEHICULAR ACCESS LINE; THENCE NORTH 47°10'36" WEST ALONG SAID NON-VEHICULAR ACCESS LINE, A DISTANCE OF 19.59 FEET TO A POINT ON THE WEST LINE OF SAID TRACT "H" AND THE BEGINNING OF A CURVE CONCAVE EASTERLY, HAVING A CHORD BEARING OF NORTH 02°28'39" WEST; THENCE NORTHERLY ALONG SAID NON-VEHICULAR ACCESS LINE AND SAID WEST LINE OF TRACT "H", HAVING A RADIUS OF 4228.28 FEET, THROUGH A CENTRAL ANGLE OF 02°57'20", AN

ARC DISTANCE OF 218.11 FEET TO THE END OF SAID CURVE; THENCE NORTH 00°59'59" WEST ALONG SAID NON-VEHICULAR ACCESS LINE AND SAID WEST LINE OF TRACT "H", A DISTANCE OF 373.51 FEET TO THE POINT OF BEGINNING. CONTAINING 0.500 ACRE, MORE OR LESS.

SAID LANDS CONTAINING A NET ACREAGE OF 13.245 ACRES, MORE OR LESS.

TOGETHER WITH:
THE EAST HALF (E1/2) OF THE NORTH 122.00 FEET OF TRACT 66, BLOCK 89, "PALM BEACH FARMS COMPANY PLAT No. 3", PLAT BOOK 2, PAGES 45-54, PALM BEACH COUNTY RECORDS, FLORIDA. CONTAINING 0.896 ACRES MORE OR LESS.

TOGETHER WITH:
A PORTION OF TRACT "B", COMMERCE CENTER OF COCONUT CREEK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 131, PAGE 30 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEASTERLY CORNER OF SAID TRACT "B"; THENCE RUN SOUTH 89°37'19" WEST ALONG THE NORTHERLY LINE OF SAID TRACT "B" FOR 926.36 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE SOUTH 00°25'15" EAST FOR 406.28 FEET; THENCE SOUTH 89°34'45" WEST FOR 41.00 FEET; THENCE SOUTH 00°25'15" EAST, FOR 316.57 FEET; THENCE SOUTH 89°28'23" EAST FOR 133.45 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE LEFT HAVING A RADIUS OF 342.00 FEET AND A CENTRAL ANGLE OF 24°37'19" FOR AN ARC DISTANCE OF 146.97 FEET TO A POINT OF REVERSE CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT HAVING A RADIUS OF 354.00 FEET AND A CENTRAL ANGLE OF 2°54'07" FOR AN ARC OF DISTANCE OF 17.93 FEET; THENCE SOUTH 00°25'15" EAST FOR 131.88 FEET TO A POINT ON THE SOUTHERLY LINE OF SAID TRACT "B"; THENCE NORTH 89°28'23" WEST, ALONG A LINE THAT IS 60.00 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 18, TOWNSHIP 48 SOUTH, RANGE 42 EAST, FOR 68.46 FEET; THENCE NORTH 85°39'32" WEST FOR 180.40 FEET; THENCE NORTH 89°28'23" WEST, FOR 313.77 FEET; THENCE NORTH 00°31'37" EAST, FOR 90.37 FEET, TO A POINT ON THE NEXT DESCRIBED CURVE, SAID POINT BEARS SOUTH 35°30'35" WEST, FROM THE RADIUS POINT OF SAID CURVE; THENCE NORTHWESTERLY, NORTHERLY AND NORTHEASTERLY, ALONG A CIRCULAR CURVE TO THE RIGHT, HAVING A RADIUS OF 235.00 FEET AND A CENTRAL ANGLE OF 53°28'56" FOR AN ARC DISTANCE OF 219.36 FEET TO A POINT OF TANGENCY; THENCE NORTH 01°00'29" WEST, FOR 205.01 FEET TO A POINT OF CURVATURE; THENCE NORTHWESTERLY, ALONG A CIRCULAR CURVE TO THE LEFT, HAVING A

RADIUS OF 4,402.28 FEET AND A CENTRAL ANGLE OF 04°08'02" FOR AN ARC DISTANCE OF 317.62 FEET (THE LAST SEVEN COURSES BEING COINCIDENT WITH PORTIONS OF THE SOUTHERLY AND THE WESTERLY LINES OF SAID TRACT "B"); THENCE NORTH 89°37'19" EAST, PARALLEL TO THE NORTHERLY LINE OF SAID TRACT "B", FOR 422.34 FEET TO THE POINT OF BEGINNING. CONTAINING 7.466 ACRES MORE OR LESS.

TOGETHER WITH:
A PORTION OF NORTHWEST 40TH STREET, ACCORDING TO THE PLAT OF COMMERCE CENTER OF COCONUT CREEK, AS RECORDED IN PLAT BOOK 131, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF TRACT "H" AND THE NORTH LINE OF NORTHWEST 40TH STREET, ACCORDING TO THE PLAT OF COMMERCE CENTER OF COCONUT CREEK AS RECORDED 1N PLAT BOOK 131, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE ALONG THE SOUTH BOUNDARY OF SAID TRACT "H" AND "G" AND THE NORTH LINE OF SAID NORTHWEST 40TH STREET FOR THE FOLLOWING FOUR (4) COURSES: NORTH 89°37'15" EAST, A DISTANCE OF 260.70 FEET; THENCE NORTH 00°50'43" WEST, A DISTANCE OF 15.00 FEET; THENCE NORTH 89°37'15" EAST, A DISTANCE OF 1123.56 FEET; THENCE NORTH 44°36'00" EAST, A DISTANCE OF 42.44 FEET;

THENCE LEAVING SAID SOUTH LINE OF TRACT "G", PROCEED SOUTH 05°43'28" EAST, A DISTANCE OF 132.58 FEET TO THE NORTHEASTERLY CORNER OF TRACT "D" OF SAID PLAT OF COMMERCE CENTER OF COCONUT CREEK AND THE SOUTH RIGHT OF WAY LINE OF NORTHWEST 40TH STREET; THENCE CONTINUE ALONG THE NORTH BOUNDARY OF SAID TRACT "D", TRACT "C", AND THE SOUTH RIGHT OF WAY LINE OF NORTHWEST 40TH STREET FOR THE FOLLOWING SIX COURSES: THENCE NORTH 45°24'00" WEST, A DISTANCE OF 42.41 FEET; THENCE SOUTH 89°37'15" WEST, A DISTANCE OF 150.00 FEET; THENCE NORTH 83°32'11" WEST, A DISTANCE OF 100.72 FEET; THENCE SOUTH 89°37'15" WEST, A DISTANCE OF 234.89 FEET; THENCE NORTH 00°25'15" WEST, A DISTANCE OF 15.00 FEET; THENCE SOUTH 89°37'15" WEST, A DISTANCE OF 908.99 FEET TO THE EAST LINE OF STATE ROAD NO. 7 (U.S. 441) AND A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 4228.28 FEET, A CENTRAL ANGLE OF 00°24'29" AND A CHORD BEARING OF NORTH 05°18'41" WEST; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 30.12 FEET TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 1.634 ACRES MORE OR LESS.

SAID LANDS LYING IN THE CITY OF COCONUT CREEK, BROWARD COUNTY, FLORIDA, CONTAINING A TOTAL OF 45.650 ACRES, MORE OR LESS.

EXHIBIT B

FEE TO TRUST LANDS LEGAL DESCRIPTION:

ALL OF TRACT "C", TRACT "D" AND TRACT "G", COMMERCE CENTER OF COCONUT CREEK, PLAT BOOK 131, PAGE 30, BROWARD COUNTY RECORDS, FLORIDA. CONTAINING 22.409 ACRES MORE OR LESS.

TOGETHER WITH:
TRACT "H", COMMERCE CENTER OF COCONUT CREEK, PLAT BOOK 131, PAGE 30, BROWARD COUNTY RECORDS, FLORIDA. LESS FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY, PARCEL 118 AS SHOWN ON FDOT SECTION MAP 4486100-2531, DESCRIBED AS FOLLOWS:

LESS AND EXCEPTING:
THAT PART OF TRACT "H" COMMERCE CENTER OF COCONUT CREEK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 131, PAGE 30 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, LYING IN SECTION 18, TOWNSHIP 48 SOUTH, RANGE 42 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHWEST CORNER OF SAID TRACT "H"; THENCE RUN SOUTH 00° 50'59" EAST ALONG A NON-VEHICULAR ACCESS LINE AND THE WEST LINE OF SAID TRACT "H", A DISTANCE OF 20.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 89°30'20" EAST ALONG A LINE 20.00 FEET SOUTH OF AND PARRALLEL WITH THE NORTH LINE OF SAID TRACT "H", A DISTANCE OF 72.17 FEET; THENCE SOUTH 01°57'54" EAST, A DISTANCE OF 159.66 FEET TO A POINT ON A CURVE CONCAVE WESTERLY, HAVING A CHORD BEARING OF SOUTH 09°51'32" WEST; THENCE SOUTHWESTERLY ALONG SAID CURVE, HAVING A RADIUS OF 136.00 FEET, THROUGH A CENTRAL ANGLE OF 23°38'52", AN ARC DISTANCE OF 56.13 FEET TO THE END OF SAID CURVE; THENCE SOUTH 21°40'58" WEST, A DISTANCE OF 130.76 FEET TO A POINT ON A CURVE CONCAVE EASTERLY, HAVING A CHORD BEARING OF SOUTH 09°39'02" WEST; THENCE SOUTHERLY ALONG SAID CURVE, HAVING A RADIUS OF 128.00 FEET, THROUGH A CENTRAL ANGLE OF 24°03'53", AN ARC DISTANCE OF 53.76 FEET TO THE END OF SAID CURVE; THENCE SOUTH 02°22'55" EAST, A DISTANCE OF 183.48 FEET TO A POINT ON A CURVE CONCAVE NORTHEASTERLY, HAVING A CHORD BEARING OF SOUTH 19°32'41" EAST; THENCE SOUTHERLY AND EASTERLY ALONG SAID CURVE, HAVING A RADIUS OF 60.00 FEET, THROUGH A CENTRAL ANGLE OF 34°19'32", AN ARC DISTANCE OF 35.94 FEET TO THE END OF SAID CURVE; AND A POINT ON SAID NON-VEHICULAR ACCESS LINE; THENCE NORTH 47°10'36" WEST ALONG SAID NON-VEHICULAR ACCESS LINE, A DISTANCE OF 19.59 FEET TO A POINT ON THE WEST LINE OF SAID TRACT "H" AND THE BEGINNING OF A CURVE CONCAVE EASTERLY, HAVING A CHORD BEARING OF NORTH 02°28'39" WEST; THENCE NORTHERLY ALONG SAID NON-VEHICULAR ACCESS LINE AND SAID WEST LINE OF TRACT "H", HAVING A RADIUS OF 4228.28 FEET, THROUGH A CENTRAL ANGLE OF 02°5720", AN

ARC DISTANCE OF 218.11 FEET TO THE END OF SAID CURVE; THENCE NORTH 00°59'59" WEST ALONG SAID NON-VEHICULAR ACCESS LINE AND SAID WEST LINE OF TRACT "H", A DISTANCE OF 373.51 FEET TO THE POINT OF BEGINNING. CONTAINING 0.500 ACRE, MORE OR LESS.

SAID LANDS CONTAINING A NET ACREAGE OF 13.245 ACRES, MORE OR LESS.

TOGETHER WITH:
THE EAST HALF (E1/2) OF THE NORTH 122.00 FEET OF TRACT 66, BLOCK 89, "PALM BEACH FARMS COMPANY PLAT No. 3", PLAT BOOK 2, PAGES 45-54, PALM BEACH COUNTY RECORDS, FLORIDA. CONTAINING 0.896 ACRES MORE OR LESS.

TOGETHER WITH:
A PORTION OF TRACT "B", COMMERCE CENTER OF COCONUT CREEK, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 131, PAGE 30 OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEASTERLY CORNER OF SAID TRACT "B"; THENCE RUN SOUTH 89°37'19" WEST ALONG THE NORTHERLY LINE OF SAID TRACT "B" FOR 926.36 FEET TO THE POINT OF BEGINNING OF THE FOLLOWING DESCRIBED PARCEL; THENCE SOUTH 00°25'15" EAST FOR 406.28 FEET; THENCE SOUTH 89°34'45" WEST FOR 41.00 FEET; THENCE SOUTH 00°25'15" EAST, FOR 316.57 FEET; THENCE SOUTH 89°28'23" EAST FOR 133.45 FEET TO A POINT OF CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE LEFT HAVING A RADIUS OF 342.00 FEET AND A CENTRAL ANGLE OF 24°37'19" FOR AN ARC DISTANCE OF 146.97 FEET TO A POINT OF REVERSE CURVATURE; THENCE NORTHEASTERLY ALONG A CIRCULAR CURVE TO THE RIGHT HAVING A RADIUS OF 354.00 FEET AND A CENTRAL ANGLE OF 2°54'07" FOR AN ARC OF DISTANCE OF 17.93 FEET; THENCE SOUTH 00°25'15" EAST FOR 131.88 FEET TO A POINT ON THE SOUTHERLY LINE OF SAID TRACT "B"; THENCE NORTH 89°28'23" WEST, ALONG A LINE THAT IS 60.00 FEET NORTH OF AND PARALLEL WITH THE SOUTH LINE OF THE SOUTHWEST 1/4 OF SECTION 18, TOWNSHIP 48 SOUTH, RANGE 42 EAST, FOR 68A6 FEET; THENCE NORTH 85°39'32" WEST FOR 180.40 FEET; THENCE NORTH 89°28'23" WEST, FOR 313.77 FEET; THENCE NORTH 00°31'37" EAST, FOR 90.37 FEET, TO A POINT ON THE NEXT DESCRIBED CURVE, SAID POINT BEARS SOUTH 35°30'35" WEST, FROM THE RADIUS POINT OF SAID CURVE; THENCE NORTHWESTERLY, NORTHERLY AND NORTHEASTERLY, ALONG A CIRCULAR CURVE TO THE RIGHT, HAVING A RADIUS OF 235.00 FEET AND A CENTRAL ANGLE OF 53°28'56" FOR AN ARC DISTANCE OF 219.36 FEET TO A POINT OF TANGENCY; THENCE NORTH 01°00'29" WEST, FOR 205.01 FEET TO A POINT OF CURVATURE; THENCE NORTHWESTERLY, ALONG A CIRCULAR CURVE TO THE LEFT, HAVING A

RADIUS OF 4,402.28 FEET AND A CENTRAL ANGLE OF 04°08'02" FOR AN ARC DISTANCE OF 317.62 FEET (THE LAST SEVEN COURSES BEING COINCIDENT WITH PORTIONS OF THE SOUTHERLY AND THE WESTERLY LINES OF SAID TRACT "B"); THENCE NORTH 89°37'19" EAST, PARALLEL TO THE NORTHERLY LINE OF SAID TRACT "B", FOR 422.34 FEET TO THE POINT OF BEGINNING. CONTAINING 7.466 ACRES MORE OR LESS.

TOGETHER WITH:
A PORTION OF NORTHWEST 40TH STREET, ACCORDING TO THE PLAT OF COMMERCE CENTER OF COCONUT CREEK, AS RECORDED IN PLAT BOOK 131, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHWEST CORNER OF TRACT "H" AND THE NORTH LINE OF NORTHWEST 40TH STREET, ACCORDING TO THE PLAT OF COMMERCE CENTER OF COCONUT CREEK AS RECORDED IN PLAT BOOK 131, PAGE 30, OF THE PUBLIC RECORDS OF BROWARD COUNTY, FLORIDA; THENCE ALONG THE SOUTH BOUNDARY OF SAID TRACT "H" AND "G" AND THE NORTH LINE OF SAID NORTHWEST 40TH STREET FOR THE FOLLOWING FOUR (4) COURSES: NORTH 89°37'15" EAST, A DISTANCE OF 260.70 FEET; THENCE NORTH 00°50'43" WEST, A DISTANCE OF 15.00 FEET; THENCE NORTH 89°37'15" EAST, A DISTANCE OF 1123.56 FEET; THENCE NORTH 44°36'00" EAST, A DISTANCE OF 42.44 FEET;

THENCE LEAVING SAID SOUTH LINE OF TRACT "G", PROCEED SOUTH 05°43'28" EAST, A DISTANCE OF 132.58 FEET TO THE NORTHEASTERLY CORNER OF TRACT "D" OF SAID PLAT OF COMMERCE CENTER OF COCONUT CREEK AND THE SOUTH RIGHT OF WAY LINE OF NORTHWEST 40TH STREET; THENCE CONTINUE ALONG THE NORTH BOUNDARY OF SAID TRACT "D", TRACT "C", AND THE SOUTH RIGHT OF WAY LINE OF NORTHWEST 40TH STREET FOR THE FOLLOWING SIX COURSES: THENCE NORTH 45°24'00" WEST, A DISTANCE OF 42.41 FEET; THENCE SOUTH 89°37'15" WEST, A DISTANCE OF 150.00 FEET; THENCE NORTH 83°32'11" WEST, A DISTANCE OF 100.72 FEET; THENCE SOUTH 89°37'15" WEST, A DISTANCE OF 234.89 FEET; THENCE NORTH 00°25'15" WEST, A DISTANCE OF 15.00 FEET; THENCE SOUTH 89°37'15" WEST, A DISTANCE OF 908.99 FEET TO THE EAST LINE OF STATE ROAD NO. 7 (U.S. 441) AND A POINT ON THE ARC OF A NON-TANGENT CURVE CONCAVE TO THE EAST HAVING A RADIUS OF 4228.28 FEET, A CENTRAL ANGLE OF 00°24'29" AND A CHORD BEARING OF NORTH 05°18'41" WEST; THENCE NORTHERLY ALONG THE ARC OF SAID CURVE A DISTANCE OF 30.12 FEET TO THE POINT OF BEGINNING.

SAID LANDS CONTAINING 1.634 ACRES MORE OR LESS.

SAID LANDS LYING IN THE CITY OF COCONUT CREEK, BROWARD COUNTY, FLORIDA, CONTAINING A TOTAL OF 45.650 ACRES, MORE OR LESS.

EXHIBIT "C"

CALCULATION OF CONSUMER PRICE INDEX
Based on Bureau of Labor Statistics Data

Consumer Price Index — All Urban Consumers

Not Seasonally Adjusted

Miami-Fort Lauderdale, FL Area
Base Period 1982 —1984 =100

A) Index _____ - _____

B) Index _____

C) Change in Index

Percent Change (rounded to one decimal)

C ÷ B = % change

D) _____% or_____

A = The CPI — All Urban Consumers for (*) This Year _____
B = The CPI — All Urban Consumers for (*) Last Year _____

C = Subtract **B** from **A** which equals the change in the Raw Index.

D = C÷Bx 100 = the percentage change for the one year period.

(X) = the payment for the prior year
(Y) = the decimal equivalent of "D"
(Z) = current payment
(*) = Month first payment made under A.3.b.

RE: COCONUT CREEK FEE TO TRUST LANDS MITIGATION AGREEMENT; WAIVER OF SOVEREIGN IMMUNITY

SEMINOLE TRIBE OF FLORIDA
HOLLYWOOD, FLORIDA

RESOLUTION NO. C-154-11

WHEREAS, the Seminole Tribe of Florida is an organized Indian Tribe as defined in Section 16 of the Act of June 18, 1934, as amended; and

WHEREAS, the Tribal Council of the Seminole Tribe of Florida is the governing body of the Seminole Tribe of Florida; and

WHEREAS, the Seminole Tribe of Florida ("Tribe") and the City of Coconut Creek, Florida ("City") have negotiated a proposed Coconut Creek Fee To Trust Lands Mitigation Agreement ("Agreement") to address issues related to the Tribe's application to the U.S. Department of the Interior, Bureau of Indian Affairs ("BIA") to take the Coconut Creek Fee to Trust Lands identified in the Agreement into trust for the use and benefit of the Tribe; and

WHEREAS, the Tribe has filed an application for a Planned MainStreet Development District ("PMDD") with the City, setting forth future development plans for the properties within the City that are owned or controlled by the Tribe as described in the Agreement, which the City is scheduled to consider for approval on January 27, 2011 ("Coconut Creek Lands"); and

WHEREAS, as part of the PMDD application, the Tribe has proposed various improvements designed to ameliorate the impacts of its proposed development plans for the Coconut Creek Fee to Trust Lands on the City; and

WHEREAS, the City has objected to the Tribe's application for trust status for the Coconut Creek Fee to Trust Lands; and

WHEREAS, if the BIA takes the Coconut Creek Fee to Trust Lands into trust for the use and benefit of the Tribe, said lands will no longer be subject to the jurisdiction of the City; and

WHEREAS, the Tribe desires to assure the City that the Tribe will honor its commitments evidenced in the PMDD, if approved by the City on January 27, 2011 as outlined in the Agreement even if the Coconut Creek Fee to Trust Lands are ultimately taken into trust; and

WHEREAS, the Tribe will assist the City in defraying the costs and expenses which the City will incur as a result of the Coconut Creek Fee to Trust Lands being taken into trust, and the anticipated impacts of the development to occur thereon by making a payment ("Annual Tribal Contribution") to the City for so long as gaming is conducted on the Tribe's trust lands within the boundaries of the City, pursuant to the terms set forth in the Agreement; and

WHEREAS, the Agreement requires the Tribe to waive its sovereign immunity for the limited purpose of enforcing the Agreement and/or resolving disputes arising under the Coconut Creek Fee To

EXHIBIT D

Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida as specifically set forth in the Agreement; and

WHEREAS, among other obligation and commitments, the City will formally withdraw all ofits negative comments and objections to the Tribe's trust application and the proposed development plans and execute a letter to the BIA fully supporting the Tribe's trust application and proposed development plans as subject to the terms and conditions of the Agreement; and

WHEREAS, the Tribal Council having reviewed the proposed Coconut Creek Fee to Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida, a copy of which is attached hereto, marked Exhibit "A," and by this reference is incorporated herein and is otherwise fully advised.

NOW THEREFORE BE IT RESOLVED: the Tribal Council of the Seminole Tribe of Florida hereby approves the form of the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida; and

BE IT FURTHER RESOLVED: that the Chairman of the Tribal Council as attested to the Secretary of the Seminole Tribe of Florida is hereby authorized and directed to execute a final version of the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida; and

BE IT FURTHER RESOLVED: that the Tribal Council of the Seminole Tribe hereby expressly and unequivocally waives the sovereign immunity of the Seminole Tribe of Florida for the limited purpose of enforcing and/or resolving disputes arising under the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida, and as specifically limited and set forth in the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida, as authorized by this resolution; all in accordance with the provisions set forth in Ordinance No. C-01-95 enacted by the Tribal Council of the Seminole Tribe, and consents on behalf of the Seminole Tribe of Florida to the jurisdiction of the United States District Court for the Southern District of Florida and the courts of the Seventeenth Judicial Circuit in and for Broward County, Florida, and the federal and state courts having appellate jurisdiction thereover, or agrees to binding arbitration in the event such courts are unable or unwilling to accept jurisdiction (all in accord with the terms and provisions of the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida) with respect to any dispute, enforcement or collection matter arising thereunder, and further waives any requirement for exhaustion of remedies in any court of forum of the Seminole Tribe of Florida; and

BE IT FURTHER RESOLVED: that the General Counsel of the Seminole Tribe of Florida is hereby authorized to make minor, non-substantive changes to the Agreement and may withhold submission of the Agreement pending the resolution of all pending issues between the Tribe and the City regarding same; and

RE: COCONUT CREEK FEE TO TRUST LANDS MITIGATION AGREEMENT; WAIVER OF SOVEREIGN IMMUNITY

RESOLUTION NO. C-154-11

PAGE THREE

BE IT FURTHER RESOLVED: the Tribe shall submit the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida to the Secretary of the Interior for review and approval pursuant to 25 USC §81; and

BE IT FURTHER RESOLVED: the Treasurer of the Tribe is hereby authorized and directed to expend the necessary Tribal funds to satisfy the financial requirements of the Coconut Creek Fee To Trust Lands Mitigation Agreement with the City of Coconut Creek, Florida; and

BE IT FURTHER RESOLVED: that this resolution is hereby adopted after motion duly made by Max B. Osceola, Jr., seconded by Andrew J. Bowers, Jr, and a roll call vote as follows:

Chairman Mitchell Cypress ..... AYE
Vice-Chairman Richard Bowers, Jr ..... AYE
Council Representative Manuel Tiger ..... AYE
Council Representative Andrew J. Bowers, Jr ....AYE
Council Representative Max B. Osceola, Jr ..... AYE

DONE THIS THE 24TH DAY OF JANUARY, 2011 at the Special Meeting of the Tribal Council, duly convened at the Immokalee Seminole Indian Reservation, with a quorum being present, by a vote of 5 For, 0 Against, with no Abstentions.

Chairman
TRIBAL COUNCIL

ATTEST:

Secretary
TRIBAL COUNCIL

EXHIBIT E

RESOLUTION NO. 2011- 09

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF COCONUT CREEK, FLORIDA, AUTHORIZING THE CITY MANAGER TO EXECUTE THE ATTACHED COCONUT CREEK FEE TO TRUST LANDS MITIGATION AGREEMENT BETWEEN THE CITY AND THE SEMINOLE TRIBE OF FLORIDA (STOF); PROVIDING AN EFFECTIVE DATE

WHEREAS, The Seminole Tribe of Florida ("STOF") has filed an application for a Planned MainStreet Development District (PMDD) detailing future development plans for the properties within the City of Coconut Creek ("City") that are owned or controlled by STOF, including a request for the abandonment of Northwest 40th Street, and

WHEREAS, STOF has proposed various improvements designed to ameliorate the impacts of the proposed development plans for the Coconut Creek Fee to Trust Lands that impact the City and its residents; and

WHEREAS, the City has objected to STOF's application for trust status for the Coconut Creek Fee to Trust Lands, which, if approved by the Bureau of Indian Affairs, would remove said lands from the jurisdiction of the City; and

WHEREAS, STOF desires to assure the City that STOF will honor its commitments evidenced in the approved PMDD, as outlined in this Agreement, even if the Coconut Creek Fee to Trust Lands ultimately are taken into trust;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF COCONUT CREEK, FLORIDA:

Section 1: That the City Commission has reviewed and hereby approves the attached Coconut Creek Fee to Trust Lands Mitigation Agreement between the City of Coconut Creek and The Seminole Tribe of Florida.

Section 2: That the City Manager is hereby authorized to execute the attached Coconut Creek Fee to Trust Lands Mitigation Agreement between the City of Coconut Creek and The Seminole Tribe of Florida.

Section 3: **That the effective** date of said Coconut Creek Fee to Trust Lands Mitigation Agreement, excluding the provisions of this Agreement relating to Annual Tribal Contribution, One-Time Payment, and the withdrawal of City's objections to Fee to Trust Application, shall be the date of approval by the Secretary of the Interior.

Section 4: That the effective date of the provisions of said Coconut Creek Fee to Trust Lands Mitigation Agreement pertaining to Annual Tribal Contribution, One-Time Payment, and withdrawal of City's objections to Fee to Trust Application shall be effective the date said Agreement is fully executed by both parties.

Section 5: That this Resolution shall be in full force and effect immediately upon its passage and adoption.

Adopted this **27th** day of **Jantla** 17, **2011** on a motion by **Vice Mayor Sarbone** and seconded by commissioner **Gerber**

Ayes	5
Nays	0
Absent or Abstaining	0

Lisa K. Aronson, Mayor

Attest:

L 1142ii-14411:1-d- —
arbara S. Price, MMC
City Clerk

Aronson	Aye
Sarbone	Ave
Gerber	Aye
Tooley	Aye
Belvedere	Aye

City Clerk/Common/Documents/201 i Resolutions

EXHIBIT F

RESOLUTION NO, 2011- 09

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF COCONUT CREEK, FLORIDA, AUTHORIZING THE CITY MANAGER TO EXECUTE THE ATTACHED COCONUT CREEK FEE TO TRUST LANDS MITIGATION AGREEMENT BETWEEN THE CITY AND THE SEMINOLE TRIBE OF FLORIDA (STOF); PROVIDING AN EFFECTIVE DATE

WHEREAS, The Seminole Tribe of Florida ("STOF") has filed an application for a Planned MainStreet Development District (PMDD) detailing future development plans for the properties within the City of Coconut Creek ("City") that are owned or controlled by STOF, including a request for the abandonment of Northwest 40th Street, and

WHEREAS, STOF has proposed various improvements designed to ameliorate the impacts of the proposed development plans for the Coconut Creek Fee to Trust Lands that impact the City and its residents; and

WHEREAS, the City has objected to STOF's application for trust status for the Coconut Creek Fee to Trust Lands, which, if approved by the Bureau of Indian Affairs, would remove said lands from the jurisdiction of the City; and

WHEREAS, STOF desires to assure the City that STOF will honor its commitments evidenced in the approved PMDD, as outlined in this Agreement, even if the Coconut Creek Fee to Trust Lands ultimately are taken into trust;

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF COCONUT CREEK, FLORIDA:

State of Florida
County of Broward
City **of Coconut Creek**
I HER BY CERTIFY that this Is a true and correct copy
of 0 1 —0
Witness my **hand the Official Seai of**
The Ci of Coconut Creak this **day of**
February 20 11
Clerk

Section 1: That the City Commission has reviewed and hereby approves the attached Coconut Creek Fee to Trust Lands Mitigation Agreement between the City of Coconut Creek and The Seminole Tribe of Florida.

Section 2: That the City Manager is hereby authorized to execute the attached Coconut Creek Fee to Trust Lands Mitigation Agreement between the City of Coconut Creek and The Seminole Tribe of Florida.

Section 3: That the effective date of said Coconut Creek Fee to Trust Lands Mitigation Agreement, excluding the provisions of this Agreement relating to Annual Tribal Contribution, One-Time Payment, and the withdrawal of City's objections to Fee to Trust Application, shall be the date of approval by the Secretary of the Interior.

Section 4: That the effective date of the provisions of said Coconut Creek Fee to Trust Lands Mitigation Agreement pertaining to Annual Tribal Contribution, One-Time Payment, and withdrawal of City's objections to Fee to Trust Application shall be effective the date said Agreement is fully executed by both parties.

Section 5: That this Resolution shall be in full force and effect immediately upon its passage and adoption.

Adopted this 27th day of January, 2011 on a motion by Vice Mayor Sarbone and seconded by Commissioner Gerber

Ayes	5
Nays	0
Absent or Abstaining	0

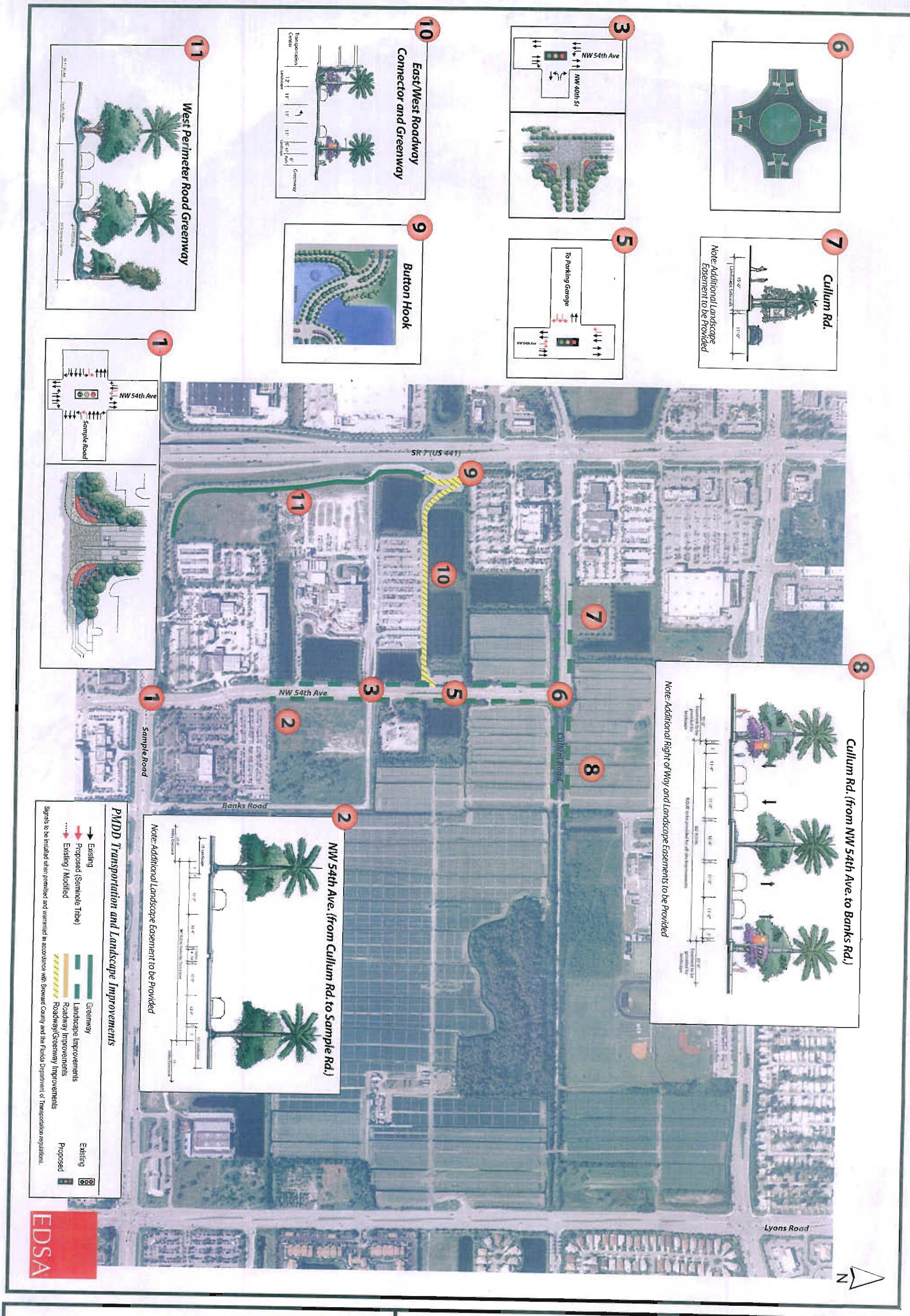
Ls K. Aronson, Mayor

Attest:

Barbara S. Price, MMC
City Clerk

Aronson	Aye
Sarbone	Aye
Gerber	Ave
Tooley	
Belvedere	Aye

City Clerk/Common/Documents/2011 Resolulions



Coconut Creek
Butterfly Capital of the World™

KEITH and SCHNARS, P.A.
ENGINEERS, PLANNERS, SURVEYORS

FRIEDMUTTER GROUP
ARCHITECTURAL & DESIGN STUDIOS

Seminole
Planned MainStreet Development District
Roadway Improvements / Signalization and Landscape Improvements

EXHIBIT
11G
REVISED
01-27-2011

Appendix B

Traffic Count Data

Appendix B-1
Traffic Machine Counts

County: 86
Station: 8884
Description: SAMPLE ROAD BTWN SR 7 AND NW 54 AVE (M-9)
Start Date: 04/14/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	53	65	48	35	201	106	103	92	70	371	572
0100	37	33	26	26	122	77	55	51	33	216	338
0200	32	29	36	20	117	34	57	42	37	170	287
0300	24	40	29	31	124	38	37	32	39	146	270
0400	22	27	48	37	134	41	29	41	50	161	295
0500	67	49	113	120	349	62	40	87	96	285	634
0600	179	238	321	338	1076	113	148	247	250	758	1834
0700	429	538	639	625	2231	336	403	360	413	1512	3743
0800	557	516	526	447	2046	393	441	442	414	1690	3736
0900	406	435	364	359	1564	365	391	375	368	1499	3063
1000	378	351	354	360	1443	337	356	349	390	1432	2875
1100	364	375	368	368	1475	368	360	392	386	1506	2981
1200	343	393	363	421	1520	425	397	376	427	1625	3145
1300	397	371	396	367	1531	401	451	446	418	1716	3247
1400	382	353	395	394	1524	441	406	451	509	1807	3331
1500	357	462	389	410	1618	459	455	524	477	1915	3533
1600	390	422	410	410	1632	558	523	527	569	2177	3809
1700	362	454	380	405	1601	510	612	648	594	2364	3965
1800	391	414	362	377	1544	606	521	474	505	2106	3650
1900	336	326	313	314	1289	441	397	397	376	1611	2900
2000	237	284	247	243	1011	355	337	311	290	1293	2304
2100	206	228	191	159	784	276	309	280	254	1119	1903
2200	181	188	157	140	666	271	237	190	172	870	1536
2300	110	103	88	94	395	180	156	146	159	641	1036
24-Hour Totals:					25997					28990	54987

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0715	2359	0800	1690	0730	3944
P.M.	1515	1651	1715	2460	1715	4090
Daily	0715	2359	1715	2460	1715	4090

County: 86
Station: 8884
Description: SAMPLE ROAD BTWN SR 7 AND NW 54 AVE (M-9)
Start Date: 04/15/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	62	78	56	43	239	117	85	99	77	378	617
0100	42	54	20	26	142	60	77	57	52	246	388
0200	32	32	16	28	108	45	51	46	55	197	305
0300	30	41	34	30	135	34	44	34	42	154	289
0400	31	43	50	42	166	33	37	45	56	171	337
0500	59	55	107	124	345	50	46	79	93	268	613
0600	183	216	328	307	1034	120	144	248	252	764	1798
0700	448	528	590	621	2187	308	392	365	390	1455	3642
0800	491	517	494	447	1949	376	393	455	401	1625	3574
0900	424	403	393	396	1616	358	348	400	359	1465	3081
1000	380	381	370	334	1465	380	353	359	386	1478	2943
1100	387	355	373	402	1517	345	390	413	399	1547	3064
1200	400	407	419	446	1672	468	435	402	492	1797	3469
1300	404	418	390	361	1573	423	450	472	437	1782	3355
1400	403	408	435	398	1644	468	437	456	494	1855	3499
1500	436	502	446	456	1840	499	465	546	511	2021	3861
1600	405	404	431	383	1623	590	523	568	547	2228	3851
1700	405	481	404	405	1695	588	736	670	599	2593	4288
1800	445	445	413	353	1656	602	535	490	517	2144	3800
1900	344	396	363	320	1423	493	478	432	350	1753	3176
2000	351	293	316	299	1259	338	311	315	320	1284	2543
2100	264	293	238	220	1015	315	299	282	255	1151	2166
2200	242	261	220	190	913	275	272	226	253	1026	1939
2300	162	171	165	184	682	236	213	242	189	880	1562
24-Hour Totals:					27898					30262	58160

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0715	2230	1130	1715	0715	3753
P.M.	1500	1840	1715	2607	1715	4342
Daily	0715	2230	1715	2607	1715	4342

County: 86
Station: 8884
Description: SAMPLE ROAD BTWN SR 7 AND NW 54 AVE (M-9)
Start Date: 04/16/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	128	119	124	88	459	185	151	123	123	582	1041
0100	81	63	59	62	265	111	117	106	90	424	689
0200	69	58	75	46	248	104	106	93	106	409	657
0300	45	56	43	41	185	65	97	100	100	362	547
0400	44	50	43	42	179	86	64	67	58	275	454
0500	41	45	54	70	210	49	65	67	69	250	460
0600	95	106	160	155	516	91	97	130	145	463	979
0700	136	174	247	266	823	119	147	222	251	739	1562
0800	228	276	283	283	1070	223	261	272	298	1054	2124
0900	323	353	310	350	1336	273	289	320	356	1238	2574
1000	332	364	348	381	1425	381	326	296	328	1331	2756
1100	363	401	423	417	1604	307	334	358	329	1328	2932
1200	419	445	418	444	1726	356	334	314	351	1355	3081
1300	425	396	389	430	1640	321	326	342	308	1297	2937
1400	420	425	383	395	1623	368	325	333	308	1334	2957
1500	384	370	361	381	1496	282	292	308	306	1188	2684
1600	364	337	355	358	1414	410	483	389	474	1756	3170
1700	301	331	354	325	1311	411	437	433	370	1651	2962
1800	339	355	348	317	1359	456	478	416	416	1766	3125
1900	345	317	302	292	1256	362	349	375	366	1452	2708
2000	281	289	285	285	1140	349	333	337	304	1323	2463
2100	264	253	257	197	971	313	283	311	239	1146	2117
2200	206	235	220	191	852	257	278	225	255	1015	1867
2300	161	178	146	158	643	210	238	216	203	867	1510
24-Hour Totals:					23751					24605	48356

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	1704	0930	1383	1130	3081
P.M.	1215	1732	1800	1766	1600	3170
Daily	1215	1732	1800	1766	1600	3170

County: 86
Station: 8884
Description: SAMPLE ROAD BTWN SR 7 AND NW 54 AVE (M-9)
Start Date: 04/17/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	126	126	112	84	448	197	180	131	151	659	1107
0100	66	71	58	72	267	132	117	100	78	427	694
0200	59	52	45	35	191	91	100	87	80	358	549
0300	35	45	38	43	161	72	81	77	80	310	471
0400	47	44	33	37	161	63	57	55	50	225	386
0500	43	41	39	45	168	58	47	44	46	195	363
0600	66	67	84	94	311	51	54	77	90	272	583
0700	77	79	112	123	391	89	92	110	146	437	828
0800	113	141	161	183	598	132	133	150	189	604	1202
0900	196	200	267	263	926	207	175	216	230	828	1754
1000	284	266	317	320	1187	272	290	262	335	1159	2346
1100	299	313	346	402	1360	307	325	302	337	1271	2631
1200	304	352	365	403	1424	339	368	399	391	1497	2921
1300	380	351	359	401	1491	417	433	448	432	1730	3221
1400	371	353	361	368	1453	427	382	401	390	1600	3053
1500	369	338	379	335	1421	402	421	394	366	1583	3004
1600	299	338	326	317	1280	392	367	346	409	1514	2794
1700	293	306	275	306	1180	373	399	420	368	1560	2740
1800	308	306	311	315	1240	394	406	363	344	1507	2747
1900	308	273	233	248	1062	359	343	316	307	1325	2387
2000	273	230	258	249	1010	309	316	278	294	1197	2207
2100	240	204	179	174	797	260	240	215	222	937	1734
2200	161	139	166	123	589	224	196	160	161	741	1330
2300	95	95	74	72	336	144	145	121	115	525	861
24-Hour Totals:					19452					22461	41913

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1423	1145	1443	1145	2866
P.M.	1215	1500	1315	1740	1315	3222
Daily	1215	1500	1315	1740	1315	3222

County: 86
Station: 8885
Description: SAMPLE RD BTWN BANKS RD AND LYONS RD (M-5)
Start Date: 04/14/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	89	90	72	63	314	100	110	83	57	350	664
0100	65	72	52	48	237	80	55	51	31	217	454
0200	53	45	51	31	180	35	47	34	32	148	328
0300	32	48	37	51	168	35	36	36	27	134	302
0400	32	39	54	48	173	30	30	37	59	156	329
0500	86	65	110	140	401	45	39	65	82	231	632
0600	206	285	324	388	1203	99	141	213	264	717	1920
0700	520	600	796	727	2643	317	377	368	382	1444	4087
0800	721	591	620	576	2508	400	411	418	395	1624	4132
0900	477	487	393	396	1753	370	365	356	379	1470	3223
1000	418	391	405	404	1618	331	344	414	378	1467	3085
1100	411	394	433	415	1653	402	375	410	460	1647	3300
1200	361	469	454	467	1751	435	439	436	422	1732	3483
1300	474	437	475	469	1855	446	446	483	478	1853	3708
1400	500	458	492	399	1849	458	448	494	462	1862	3711
1500	456	529	505	488	1978	500	474	556	525	2055	4033
1600	471	559	493	516	2039	529	566	541	564	2200	4239
1700	446	572	489	496	2003	700	653	736	707	2796	4799
1800	459	461	408	399	1727	588	589	556	501	2234	3961
1900	361	370	372	322	1425	495	390	433	393	1711	3136
2000	360	326	300	280	1266	328	365	294	261	1248	2514
2100	271	301	253	214	1039	265	267	238	233	1003	2042
2200	247	239	184	182	852	247	234	202	177	860	1712
2300	156	138	118	114	526	176	161	144	153	634	1160
24-Hour Totals:					31161					29793	60954

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0715	2844	1145	1770	0730	4396
P.M.	1600	2039	1700	2796	1700	4799
Daily	0715	2844	1700	2796	1700	4799

County: 86
Station: 8885
Description: SAMPLE RD BTWN BANKS RD AND LYONS RD (M-5)
Start Date: 04/15/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	105	102	92	64	363	98	89	85	84	356	719
0100	59	78	45	54	236	60	67	46	51	224	460
0200	38	49	31	41	159	49	46	34	40	169	328
0300	34	52	47	45	178	24	40	37	39	140	318
0400	64	41	59	58	222	30	43	34	48	155	377
0500	70	75	122	135	402	42	44	82	74	242	644
0600	199	268	332	378	1177	87	149	202	251	689	1866
0700	505	594	745	708	2552	263	382	363	384	1392	3944
0800	613	628	507	565	2313	400	425	401	420	1646	3959
0900	456	471	411	433	1771	353	327	383	388	1451	3222
1000	374	406	386	382	1548	339	342	400	348	1429	2977
1100	409	419	388	472	1688	385	394	409	438	1626	3314
1200	486	481	471	448	1886	441	447	457	442	1787	3673
1300	520	475	437	465	1897	474	436	486	449	1845	3742
1400	494	491	511	461	1957	433	481	488	463	1865	3822
1500	517	574	537	479	2107	528	482	552	543	2105	4212
1600	506	536	476	480	1998	533	574	580	583	2270	4268
1700	493	572	449	473	1987	676	713	725	671	2785	4772
1800	485	492	459	427	1863	587	567	552	505	2211	4074
1900	403	461	385	356	1605	498	465	419	365	1747	3352
2000	395	370	394	371	1530	364	456	456	514	1790	3320
2100	302	338	310	245	1195	548	507	573	485	2113	3308
2200	268	295	241	226	1030	531	504	528	590	2153	3183
2300	201	202	190	216	809	537	491	531	490	2049	2858
24-Hour Totals:					32473					34239	66712

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0730	2694	1145	1783	0730	4266
P.M.	1500	2107	1700	2785	1700	4772
Daily	0730	2694	1700	2785	1700	4772

County: 86
Station: 8885
Description: SAMPLE RD BTWN BANKS RD AND LYONS RD (M-5)
Start Date: 04/16/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	166	148	147	124	585	425	350	303	233	1311	1896
0100	99	89	97	108	393	227	223	232	143	825	1218
0200	94	89	100	83	366	118	94	84	90	386	752
0300	72	79	90	77	318	50	78	74	82	284	602
0400	63	69	59	52	243	66	55	75	52	248	491
0500	57	63	59	92	271	42	46	86	93	267	538
0600	113	127	178	160	578	92	114	160	184	550	1128
0700	157	187	259	281	884	146	211	230	303	890	1774
0800	245	306	309	312	1172	279	298	366	312	1255	2427
0900	329	388	362	399	1478	326	315	340	395	1376	2854
1000	392	366	401	413	1572	405	317	460	698	1880	3452
1100	395	456	430	485	1766	702	688	703	648	2741	4507
1200	493	437	495	497	1922	704	680	707	692	2783	4705
1300	498	454	439	490	1881	658	625	587	521	2391	4272
1400	476	479	491	451	1897	684	697	638	599	2618	4515
1500	439	441	438	434	1752	668	774	707	777	2926	4678
1600	415	405	407	412	1639	435	542	420	431	1828	3467
1700	390	402	382	382	1556	458	459	405	421	1743	3299
1800	404	393	398	395	1590	453	527	437	387	1804	3394
1900	363	393	329	307	1392	412	333	353	391	1489	2881
2000	362	332	320	333	1347	310	325	306	250	1191	2538
2100	302	290	274	208	1074	310	276	244	241	1071	2145
2200	226	269	247	226	968	238	291	246	227	1002	1970
2300	213	216	185	170	784	202	258	204	192	856	1640
24-Hour Totals:					27428					33715	61143

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1910	1045	2791	1145	4649
P.M.	1230	1944	1500	2926	1200	4705
Daily	1230	1944	1500	2926	1200	4705

County: 86
Station: 8885
Description: SAMPLE RD BTWN BANKS RD AND LYONS RD (M-5)
Start Date: 04/17/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	151	159	128	128	566	184	162	135	128	609	1175
0100	108	96	89	99	392	133	110	91	72	406	798
0200	84	76	90	61	311	95	88	66	77	326	637
0300	61	71	74	77	283	66	81	66	48	261	544
0400	71	57	58	58	244	51	47	49	43	190	434
0500	64	49	45	63	221	49	41	31	50	171	392
0600	80	75	105	95	355	44	59	74	93	270	625
0700	90	97	117	141	445	110	97	119	153	479	924
0800	122	180	168	180	650	146	135	169	218	668	1318
0900	207	228	272	298	1005	197	202	204	243	846	1851
1000	296	319	338	297	1250	249	287	277	306	1119	2369
1100	327	321	384	405	1437	332	329	337	380	1378	2815
1200	360	348	404	406	1518	353	437	442	396	1628	3146
1300	393	428	376	422	1619	440	434	510	483	1867	3486
1400	445	417	409	409	1680	451	610	492	408	1961	3641
1500	396	414	417	364	1591	469	443	396	385	1693	3284
1600	353	389	380	393	1515	380	390	344	404	1518	3033
1700	353	348	328	355	1384	424	403	385	419	1631	3015
1800	329	345	319	326	1319	375	414	366	347	1502	2821
1900	312	327	276	245	1160	394	344	300	301	1339	2499
2000	286	273	259	270	1088	251	294	240	244	1029	2117
2100	271	232	197	187	887	248	215	175	199	837	1724
2200	205	159	160	148	672	208	156	162	156	682	1354
2300	133	109	83	86	411	130	132	126	96	484	895
24-Hour Totals:					22003					22894	44897

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1517	1145	1612	1145	3129
P.M.	1345	1693	1330	2054	1345	3729
Daily	1345	1693	1330	2054	1345	3729

County: 86
Station: 8881
Description: WILES RD BTW LYONS AND SR-7 (M-2)
Start Date: 04/14/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	35	26	19	17	97	30	23	21	13	87	184
0100	13	17	15	7	52	15	18	11	7	51	103
0200	15	13	15	9	52	8	8	2	7	25	77
0300	13	12	8	8	41	4	11	9	10	34	75
0400	11	20	15	32	78	8	4	16	8	36	114
0500	27	35	51	62	175	10	16	24	31	81	256
0600	81	99	168	183	531	36	44	86	121	287	818
0700	306	353	399	374	1432	217	398	304	192	1111	2543
0800	367	356	298	274	1295	195	189	177	202	763	2058
0900	270	234	190	181	875	169	149	141	134	593	1468
1000	167	155	177	190	689	132	133	178	159	602	1291
1100	190	181	207	170	748	162	125	137	158	582	1330
1200	149	190	223	212	774	166	171	167	178	682	1456
1300	190	191	201	173	755	198	162	169	201	730	1485
1400	215	216	199	475	1105	204	225	223	219	871	1976
1500	302	242	257	235	1036	209	230	278	270	987	2023
1600	287	269	297	289	1142	272	258	324	325	1179	2321
1700	327	409	425	314	1475	306	371	351	375	1403	2878
1800	312	276	236	203	1027	312	312	256	243	1123	2150
1900	230	242	200	188	860	188	204	139	167	698	1558
2000	148	176	139	140	603	162	131	125	115	533	1136
2100	162	121	134	124	541	128	102	104	91	425	966
2200	113	98	86	73	370	116	101	68	67	352	722
2300	64	54	54	38	210	66	50	37	32	185	395
24-Hour Totals:					15963					13420	29383

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0730	1496	0700	1111	0715	2582
P.M.	1700	1475	1715	1409	1700	2878
Daily	0730	1496	1715	1409	1700	2878

County: 86
Station: 8881
Description: WILES RD BTW LYONS AND SR-7 (M-2)
Start Date: 04/15/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	35	37	23	20	115	38	38	30	21	127	242
0100	13	17	17	12	59	14	9	16	14	53	112
0200	9	11	16	8	44	12	12	8	4	36	80
0300	15	15	11	11	52	10	13	13	8	44	96
0400	7	13	19	21	60	6	9	14	14	43	103
0500	37	30	55	63	185	9	21	26	42	98	283
0600	76	115	133	168	492	39	45	95	111	290	782
0700	245	368	435	394	1442	170	359	340	210	1079	2521
0800	365	341	285	304	1295	218	175	157	217	767	2062
0900	237	237	188	161	823	147	165	133	144	589	1412
1000	180	196	169	188	733	135	151	134	157	577	1310
1100	176	158	191	199	724	154	134	165	168	621	1345
1200	215	210	193	231	849	189	178	171	198	736	1585
1300	216	238	232	228	914	196	193	212	176	777	1691
1400	205	185	232	433	1055	200	225	252	217	894	1949
1500	316	240	253	235	1044	211	231	221	258	921	1965
1600	270	316	305	270	1161	264	276	309	285	1134	2295
1700	297	275	271	267	1110	343	355	306	352	1356	2466
1800	273	312	233	238	1056	309	290	262	225	1086	2142
1900	213	216	208	208	845	230	214	176	192	812	1657
2000	209	206	191	166	772	191	190	188	126	695	1467
2100	210	132	159	163	664	181	156	145	149	631	1295
2200	157	153	116	101	527	145	124	96	119	484	1011
2300	98	82	86	61	327	94	100	64	79	337	664
24-Hour Totals:					16348					14187	30535

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0715	1562	0715	1127	0715	2689
P.M.	1445	1242	1700	1356	1700	2466
Daily	0715	1562	1700	1356	0715	2689

County: 86
Station: 8881
Description: WILES RD BTW LYONS AND SR-7 (M-2)
Start Date: 04/16/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	63	78	46	37	224	55	45	44	36	180	404
0100	50	26	28	15	119	39	40	25	23	127	246
0200	21	23	22	16	82	26	13	25	14	78	160
0300	12	17	11	14	54	16	14	17	18	65	119
0400	15	16	18	23	72	11	13	13	12	49	121
0500	13	22	27	113	175	13	12	31	79	135	310
0600	87	46	51	55	239	42	28	37	59	166	405
0700	65	62	101	113	341	55	64	83	89	291	632
0800	115	137	176	187	615	112	96	121	125	454	1069
0900	152	140	161	177	630	159	134	170	184	647	1277
1000	146	212	178	223	759	179	174	222	243	818	1577
1100	238	225	267	261	991	266	228	228	278	1000	1991
1200	246	268	255	283	1052	253	285	281	296	1115	2167
1300	226	214	265	242	947	243	281	273	260	1057	2004
1400	218	258	210	259	945	283	257	306	265	1111	2056
1500	240	244	218	203	905	312	334	297	305	1248	2153
1600	247	192	205	206	850	254	238	184	179	855	1705
1700	221	157	196	185	759	200	195	179	149	723	1482
1800	212	219	220	183	834	167	165	191	157	680	1514
1900	186	154	194	170	704	144	147	149	146	586	1290
2000	148	163	168	138	617	156	155	130	100	541	1158
2100	156	152	145	129	582	99	97	104	88	388	970
2200	112	128	112	86	438	118	102	91	93	404	842
2300	90	71	87	63	311	76	80	64	58	278	589
24-Hour Totals:					13245					12996	26241

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	1042	1145	1097	1145	2127
P.M.	1200	1052	1500	1248	1430	2170
Daily	1200	1052	1500	1248	1430	2170

County: 86
Station: 8881
Description: WILES RD BTW LYONS AND SR-7 (M-2)
Start Date: 04/17/2011
Start Time: 0000

	Direction: E					Direction: W					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	77	46	45	47	215	50	62	50	30	192	407
0100	46	46	31	42	165	34	28	26	23	111	276
0200	31	25	28	23	107	23	26	29	16	94	201
0300	11	17	10	7	45	14	12	8	13	47	92
0400	12	13	8	6	39	7	16	13	12	48	87
0500	11	24	12	14	61	9	10	17	13	49	110
0600	20	29	27	24	100	11	14	21	38	84	184
0700	42	42	49	55	188	29	28	38	55	150	338
0800	58	77	76	93	304	52	50	65	91	258	562
0900	106	109	134	142	491	96	95	99	129	419	910
1000	122	155	159	158	594	109	125	131	153	518	1112
1100	193	170	208	177	748	129	130	164	128	551	1299
1200	188	221	208	219	836	173	171	182	176	702	1538
1300	201	221	192	220	834	165	182	182	180	709	1543
1400	220	245	216	246	927	199	194	184	159	736	1663
1500	198	208	192	187	785	166	169	171	157	663	1448
1600	200	180	173	170	723	147	139	135	170	591	1314
1700	174	171	151	188	684	163	185	157	133	638	1322
1800	161	174	160	170	665	151	156	150	121	578	1243
1900	151	117	114	126	508	140	134	124	117	515	1023
2000	131	130	132	121	514	95	112	102	86	395	909
2100	110	91	66	97	364	90	89	71	77	327	691
2200	94	74	68	53	289	76	61	69	50	256	545
2300	49	38	32	28	147	34	51	37	28	150	297
24-Hour Totals:					10333					8781	19114

Peak Volume Information

	Direction: E		Direction: W		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	794	1145	654	1145	1448
P.M.	1400	927	1345	757	1400	1663
Daily	1400	927	1345	757	1400	1663

County: 86
Station: 8887
Description: NW 54 AVE N OF SAMPLE RD (M-6)
Start Date: 04/14/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	20	18	21	16	75	57	47	55	36	195	270
0100	15	15	17	16	63	46	46	42	36	170	233
0200	22	15	17	11	65	30	32	34	34	130	195
0300	14	29	18	6	67	26	24	26	25	101	168
0400	9	12	8	11	40	27	14	12	14	67	107
0500	13	7	12	20	52	22	15	21	11	69	121
0600	19	41	53	41	154	14	23	20	21	78	232
0700	44	50	56	72	222	27	30	39	46	142	364
0800	79	58	69	64	270	37	48	59	38	182	452
0900	87	78	80	82	327	54	41	59	67	221	548
1000	78	79	77	102	336	51	76	63	105	295	631
1100	87	114	114	107	422	61	92	79	96	328	750
1200	101	99	111	128	439	95	108	102	110	415	854
1300	97	102	117	117	433	81	88	118	117	404	837
1400	106	98	97	105	406	94	98	95	90	377	783
1500	85	93	125	107	410	124	146	114	117	501	911
1600	124	131	111	116	482	144	116	124	122	506	988
1700	111	117	131	113	472	86	142	106	111	445	917
1800	106	106	99	105	416	96	90	71	87	344	760
1900	104	110	93	74	381	72	108	90	105	375	756
2000	87	81	67	77	312	123	97	58	69	347	659
2100	56	58	57	44	215	73	115	69	82	339	554
2200	51	55	46	50	202	101	75	66	68	310	512
2300	24	35	35	47	141	73	75	69	62	279	420
24-Hour Totals:					6402					6620	13022

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1115	436	1145	401	1145	819
P.M.	1530	487	1515	521	1600	988
Daily	1530	487	1515	521	1600	988

County: 86
Station: 8887
Description: NW 54 AVE N OF SAMPLE RD (M-6)
Start Date: 04/15/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	24	24	18	32	98	58	39	52	42	191	289
0100	17	26	11	13	67	28	48	50	36	162	229
0200	20	26	13	12	71	28	31	29	35	123	194
0300	17	18	21	16	72	28	26	32	28	114	186
0400	10	16	10	7	43	28	18	23	21	90	133
0500	15	13	15	14	57	21	18	17	10	66	123
0600	19	44	56	49	168	22	17	24	17	80	248
0700	46	68	62	59	235	24	39	29	45	137	372
0800	71	70	63	74	278	48	44	49	60	201	479
0900	59	68	76	78	281	39	45	55	57	196	477
1000	76	80	82	81	319	65	66	63	72	266	585
1100	78	87	106	94	365	71	77	84	125	357	722
1200	86	88	96	109	379	82	88	89	92	351	730
1300	96	85	109	86	376	92	90	101	112	395	771
1400	93	109	91	110	403	132	86	100	105	423	826
1500	101	105	103	90	399	122	116	98	106	442	841
1600	79	77	102	93	351	135	107	99	118	459	810
1700	112	90	113	122	437	115	103	96	103	417	854
1800	111	108	99	91	409	132	79	84	95	390	799
1900	112	111	91	102	416	90	72	72	72	306	722
2000	88	93	67	84	332	108	91	65	64	328	660
2100	73	99	66	60	298	67	59	73	75	274	572
2200	55	57	56	58	226	61	48	56	58	223	449
2300	48	41	63	59	211	68	55	65	89	277	488
24-Hour Totals:					6291					6268	12559

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	374	1145	384	1130	753
P.M.	1730	454	1600	459	1715	870
Daily	1730	454	1600	459	1715	870

County: 86
Station: 8887
Description: NW 54 AVE N OF SAMPLE RD (M-6)
Start Date: 04/16/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	38	44	44	26	152	76	62	68	49	255	407
0100	24	30	29	37	120	41	53	51	57	202	322
0200	41	21	31	24	117	44	41	40	46	171	288
0300	18	33	30	21	102	38	48	36	41	163	265
0400	10	20	27	11	68	38	34	22	27	121	189
0500	19	12	17	22	70	26	23	23	14	86	156
0600	26	48	35	42	151	34	25	21	18	98	249
0700	23	35	39	54	151	21	35	31	37	124	275
0800	57	52	58	71	238	41	36	38	62	177	415
0900	61	72	73	61	267	36	50	63	49	198	465
1000	78	76	70	64	288	69	42	61	53	225	513
1100	78	85	91	87	341	85	67	65	108	325	666
1200	98	87	94	88	367	88	89	57	79	313	680
1300	101	92	80	96	369	81	97	90	86	354	723
1400	100	108	74	99	381	89	99	95	84	367	748
1500	85	84	102	84	355	98	103	94	105	400	755
1600	109	100	83	89	381	91	123	110	84	408	789
1700	97	102	84	72	355	108	99	72	90	369	724
1800	91	88	79	83	341	96	87	78	78	339	680
1900	103	89	103	87	382	75	105	80	102	362	744
2000	66	97	82	73	318	92	62	81	69	304	622
2100	75	80	91	75	321	69	64	62	57	252	573
2200	65	65	71	54	255	68	56	91	68	283	538
2300	47	51	47	46	191	69	80	67	68	284	475
24-Hour Totals:					6081					6180	12261

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	366	1130	350	1130	713
P.M.	1530	395	1545	429	1530	808
Daily	1530	395	1545	429	1530	808

County: 86
Station: 8887
Description: NW 54 AVE N OF SAMPLE RD (M-6)
Start Date: 04/17/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	30	42	39	27	138	61	58	65	56	240	378
0100	41	25	24	22	112	60	55	55	43	213	325
0200	23	15	24	18	80	35	38	46	45	164	244
0300	22	35	26	24	107	33	43	42	52	170	277
0400	25	10	11	14	60	46	32	29	26	133	193
0500	16	15	13	19	63	29	21	32	17	99	162
0600	10	30	23	32	95	23	14	20	13	70	165
0700	20	21	26	27	94	17	17	15	22	71	165
0800	30	33	36	42	141	23	24	23	19	89	230
0900	43	52	46	61	202	23	27	32	28	110	312
1000	40	66	66	80	252	42	33	35	40	150	402
1100	67	81	118	75	341	45	56	61	71	233	574
1200	82	83	75	95	335	62	65	68	56	251	586
1300	78	89	91	67	325	55	73	63	63	254	579
1400	101	78	90	64	333	69	87	99	74	329	662
1500	80	94	82	80	336	71	85	108	68	332	668
1600	69	74	70	61	274	92	99	74	84	349	623
1700	78	71	65	74	288	96	62	78	63	299	587
1800	67	86	74	76	303	58	73	72	67	270	573
1900	80	72	79	58	289	66	76	78	75	295	584
2000	54	48	40	47	189	78	56	54	76	264	453
2100	41	31	40	40	152	56	47	60	42	205	357
2200	48	43	37	33	161	59	40	48	47	194	355
2300	30	23	40	32	125	46	32	39	24	141	266
24-Hour Totals:					4795					4925	9720

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	358	1145	266	1130	617
P.M.	1245	353	1530	367	1515	678
Daily	1130	358	1530	367	1515	678

County: 86
Station: 8888
Description: NW 54 AVE S OF CULLUM RD CURVE (M-7)
Start Date: 04/14/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	2	7	5	6	20	7	6	5	8	26	46
0100	5	3	4	1	13	3	8	5	2	18	31
0200	5	2	0	4	11	6	3	3	4	16	27
0300	3	5	3	2	13	8	7	9	6	30	43
0400	11	6	1	2	20	3	4	3	1	11	31
0500	1	0	3	3	7	5	8	4	8	25	32
0600	2	7	13	9	31	12	17	9	15	53	84
0700	14	21	19	26	80	18	35	40	56	149	229
0800	25	17	18	24	84	37	47	37	44	165	249
0900	27	25	18	21	91	57	39	52	44	192	283
1000	26	21	30	25	102	61	51	48	62	222	324
1100	33	37	28	37	135	40	64	53	55	212	347
1200	34	41	23	34	132	48	55	39	55	197	329
1300	29	36	47	38	150	49	62	53	44	208	358
1400	32	32	29	37	130	47	64	49	52	212	342
1500	40	36	47	40	163	50	64	51	54	219	382
1600	46	52	54	57	209	51	58	56	48	213	422
1700	47	45	53	56	201	53	57	56	61	227	428
1800	32	37	33	33	135	38	41	58	38	175	310
1900	37	42	40	42	161	31	49	40	48	168	329
2000	29	21	20	27	97	25	30	24	23	102	199
2100	33	20	17	16	86	31	26	20	21	98	184
2200	16	18	9	8	51	21	13	12	13	59	110
2300	6	9	19	9	43	12	11	13	12	48	91
24-Hour Totals:					2165					3045	5210

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	140	1000	222	1115	356
P.M.	1615	210	1700	227	1700	428
Daily	1615	210	1700	227	1700	428

County: 86
Station: 8888
Description: NW 54 AVE S OF CULLUM RD CURVE (M-7)
Start Date: 04/15/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	6	8	10	9	33	9	7	8	13	37	70
0100	3	4	4	7	18	8	4	15	14	41	59
0200	6	6	5	4	21	12	4	3	5	24	45
0300	5	3	5	14	27	6	9	9	6	30	57
0400	7	6	4	2	19	4	1	6	1	12	31
0500	2	2	2	3	9	6	4	7	4	21	30
0600	3	4	11	17	35	9	10	12	16	47	82
0700	21	23	35	23	102	11	29	44	38	122	224
0800	22	21	24	25	92	44	39	31	60	174	266
0900	22	25	16	28	91	42	34	40	45	161	252
1000	28	27	37	37	129	47	47	51	44	189	318
1100	33	26	22	35	116	43	55	76	57	231	347
1200	39	36	39	51	165	61	49	51	49	210	375
1300	47	27	36	30	140	71	42	55	84	252	392
1400	35	39	46	59	179	67	58	48	50	223	402
1500	50	50	56	44	200	56	50	48	46	200	400
1600	40	39	49	50	178	57	44	42	52	195	373
1700	61	57	56	56	230	51	52	55	56	214	444
1800	46	43	31	46	166	64	42	46	44	196	362
1900	49	35	24	30	138	35	48	42	34	159	297
2000	43	34	28	18	123	40	42	38	38	158	281
2100	31	30	26	15	102	40	33	25	26	124	226
2200	16	23	17	24	80	21	27	21	15	84	164
2300	14	18	14	17	63	27	20	22	25	94	157
24-Hour Totals:					2456					3198	5654

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	149	1115	249	1130	375
P.M.	1700	230	1330	264	1700	444
Daily	1700	230	1330	264	1700	444

County: 86
Station: 8888
Description: NW 54 AVE S OF CULLUM RD CURVE (M-7)
Start Date: 04/16/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	9	10	15	7	41	9	18	7	17	51	92
0100	14	17	7	6	44	15	12	13	6	46	90
0200	7	8	1	6	22	16	7	9	7	39	61
0300	5	9	12	11	37	10	5	12	4	31	68
0400	13	2	7	4	26	5	2	7	2	16	42
0500	4	1	4	9	18	5	4	8	6	23	41
0600	7	3	7	9	26	8	12	16	16	52	78
0700	7	19	9	17	52	19	18	20	31	88	140
0800	24	21	15	17	77	30	30	31	41	132	209
0900	23	26	26	20	95	36	34	44	35	149	244
1000	22	32	33	19	106	46	25	43	46	160	266
1100	30	22	28	36	116	38	48	47	45	178	294
1200	38	43	40	32	153	52	76	65	49	242	395
1300	43	35	26	34	138	65	53	52	63	233	371
1400	36	49	41	47	173	62	70	54	46	232	405
1500	39	38	36	30	143	59	69	53	64	245	388
1600	45	47	41	30	163	46	50	51	44	191	354
1700	49	41	38	28	156	41	34	38	45	158	314
1800	36	32	38	31	137	35	43	29	43	150	287
1900	41	35	30	33	139	41	55	44	26	166	305
2000	40	33	25	20	118	48	42	36	30	156	274
2100	24	23	30	25	102	18	30	29	32	109	211
2200	16	16	16	14	62	28	20	32	27	107	169
2300	18	15	20	12	65	19	12	22	22	75	140
24-Hour Totals:					2209					3029	5238

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	157	1145	238	1145	395
P.M.	1415	176	1215	255	1215	413
Daily	1415	176	1215	255	1215	413

County: 86
Station: 8888
Description: NW 54 AVE S OF CULLUM RD CURVE (M-7)
Start Date: 04/17/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	10	15	5	9	39	15	20	11	10	56	95
0100	10	10	8	4	32	9	14	9	11	43	75
0200	4	12	8	3	27	9	9	7	9	34	61
0300	4	7	9	14	34	3	9	9	4	25	59
0400	20	3	6	0	29	3	2	6	2	13	42
0500	3	4	7	3	17	1	2	6	5	14	31
0600	4	4	4	2	14	7	7	12	8	34	48
0700	4	10	5	3	22	8	11	14	9	42	64
0800	11	6	8	8	33	15	19	16	19	69	102
0900	10	5	9	13	37	22	27	21	16	86	123
1000	13	16	18	15	62	25	27	29	38	119	181
1100	20	26	38	34	118	28	47	43	45	163	281
1200	37	26	31	27	121	43	33	46	38	160	281
1300	32	44	40	32	148	45	36	37	34	152	300
1400	40	40	37	37	154	39	65	57	42	203	357
1500	38	44	34	32	148	36	48	37	44	165	313
1600	23	34	28	29	114	34	35	20	52	141	255
1700	37	38	32	33	140	35	31	32	34	132	272
1800	38	25	33	20	116	26	26	39	28	119	235
1900	26	18	24	28	96	34	33	21	22	110	206
2000	28	14	11	21	74	24	16	16	33	89	163
2100	7	8	18	14	47	14	13	21	17	65	112
2200	14	14	14	3	45	14	17	17	13	61	106
2300	9	10	11	9	39	10	13	7	14	44	83
24-Hour Totals:					1706					2139	3845

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	135	1115	178	1115	313
P.M.	1430	156	1400	203	1400	357
Daily	1430	156	1400	203	1400	357

County: 86
Station: 8883
Description: SR 7 S OF CULLUM RD (M-8)
Start Date: 04/14/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	86	85	80	68	319	54	43	45	28	170	489
0100	76	66	58	40	240	28	31	24	17	100	340
0200	66	53	48	58	225	19	23	12	13	67	292
0300	43	56	32	50	181	17	14	13	14	58	239
0400	19	37	41	38	135	10	22	22	20	74	209
0500	65	59	68	71	263	43	61	50	78	232	495
0600	100	109	200	206	615	102	158	234	323	817	1432
0700	272	356	322	348	1298	357	461	574	413	1805	3103
0800	328	360	397	354	1439	426	399	350	398	1573	3012
0900	281	287	290	246	1104	318	308	337	266	1229	2333
1000	240	285	275	322	1122	228	214	268	270	980	2102
1100	330	300	292	324	1246	285	268	278	262	1093	2339
1200	315	351	335	340	1341	306	326	285	309	1226	2567
1300	325	331	361	348	1365	290	298	329	284	1201	2566
1400	353	333	346	360	1392	304	335	298	340	1277	2669
1500	364	395	416	370	1545	268	318	355	322	1263	2808
1600	417	427	408	426	1678	318	340	334	360	1352	3030
1700	407	426	429	378	1640	386	377	370	359	1492	3132
1800	390	353	369	348	1460	341	364	343	312	1360	2820
1900	277	318	288	279	1162	305	288	221	243	1057	2219
2000	291	264	242	274	1071	199	212	171	185	767	1838
2100	246	278	226	228	978	192	158	174	113	637	1615
2200	195	202	170	146	713	108	125	110	99	442	1155
2300	163	111	135	107	516	93	85	88	64	330	846
24-Hour Totals:					23048					20602	43650

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0800	1439	0715	1874	0715	3228
P.M.	1645	1688	1645	1493	1645	3181
Daily	1645	1688	0715	1874	0715	3228

County: 86
Station: 8883
Description: SR 7 S OF CULLUM RD (M-8)
Start Date: 04/15/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	88	97	85	70	340	50	44	35	37	166	506
0100	67	59	44	57	227	33	29	22	25	109	336
0200	79	44	59	43	225	39	21	18	18	96	321
0300	28	58	48	53	187	21	20	17	13	71	258
0400	40	42	49	50	181	14	23	23	31	91	272
0500	64	48	79	102	293	43	42	47	79	211	504
0600	87	123	196	228	634	85	124	212	298	719	1353
0700	291	318	347	364	1320	318	413	448	412	1591	2911
0800	313	360	383	274	1330	408	422	353	382	1565	2895
0900	288	288	271	293	1140	302	355	292	294	1243	2383
1000	246	301	288	301	1136	277	293	263	276	1109	2245
1100	266	323	325	346	1260	271	294	292	294	1151	2411
1200	373	339	315	349	1376	302	312	325	306	1245	2621
1300	331	346	410	352	1439	331	303	317	295	1246	2685
1400	373	344	360	396	1473	328	310	379	346	1363	2836
1500	382	360	410	364	1516	328	301	361	373	1363	2879
1600	406	412	347	409	1574	324	361	331	338	1354	2928
1700	414	439	452	423	1728	423	362	403	351	1539	3267
1800	447	383	351	369	1550	364	375	352	311	1402	2952
1900	352	329	303	279	1263	298	304	321	304	1227	2490
2000	298	329	239	216	1082	262	293	213	233	1001	2083
2100	229	243	246	239	957	258	182	191	171	802	1759
2200	222	240	177	223	862	182	172	150	135	639	1501
2300	169	145	167	122	603	151	127	106	108	492	1095
24-Hour Totals:					23696					21795	45491

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0745	1420	0730	1690	0730	3074
P.M.	1715	1761	1700	1539	1700	3267
Daily	1715	1761	0730	1690	1700	3267

County: 86
Station: 8883
Description: SR 7 S OF CULLUM RD (M-8)
Start Date: 04/16/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	113	127	122	101	463	92	78	83	63	316	779
0100	114	100	78	91	383	62	46	38	40	186	569
0200	111	66	77	80	334	32	40	34	27	133	467
0300	74	77	81	100	332	27	31	32	19	109	441
0400	54	65	72	49	240	26	24	35	21	106	346
0500	53	69	93	78	293	33	25	22	52	132	425
0600	91	73	120	105	389	48	51	70	115	284	673
0700	112	114	176	213	615	81	118	168	153	520	1135
0800	205	235	232	261	933	179	185	241	262	867	1800
0900	238	262	261	278	1039	257	260	260	257	1034	2073
1000	276	294	276	282	1128	290	301	267	319	1177	2305
1100	303	289	344	354	1290	324	335	359	308	1326	2616
1200	321	349	306	323	1299	357	366	365	352	1440	2739
1300	312	340	354	357	1363	323	354	368	353	1398	2761
1400	301	338	353	310	1302	381	354	378	324	1437	2739
1500	362	304	321	338	1325	346	316	315	288	1265	2590
1600	295	348	347	339	1329	319	317	287	324	1247	2576
1700	296	307	335	354	1292	269	283	291	250	1093	2385
1800	318	297	323	255	1193	303	294	317	272	1186	2379
1900	275	250	245	265	1035	284	254	224	219	981	2016
2000	256	254	256	210	976	236	230	203	228	897	1873
2100	263	218	220	179	880	179	211	187	166	743	1623
2200	201	215	192	211	819	176	156	153	157	642	1461
2300	184	148	176	134	642	151	127	125	115	518	1160
24-Hour Totals:					20894					19037	39931

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1130	1368	1145	1396	1130	2758
P.M.	1415	1363	1345	1466	1345	2815
Daily	1130	1368	1345	1466	1345	2815

County: 86
Station: 8883
Description: SR 7 S OF CULLUM RD (M-8)
Start Date: 04/17/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	142	130	133	137	542	84	86	76	82	328	870
0100	98	88	106	83	375	57	53	52	43	205	580
0200	66	89	82	62	299	44	44	31	32	151	450
0300	63	82	67	81	293	32	29	18	24	103	396
0400	74	41	63	50	228	25	37	26	21	109	337
0500	57	50	57	47	211	25	29	29	26	109	320
0600	67	63	69	58	257	35	42	45	69	191	448
0700	73	66	82	108	329	65	69	99	96	329	658
0800	111	115	143	157	526	94	124	137	165	520	1046
0900	180	157	156	196	689	166	154	187	216	723	1412
1000	217	215	245	255	932	202	204	227	290	923	1855
1100	210	255	258	310	1033	251	223	232	231	937	1970
1200	270	297	353	307	1227	284	266	293	325	1168	2395
1300	300	314	319	329	1262	277	322	286	282	1167	2429
1400	325	320	330	315	1290	269	292	262	294	1117	2407
1500	310	305	334	300	1249	264	280	295	248	1087	2336
1600	294	311	308	301	1214	277	302	267	293	1139	2353
1700	287	275	245	270	1077	227	257	240	243	967	2044
1800	273	262	244	256	1035	275	247	255	216	993	2028
1900	207	226	228	202	863	248	213	199	199	859	1722
2000	216	237	224	201	878	195	195	166	176	732	1610
2100	161	165	165	180	671	151	146	125	108	530	1201
2200	145	151	124	130	550	106	131	102	102	441	991
2300	98	107	111	92	408	75	95	83	74	327	735
24-Hour Totals:					17438					15155	32593

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1230	1145	1074	1145	2304
P.M.	1345	1304	1230	1217	1230	2491
Daily	1345	1304	1230	1217	1230	2491

County: 86
Station: 8882
Description: SR 7 BTWN WILES RD AND CULLUM RD (M-3)
Start Date: 04/14/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	70	74	66	56	266	54	46	42	37	179	445
0100	51	56	41	33	181	27	30	28	20	105	286
0200	55	32	31	41	159	22	19	17	18	76	235
0300	34	38	28	30	130	22	24	24	23	93	223
0400	28	32	42	32	134	12	25	28	25	90	224
0500	56	50	74	74	254	57	67	57	88	269	523
0600	108	105	231	203	647	119	169	246	333	867	1514
0700	317	402	411	427	1557	364	497	593	477	1931	3488
0800	343	418	461	398	1620	437	456	384	479	1756	3376
0900	308	328	310	283	1229	377	336	386	329	1428	2657
1000	282	289	354	348	1273	287	308	314	353	1262	2535
1100	409	348	323	386	1466	360	328	374	338	1400	2866
1200	375	418	393	393	1579	398	401	336	374	1509	3088
1300	380	430	426	404	1640	350	356	402	351	1459	3099
1400	415	430	372	468	1685	356	431	386	413	1586	3271
1500	456	433	496	447	1832	359	398	445	403	1605	3437
1600	451	505	494	509	1959	380	428	419	455	1682	3641
1700	430	229	205	279	1143	469	470	493	459	1891	3034
1800	404	390	385	351	1530	411	473	423	392	1699	3229
1900	295	368	347	360	1370	361	361	300	318	1340	2710
2000	334	309	304	290	1237	245	253	207	224	929	2166
2100	305	282	237	232	1056	223	189	211	151	774	1830
2200	230	210	180	151	771	152	155	129	127	563	1334
2300	159	114	112	93	478	115	101	96	73	385	863
24-Hour Totals:					25196					24878	50074

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0745	1649	0715	2004	0715	3587
P.M.	1600	1959	1700	1891	1615	3709
Daily	1600	1959	0715	2004	1615	3709

County: 86
Station: 8882
Description: SR 7 BTWN WILES RD AND CULLUM RD (M-3)
Start Date: 04/15/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	82	91	88	73	334	62	55	39	47	203	537
0100	54	46	47	43	190	32	27	33	40	132	322
0200	52	37	50	36	175	48	22	18	26	114	289
0300	28	34	38	49	149	20	34	29	23	106	255
0400	38	40	42	44	164	20	19	32	32	103	267
0500	48	49	87	90	274	47	48	61	83	239	513
0600	91	126	204	241	662	102	138	209	301	750	1412
0700	299	346	424	368	1437	322	438	493	464	1717	3154
0800	339	393	393	330	1455	447	454	370	445	1716	3171
0900	319	328	275	303	1225	389	382	362	359	1492	2717
1000	326	321	349	343	1339	319	346	298	344	1307	2646
1100	309	365	330	411	1415	353	361	369	373	1456	2871
1200	436	436	408	407	1687	390	401	411	406	1608	3295
1300	415	391	476	432	1714	441	358	427	401	1627	3341
1400	410	392	441	471	1714	378	429	427	424	1658	3372
1500	441	424	465	430	1760	403	382	459	413	1657	3417
1600	460	494	414	475	1843	415	452	418	430	1715	3558
1700	493	466	565	542	2066	480	457	518	456	1911	3977
1800	469	473	427	443	1812	487	468	426	392	1773	3585
1900	425	386	361	347	1519	364	371	414	375	1524	3043
2000	382	355	326	276	1339	329	362	277	290	1258	2597
2100	280	277	275	224	1056	287	238	246	215	986	2042
2200	230	246	171	221	868	208	203	175	158	744	1612
2300	162	166	155	127	610	165	152	138	128	583	1193
24-Hour Totals:					26807					26379	53186

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1691	0730	1858	0730	3382
P.M.	1700	2066	1730	1929	1730	3978
Daily	1700	2066	1730	1929	1730	3978

County: 86
Station: 8882
Description: SR 7 BTWN WILES RD AND CULLUM RD (M-3)
Start Date: 04/16/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	124	112	128	85	449	99	93	94	73	359	808
0100	92	88	79	73	332	66	56	50	46	218	550
0200	80	62	54	68	264	42	46	29	34	151	415
0300	55	57	67	68	247	28	29	32	14	103	350
0400	47	42	60	27	176	19	14	30	26	89	265
0500	46	47	86	66	245	33	28	37	53	151	396
0600	75	71	115	92	353	51	67	87	115	320	673
0700	115	118	178	208	619	118	146	208	203	675	1294
0800	201	256	243	273	973	206	250	301	312	1069	2042
0900	258	296	296	319	1169	315	292	331	340	1278	2447
1000	296	326	318	348	1288	346	376	367	437	1526	2814
1100	367	382	383	419	1551	404	426	450	425	1705	3256
1200	407	427	408	398	1640	441	507	477	496	1921	3561
1300	377	423	461	434	1695	452	410	472	448	1782	3477
1400	383	447	448	424	1702	508	473	445	446	1872	3574
1500	429	403	400	402	1634	450	453	421	420	1744	3378
1600	364	424	412	392	1592	354	407	368	379	1508	3100
1700	411	363	398	399	1571	335	309	392	325	1361	2932
1800	378	348	393	368	1487	357	369	370	352	1448	2935
1900	353	314	335	318	1320	351	344	320	269	1284	2604
2000	305	309	299	243	1156	320	297	260	266	1143	2299
2100	296	246	228	200	970	234	212	236	200	882	1852
2200	226	234	178	216	854	187	179	190	178	734	1588
2300	170	163	178	123	634	173	146	156	138	613	1247
24-Hour Totals:					23921					23936	47857

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1661	1145	1850	1145	3511
P.M.	1415	1748	1215	1932	1330	3626
Daily	1415	1748	1215	1932	1330	3626

County: 86
Station: 8882
Description: SR 7 BTWN WILES RD AND CULLUM RD (M-3)
Start Date: 04/17/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	146	116	141	107	510	110	106	88	91	395	905
0100	100	85	81	85	351	51	69	57	50	227	578
0200	57	77	78	55	267	47	43	28	34	152	419
0300	52	80	54	56	242	33	26	30	20	109	351
0400	72	38	48	32	190	25	30	31	26	112	302
0500	42	42	59	42	185	21	31	32	34	118	303
0600	59	58	68	56	241	36	49	66	83	234	475
0700	69	69	93	88	319	73	88	113	127	401	720
0800	118	110	149	151	528	111	158	163	197	629	1157
0900	158	189	180	214	741	205	197	224	250	876	1617
1000	227	269	264	293	1053	258	274	297	356	1185	2238
1100	242	286	328	348	1204	305	319	338	326	1288	2492
1200	329	330	387	364	1410	383	372	324	400	1479	2889
1300	348	382	367	366	1463	337	379	378	366	1460	2923
1400	377	387	419	399	1582	333	382	367	392	1474	3056
1500	381	406	362	334	1483	366	360	365	332	1423	2906
1600	327	387	355	347	1416	311	379	293	366	1349	2765
1700	326	363	293	324	1306	289	293	318	323	1223	2529
1800	329	304	293	293	1219	309	304	319	269	1201	2420
1900	283	253	237	258	1031	309	266	242	244	1061	2092
2000	263	241	205	217	926	223	218	193	201	835	1761
2100	183	173	169	174	699	180	147	155	139	621	1320
2200	165	153	142	139	599	136	140	129	118	523	1122
2300	93	99	108	80	380	91	109	95	84	379	759
24-Hour Totals:					19345					18754	38099

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1394	1130	1419	1145	2799
P.M.	1430	1605	1415	1507	1415	3093
Daily	1430	1605	1415	1507	1415	3093

County: 86
Station: 8886
Description: LYONS RD BTWN WILES RD AND SAMPLE RD (M-4)
Start Date: 04/14/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	39	35	39	28	141	33	36	25	24	118	259
0100	18	24	19	18	79	13	18	17	16	64	143
0200	13	13	7	9	42	9	11	9	9	38	80
0300	11	10	16	7	44	19	6	14	16	55	99
0400	8	5	19	29	61	9	16	24	33	82	143
0500	23	46	44	62	175	37	47	54	72	210	385
0600	72	87	178	186	523	100	157	232	271	760	1283
0700	263	375	365	336	1339	274	388	502	433	1597	2936
0800	327	277	355	292	1251	482	396	356	357	1591	2842
0900	265	225	218	207	915	347	328	258	250	1183	2098
1000	162	190	250	237	839	245	237	257	257	996	1835
1100	197	191	232	224	844	236	255	267	247	1005	1849
1200	242	260	262	231	995	222	245	262	249	978	1973
1300	284	239	287	286	1096	250	246	291	245	1032	2128
1400	287	273	309	318	1187	265	294	293	366	1218	2405
1500	361	352	354	350	1417	303	352	318	309	1282	2699
1600	344	363	372	382	1461	309	342	373	338	1362	2823
1700	458	464	519	476	1917	442	426	476	437	1781	3698
1800	443	403	326	333	1505	382	338	353	265	1338	2843
1900	287	228	258	216	989	276	274	236	242	1028	2017
2000	221	258	197	200	876	215	231	175	168	789	1665
2100	206	213	209	161	789	161	172	143	142	618	1407
2200	135	132	102	90	459	149	142	119	99	509	968
2300	85	60	62	47	254	71	80	69	63	283	537
24-Hour Totals:					19198					19917	39115

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0715	1403	0730	1813	0715	3208
P.M.	1700	1917	1700	1781	1700	3698
Daily	1700	1917	0730	1813	1700	3698

County: 86
Station: 8886
Description: LYONS RD BTWN WILES RD AND SAMPLE RD (M-4)
Start Date: 04/15/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	46	45	26	32	149	45	37	38	27	147	296
0100	17	20	23	10	70	22	27	19	16	84	154
0200	12	14	15	12	53	15	18	11	9	53	106
0300	11	13	16	7	47	12	14	19	13	58	105
0400	13	11	18	27	69	10	11	20	30	71	140
0500	30	31	47	72	180	40	40	43	67	190	370
0600	72	87	185	186	530	82	152	171	220	625	1155
0700	267	365	371	352	1355	243	346	442	404	1435	2790
0800	368	287	320	291	1266	456	397	290	347	1490	2756
0900	242	226	223	217	908	312	297	301	253	1163	2071
1000	186	211	200	234	831	228	220	258	233	939	1770
1100	234	184	233	276	927	269	218	227	236	950	1877
1200	268	252	251	243	1014	277	292	273	300	1142	2156
1300	284	277	310	291	1162	276	278	299	275	1128	2290
1400	277	309	295	330	1211	251	302	274	390	1217	2428
1500	334	317	386	351	1388	341	345	307	329	1322	2710
1600	375	375	369	403	1522	314	385	391	359	1449	2971
1700	475	480	452	424	1831	433	449	371	340	1593	3424
1800	405	416	334	320	1475	373	349	315	332	1369	2844
1900	291	255	245	227	1018	281	282	256	276	1095	2113
2000	247	286	263	258	1054	251	227	213	195	886	1940
2100	227	200	217	210	854	212	178	189	158	737	1591
2200	199	200	160	133	692	166	181	137	136	620	1312
2300	112	84	106	99	401	122	106	109	106	443	844
24-Hour Totals:					20007					20206	40213

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	0715	1456	0730	1699	0715	3104
P.M.	1700	1831	1630	1632	1700	3424
Daily	1700	1831	0730	1699	1700	3424

County: 86
Station: 8886
Description: LYONS RD BTWN WILES RD AND SAMPLE RD (M-4)
Start Date: 04/16/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	79	70	57	50	256	77	91	63	64	295	551
0100	43	27	27	32	129	46	34	41	35	156	285
0200	28	25	25	20	98	43	21	20	15	99	197
0300	26	29	31	23	109	17	30	27	18	92	201
0400	9	19	20	12	60	17	16	16	27	76	136
0500	15	21	36	52	124	15	26	25	77	143	267
0600	43	50	72	68	233	59	64	71	86	280	513
0700	59	78	126	111	374	81	125	126	144	476	850
0800	154	169	187	188	698	167	165	210	207	749	1447
0900	184	154	224	253	815	219	232	221	266	938	1753
1000	239	264	309	303	1115	217	308	271	299	1095	2210
1100	345	310	335	351	1341	297	281	289	307	1174	2515
1200	344	392	335	381	1452	318	309	314	322	1263	2715
1300	357	352	398	376	1483	309	287	296	281	1173	2656
1400	378	366	381	394	1519	286	265	279	281	1111	2630
1500	411	399	435	385	1630	315	267	228	273	1083	2713
1600	314	271	232	256	1073	288	266	242	277	1073	2146
1700	299	257	264	231	1051	256	299	251	234	1040	2091
1800	226	284	249	217	976	277	233	260	239	1009	1985
1900	224	213	218	216	871	225	197	191	247	860	1731
2000	230	195	172	183	780	188	190	172	160	710	1490
2100	198	170	154	135	657	189	183	166	129	667	1324
2200	107	172	144	111	534	172	169	128	157	626	1160
2300	104	82	101	98	385	147	143	106	113	509	894
24-Hour Totals:					17763					16697	34460

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	1422	1145	1248	1145	2670
P.M.	1445	1639	1200	1263	1445	2730
Daily	1445	1639	1200	1263	1445	2730

County: 86
Station: 8886
Description: LYONS RD BTWN WILES RD AND SAMPLE RD (M-4)
Start Date: 04/17/2011
Start Time: 0000

	Direction: N					Direction: S					Combined
Time	1st	2nd	3rd	4th	Total	1st	2nd	3rd	4th	Total	Total
0000	55	82	58	63	258	92	93	48	76	309	567
0100	52	42	29	30	153	73	48	37	36	194	347
0200	27	32	36	23	118	44	38	21	18	121	239
0300	24	20	26	19	89	25	20	20	21	86	175
0400	13	25	18	20	76	20	19	13	9	61	137
0500	15	17	28	21	81	12	15	16	24	67	148
0600	19	19	49	34	121	26	33	49	59	167	288
0700	53	41	53	71	218	63	59	78	76	276	494
0800	61	81	94	108	344	98	97	109	132	436	780
0900	121	111	173	172	577	125	173	174	208	680	1257
1000	166	214	190	191	761	165	207	202	191	765	1526
1100	181	193	217	206	797	193	214	221	226	854	1651
1200	248	259	235	249	991	232	294	272	239	1037	2028
1300	239	246	260	276	1021	259	258	242	224	983	2004
1400	251	279	217	263	1010	221	236	235	226	918	1928
1500	256	230	202	203	891	226	236	235	222	919	1810
1600	236	224	204	239	903	223	188	210	189	810	1713
1700	222	202	236	206	866	229	234	224	205	892	1758
1800	227	222	183	179	811	225	187	192	222	826	1637
1900	177	161	160	161	659	194	179	177	203	753	1412
2000	143	176	161	138	618	166	183	145	141	635	1253
2100	147	109	110	98	464	126	133	109	107	475	939
2200	98	96	64	78	336	113	77	84	97	371	707
2300	70	54	35	36	195	64	61	53	30	208	403
24-Hour Totals:					12358					12843	25201

Peak Volume Information

	Direction: N		Direction: S		Combined Directions	
	Hour	Volume	Hour	Volume	Hour	Volume
A.M.	1145	948	1145	1024	1145	1972
P.M.	1330	1066	1215	1064	1215	2046
Daily	1330	1066	1215	1064	1215	2046

Appendix B-2

Florida Department of Transportation
Historical Annual Average Daily Traffic Volumes
Source: 2010 Florida Traffic Information and Highway Data DVD

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 0467 - SR 834/SAMPLE RD - E OF SR 7/US 441

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	55500 C	E 26000	W 29500	8.35	52.69	3.50
2009	60000 C	E 28500	W 31500	8.53	53.89	3.10
2008	63500 C	E 30500	W 33000	8.81	54.16	3.10
2007	66000 C	E 33000	W 33000	8.63	55.75	3.10
2006	59500 C	E 29000	W 30500	8.40	55.34	3.60
2005	59500 C	E 29500	W 30000	8.20	51.70	3.60
2004	58500 C	E 29500	W 29000	9.10	55.30	3.60
2003	58500 C	E 29000	W 29500	8.60	57.50	2.90
2002	59500 C	E 29000	W 30500	8.70	56.40	2.90
2001	60000 C	E 29500	W 30500	9.00	60.20	3.80
2000	65000 C	E 32000	W 33000	8.90	57.80	3.20
1999	64500 C	E 32000	W 32500	9.60	62.50	5.20
1998	58500 C	E 29000	W 29500	8.70	56.10	3.10
1997	64500 C	E 31500	W 33000	9.60	54.90	2.70
1996	61500 C	E 30500	W 31000	10.20	55.50	6.70
1995	43000 C	E 20500	W 22500	9.90	59.80	6.30

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 0123 - SR 834/SAMPLE RD - W OF SR 7/US 441

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	47500 C	E 23500	W 24000	8.35	52.69	3.00
2009	44500 C	E 21500	W 23000	8.53	53.89	3.50
2008	51000 C	E 25000	W 26000	8.81	54.16	3.50
2007	47500 C	E 23500	W 24000	8.63	55.75	3.10
2006	48000 C	E 24000	W 24000	8.40	55.34	4.00
2005	49500 C	E 25000	W 24500	8.20	51.70	2.60
2004	49000 C	E 24000	W 25000	9.10	55.30	2.60
2003	52000 C	E 26000	W 26000	8.60	57.50	2.60
2002	48500 C	E 24000	W 24500	8.70	56.40	4.40
2001	47500 C	E 23500	W 24000	9.00	60.20	3.80

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 0053 - SR 834 / SAMPLE RD - W OF SR 91/FLA TPK

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	54000 C	E 26500	W 27500	8.35	52.69	4.00
2009	60500 C	E 29000	W 31500	8.53	53.89	4.40
2008	61000 C	E 31000	W 30000	8.81	54.16	2.70
2007	61500 C	E 31000	W 30500	8.63	55.75	2.70
2006	62000 C	E 30500	W 31500	8.40	55.34	2.70
2005	58500 C	E 28000	W 30500	8.20	51.70	2.50
2004	58000 C	E 29000	W 29000	9.10	55.30	2.50
2003	50000 C	E 25000	W 25000	8.60	57.50	3.40
2002	49500 C	E 25500	W 24000	8.70	56.40	4.40
2001	47000 C	E 23500	W 23500	9.00	60.20	3.40
2000	49000 C	E 24500	W 24500	8.90	57.80	3.20
1999	58000 C	E 28500	W 29500	9.60	62.50	5.20

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 9769 - NW 31 ST E OF SR 7

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	6200 F	E 2800	W 3400	8.35	52.69	9.30
2009	6200 C	E 2800	W 3400	8.53	53.89	5.30
2008	7200 F	E 2900	W 4300	8.81	54.16	6.50
2007	7400 C	E 3000	W 4400	8.63	55.75	4.80
2006	9700 C	E 3900	W 5800	8.40	55.34	2.90

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 9581 - WILES ROAD, E OF SR 7

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	23000 C	E 12000	W 11000	8.35	52.69	9.30
2009	14500 F	E 7700	W 6800	8.53	53.89	5.30
2008	14900 C	E 7900	W 7000	8.81	54.16	6.50
2007	16900 C	E 9000	W 7900	8.63	55.75	4.80
2006	18900 C	E 10500	W 8400	8.40	55.34	2.90
2005	18100 C	E 9300	W 8800	8.20	51.70	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 7116 - WILES RD, W OF SR 7

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	32500 F	E 16500	W 16000	9.60	57.92	9.30
2009	31500 C	E 16000	W 15500	9.71	58.42	5.30
2008	33500 C	E 16500	W 17000	9.67	56.67	6.50
2007	35000 C	E 17500	W 17500	10.19	60.63	4.80
2006	39500 C	E 20000	W 19500	9.61	59.08	2.90
2005	34500 C	E 17000	W 17500	10.00	58.10	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 9694 - WILES ROAD, E OF LYONS

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	7500 F	E 3600	W 3900	8.35	52.69	9.30
2009	7500 C	E 3600	W 3900	8.53	53.89	5.30
2008	7800 C	E 4100	W 3700	8.81	54.16	6.50
2007	7900 C	E 4000	W 3900	8.63	55.75	4.80
2006	8300 C	E 4200	W 4100	8.40	55.34	2.90
2005	8900 C	E 4200	W 4700	8.20	51.70	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 5112 - SR 7 / US 441 - N OF SR 834/SAMPLE RD

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	41500 C	N 21000	S 20500	8.35	52.69	3.80
2009	46500 C	N 23500	S 23000	8.53	53.89	6.30
2008	44500 C	N 22500	S 22000	8.81	54.16	6.30
2007	47500 C	N 24000	S 23500	8.63	55.75	2.60
2006	45500 C	N 22000	S 23500	8.40	55.34	3.50
2005	45500 C	N 22500	S 23000	8.20	51.70	3.50
2004	44000 C	N 21500	S 22500	9.10	55.30	3.50
2003	43500 C	N 22000	S 21500	8.60	57.50	4.90
2002	47000 C	N 23500	S 23500	8.70	56.40	4.90
2001	49000 C	N 24500	S 24500	9.00	60.20	2.60
2000	48000 C	N 24500	S 23500	8.90	57.80	2.50
1999	46000 C	N 23500	S 22500	9.60	62.50	2.90
1998	40500 C	N 20000	S 20500	8.70	56.10	2.70
1997	43000 C	N 21000	S 22000	9.60	54.90	2.50
1996	38000 C	N 18500	S 19500	10.70	55.50	6.20
1995	33500 C	N 17000	S 16500	9.90	59.80	3.80

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 0427 - SR 7 / US 441 - S OF SR 834/SAMPLE RD

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	47000 C	N 23500	S 23500	8.35	52.69	3.30
2009	42500 C	N 20500	S 22000	8.53	53.89	4.20
2008	52500 C	N 26000	S 26500	8.81	54.16	4.20
2007	43000 C	N 21000	S 22000	8.63	55.75	2.70
2006	40000 C	N 21000	S 19000	8.40	55.34	3.90
2005	42000 C	N 21000	S 21000	8.20	51.70	3.90
2004	42000 C	N 21000	S 21000	9.10	55.30	3.90
2003	43000 C	N 21500	S 21500	8.60	57.50	2.80
2002	42000 C	N 21000	S 21000	8.70	56.40	2.80
2001	40000 C	N 21000	S 19000	9.00	60.20	2.60
2000	39000 C	N 20500	S 18500	8.90	57.80	2.50
1999	37500 C	N 19000	S 18500	9.60	62.50	2.90
1998	38000 C	N 19000	S 19000	8.70	56.10	2.90
1997	34000 C	N 17500	S 16500	9.60	54.90	4.20
1996	32000 C	N 16500	S 15500	10.20	55.50	3.50
1995	34000 C	N 17000	S 17000	9.90	59.80	2.50

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 4506 - RAMP FROM SB SR 7/US 441 TO SR 834/SAMPLE RD.

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	5300 F	0	0	8.35	99.99	4.00
2009	5300 C	S 5300	0	8.53	99.99	4.10
2003	6800 C	S 6800	0	8.60	99.90	3.40
2001	6200 C	S 6200	0	9.00	60.20	2.60
1998	7700 C	S 7700	0	8.70	56.10	2.70

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 4505 - RAMP FROM SR 834/SAMPLE RD. TO NB SR 7/US 441

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	5700 F	0	0	8.35	99.99	4.00
2009	5700 C	N 5700	0	8.53	99.99	4.10
2003	7200 C	N 7200		8.60	99.90	3.40
2001	6500 C	N 6500		9.00	60.20	2.60
1998	3500 C	N 3500		8.70	56.10	2.70

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 9108 - BANKS RD., S OF SAMPLE RD.

Year	AADT	Direction 1		Direction 2		K Factor	D Factor	T Factor
2010	5100 C	N	2200	S	2900	8.35	52.69	9.30
2009	4700 F	N	1900	S	2800	8.53	53.89	5.30
2008	4900 C	N	2000	S	2900	8.81	54.16	6.50
2007	5800 C	N	2400	S	3400	8.63	55.75	4.80
2006	6700 C	N	2900	S	3800	8.40	55.34	2.90
2005	6200 C	N	2700	S	3500	8.20	51.70	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

Connty: 86 - BROWARD

Site: 9768 - TURTLE CREEK DR N OF SAMPLE RD

Year	AADT	Direction 1		Direction 2		K Factor	D Factor	T Factor
2010	16400 F	N	8200	S	8200	9.60	57.92	9.30
2009	16000 C	N	8000	S	8000	9.71	58.42	5.30
2008	12100 C	N	5900	S	6200	9.67	56.67	6.50
2007	15000 C	N	7400	S	7600	10.19	60.63	4.80
2006	17800 C	N	8500	S	9300	9.61	59.08	2.90

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 9145 - LYONS RD., S OF SAWGRASS EXPRESSWAY

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	32500 C	N 16000	S 16500	8.35	52.69	9.30
2009	38500 F	N 19000	S 19500	8.53	53.89	5.30
2008	39500 C	N 19500	S 20000	8.81	54.16	6.50
2007	37000 C	N 18500	S 18500	8.63	55.75	4.80
2006	50000 C	N 25000	S 25000	8.40	55.34	2.90
2005	41000 C	N 19500	S 21500	8.20	51.70	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Florida Department of Transportation
Transportation Statistics Office
2010 Historical AADT Report

County: 86 - BROWARD

Site: 9143 - LYONS RD., N OF COPANS RD.

Year	AADT	Direction 1	Direction 2	K Factor	D Factor	T Factor
2010	29000 C	N 15000	S 14000	8.35	52.69	9.30
2009	31000 F	N 14500	S 16500	8.53	53.89	5.30
2008	32000 C	N 15000	S 17000	8.81	54.16	6.50
2007	31500 C	N 15500	S 16000	8.63	55.75	4.80
2006	34500 C	N 17000	S 17500	8.40	55.34	2.90
2005	29500 C	N 15500	S 14000	8.20	51.70	0.00

AADT Flags: C = Computed; E = Manual Estimate; F = First Year Estimate
S = Second Year Estimate; T = Third Year Estimate; X = Unknown

Appendix B-3

Intersection Turning Movement Counts

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

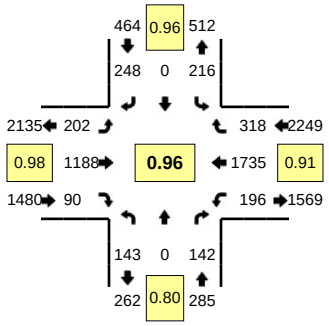
LOCATION: SR 7 -- Sample Rd

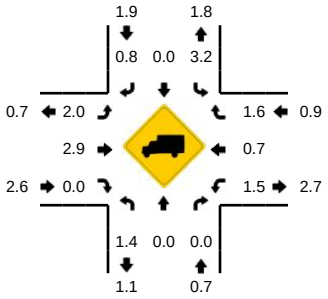
CITY/STATE: Broward, FL

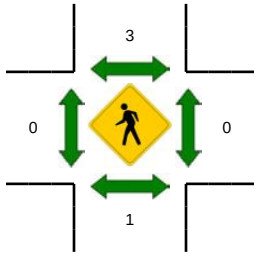
QC JOB #: 10604411

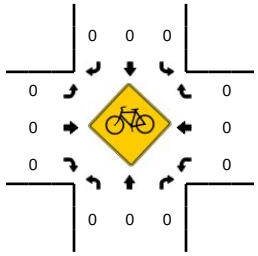
DATE: 4/14/2011

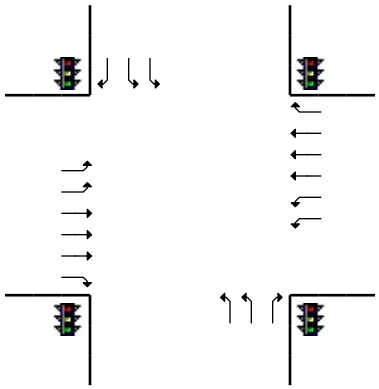
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

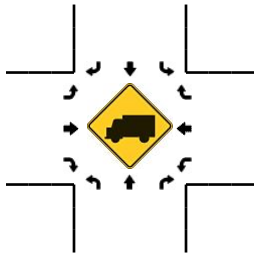


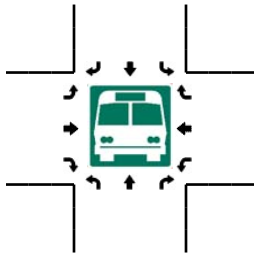












15-Min Count Period Beginning At	SR 7 (Northbound)				SR 7 (Southbound)				Sample Rd (Eastbound)				Sample Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	36	0	39	0	44	0	55	0	59	290	22	1	47	341	53	2	989	
4:15 PM	29	0	41	0	48	0	56	0	41	318	26	0	38	382	72	4	1055	
4:30 PM	32	0	31	0	65	0	48	0	44	303	30	1	52	371	76	3	1056	
4:45 PM	38	0	32	0	55	0	54	1	41	312	20	0	26	367	70	4	1020	4120
5:00 PM	25	0	32	0	46	0	61	0	58	268	25	2	30	393	80	2	1022	4153
5:15 PM	50	0	42	0	57	0	64	0	59	314	24	4	50	388	73	11	1136	4234
5:30 PM	36	0	41	0	61	0	56	0	30	287	20	1	45	474	93	4	1148	4326
5:45 PM	32	0	27	0	51	0	67	1	46	319	21	2	47	480	72	7	1172	4478

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	128	0	108	0	204	0	268	4	184	1276	84	8	188	1920	288	28	4688
Heavy Trucks	0	0	0		4	0	8		8	20	0		4	16	4		64
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

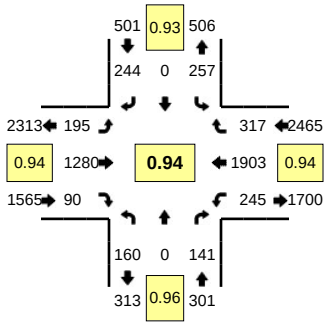
LOCATION: SR 7 -- Sample Rd

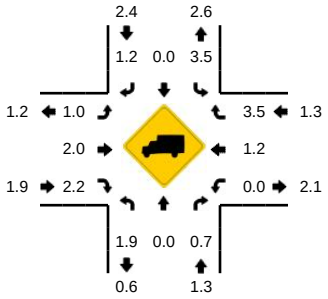
CITY/STATE: Broward, FL

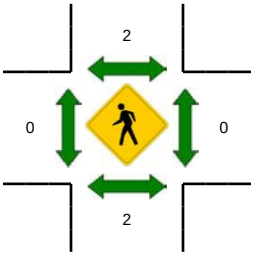
QC JOB #: 10604412

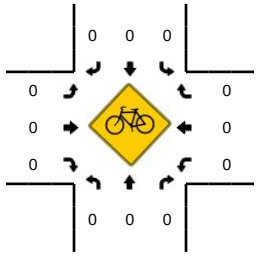
DATE: 4/15/2011

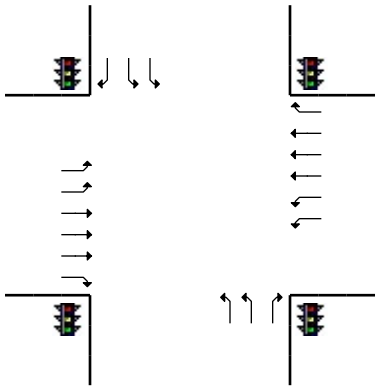
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

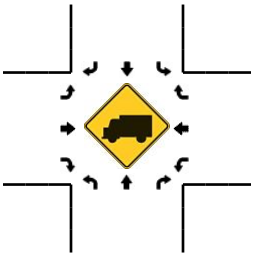


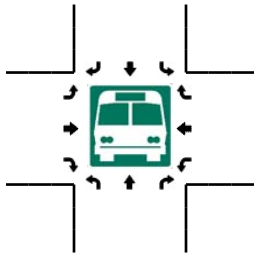












15-Min Count Period Beginning At	SR 7 (Northbound)				SR 7 (Southbound)				Sample Rd (Eastbound)				Sample Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	33	0	39	0	61	0	46	0	48	285	31	2	51	365	72	10	1043	
4:15 PM	31	0	47	0	68	0	39	0	45	310	22	0	45	388	60	7	1062	
4:30 PM	40	0	29	0	60	0	48	0	37	283	28	1	63	359	71	5	1024	
4:45 PM	38	0	42	0	54	0	73	0	51	317	21	1	62	359	75	4	1097	4226
5:00 PM	38	0	35	0	63	0	53	0	47	322	20	1	53	437	70	6	1145	4328
5:15 PM	33	0	40	0	79	0	58	0	51	344	25	1	70	491	87	5	1284	4550
5:30 PM	46	0	34	0	67	0	63	0	45	302	28	1	47	500	100	8	1241	4767
5:45 PM	43	0	32	0	48	0	70	0	46	312	17	3	53	475	60	3	1162	4832

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	132	0	160	0	316	0	232	0	204	1376	100	4	280	1964	348	20	5136
Heavy Trucks	8	0	0		20	0	4		4	20	0		0	20	20		96
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

SAMPLE ROAD & SW SERVICE ROAD
COCONUT CREEK, FLORIDA
COUNTED BY: SEBASTIAN SALVO
RIGHT IN, RIGHT OUT ONLY

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00110047
Start Date: 04/14/11
File I.D. : SAM_SERV
Page : 1

SW SERVICE ROAD

	SW SERVICE ROAD From North				SAMPLE ROAD From East				------ From South				SAMPLE ROAD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/14/11																	
16:00	0	0	7	0	0	0	7	0	0	0	0	0	0	0	0	0	14
16:15	0	0	10	0	0	0	3	0	0	0	0	0	0	0	0	0	13
16:30	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	10
16:45	0	0	11	0	0	0	3	0	0	0	0	0	0	0	0	0	14
Hr Total	0	0	33	0	0	0	18	0	0	0	0	0	0	0	0	0	51
17:00	0	0	4	0	0	0	5	0	0	0	0	0	0	0	0	0	9
17:15	0	0	7	0	0	0	1	0	0	0	0	0	0	0	0	0	8
17:30	0	0	9	0	0	0	7	0	0	0	0	0	0	0	0	0	16
17:45	0	0	11	0	0	0	7	0	0	0	0	0	0	0	0	0	18
Hr Total	0	0	31	0	0	0	20	0	0	0	0	0	0	0	0	0	51
TOTAL	0	0	64	0	0	0	38	0	0	0	0	0	0	0	0	0	102

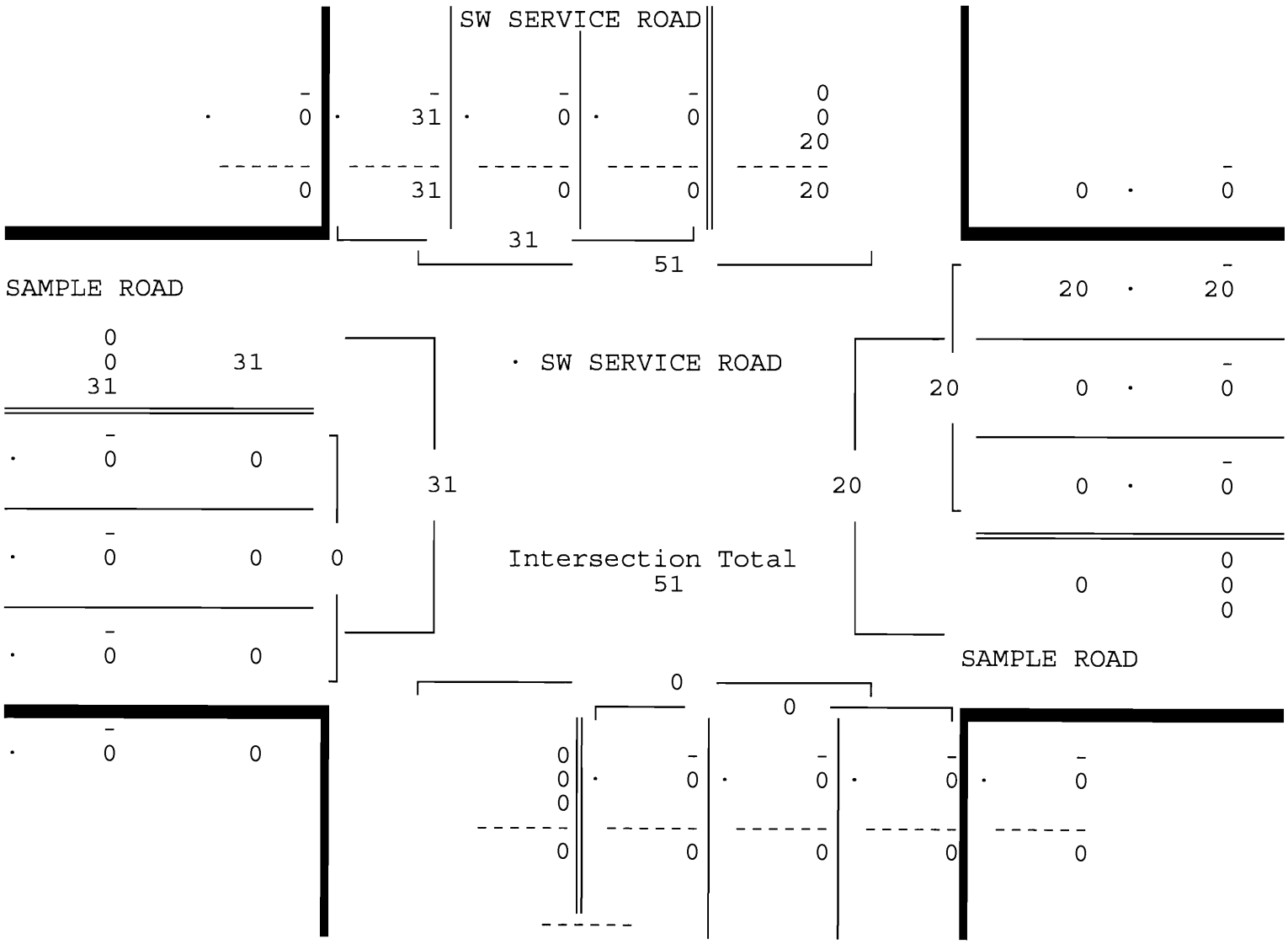
SAMPLE ROAD & SW SERVICE ROAD
COCONUT CREEK, FLORIDA
COUNTED BY: SEBASTIAN SALVO
RIGHT IN, RIGHT OUT ONLY

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00110047
Start Date: 04/14/11
File I.D. : SAM_SERV

SW SERVICE ROAD

	SW SERVICE ROAD From North				SAMPLE ROAD From East				------ From South				SAMPLE ROAD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/14/11																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 04/14/11																	
Peak start 17:00					17:00				17:00				17:00				
Volume	0	0	31	0	0	0	20	0	0	0	0	0	0	0	0	0	
Percent	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Pk total	31				20				0				0				
Highest	17:45				17:30				16:00				16:00				
Volume	0	0	11	0	0	0	7	0	0	0	0	0	0	0	0	0	
Hi total	11				7				0				0				
PHF	.70				.71				.0				.0				



SAMPLE ROAD & SW SERVICE ROAD
COCONUT CREEK, FLORIDA
COUNTED BY: SEBASTIAN SALVO
RIGHT IN, RIGHT OUT ONLY

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00110047
Start Date: 04/15/11
File I.D. : SAMPSERV
Page : 1

SW SERVICE ROAD

	SW SERVICE ROAD From North				SAMPLE ROAD From East				--------- From South				SAMPLE ROAD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/15/11																	
16:00	0	0	5	0	0	0	6	0	0	0	0	0	0	0	0	0	11
16:15	0	0	3	0	0	0	5	0	0	0	0	0	0	0	0	0	8
16:30	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	7
16:45	0	0	6	0	0	0	1	0	0	0	0	0	0	0	0	0	7
Hr Total	0	0	20	0	0	0	13	0	0	0	0	0	0	0	0	0	33
17:00	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6
17:15	0	0	8	0	0	0	2	0	0	0	0	0	0	0	0	0	10
17:30	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	5
17:45	0	0	5	0	0	0	5	0	0	0	0	0	0	0	0	0	10
Hr Total	0	0	21	0	0	0	10	0	0	0	0	0	0	0	0	0	31
TOTAL	0	0	41	0	0	0	23	0	0	0	0	0	0	0	0	0	64

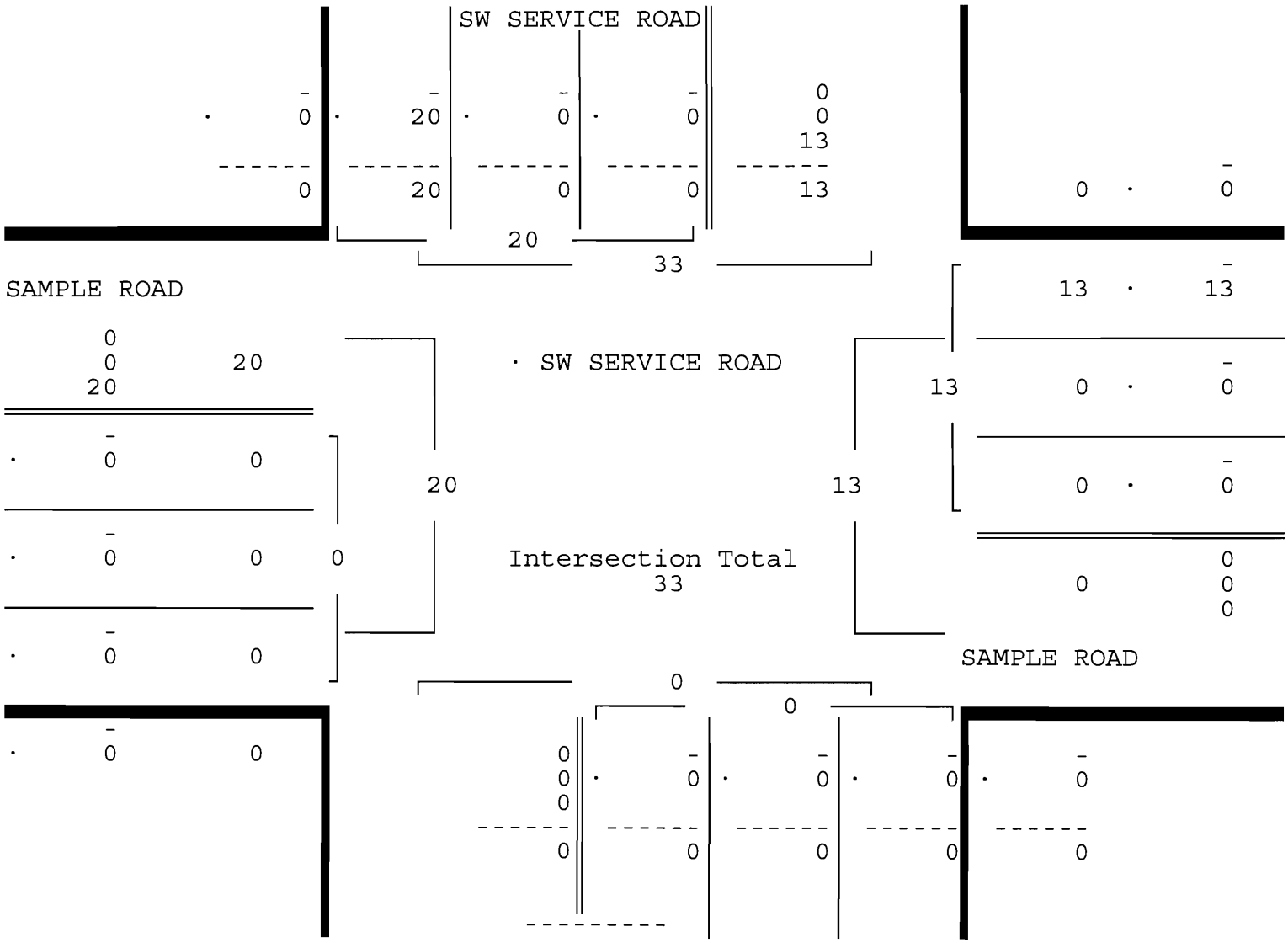
SAMPLE ROAD & SW SERVICE ROAD
COCONUT CREEK, FLORIDA
COUNTED BY: SEBASTIAN SALVO
RIGHT IN, RIGHT OUT ONLY

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00110047
Start Date: 04/15/11
File I.D. : SAMPSERV
Page : 2

SW SERVICE ROAD

	SW SERVICE ROAD From North				SAMPLE ROAD From East				--- From South				SAMPLE ROAD From West				
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Total
Date 04/15/11																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 04/15/11																	
Peak start 16:00					16:00				16:00				16:00				
Volume	0	0	20	0	0	0	13	0	0	0	0	0	0	0	0	0	
Percent	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Pk total	20				13				0				0				
Highest	16:30				16:00				16:00				16:00				
Volume	0	0	6	0	0	0	6	0	0	0	0	0	0	0	0	0	
Hi total	6				6				0				0				
PHF	.83				.54				.0				.0				



NW 54th Avenue at Sample Road

(Station # 6)

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

CLIENT: KEITH & SCHNARS, P.A.
JOB.: 2010019.001
PROJECT: Seminole Casino Coconut Creek
County: Broward

File Name : NW 54 AVE AT SAMPLE RD
Site Code : 00000006
Start Date : 4/14/2011
Page No : 1

Groups Printed- Auto & Ped - Heavy Veh

	NW 54 AV Southbound					SAMPLE RD Westbound					NW 54 AV Northbound					SAMPLE RD Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		
04:00 PM	64	17	28	0	109	61	421	77	0	559	24	37	77	2	140	17	83	324	8	0	432	1240
04:15 PM	60	15	23	0	98	54	401	82	0	537	35	33	65	1	134	16	26	424	6	2	474	1243
04:30 PM	48	23	22	0	93	67	446	56	0	569	37	33	76	3	149	11	18	382	10	2	423	1234
04:45 PM	50	18	17	0	85	77	386	60	1	524	24	29	74	1	128	11	25	409	10	1	456	1193
Total	222	73	90	0	385	259	1654	275	1	2189	120	132	292	7	551	55	152	1539	34	5	1785	4910
05:00 PM	48	20	17	0	85	58	471	50	0	579	38	25	65	0	128	15	25	412	2	0	454	1246
05:15 PM	61	20	16	0	97	81	481	62	0	624	38	26	86	0	150	16	33	398	15	1	463	1334
05:30 PM	61	20	8	1	90	94	509	55	0	658	35	39	86	2	162	11	31	427	13	1	483	1393
05:45 PM	58	9	9	0	76	98	563	57	0	718	35	20	82	0	137	15	26	335	8	0	384	1315
Total	228	69	50	1	348	331	2024	224	0	2579	146	110	319	2	577	57	115	1572	38	2	1784	5288
Grand Total	450	142	140	1	733	590	3678	499	1	4768	266	242	611	9	1128	112	267	3111	72	7	3569	10198
Apprch %	61.4	19.4	19.1	0.1		12.4	77.1	10.5	0.0		23.6	21.5	54.2	0.8		3.1	7.5	87.2	2.0	0.2		
Total %	4.4	1.4	1.4	0.0	7.2	5.8	36.1	4.9	0.0	46.8	2.6	2.4	6.0	0.1	11.1	1.1	2.6	30.5	0.7	0.1	35.0	

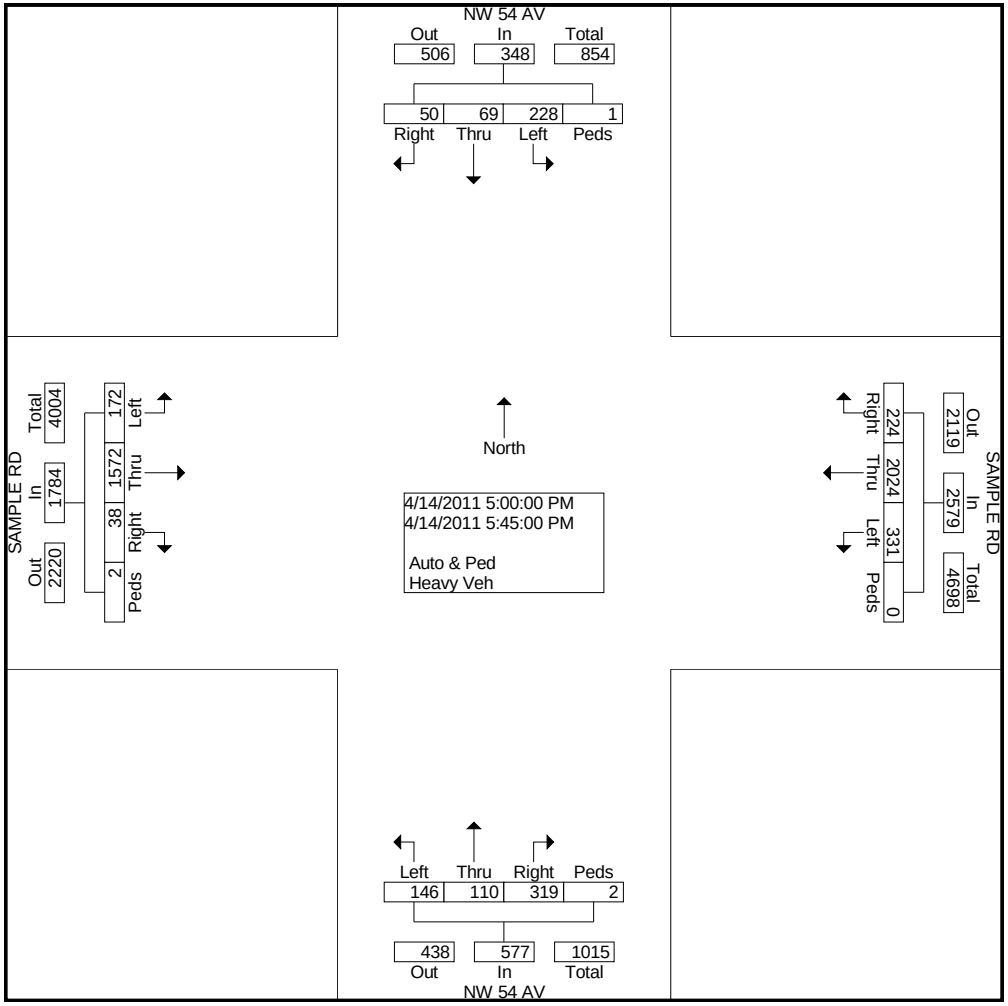
Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT SAMPLE RD
Site Code : 00000006
Start Date : 4/14/2011
Page No : 2

	NW 54 AV Southbound					SAMPLE RD Westbound					NW 54 AV Northbound					SAMPLE RD Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																						
Intersection	05:00 PM																					
Volume	228	69	50	1	348	331	2024	224	0	2579	146	110	319	2	577	57	115	1572	38	2	1784	5288
Percent	65.5	19.8	14.4	0.3		12.8	78.5	8.7	0.0		25.3	19.1	55.3	0.3		3.2	6.4	88.1	2.1	0.1		
05:30 Volume	61	20	8	1	90	94	509	55	0	658	35	39	86	2	162	11	31	427	13	1	483	1393
Peak Factor																						0.949
High Int.	05:15 PM					05:45 PM					05:30 PM					05:30 PM						
Volume	61	20	16	0	97	98	563	57	0	718	35	39	86	2	162	11	31	427	13	1	483	
Peak Factor					0.897					0.898					0.890						0.923	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT SAMPLE RD
Site Code : 00000006
Start Date : 4/14/2011
Page No : 3

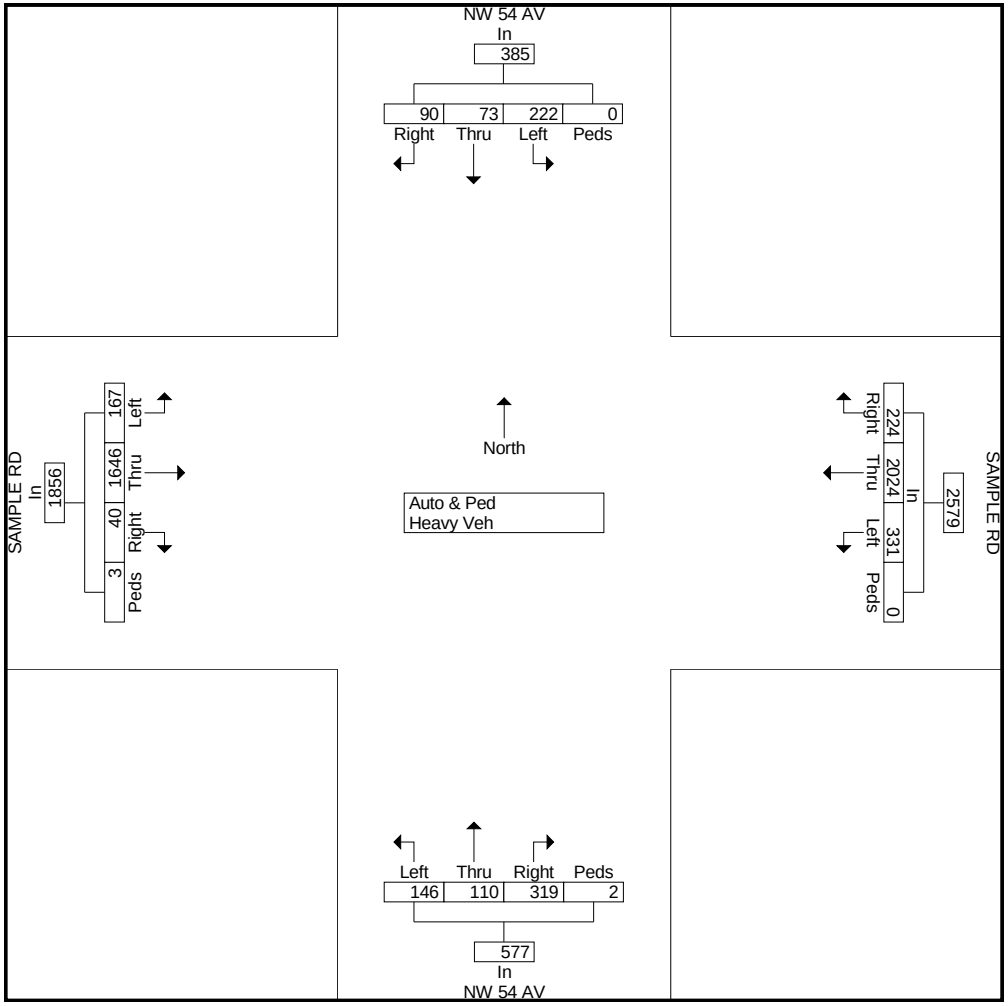


Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1

By Approach	04:00 PM					05:00 PM					05:00 PM					04:45 PM					
Volume	222	73	90	0	385	331	2024	224	0	2579	146	110	319	2	577	53	114	1646	40	3	1856
Percent	57.7	19.0	23.4	0.0		12.8	78.5	8.7	0.0		25.3	19.1	55.3	0.3		2.9	6.1	88.7	2.2	0.2	
High Int.	04:00 PM					05:45 PM					05:30 PM					05:30 PM					
Volume	64	17	28	0	109	98	563	57	0	718	35	39	86	2	162	11	31	427	13	1	483
Peak Factor					0.883					0.898					0.890						0.961

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT SAMPLE RD
Site Code : 00000006
Start Date : 4/14/2011
Page No : 4



Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT SAMPLE RD
Site Code : 00000006
Start Date : 4/14/2011
Page No : 1

Groups Printed- Heavy Veh

	NW 54 AV Southbound					SAMPLE RD Westbound					NW 54 AV Northbound					SAMPLE RD Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		
04:00 PM	2	1	0	0	3	0	9	1	0	10	0	0	2	0	2	0	1	10	0	0	11	26
04:15 PM	0	2	0	0	2	0	7	2	0	9	0	0	3	0	3	0	1	14	0	0	15	29
04:30 PM	4	0	0	0	4	1	9	0	0	10	0	0	3	0	3	0	0	4	0	0	4	21
04:45 PM	4	1	0	0	5	2	4	2	0	8	0	0	2	0	2	0	0	8	0	0	8	23
Total	10	4	0	0	14	3	29	5	0	37	0	0	10	0	10	0	2	36	0	0	38	99
05:00 PM	1	0	1	0	2	1	3	1	0	5	0	0	0	0	0	0	1	16	0	0	17	24
05:15 PM	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	0	0	9	0	0	9	14
05:30 PM	1	1	0	0	2	0	4	1	0	5	0	0	0	0	0	0	0	5	0	0	5	12
05:45 PM	3	1	0	0	4	0	9	3	0	12	0	0	2	0	2	0	0	3	0	0	3	21
Total	6	2	1	0	9	2	19	5	0	26	0	0	2	0	2	0	1	33	0	0	34	71
Grand Total	16	6	1	0	23	5	48	10	0	63	0	0	12	0	12	0	3	69	0	0	72	170
Apprch %	69.6	26.1	4.3	0.0		7.9	76.2	15.9	0.0		0.0	0.0	100.0	0.0		0.0	4.2	95.8	0.0	0.0		
Total %	9.4	3.5	0.6	0.0	13.5	2.9	28.2	5.9	0.0	37.1	0.0	0.0	7.1	0.0	7.1	0.0	1.8	40.6	0.0	0.0	42.4	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

CLIENT: KEITH & SCHNARS, P.A.
JOB.: 2010019.001
PROJECT: Seminole Casino Coconut Creek
County: Broward

File Name : NW 54 ST AT SAMPLE RD
Site Code : 00000006
Start Date : 4/15/2011
Page No : 1

Groups Printed- Auto & Ped - Heavy Veh

	NW 54 AV Southbound					SAMPLE RD Westbound					NW 54 AV Northbound					SAMPLE RD Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		
04:00 PM	59	27	26	0	112	68	431	30	2	531	38	26	67	3	134	27	372	20	16	4	439	1216
04:15 PM	50	18	16	0	84	77	420	43	0	540	35	22	75	1	133	22	472	8	23	4	529	1286
04:30 PM	49	18	19	1	87	89	454	39	0	582	45	41	81	2	169	17	362	13	12	0	404	1242
04:45 PM	57	23	11	1	92	103	399	55	0	557	31	27	86	1	145	15	389	9	27	3	443	1237
Total	215	86	72	2	375	337	1704	167	2	2210	149	116	309	7	581	81	1595	50	78	11	1815	4981
05:00 PM	63	24	5	0	92	102	608	43	0	753	40	25	86	2	153	24	421	11	19	2	477	1475
05:15 PM	50	15	17	0	82	85	593	57	0	735	44	24	79	0	147	27	421	9	20	0	477	1441
05:30 PM	42	19	12	0	73	109	567	59	0	735	38	27	59	0	124	27	432	14	22	2	497	1429
05:45 PM	68	29	18	0	115	101	426	34	0	561	45	29	100	0	174	32	381	9	16	0	438	1288
Total	223	87	52	0	362	397	2194	193	0	2784	167	105	324	2	598	110	1655	43	77	4	1889	5633
Grand Total	438	173	124	2	737	734	3898	360	2	4994	316	221	633	9	1179	191	3250	93	155	15	3704	10614
Apprch %	59.4	23.5	16.8	0.3		14.7	78.1	7.2	0.0		26.8	18.7	53.7	0.8		5.2	87.7	2.5	4.2	0.4		
Total %	4.1	1.6	1.2	0.0	6.9	6.9	36.7	3.4	0.0	47.1	3.0	2.1	6.0	0.1	11.1	1.8	30.6	0.9	1.5	0.1	34.9	

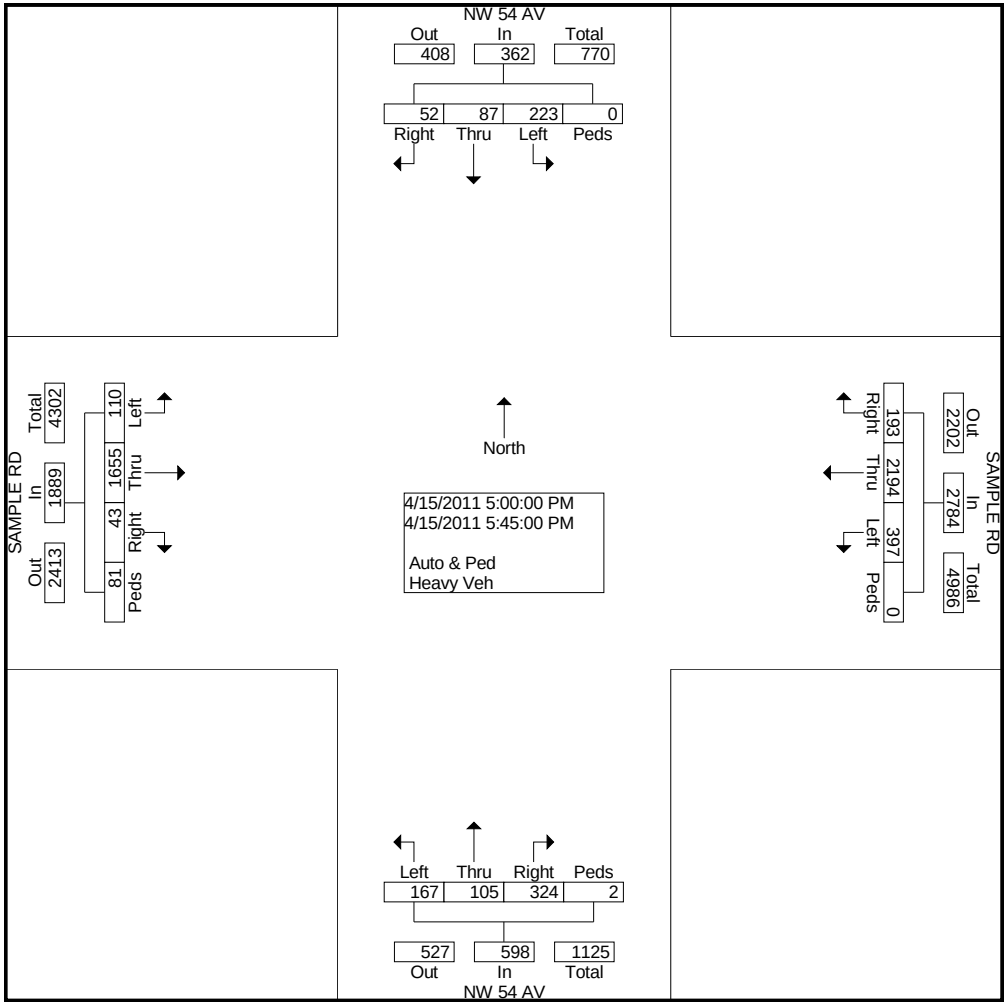
Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 ST AT SAMPLE RD
Site Code : 00000006
Start Date : 4/15/2011
Page No : 2

	NW 54 AV Southbound					SAMPLE RD Westbound					NW 54 AV Northbound					SAMPLE RD Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																						
Intersection	05:00 PM																					
Volume	223	87	52	0	362	397	2194	193	0	2784	167	105	324	2	598	110	1655	43	77	4	1889	5633
Percent	61.6	24.0	14.4	0.0		14.3	78.8	6.9	0.0		27.9	17.6	54.2	0.3		5.8	87.6	2.3	4.1	0.2		
05:00 Volume	63	24	5	0	92	102	608	43	0	753	40	25	86	2	153	24	421	11	19	2	477	1475
Peak Factor																						0.955
High Int.	05:45 PM					05:00 PM					05:45 PM					05:30 PM						
Volume	68	29	18	0	115	102	608	43	0	753	45	29	100	0	174	27	432	14	22	2	497	
Peak Factor					0.787					0.924					0.859						0.950	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 ST AT SAMPLE RD
Site Code : 00000006
Start Date : 4/15/2011
Page No : 3

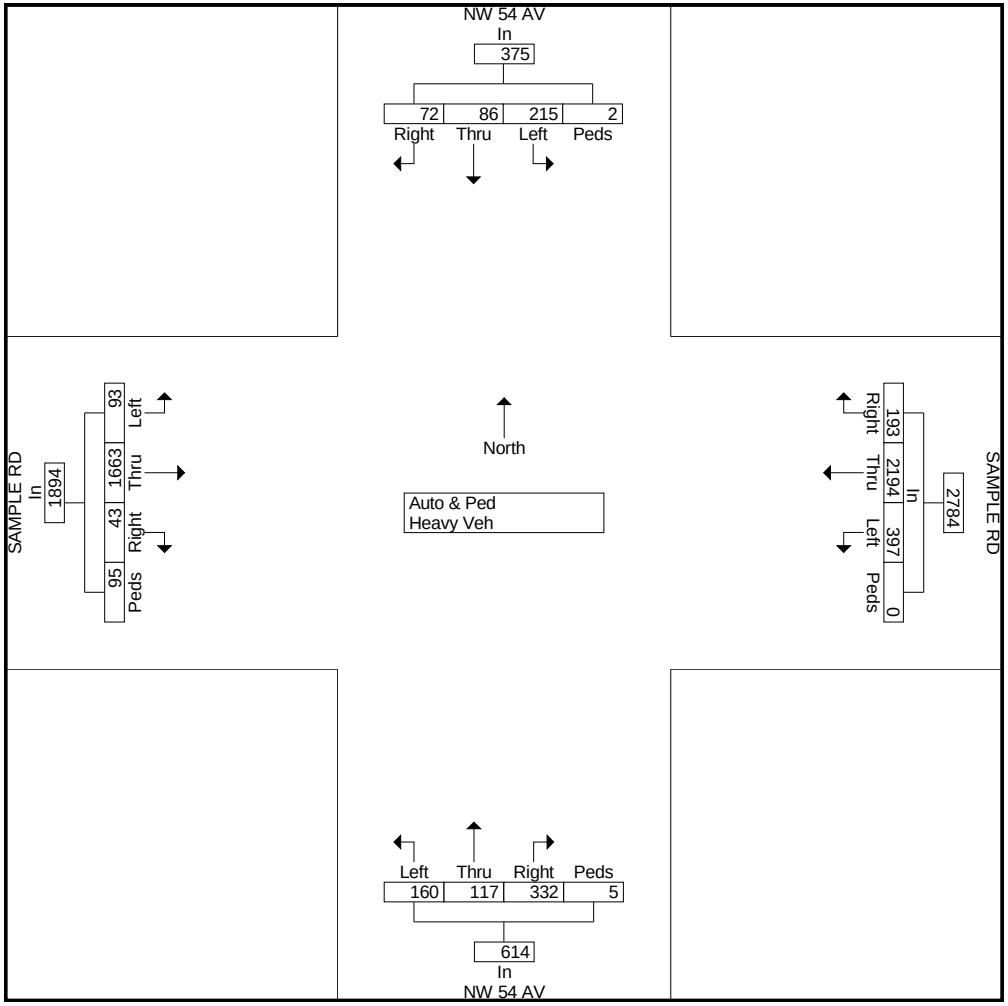


Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1

By Approach	04:00 PM					05:00 PM					04:30 PM					04:45 PM					
Volume	215	86	72	2	375	397	2194	193	0	2784	160	117	332	5	614	93	1663	43	88	7	1894
Percent	57.3	22.9	19.2	0.5		14.3	78.8	6.9	0.0		26.1	19.1	54.1	0.8		4.9	87.8	2.3	4.6	0.4	
High Int.	04:00 PM					05:00 PM					04:30 PM					05:30 PM					
Volume	59	27	26	0	112	102	608	43	0	753	45	41	81	2	169	27	432	14	22	2	497
Peak Factor					0.837					0.924					0.908						0.953

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 ST AT SAMPLE RD
Site Code : 00000006
Start Date : 4/15/2011
Page No : 4



Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 ST AT SAMPLE RD
Site Code : 00000006
Start Date : 4/15/2011
Page No : 1

Groups Printed- Heavy Veh

	NW 54 AV Southbound					SAMPLE RD Westbound					NW 54 AV Northbound					SAMPLE RD Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0	1.0		
04:00 PM	2	1	1	0	4	0	8	0	0	8	0	0	3	0	3	0	12	0	0	0	12	27
04:15 PM	4	0	0	0	4	1	7	1	0	9	0	0	2	0	2	0	10	0	0	0	10	25
04:30 PM	1	1	0	0	2	0	10	5	0	15	0	1	1	0	2	0	9	1	0	0	10	29
04:45 PM	5	0	0	0	5	0	4	1	0	5	0	0	2	0	2	0	9	1	0	0	10	22
Total	12	2	1	0	15	1	29	7	0	37	0	1	8	0	9	0	40	2	0	0	42	103
05:00 PM	5	0	1	0	6	0	8	0	0	8	0	0	2	0	2	1	11	0	0	0	12	28
05:15 PM	4	1	0	0	5	2	8	1	0	11	2	0	1	0	3	2	6	0	0	0	8	27
05:30 PM	4	0	0	0	4	2	9	3	0	14	0	0	0	0	0	0	7	0	0	0	7	25
05:45 PM	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	5	0	0	0	5	8
Total	14	1	1	0	16	4	26	5	0	35	2	0	3	0	5	3	29	0	0	0	32	88
Grand Total	26	3	2	0	31	5	55	12	0	72	2	1	11	0	14	3	69	2	0	0	74	191
Apprch %	83.9	9.7	6.5	0.0		6.9	76.4	16.7	0.0		14.3	7.1	78.6	0.0		4.1	93.2	2.7	0.0	0.0		
Total %	13.6	1.6	1.0	0.0	16.2	2.6	28.8	6.3	0.0	37.7	1.0	0.5	5.8	0.0	7.3	1.6	36.1	1.0	0.0	0.0	38.7	

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

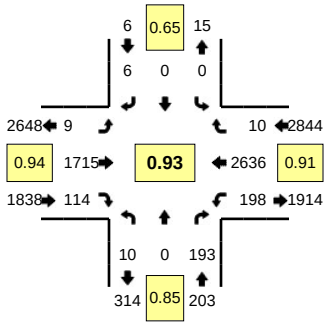
LOCATION: Banks Rd -- Sample Rd

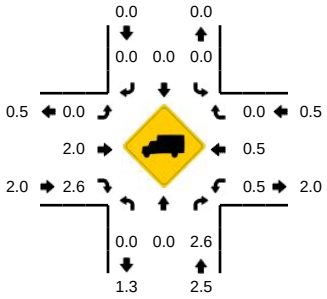
CITY/STATE: Broward, FL

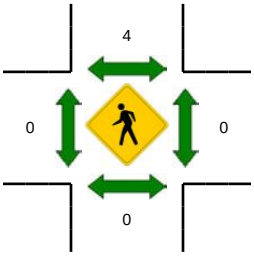
QC JOB #: 10604409

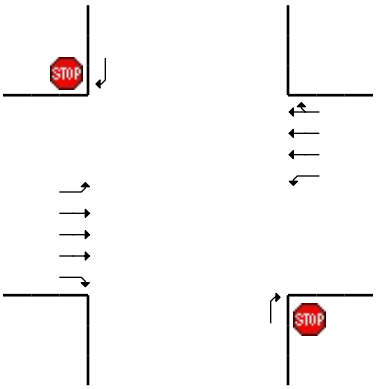
DATE: 4/14/2011

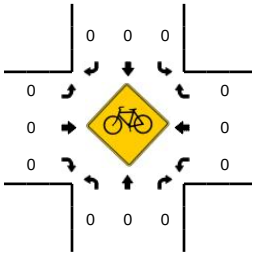
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:45 PM -- 6:00 PM

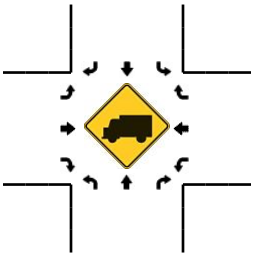


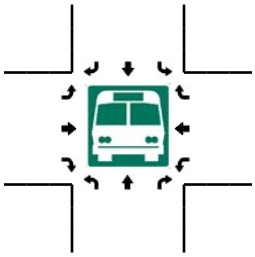












15-Min Count Period Beginning At	Banks Rd (Northbound)				Banks Rd (Southbound)				Sample Rd (Eastbound)				Sample Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	55	0	0	0	2	0	5	411	18	4	43	543	0	6	1087	
4:15 PM	0	0	49	2	0	0	4	0	2	491	16	3	35	541	0	5	1148	
4:30 PM	0	0	37	1	0	0	5	0	2	457	29	1	42	589	2	3	1168	
4:45 PM	0	0	44	1	0	0	1	0	1	450	31	1	43	553	1	1	1127	4530
5:00 PM	0	0	46	1	0	0	3	0	0	391	18	0	38	605	1	1	1104	4547
5:15 PM	0	0	56	4	0	0	0	0	1	458	34	1	52	627	1	2	1236	4635
5:30 PM	1	0	42	1	0	0	1	0	1	428	27	0	53	680	2	2	1238	4705
5:45 PM	1	0	49	2	0	0	2	0	3	438	35	3	49	724	6	1	1313	4891

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	0	196	8	0	0	8	0	12	1752	140	12	196	2896	24	4	5252
Heavy Trucks	0	0	0		0	0	0		0	28	4		4	12	0		48
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

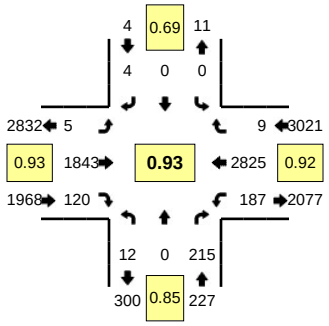
LOCATION: Banks Rd -- Sample Rd

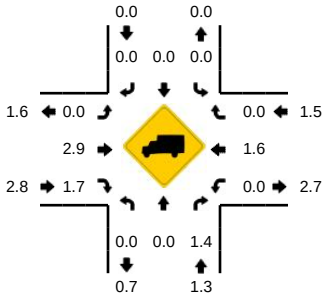
CITY/STATE: Broward, FL

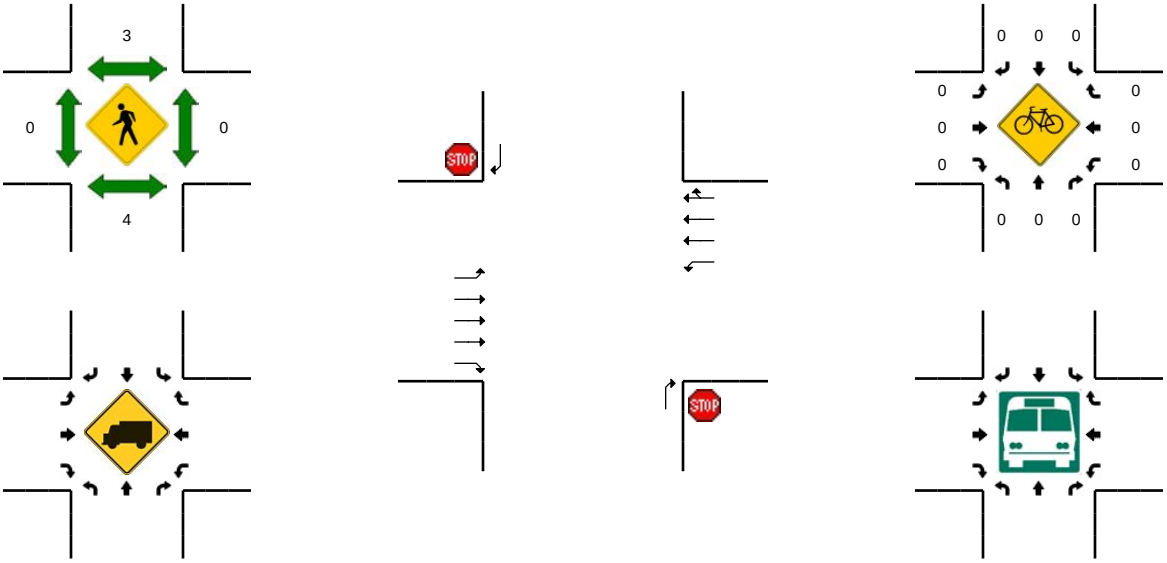
QC JOB #: 10604410

DATE: 4/15/2011

Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM







15-Min Count Period Beginning At	Banks Rd (Northbound)				Banks Rd (Southbound)				Sample Rd (Eastbound)				Sample Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	40	1	0	0	4	0	1	433	28	2	24	561	5	4	1103	
4:15 PM	0	0	50	3	0	0	3	0	1	484	25	7	33	555	4	3	1168	
4:30 PM	0	0	39	2	0	0	0	0	0	429	27	2	23	599	0	2	1123	
4:45 PM	0	0	47	1	0	0	4	0	1	449	31	1	39	562	4	4	1143	4537
5:00 PM	0	0	63	5	0	0	2	0	0	446	27	1	37	655	3	4	1243	4677
5:15 PM	0	0	54	5	0	0	0	0	0	495	34	1	48	765	0	5	1407	4916
5:30 PM	0	0	55	2	0	0	1	0	2	416	31	1	49	695	3	6	1261	5054
5:45 PM	0	0	43	0	0	0	1	0	0	486	28	0	34	710	3	4	1309	5220

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	216	20	0	0	0	0	0	1980	136	4	192	3060	0	20	5628
Heavy Trucks	0	0	0		0	0	0		0	60	4		0	48	0		112
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

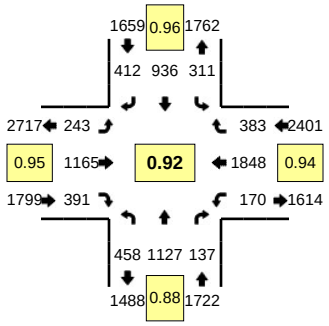
LOCATION: Lyons Rd -- Sample Rd

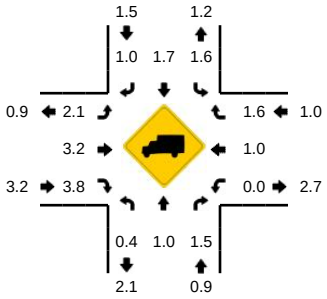
CITY/STATE: Broward, FL

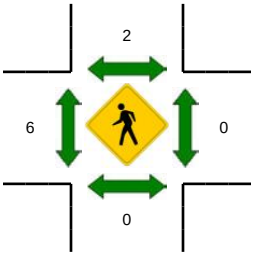
QC JOB #: 10604405

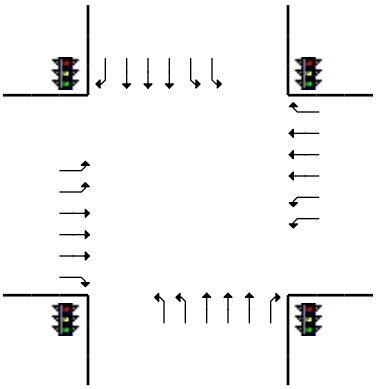
DATE: 4/14/2011

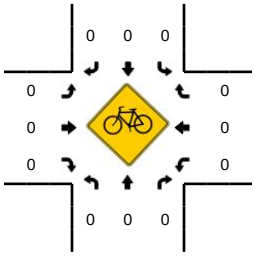
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

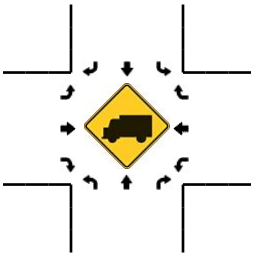


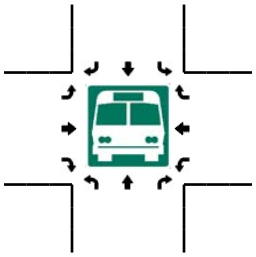












15-Min Count Period Beginning At	Lyons Rd (Northbound)				Lyons Rd (Southbound)				Sample Rd (Eastbound)				Sample Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	99	159	30	0	50	143	64	1	78	338	89	0	38	422	72	3	1586	
4:15 PM	107	221	41	0	67	188	64	2	75	324	103	1	46	344	64	3	1650	
4:30 PM	103	219	25	0	67	206	65	3	63	319	97	0	37	419	77	1	1701	
4:45 PM	86	222	32	1	44	186	78	5	68	358	107	0	36	443	85	5	1756	6693
5:00 PM	98	280	30	0	79	204	103	2	56	262	71	0	56	386	81	1	1709	6816
5:15 PM	112	207	43	1	85	219	107	4	61	309	134	0	30	474	118	3	1907	7073
5:30 PM	118	311	33	1	72	265	96	1	86	326	103	0	40	505	90	6	2053	7425
5:45 PM	128	329	31	0	65	248	106	3	39	268	83	1	33	483	94	1	1912	7581

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	472	1244	132	4	288	1060	384	4	344	1304	412	0	160	2020	360	24	8212
Heavy Trucks	0	12	0		8	16	8		8	16	12		0	24	12		116
Pedestrians		0				8				8				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

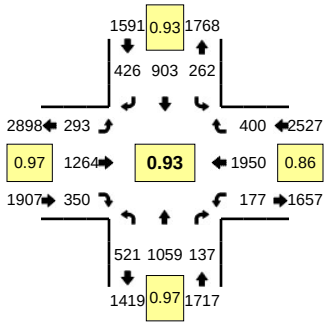
LOCATION: Lyons Rd -- Sample Rd

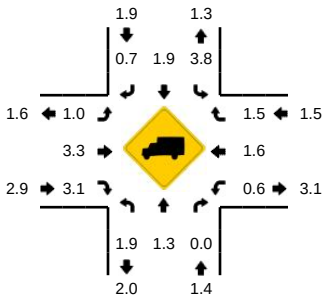
CITY/STATE: Broward, FL

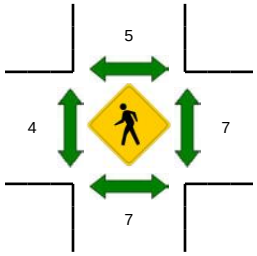
QC JOB #: 10604406

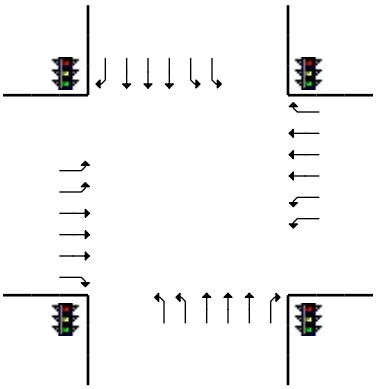
DATE: 4/15/2011

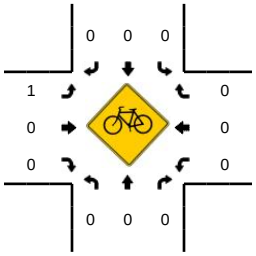
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

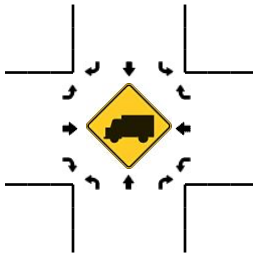


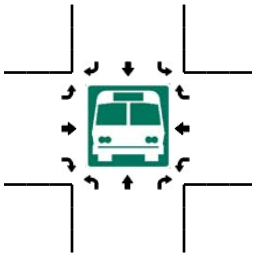












15-Min Count Period Beginning At	Lyons Rd (Northbound)				Lyons Rd (Southbound)				Sample Rd (Eastbound)				Sample Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	92	188	31	0	57	155	76	3	81	331	98	0	40	454	80	4	1690	
4:15 PM	97	227	41	0	71	233	95	1	78	330	95	0	41	371	81	1	1762	
4:30 PM	112	207	30	0	59	217	86	2	57	333	93	0	26	411	84	4	1721	
4:45 PM	89	206	35	0	56	201	94	0	74	315	99	0	45	443	89	6	1752	6925
5:00 PM	136	272	36	0	74	232	106	3	88	291	87	1	50	397	81	3	1857	7092
5:15 PM	140	228	33	0	70	213	114	4	64	382	99	0	38	570	129	1	2085	7415
5:30 PM	107	286	44	0	53	256	114	3	70	315	85	0	48	517	91	5	1994	7688
5:45 PM	138	273	24	0	48	202	92	7	70	276	79	0	30	466	99	2	1806	7742

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	560	912	132	0	280	852	456	16	256	1528	396	0	152	2280	516	4	8340
Heavy Trucks	4	8	0		12	16	0		0	40	16		4	52	4		156
Pedestrians		12				4				8				8			32
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

NW 40TH ST CONNECTOR & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: ANDREW GONZALEZ
RIGHT IN, RIGHT OUT ONLY

Site Code : 00110047
Start Date: 04/14/11
File I.D. : 40ST_SR7
Page : 1

RIGHT IN, RIGHT OUT

	SR 7 From North				NW 40TH ST CONNECTOR From East				SR 7 From South				------ From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/14/11																	
16:00	0	0	0	0	0	0	0	39	0	0	0	16	0	0	0	0	55
16:15	0	0	0	0	0	0	0	40	0	0	0	15	0	0	0	0	55
16:30	0	0	0	0	0	0	0	40	0	0	0	10	0	0	0	0	50
16:45	0	0	0	0	0	0	0	42	0	0	0	29	0	0	0	0	71
Hr Total	0	0	0	0	0	0	0	161	0	0	0	70	0	0	0	0	231
17:00	0	0	0	0	0	0	0	15	0	0	0	17	0	0	0	0	32
17:15	0	0	0	0	0	0	0	31	0	0	0	14	0	0	0	0	45
17:30	0	0	0	0	0	0	0	27	0	0	0	12	0	0	0	0	39
17:45	0	0	0	0	0	0	0	36	0	0	0	17	0	0	0	0	53
Hr Total	0	0	0	0	0	0	0	109	0	0	0	60	0	0	0	0	169
TOTAL	0	0	0	0	0	0	0	270	0	0	0	130	0	0	0	0	400

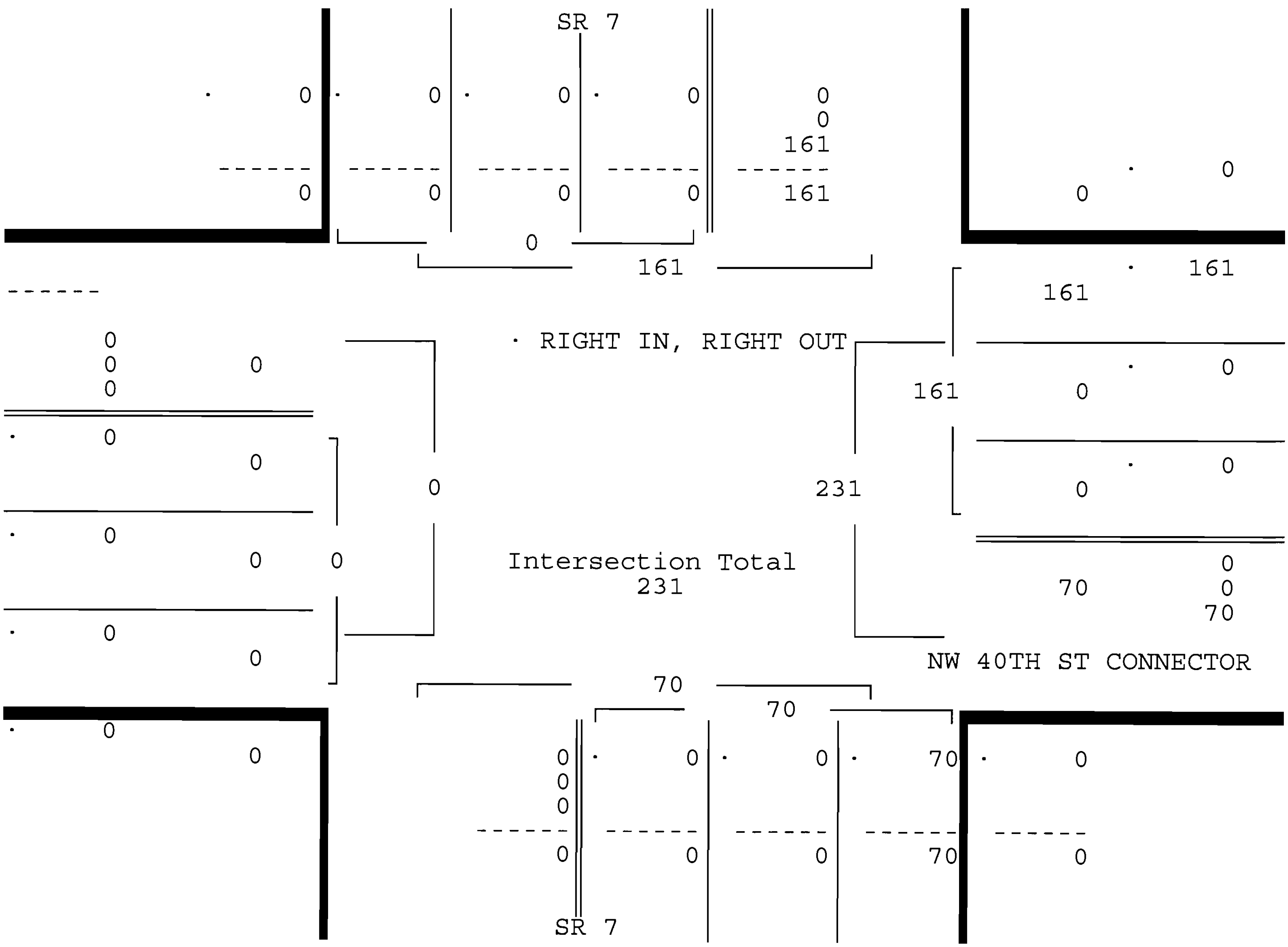
NW 40TH ST CONNECTOR & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: ANDREW GONZALEZ
RIGHT IN, RIGHT OUT ONLY

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00110047
Start Date: 04/14/11
File I.D. : 40ST_SR7

RIGHT IN, RIGHT OUT

	SR 7 From North				NW 40TH ST CONNECTOR From East				SR 7 From South				------ From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/14/11																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 04/14/11																	
Peak start	16:00				16:00				16:00				16:00				
Volume	0	0	0	0	0	0	0	161	0	0	0	70	0	0	0	0	
Percent	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	100%	0%	0%	0%	0%	
Pk total	0				161				70				0				
Highest	16:00				16:45				16:45				16:00				
Volume	0	0	0	0	0	0	0	42	0	0	0	29	0	0	0	0	
Hi total	0				42				29				0				
PHF	.0				.96				.60				.0				



Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

NW 40TH STREET CONNECTOR & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: ANDREW GONZALEZ
RIGHT IN, RIGHT OUT ONLY

Site Code : 00110047
Start Date: 04/15/11
File I.D. : 40STRSR7
Page : 1

RIGHT IN, RIGHT OUT

	SR 7 From North				NW 40TH ST CONNECTOR From East				SR 7 From South				---------- From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/15/11																	
16:00	0	0	0	0	0	0	0	34	0	0	0	9	0	0	0	0	43
16:15	0	0	0	0	0	0	0	30	0	0	0	13	0	0	0	0	43
16:30	0	0	0	0	0	0	0	26	0	0	0	10	0	0	0	0	36
16:45	0	0	0	0	0	0	0	21	0	0	0	16	0	0	0	0	37
Hr Total	0	0	0	0	0	0	0	111	0	0	0	48	0	0	0	0	159
17:00	0	0	0	0	1	0	0	25	0	0	0	16	0	0	0	0	42
17:15	0	0	0	0	0	0	0	27	0	0	0	12	0	0	0	0	39
17:30	0	0	0	0	0	0	0	31	0	0	0	21	0	0	0	0	52
17:45	0	0	0	0	0	0	0	32	0	0	0	14	0	0	0	0	46
Hr Total	0	0	0	0	1	0	0	115	0	0	0	63	0	0	0	0	179
TOTAL	0	0	0	0	1	0	0	226	0	0	0	111	0	0	0	0	338

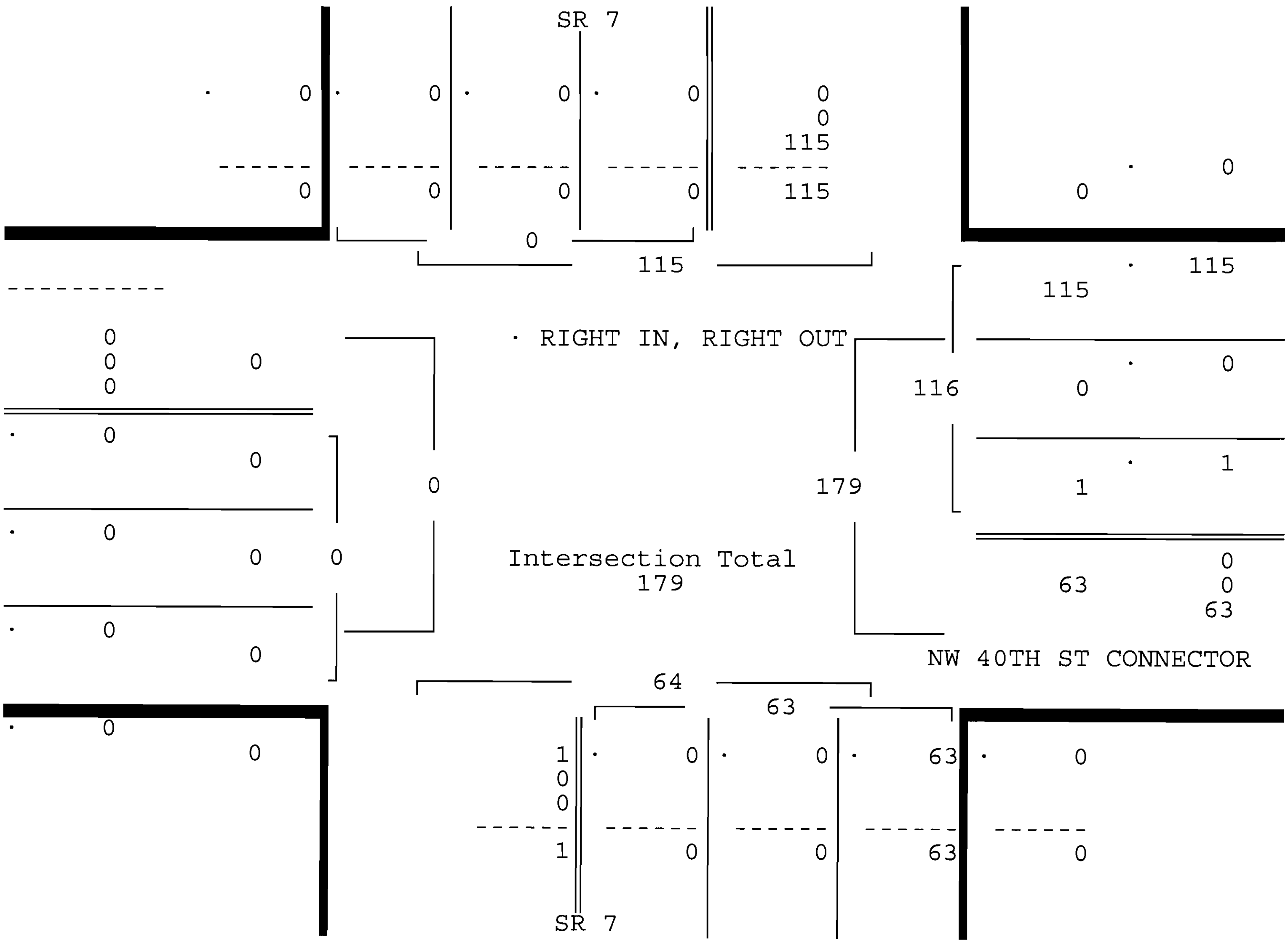
NW 40TH STREET CONNECTOR & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: ANDREW GONZALEZ
RIGHT IN, RIGHT OUT ONLY

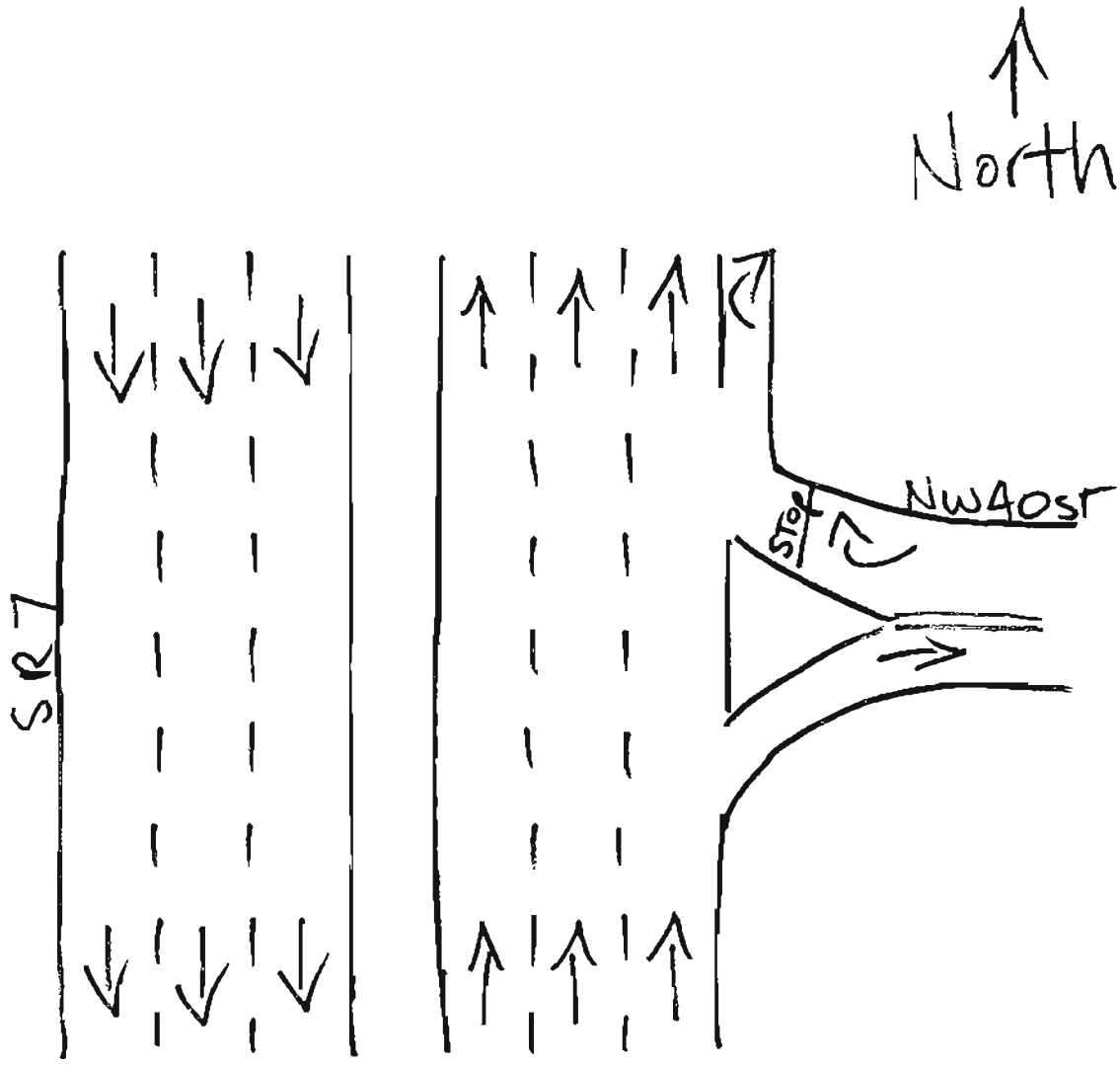
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

Site Code : 00110047
Start Date: 04/15/11
File I.D. : 40STRSR7

RIGHT IN, RIGHT OUT

	SR 7 From North				NW 40TH ST CONNECTOR From East				SR 7 From South				---------- From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/15/11																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 04/15/11																	
Peak start	17:00				17:00				17:00				17:00				
Volume	0	0	0	0	1	0	0	115	0	0	0	63	0	0	0	0	
Percent	0%	0%	0%	0%	1%	0%	0%	99%	0%	0%	0%	100%	0%	0%	0%	0%	
Pk total	0				116				63				0				
Highest	16:00				17:45				17:30				16:00				
Volume	0	0	0	0	0	0	0	32	0	0	0	21	0	0	0	0	
Hi total	0				32				21				0				
PHF	.0				.91				.75				.0				





Coconut Creek, Florida
April 14, 2011
drawn by: Luis Palomino
not signalized

Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

CULLUM ROAD & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

Site Code : 00110047
Start Date: 04/14/11
File I.D. : CULLSR7_
Page : 1

ALL VEHICLES

	SR 7 From North				CULLUM ROAD From East				SR 7 From South				CULLUM ROAD From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/14/11																	
16:00	13	36	275	61	0	5	3	36	9	42	328	4	1	44	7	14	878
16:15	11	45	315	66	0	2	4	38	6	26	327	11	2	63	5	8	929
16:30	12	18	342	71	0	8	3	37	7	23	372	6	0	50	7	9	965
16:45	15	35	317	58	0	5	9	51	18	39	352	7	1	61	7	4	979
Hr Total	51	134	1249	256	0	20	19	162	40	130	1379	28	4	218	26	35	3751
17:00	4	32	355	66	0	5	14	37	7	24	332	5	1	45	5	12	944
17:15	8	46	398	62	0	3	9	43	16	38	392	4	0	48	5	7	1079
17:30	15	41	345	85	0	9	9	44	12	48	341	2	0	72	7	3	1033
17:45	11	44	350	73	0	7	7	52	11	34	353	6	0	41	10	6	1005
Hr Total	38	163	1448	286	0	24	39	176	46	144	1418	17	1	206	27	28	4061
TOTAL	89	297	2697	542	0	44	58	338	86	274	2797	45	5	424	53	63	7812

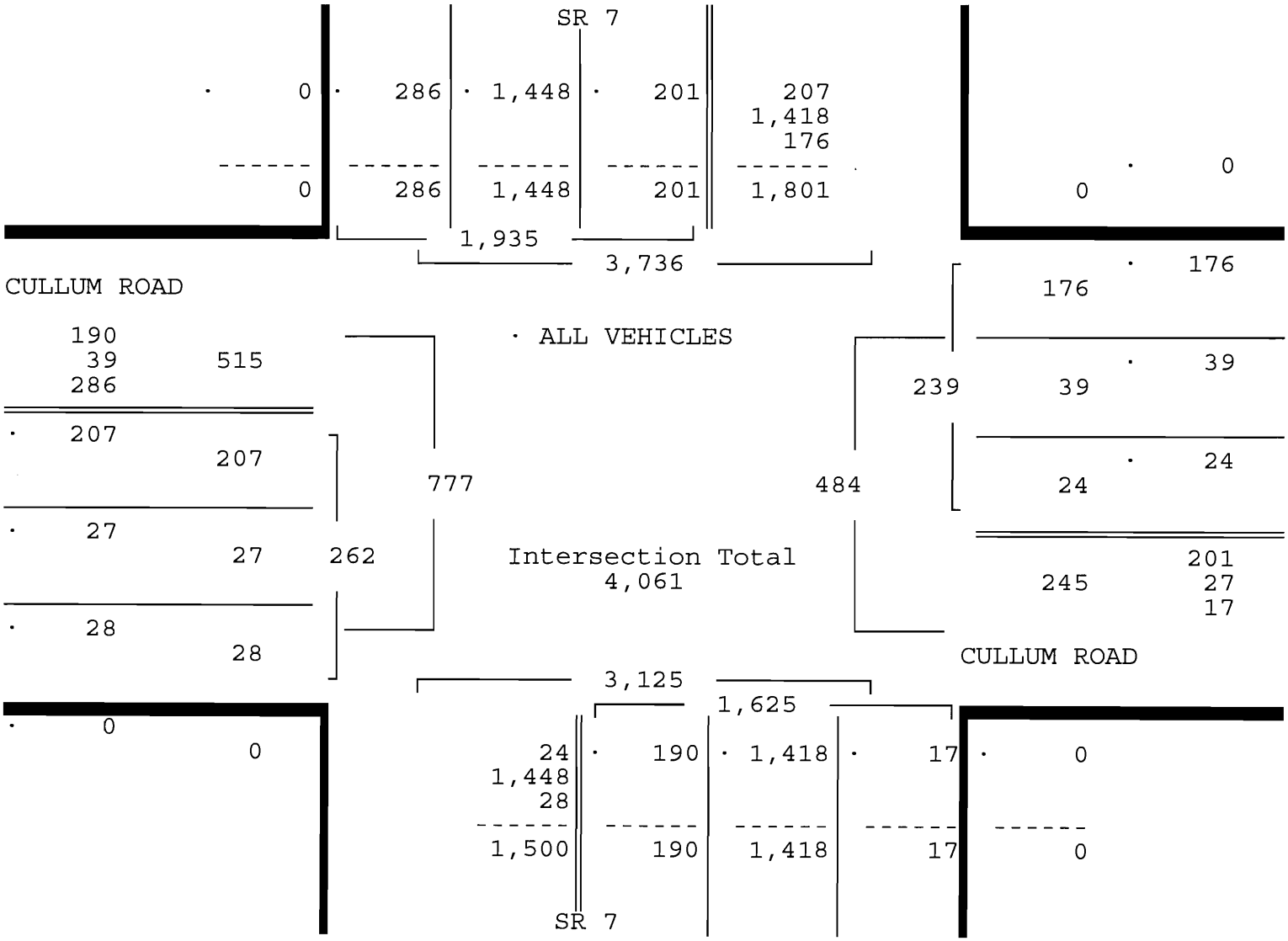
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

CULLUM ROAD & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

Site Code : 00110047
Start Date: 04/14/11
File I.D. : CULLSR7_
Page : 2

ALL VEHICLES

	SR 7 From North				CULLUM ROAD From East				SR 7 From South				CULLUM ROAD From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/14/11																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 04/14/11																	
Peak start 17:00					17:00				17:00				17:00				
Volume	38	163	1448	286	0	24	39	176	46	144	1418	17	1	206	27	28	
Percent	2%	8%	75%	15%	0%	10%	16%	74%	3%	9%	87%	1%	0%	79%	10%	11%	
Pk total	1935				239				1625				262				
Highest	17:15				17:45				17:15				17:30				
Volume	8	46	398	62	0	7	7	52	16	38	392	4	0	72	7	3	
Hi total	514				66				450				82				
PHF	.94				.91				.90				.80				



Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

CULLUM ROAD & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

Site Code : 00110047
Start Date: 04/15/11
File I.D. : CULL_SR7
Page : 1

ALL VEHICLES

	SR 7 From North				CULLUM ROAD From East				SR 7 From South				CULLUM ROAD From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/15/11																	
16:00	12	34	326	66	0	1	7	24	14	22	342	5	3	74	7	8	945
16:15	10	38	329	59	1	3	5	25	16	31	345	5	1	73	5	3	949
16:30	12	20	309	61	0	3	9	23	9	18	330	7	3	50	5	5	864
16:45	15	34	295	62	0	3	4	21	14	32	341	5	3	70	5	7	911
Hr Total	49	126	1259	248	1	10	25	93	53	103	1358	22	10	267	22	23	3669
17:00	13	27	372	61	0	11	12	52	8	34	350	7	3	66	3	9	1028
17:15	10	35	373	87	0	5	11	42	10	53	369	4	2	54	4	12	1071
17:30	19	38	351	80	0	4	13	38	16	49	356	5	0	83	4	8	1064
17:45	11	34	330	90	1	4	9	26	8	35	366	4	1	81	8	14	1022
Hr Total	53	134	1426	318	1	24	45	158	42	171	1441	20	6	284	19	43	4185
TOTAL	102	260	2685	566	2	34	70	251	95	274	2799	42	16	551	41	66	7854

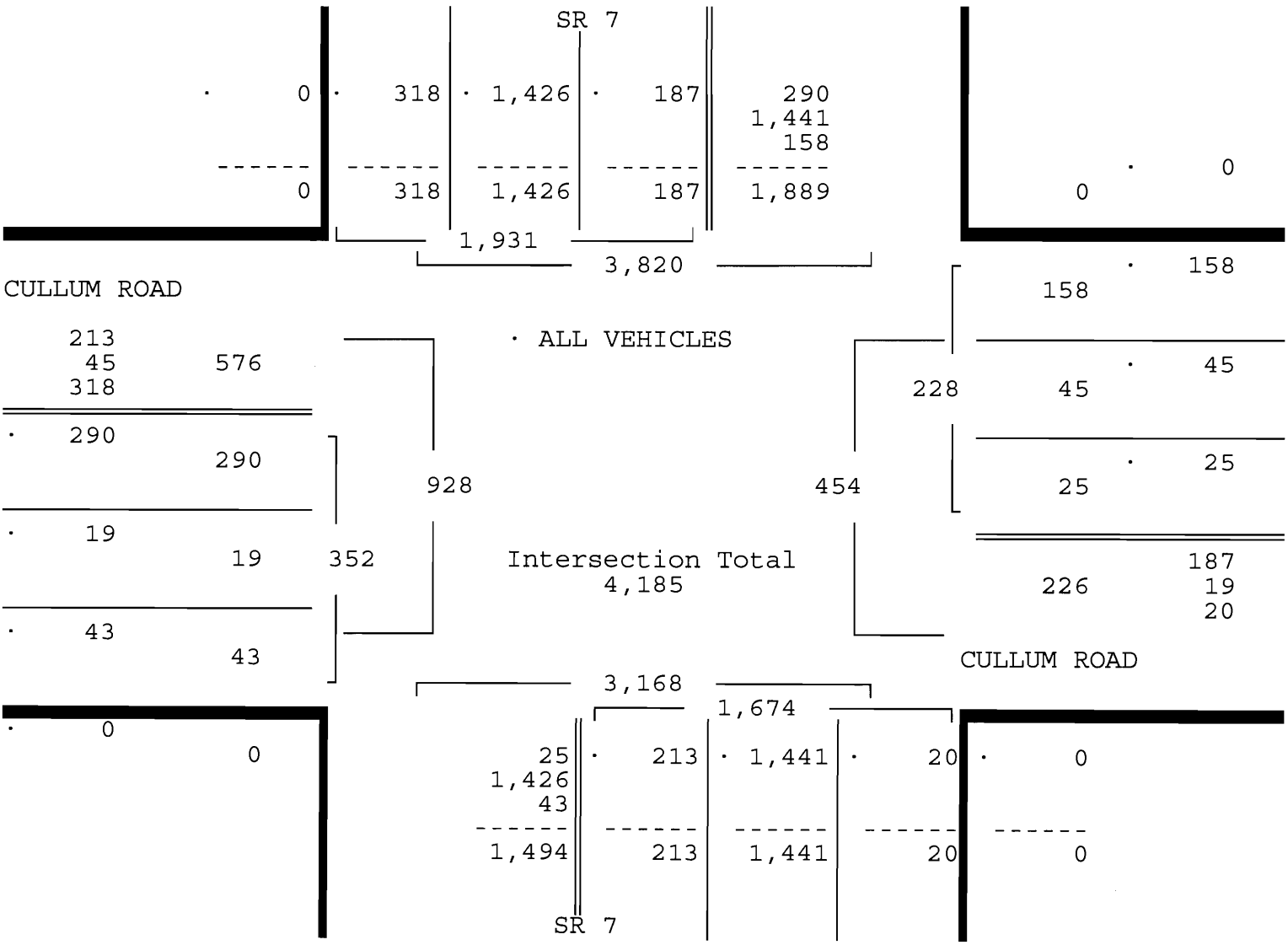
Traffic Survey Specialists, Inc.
624 Gardenia Terrace
Delray Beach, Florida 33444
Phone (561) 272-3255

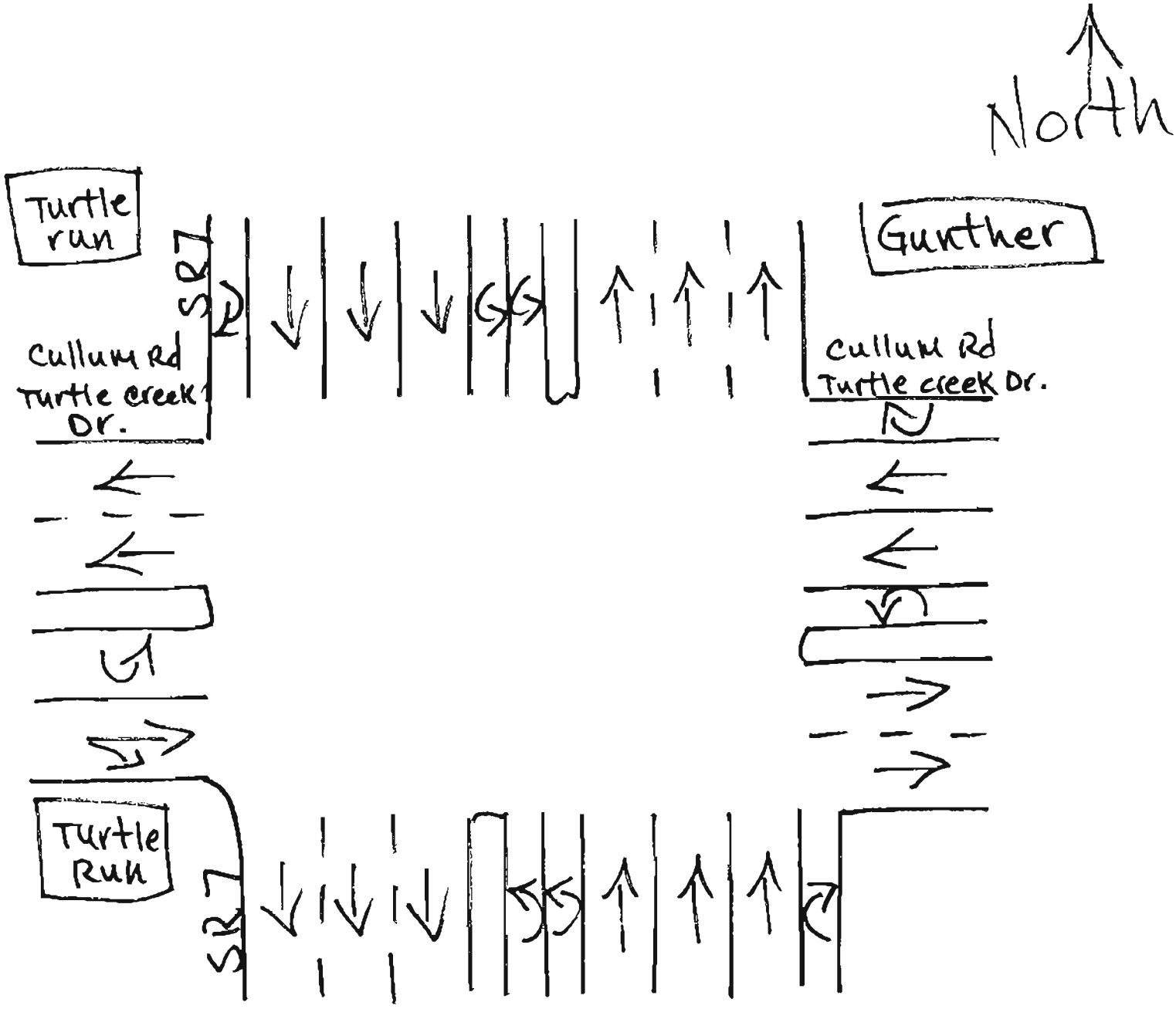
CULLUM ROAD & SR 7
COCONUT CREEK, FLORIDA
COUNTED BY: L. PALOMINO & M. CRUZ
SIGNALIZED

Site Code : 00110047
Start Date: 04/15/11
File I.D. : CULL_SR7
Page : 2

ALL VEHICLES

	SR 7 From North				CULLUM ROAD From East				SR 7 From South				CULLUM ROAD From West				
	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Total
Date 04/15/11																	
Peak Hour Analysis By Entire Intersection for the Period: 16:00 to 18:00 on 04/15/11																	
Peak start	17:00				17:00				17:00				17:00				
Volume	53	134	1426	318	1	24	45	158	42	171	1441	20	6	284	19	43	
Percent	3%	7%	74%	16%	0%	11%	20%	69%	3%	10%	86%	1%	2%	81%	5%	12%	
Pk total	1931				228				1674				352				
Highest	17:15				17:00				17:15				17:45				
Volume	10	35	373	87	0	11	12	52	10	53	369	4	1	81	8	14	
Hi total	505				75				436				104				
PHF	.96				.76				.96				.85				





Coconut Creek, Florida
April 14, 2011
drawn by: Luis Palomino
Signalized

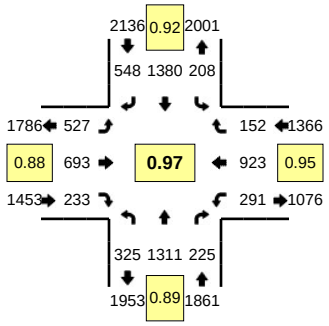
Type of peak hour being reported: Intersection Peak

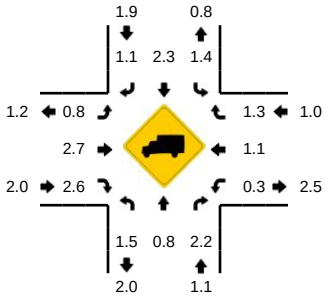
Method for determining peak hour: Total Entering Volume

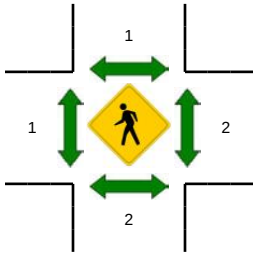
LOCATION: SR 7 -- Wiles Rd
CITY/STATE: Broward, FL

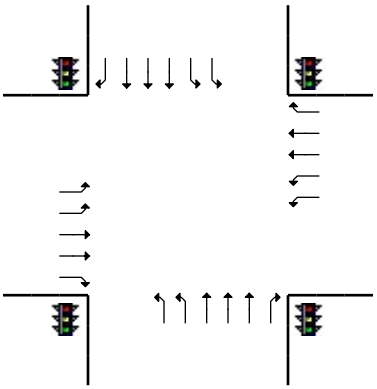
QC JOB #: 10604401
DATE: 4/14/2011

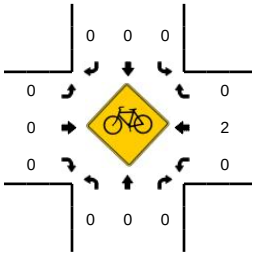
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

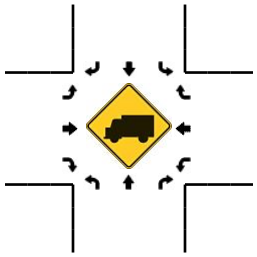


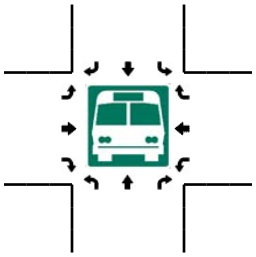












15-Min Count Period Beginning At	SR 7 (Northbound)				SR 7 (Southbound)				Wiles Rd (Eastbound)				Wiles Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	57	332	46	16	41	292	106	7	113	155	41	5	61	179	49	0	1500	
4:15 PM	51	302	53	13	42	275	118	13	141	169	54	7	82	195	41	0	1556	
4:30 PM	55	363	57	13	46	322	128	9	129	159	45	3	84	196	50	0	1659	
4:45 PM	65	332	53	13	47	302	107	6	115	191	56	7	67	246	54	1	1662	6377
5:00 PM	50	305	37	7	42	307	122	8	117	157	68	5	89	208	51	0	1573	6450
5:15 PM	70	375	70	12	28	388	128	18	117	172	54	8	63	223	32	0	1758	6652
5:30 PM	72	315	60	9	42	319	143	11	140	211	64	10	78	258	33	0	1765	6758
5:45 PM	84	316	58	21	46	366	155	13	114	153	47	16	61	234	36	0	1720	6816

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	288	1260	240	36	168	1276	572	44	560	844	256	40	312	1032	132	0	7060
Heavy Trucks	4	4	4		4	8	12		4	20	4		0	12	0		76
Pedestrians		4				0				0				4			8
Bicycles	0	0	0		0	0	0		0	0	0		0	1	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

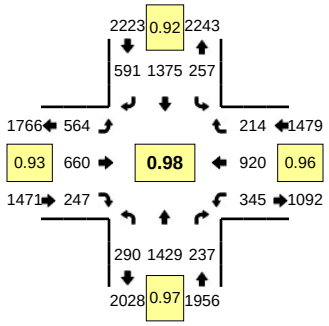
LOCATION: SR 7 -- Wiles Rd

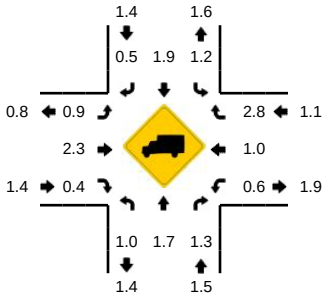
CITY/STATE: Broward, FL

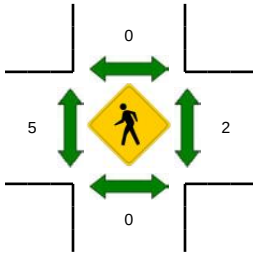
QC JOB #: 10604402

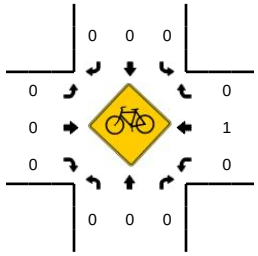
DATE: 4/15/2011

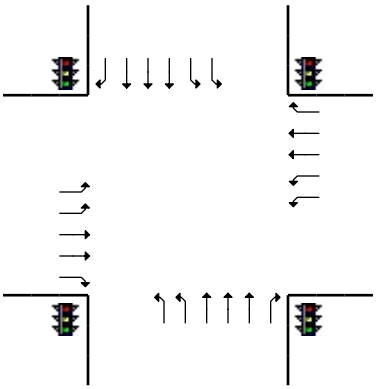
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

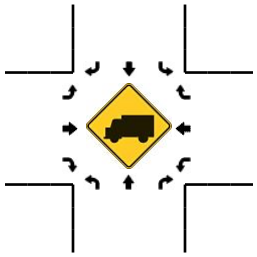


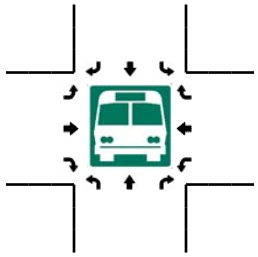












15-Min Count Period Beginning At	SR 7 (Northbound)				SR 7 (Southbound)				Wiles Rd (Eastbound)				Wiles Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	68	341	62	16	52	321	120	8	106	145	45	8	79	167	33	0	1571	
4:15 PM	54	299	62	10	39	285	112	5	136	198	62	6	77	210	50	0	1605	
4:30 PM	57	328	51	16	46	308	119	11	128	161	46	6	72	202	47	0	1598	
4:45 PM	58	300	46	26	41	299	128	19	124	184	60	5	58	222	49	1	1620	6394
5:00 PM	43	348	51	18	49	301	139	18	140	164	72	4	97	226	57	0	1727	6550
5:15 PM	67	361	60	14	48	381	160	14	125	170	59	4	79	226	49	1	1818	6763
5:30 PM	64	342	66	17	55	332	141	14	138	166	61	5	81	246	58	0	1786	6951
5:45 PM	54	378	60	13	42	361	151	17	134	160	55	14	87	222	50	0	1798	7129

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	268	1444	240	56	192	1524	640	56	500	680	236	16	316	904	196	4	7272
Heavy Trucks	0	24	8		4	40	0		4	20	0		0	8	8		116
Pedestrians		0				0				16				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

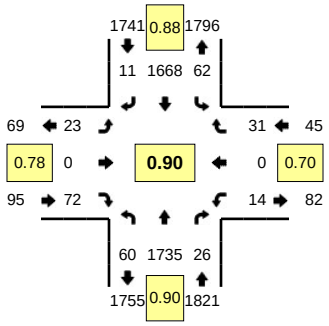
LOCATION: Lyons Rd -- Cullum Rd

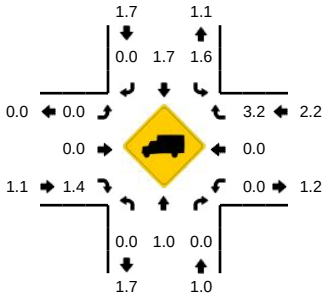
CITY/STATE: Coconut Creek, FL

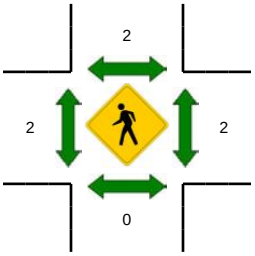
QC JOB #: 10615108

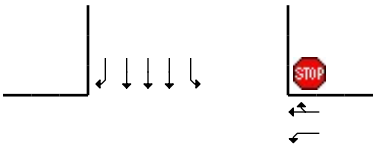
DATE: 5/12/2011

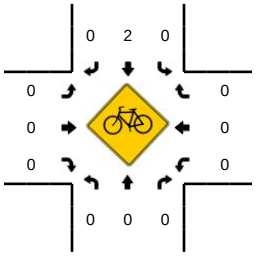
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

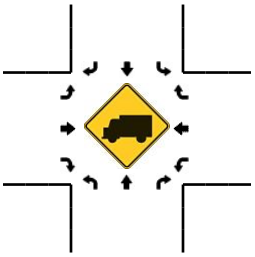


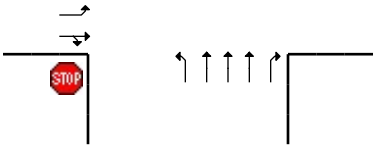


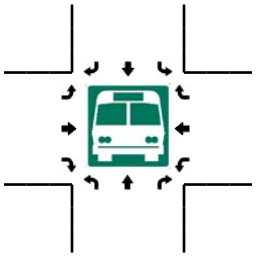












15-Min Count Period Beginning At	Lyons Rd (Northbound)				Lyons Rd (Southbound)				Cullum Rd (Eastbound)				Cullum Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	8	358	3	1	11	307	2	0	5	0	10	0	1	0	8	0	714	
4:15 PM	14	355	3	1	9	388	6	0	1	0	9	0	4	0	5	2	797	
4:30 PM	15	348	2	0	9	354	4	1	3	0	27	0	5	0	7	0	775	
4:45 PM	16	444	4	0	12	318	6	0	2	0	12	0	3	0	8	0	825	3111
5:00 PM	18	358	6	0	10	370	4	2	5	0	21	0	0	0	3	1	798	3195
5:15 PM	14	494	5	0	15	443	5	2	7	0	26	0	4	0	10	0	1025	3423
5:30 PM	11	461	8	2	10	384	0	1	5	0	13	0	4	0	12	0	911	3559
5:45 PM	15	422	7	0	20	471	2	2	6	0	12	0	5	0	6	0	968	3702

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	56	1976	20	0	60	1772	20	8	28	0	104	0	16	0	40	0	4100
Heavy Trucks	0	20	0		0	32	0		0	0	0		0	0	0		52
Pedestrians		0				0				4				4			8
Bicycles	0	0	0		0	2	0		0	0	0		0	0	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/17/2011 6:20 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

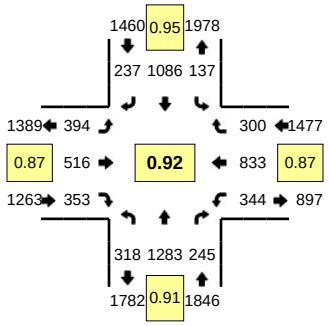
LOCATION: Lyons Rd -- Wiles Rd

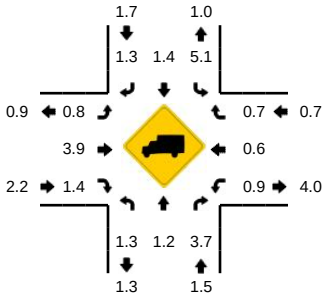
CITY/STATE: Broward, FL

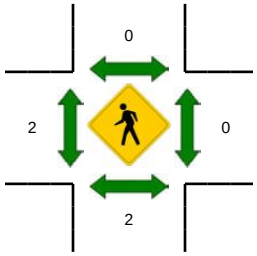
QC JOB #: 10604403

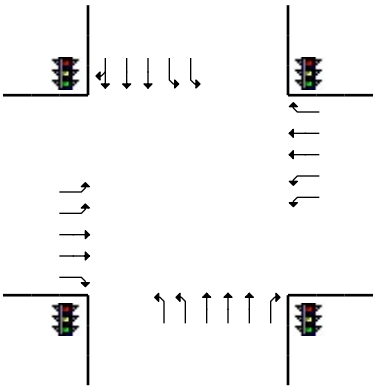
DATE: 4/14/2011

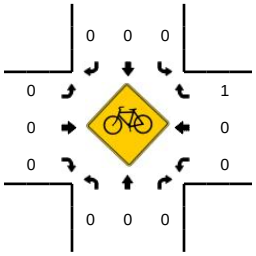
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

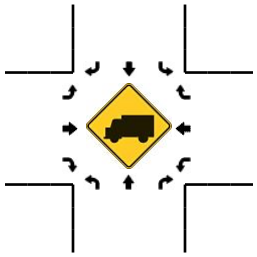


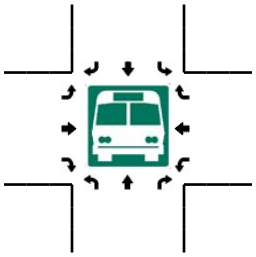












15-Min Count Period Beginning At	Lyons Rd (Northbound)				Lyons Rd (Southbound)				Wiles Rd (Eastbound)				Wiles Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	60	259	46	0	39	206	67	0	67	102	64	0	49	142	46	0	1147	
4:15 PM	62	211	46	0	47	222	62	0	68	113	78	0	66	146	57	0	1178	
4:30 PM	66	271	42	0	35	217	83	0	86	98	78	0	67	143	69	0	1255	
4:45 PM	80	248	67	0	38	236	91	1	67	123	68	1	53	172	57	1	1303	4883
5:00 PM	51	270	58	0	37	250	50	1	85	134	81	2	84	189	62	0	1354	5090
5:15 PM	85	352	71	1	34	278	63	1	96	116	80	0	70	204	66	0	1517	5429
5:30 PM	95	306	62	0	37	293	57	1	111	147	103	0	90	232	101	1	1636	5810
5:45 PM	86	355	54	0	26	265	67	0	100	119	89	0	98	208	71	1	1539	6046

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	380	1224	248	0	148	1172	228	4	444	588	412	0	360	928	404	4	6544
Heavy Trucks	12	16	12		4	20	8		0	16	12		4	0	0		104
Pedestrians		4				0				8				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

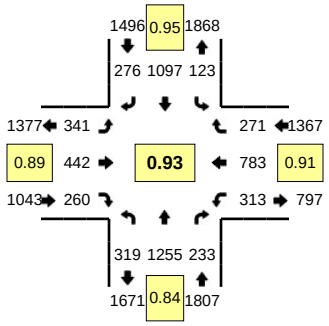
Type of peak hour being reported: Intersection Peak

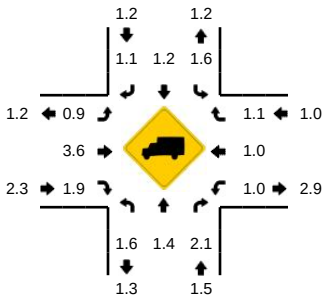
Method for determining peak hour: Total Entering Volume

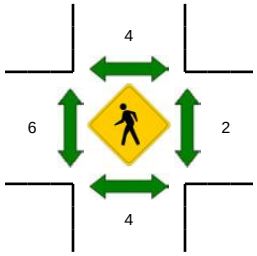
LOCATION: Lyons Rd -- Wiles Rd
CITY/STATE: Broward, FL

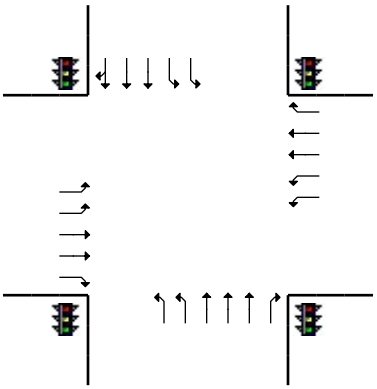
QC JOB #: 10604404
DATE: 4/15/2011

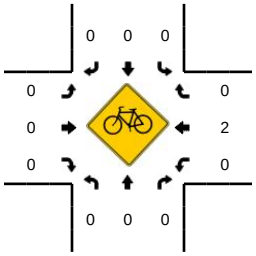
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

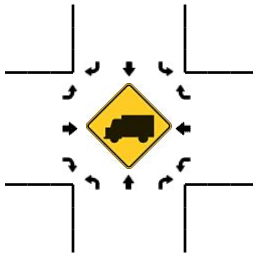


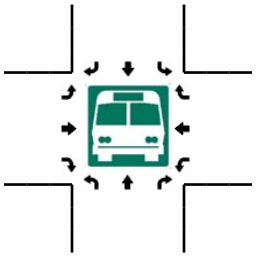












15-Min Count Period Beginning At	Lyons Rd (Northbound)				Lyons Rd (Southbound)				Wiles Rd (Eastbound)				Wiles Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	59	287	43	1	23	223	66	1	59	104	54	2	69	119	56	0	1166	
4:15 PM	66	225	52	0	41	211	51	0	89	144	86	0	85	177	46	1	1274	
4:30 PM	59	255	47	2	33	280	83	0	107	97	82	1	61	148	68	0	1323	
4:45 PM	73	305	60	0	42	258	71	0	71	110	64	1	71	166	50	0	1342	5105
5:00 PM	69	271	48	0	34	265	57	1	90	119	70	0	89	215	70	0	1398	5337
5:15 PM	82	390	73	0	24	306	72	0	67	102	78	0	76	190	74	0	1534	5597
5:30 PM	93	306	54	0	38	280	65	0	97	123	58	0	72	184	68	0	1438	5712
5:45 PM	74	288	58	1	26	246	82	0	87	98	54	0	76	194	59	0	1343	5713

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	328	1560	292	0	96	1224	288	0	268	408	312	0	304	760	296	0	6136
Heavy Trucks	4	12	4		0	20	0		4	20	4		0	12	4		84
Pedestrians		12				4				0				0			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 4/19/2011 7:06 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

NW 54th Avenue at South Casino Access

(Station # 7)

MARLIN ENGINEERING INC.

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

CLIENT: KEITH & SCHNARS, P.A.
JOB.: 2010019.001
PROJECT: Seminole Casino Coconut Creek
County: Broward

File Name : NW 54 AVE AT S CASINO ACCESS
Site Code : 00000007
Start Date : 4/21/2011
Page No : 1

Groups Printed- Auto & Ped - Heavy Veh

	NW 54 AVE Southbound					S CASINO ACCESS Westbound					NW 54 AVE Northbound					S CASINO ACCESS Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	2	60	4	1	67	8	2	1	0	11	27	63	5	0	95	4	1	13	1	19	192
04:15 PM	3	58	6	4	71	9	4	0	2	15	19	54	8	0	81	3	0	10	0	13	180
04:30 PM	3	58	10	1	72	12	3	0	0	15	27	66	11	3	107	6	0	13	0	19	213
04:45 PM	2	64	12	3	81	7	3	0	1	11	26	59	8	1	94	5	0	6	3	14	200
Total	10	240	32	9	291	36	12	1	3	52	99	242	32	4	377	18	1	42	4	65	785
05:00 PM	3	46	10	2	61	13	3	2	2	20	21	80	10	0	111	3	0	11	1	15	207
05:15 PM	4	61	6	0	71	11	3	0	0	14	11	87	10	1	109	1	0	4	0	5	199
05:30 PM	4	43	12	6	65	10	2	3	2	17	30	83	10	2	125	4	0	11	2	17	224
05:45 PM	3	50	6	2	61	9	4	0	2	15	28	64	9	0	101	3	0	7	0	10	187
Total	14	200	34	10	258	43	12	5	6	66	90	314	39	3	446	11	0	33	3	47	817
Grand Total	24	440	66	19	549	79	24	6	9	118	189	556	71	7	823	29	1	75	7	112	1602
Apprch %	4.4	80.1	12.0	3.5		66.9	20.3	5.1	7.6		23.0	67.6	8.6	0.9		25.9	0.9	67.0	6.3		
Total %	1.5	27.5	4.1	1.2	34.3	4.9	1.5	0.4	0.6	7.4	11.8	34.7	4.4	0.4	51.4	1.8	0.1	4.7	0.4	7.0	

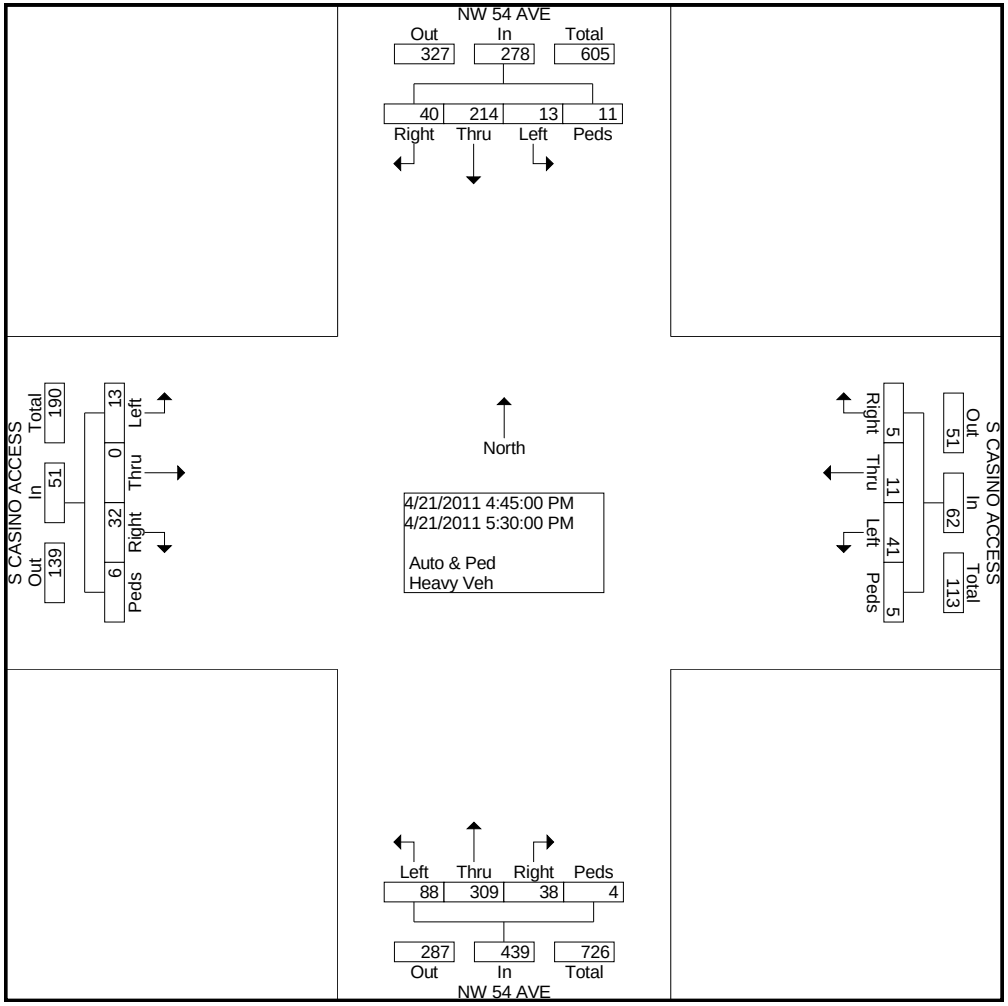
Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT S CASINO ACCESS
Site Code : 00000007
Start Date : 4/21/2011
Page No : 2

	NW 54 AVE Southbound					S CASINO ACCESS Westbound					NW 54 AVE Northbound					S CASINO ACCESS Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:45 PM																				
Volume	13	214	40	11	278	41	11	5	5	62	88	309	38	4	439	13	0	32	6	51	830
Percent	4.7	77.0	14.4	4.0		66.1	17.7	8.1	8.1		20.0	70.4	8.7	0.9		25.5	0.0	62.7	11.8		
05:30 Volume	4	43	12	6	65	10	2	3	2	17	30	83	10	2	125	4	0	11	2	17	224
Peak Factor																					0.926
High Int.	04:45 PM					05:00 PM					05:30 PM					05:30 PM					
Volume	2	64	12	3	81	13	3	2	2	20	30	83	10	2	125	4	0	11	2	17	
Peak Factor					0.858					0.775					0.878					0.750	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT S CASINO ACCESS
Site Code : 00000007
Start Date : 4/21/2011
Page No : 3

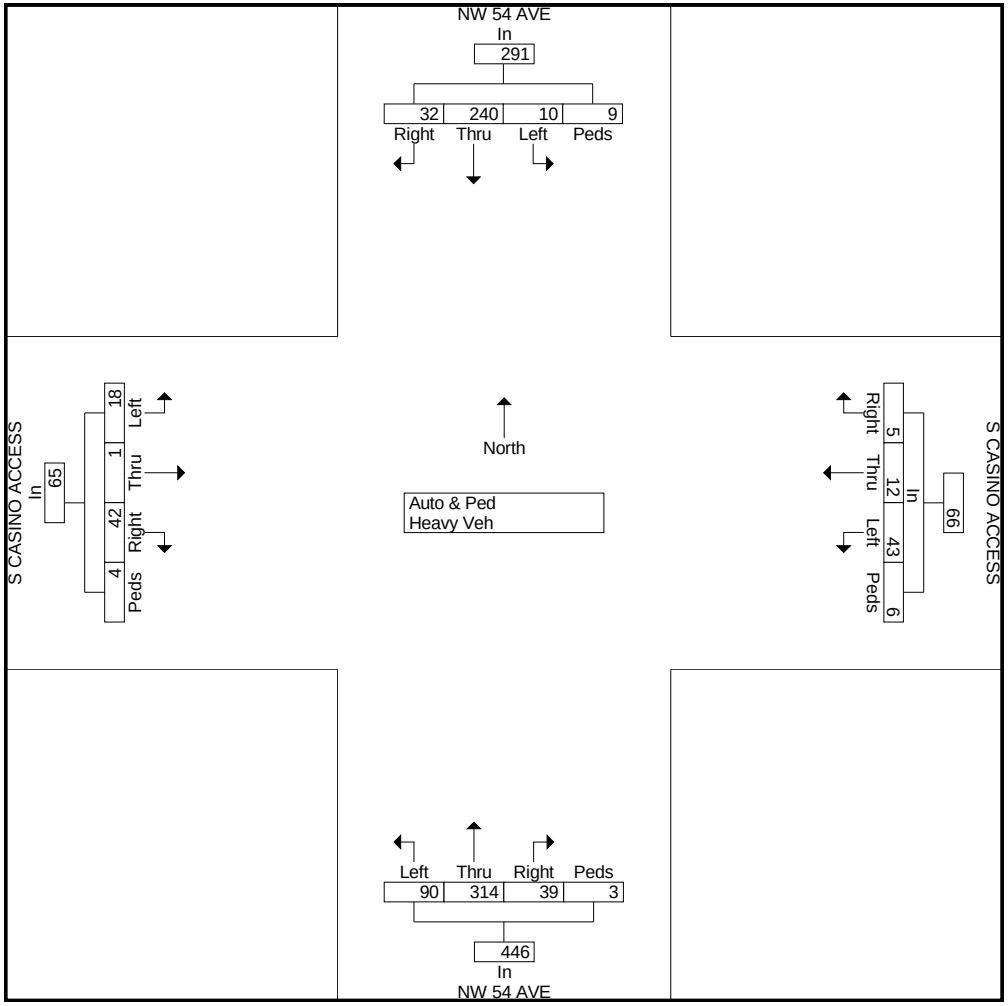


Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1

By Approach	04:00 PM					05:00 PM					05:00 PM					04:00 PM				
Volume	10	240	32	9	291	43	12	5	6	66	90	314	39	3	446	18	1	42	4	65
Percent	3.4	82.5	11.0	3.1		65.2	18.2	7.6	9.1		20.2	70.4	8.7	0.7		27.7	1.5	64.6	6.2	
High Int.	04:45 PM					05:00 PM					05:30 PM					04:00 PM				
Volume	2	64	12	3	81	13	3	2	2	20	30	83	10	2	125	4	1	13	1	19
Peak Factor					0.898					0.825					0.892					0.855

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT S CASINO ACCESS
Site Code : 00000007
Start Date : 4/21/2011
Page No : 4



Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT S CASINO ACCESS
Site Code : 00000007
Start Date : 4/21/2011
Page No : 1

Groups Printed- Heavy Veh

	NW 54 AVE Southbound					S CASINO ACCESS Westbound					NW 54 AVE Northbound					S CASINO ACCESS Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	1	3	0	0	4	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	7
04:15 PM	3	1	2	0	6	0	2	0	0	2	0	1	1	0	2	0	0	0	0	0	10
04:30 PM	2	7	1	0	10	0	3	0	0	3	1	2	0	0	3	1	0	0	0	1	17
04:45 PM	1	3	0	0	4	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	8
Total	7	14	3	0	24	1	7	0	0	8	2	6	1	0	9	1	0	0	0	1	42
05:00 PM	3	0	1	0	4	0	1	0	0	1	1	2	0	0	3	0	0	0	0	0	8
05:15 PM	3	1	0	0	4	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	10
05:30 PM	3	5	0	0	8	0	2	0	0	2	1	1	0	0	2	0	0	0	0	0	12
05:45 PM	2	2	0	0	4	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	7
Total	11	8	1	0	20	0	8	0	0	8	2	7	0	0	9	0	0	0	0	0	37
Grand Total	18	22	4	0	44	1	15	0	0	16	4	13	1	0	18	1	0	0	0	1	79
Apprch %	40.9	50.0	9.1	0.0		6.3	93.8	0.0	0.0		22.2	72.2	5.6	0.0		100.0	0.0	0.0	0.0		
Total %	22.8	27.8	5.1	0.0	55.7	1.3	19.0	0.0	0.0	20.3	5.1	16.5	1.3	0.0	22.8	1.3	0.0	0.0	0.0	1.3	

NW 54th Avenue at NW 40th Street

(Station # 8)

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

CLIENT: KEITH & SCHNARS, P.A.
JOB.: 2010019.001
PROJECT: Seminole Casino Coconut Creek
County: Broward

File Name : NW 54 AVE AT NW 40 ST
Site Code : 00000008
Start Date : 4/14/2011
Page No : 1

Groups Printed- Auto & Ped - Heavy Veh

	NW 54 AVE Southbound					NW 40 ST Westbound					NW 54 AVE Northbound					NW 40 ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	1	22	21	2	46	1	1	8	6	16	51	35	2	5	93	5	0	72	8	85	240
04:15 PM	6	23	24	0	53	4	2	4	0	10	42	41	5	0	88	2	1	38	15	56	207
04:30 PM	8	24	22	1	55	11	1	9	1	22	31	33	2	0	66	5	1	42	18	66	209
04:45 PM	3	15	17	1	36	3	0	2	0	5	35	33	0	0	68	6	1	37	12	56	165
Total	18	84	84	4	190	19	4	23	7	53	159	142	9	5	315	18	3	189	53	263	821
05:00 PM	6	31	14	1	52	3	4	5	0	12	32	32	1	0	65	1	2	28	5	36	165
05:15 PM	3	28	15	0	46	5	0	2	6	13	43	38	2	0	83	5	1	52	7	65	207
05:30 PM	3	27	29	0	59	6	0	7	6	19	52	37	2	0	91	7	2	39	17	65	234
05:45 PM	4	21	23	0	48	1	0	8	12	21	42	34	6	0	82	3	3	31	5	42	193
Total	16	107	81	1	205	15	4	22	24	65	169	141	11	0	321	16	8	150	34	208	799
Grand Total	34	191	165	5	395	34	8	45	31	118	328	283	20	5	636	34	11	339	87	471	1620
Apprch %	8.6	48.4	41.8	1.3		28.8	6.8	38.1	26.3		51.6	44.5	3.1	0.8		7.2	2.3	72.0	18.5		
Total %	2.1	11.8	10.2	0.3	24.4	2.1	0.5	2.8	1.9	7.3	20.2	17.5	1.2	0.3	39.3	2.1	0.7	20.9	5.4	29.1	

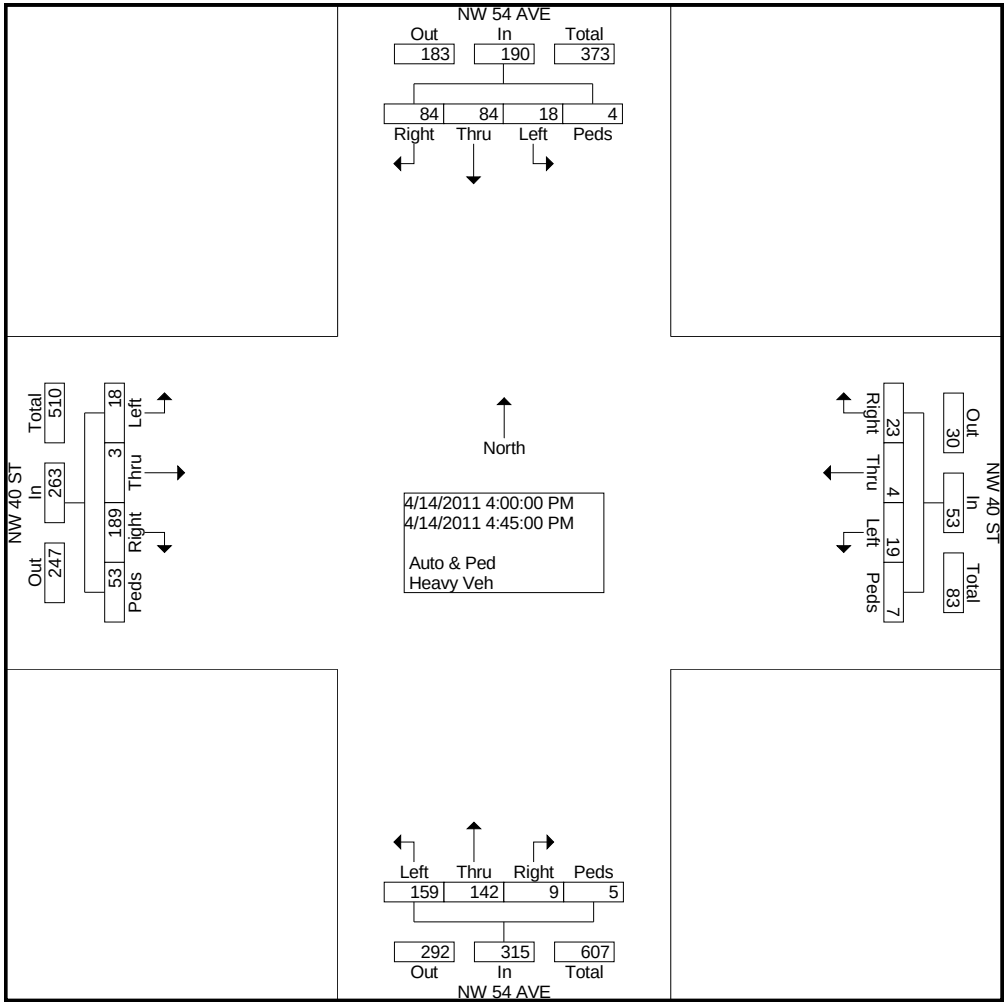
Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT NW 40 ST
Site Code : 00000008
Start Date : 4/14/2011
Page No : 2

	NW 54 AVE Southbound					NW 40 ST Westbound					NW 54 AVE Northbound					NW 40 ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	04:00 PM																				
Volume	18	84	84	4	190	19	4	23	7	53	159	142	9	5	315	18	3	189	53	263	821
Percent	9.5	44.2	44.2	2.1		35.8	7.5	43.4	13.2		50.5	45.1	2.9	1.6		6.8	1.1	71.9	20.2		
04:00 Volume	1	22	21	2	46	1	1	8	6	16	51	35	2	5	93	5	0	72	8	85	240
Peak Factor																					0.855
High Int.	04:30 PM					04:30 PM					04:00 PM					04:00 PM					
Volume	8	24	22	1	55	11	1	9	1	22	51	35	2	5	93	5	0	72	8	85	
Peak Factor					0.864					0.602					0.847					0.774	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT NW 40 ST
Site Code : 00000008
Start Date : 4/14/2011
Page No : 3

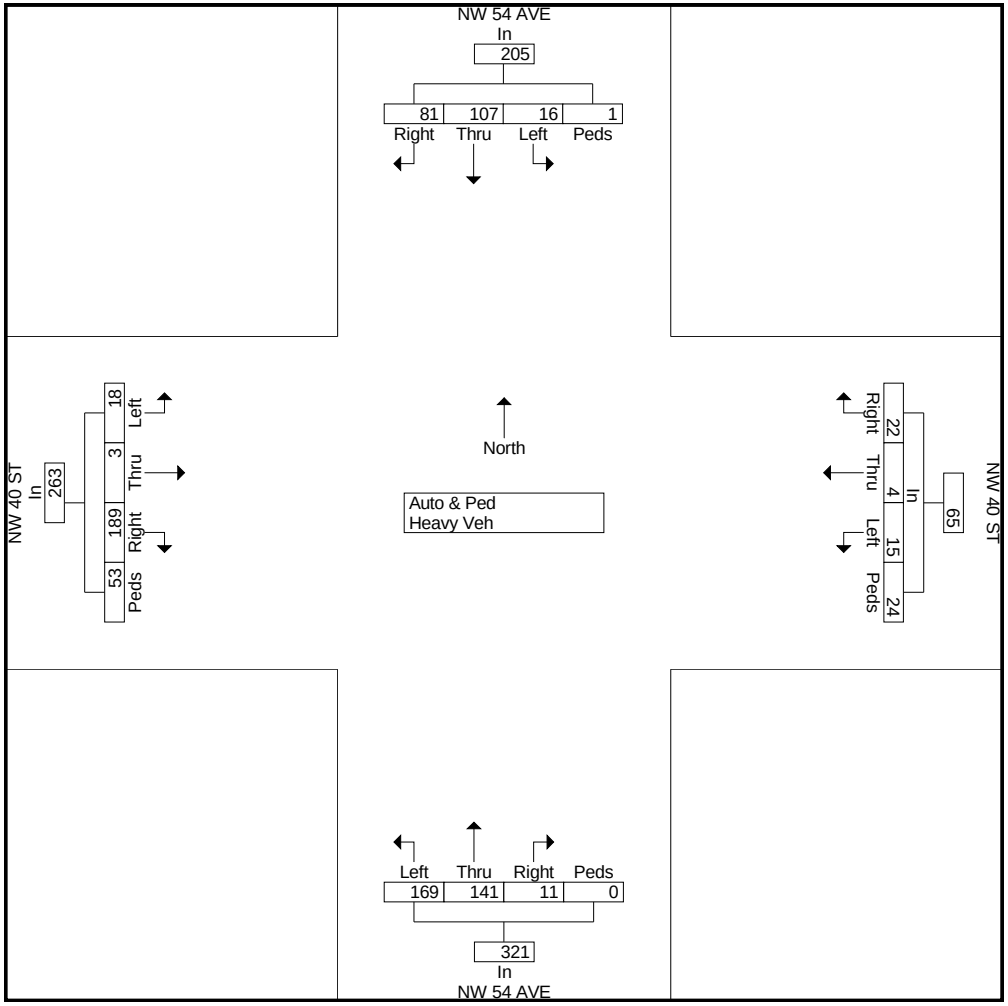


Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1

By Approach	05:00 PM					05:00 PM					05:00 PM					04:00 PM				
Volume	16	107	81	1	205	15	4	22	24	65	169	141	11	0	321	18	3	189	53	263
Percent	7.8	52.2	39.5	0.5		23.1	6.2	33.8	36.9		52.6	43.9	3.4	0.0		6.8	1.1	71.9	20.2	
High Int.	05:30 PM					05:45 PM					05:30 PM					04:00 PM				
Volume	3	27	29	0	59	1	0	8	12	21	52	37	2	0	91	5	0	72	8	85
Peak Factor					0.869					0.774					0.882					0.774

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT NW 40 ST
Site Code : 00000008
Start Date : 4/14/2011
Page No : 4



Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AVE AT NW 40 ST
Site Code : 00000008
Start Date : 4/14/2011
Page No : 1

Groups Printed- Heavy Veh

	NW 54 AVE Southbound					NW 40 ST Westbound					NW 54 AVE Northbound					NW 40 ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	1	2	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
04:30 PM	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	6
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total	2	10	1	0	13	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	16
05:00 PM	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	6	1	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	8
Grand Total	2	16	2	0	20	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	24
Apprch %	10.0	80.0	10.0	0.0		0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	8.3	66.7	8.3	0.0	83.3	0.0	0.0	0.0	0.0	0.0	0.0	12.5	0.0	0.0	12.5	0.0	0.0	4.2	0.0	4.2	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

CLIENT: KEITH & SCHNARS, P.A.
JOB.: 2010019.001
PROJECT: Seminole Casino Coconut Creek
County: Broward

File Name : NW 54 AV AT NW 40 ST
Site Code : 00000008
Start Date : 4/15/2011
Page No : 1

Groups Printed- Auto & Ped - Heavy Veh

	NW 54 AV Southbound					NW 40 ST Westbound					NW 54 AV Northbound					NW 40 ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	6	20	15	0	41	5	0	5	5	15	22	30	2	0	54	2	0	57	4	63	173
04:15 PM	2	25	20	0	47	4	0	8	0	12	23	25	2	0	50	3	0	42	11	56	165
04:30 PM	2	12	10	0	24	4	0	3	1	8	22	40	4	0	66	4	1	43	17	65	163
04:45 PM	2	26	16	0	44	1	2	5	2	10	32	29	4	0	65	2	1	36	13	52	171
Total	12	83	61	0	156	14	2	21	8	45	99	124	12	0	235	11	2	178	45	236	672
05:00 PM	3	25	19	1	48	3	0	5	2	10	34	40	5	0	79	5	0	34	10	49	186
05:15 PM	2	28	16	0	46	7	2	2	6	17	27	46	2	0	75	2	2	39	11	54	192
05:30 PM	4	26	18	0	48	5	0	6	9	20	35	42	0	0	77	2	3	28	19	52	197
05:45 PM	2	27	20	0	49	1	0	6	6	13	30	41	4	0	75	2	0	41	10	53	190
Total	11	106	73	1	191	16	2	19	23	60	126	169	11	0	306	11	5	142	50	208	765
Grand Total	23	189	134	1	347	30	4	40	31	105	225	293	23	0	541	22	7	320	95	444	1437
Apprch %	6.6	54.5	38.6	0.3		28.6	3.8	38.1	29.5		41.6	54.2	4.3	0.0		5.0	1.6	72.1	21.4		
Total %	1.6	13.2	9.3	0.1	24.1	2.1	0.3	2.8	2.2	7.3	15.7	20.4	1.6	0.0	37.6	1.5	0.5	22.3	6.6	30.9	

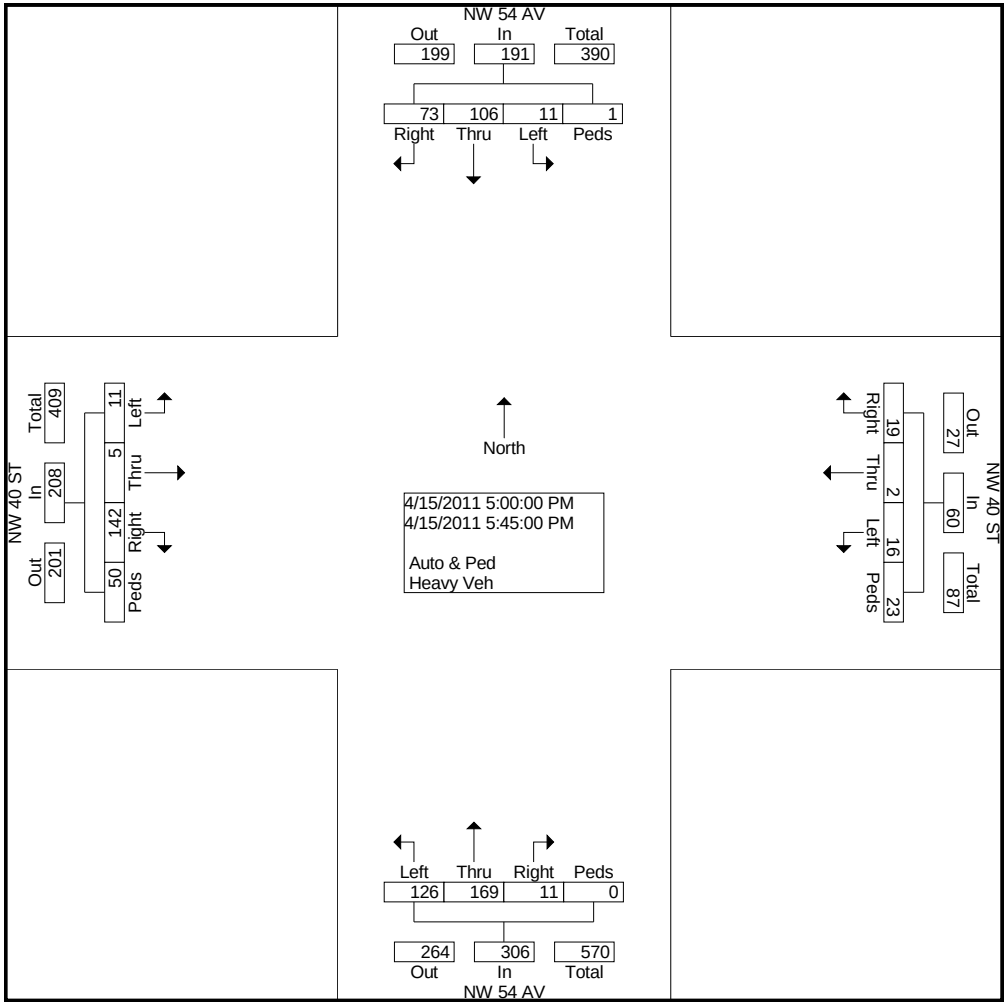
Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AV AT NW 40 ST
Site Code : 00000008
Start Date : 4/15/2011
Page No : 2

	NW 54 AV Southbound					NW 40 ST Westbound					NW 54 AV Northbound					NW 40 ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	11	106	73	1	191	16	2	19	23	60	126	169	11	0	306	11	5	142	50	208	765
Percent	5.8	55.5	38.2	0.5		26.7	3.3	31.7	38.3		41.2	55.2	3.6	0.0		5.3	2.4	68.3	24.0		
05:30 Volume	4	26	18	0	48	5	0	6	9	20	35	42	0	0	77	2	3	28	19	52	197
Peak Factor																					0.971
High Int.	05:45 PM					05:30 PM					05:00 PM					05:15 PM					
Volume	2	27	20	0	49	5	0	6	9	20	34	40	5	0	79	2	2	39	11	54	
Peak Factor					0.974					0.750					0.968					0.963	

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AV AT NW 40 ST
Site Code : 00000008
Start Date : 4/15/2011
Page No : 3

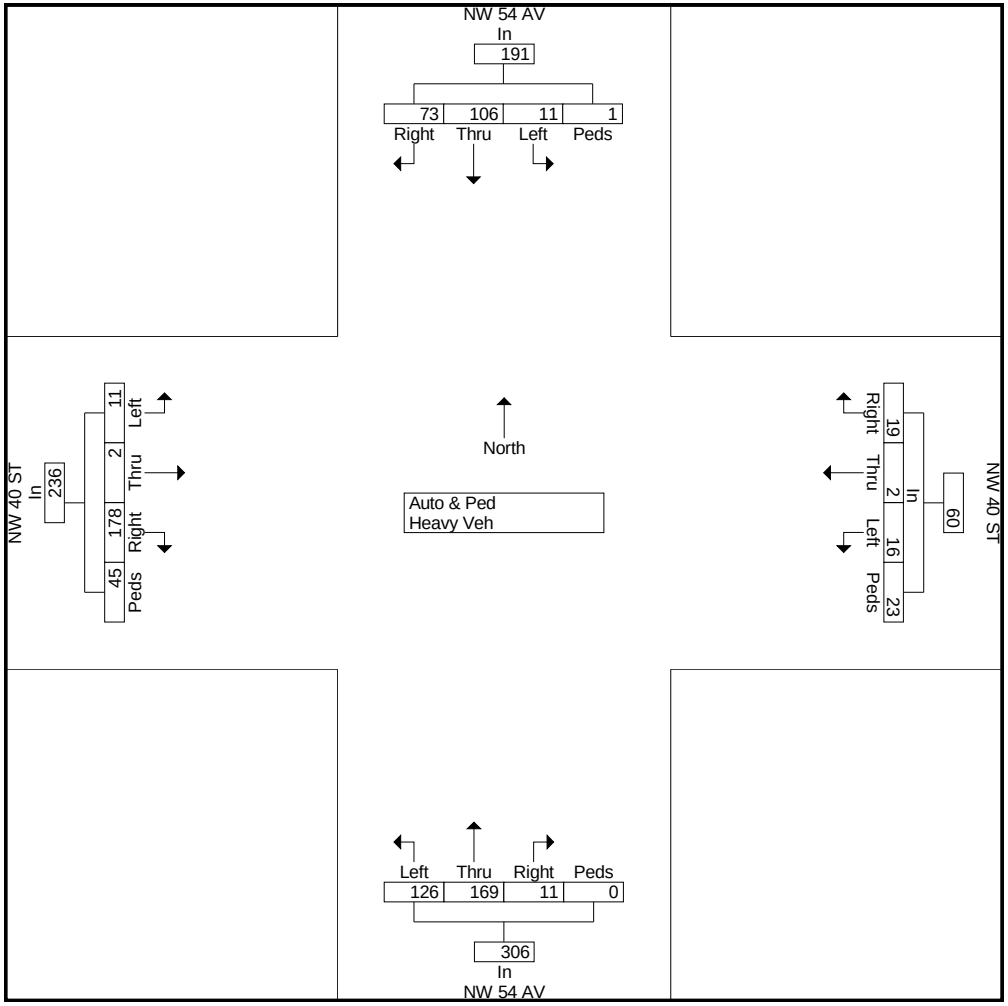


Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1

By Approach	05:00 PM					05:00 PM					05:00 PM					04:00 PM				
Volume	11	106	73	1	191	16	2	19	23	60	126	169	11	0	306	11	2	178	45	236
Percent	5.8	55.5	38.2	0.5		26.7	3.3	31.7	38.3		41.2	55.2	3.6	0.0		4.7	0.8	75.4	19.1	
High Int.	05:45 PM					05:30 PM					05:00 PM					04:30 PM				
Volume	2	27	20	0	49	5	0	6	9	20	34	40	5	0	79	4	1	43	17	65
Peak Factor					0.974					0.750					0.968					0.908

Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AV AT NW 40 ST
Site Code : 00000008
Start Date : 4/15/2011
Page No : 4



Marlin Engineering, Inc
2191 NW 97th Avenue
Miami,Florida 33172
Ph: (305) 477-7575

File Name : NW 54 AV AT NW 40 ST
Site Code : 00000008
Start Date : 4/15/2011
Page No : 1

Groups Printed- Heavy Veh

	NW 54 AV Southbound					NW 40 ST Westbound					NW 54 AV Northbound					NW 40 ST Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
Total	0	8	0	0	8	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	10
05:00 PM	0	3	0	0	3	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	5
05:15 PM	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	3
05:30 PM	0	4	2	0	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	10	2	0	12	0	0	0	0	0	2	3	0	0	5	0	0	1	0	1	18
Grand Total	0	18	2	0	20	0	0	0	0	0	2	5	0	0	7	0	0	1	0	1	28
Apprch %	0.0	90.0	10.0	0.0		0.0	0.0	0.0	0.0		28.6	71.4	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	0.0	64.3	7.1	0.0	71.4	0.0	0.0	0.0	0.0	0.0	7.1	17.9	0.0	0.0	25.0	0.0	0.0	3.6	0.0	3.6	

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

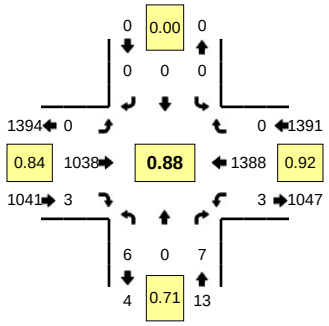
LOCATION: Banks Rd -- Wiles Rd

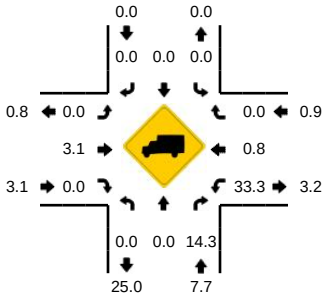
CITY/STATE: Coconut Creek, FL

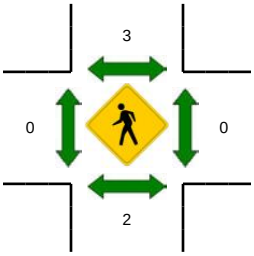
QC JOB #: 10615107

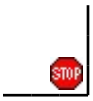
DATE: 5/12/2011

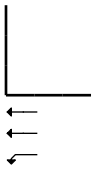
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

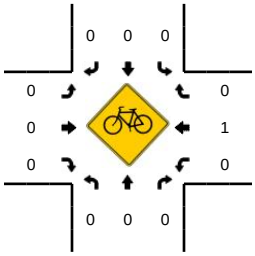


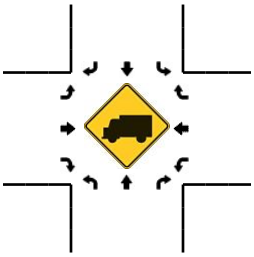


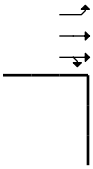


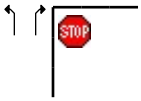


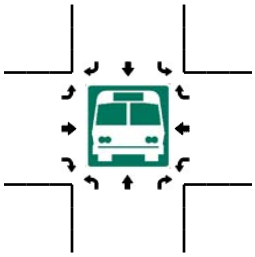












15-Min Count Period Beginning At	Banks Rd (Northbound)				Banks Rd (Southbound)				Wiles Rd (Eastbound)				Wiles Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	0	2	0	0	0	0	0	0	246	1	1	0	277	0	0	530	
4:15 PM	3	0	1	0	0	0	0	0	0	237	0	1	1	252	0	1	496	
4:30 PM	5	0	1	0	0	0	0	0	0	231	1	0	2	301	0	0	541	
4:45 PM	1	0	1	0	0	0	0	0	0	228	1	0	1	332	0	0	564	2131
5:00 PM	0	0	1	0	0	0	0	0	0	241	0	0	0	290	0	0	532	2133
5:15 PM	2	0	3	0	0	0	0	0	0	308	0	0	0	379	0	0	692	2329
5:30 PM	2	0	1	0	0	0	0	0	0	257	2	0	1	346	0	1	610	2398
5:45 PM	2	0	2	0	0	0	0	0	0	232	1	0	0	373	0	1	611	2445

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	0	12	0	0	0	0	0	0	1232	0	0	0	1516	0	0	2768
Heavy Trucks	0	0	4		0	0	0		0	32	0		0	8	0		44
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/17/2011 6:20 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net)

Appendix B-4

Seasonal Factors, Peak Season Conversion Factors, and Axle Factors

Source: 2010 Florida Traffic Information and Highway Data DVD

2010 Peak Season Factor Category Report - Report Type: ALL
Category: 8601 CEN.-W OF US1 TO SR7

MOCF: 0.96

Week	Dates	SF	PSCF
1	01/01/2010 - 01/02/2010	1.00	1.04
2	01/03/2010 - 01/09/2010	1.00	1.04
3	01/10/2010 - 01/16/2010	1.00	1.04
4	01/17/2010 - 01/23/2010	0.99	1.03
* 5	01/24/2010 - 01/30/2010	0.97	1.01
* 6	01/31/2010 - 02/06/2010	0.96	1.00
* 7	02/07/2010 - 02/13/2010	0.95	0.99
* 8	02/14/2010 - 02/20/2010	0.94	0.98
* 9	02/21/2010 - 02/27/2010	0.94	0.98
*10	02/28/2010 - 03/06/2010	0.94	0.98
*11	03/07/2010 - 03/13/2010	0.95	0.99
*12	03/14/2010 - 03/20/2010	0.95	0.99
*13	03/21/2010 - 03/27/2010	0.96	1.00
*14	03/28/2010 - 04/03/2010	0.97	1.01
*15	04/04/2010 - 04/10/2010	0.97	1.01
*16	04/11/2010 - 04/17/2010	0.98	1.02
*17	04/18/2010 - 04/24/2010	0.99	1.03
18	04/25/2010 - 05/01/2010	0.99	1.03
19	05/02/2010 - 05/08/2010	0.99	1.03
20	05/09/2010 - 05/15/2010	1.00	1.04
21	05/16/2010 - 05/22/2010	1.00	1.04
22	05/23/2010 - 05/29/2010	1.00	1.04
23	05/30/2010 - 06/05/2010	1.00	1.04
24	06/06/2010 - 06/12/2010	1.01	1.05
25	06/13/2010 - 06/19/2010	1.01	1.05
26	06/20/2010 - 06/26/2010	1.02	1.06
27	06/27/2010 - 07/03/2010	1.03	1.07
28	07/04/2010 - 07/10/2010	1.04	1.08
29	07/11/2010 - 07/17/2010	1.04	1.08
30	07/18/2010 - 07/24/2010	1.04	1.08
31	07/25/2010 - 07/31/2010	1.04	1.08
32	08/01/2010 - 08/07/2010	1.04	1.08
33	08/08/2010 - 08/14/2010	1.04	1.08
34	08/15/2010 - 08/21/2010	1.03	1.07
35	08/22/2010 - 08/28/2010	1.04	1.08
36	08/29/2010 - 09/04/2010	1.04	1.08
37	09/05/2010 - 09/11/2010	1.04	1.08
38	09/12/2010 - 09/18/2010	1.04	1.08
39	09/19/2010 - 09/25/2010	1.04	1.08
40	09/26/2010 - 10/02/2010	1.03	1.07
41	10/03/2010 - 10/09/2010	1.02	1.06
42	10/10/2010 - 10/16/2010	1.01	1.05
43	10/17/2010 - 10/23/2010	1.01	1.05
44	10/24/2010 - 10/30/2010	1.01	1.05
45	10/31/2010 - 11/06/2010	1.00	1.04
46	11/07/2010 - 11/13/2010	1.00	1.04
47	11/14/2010 - 11/20/2010	1.00	1.04
48	11/21/2010 - 11/27/2010	1.00	1.04
49	11/28/2010 - 12/04/2010	1.00	1.04
50	12/05/2010 - 12/11/2010	1.00	1.04
51	12/12/2010 - 12/18/2010	1.00	1.04
52	12/19/2010 - 12/25/2010	1.00	1.04
53	12/26/2010 - 12/31/2010	1.00	1.04

* Peak Season

2010 Weekly Axle Factor Category Report - Report Type: ALL

County: 86 - BROWARD

Week	Dates	8618 SR 5, I595 - SR 870	8619 SR 834, SR 817- US 1	8620 SR A1A, DADE - SR 5	8621 SR 814, SR 7 - US 1
1	01/01/2010 - 01/02/2010	0.99	0.98	0.97	0.96
2	01/03/2010 - 01/09/2010	0.99	0.99	0.97	0.96
3	01/10/2010 - 01/16/2010	0.99	0.99	0.97	0.96
4	01/17/2010 - 01/23/2010	0.99	0.99	0.97	0.96
5	01/24/2010 - 01/30/2010	0.99	0.99	0.97	0.96
6	01/31/2010 - 02/06/2010	0.99	0.98	0.97	0.96
7	02/07/2010 - 02/13/2010	0.99	0.98	0.97	0.96
8	02/14/2010 - 02/20/2010	0.99	0.98	0.97	0.96
9	02/21/2010 - 02/27/2010	0.99	0.98	0.97	0.96
10	02/28/2010 - 03/06/2010	0.99	0.98	0.97	0.96
11	03/07/2010 - 03/13/2010	0.99	0.98	0.97	0.96
12	03/14/2010 - 03/20/2010	0.99	0.98	0.97	0.96
13	03/21/2010 - 03/27/2010	0.99	0.98	0.97	0.96
14	03/28/2010 - 04/03/2010	0.99	0.98	0.97	0.96
15	04/04/2010 - 04/10/2010	0.99	0.98	0.97	0.96
16	04/11/2010 - 04/17/2010	0.99	0.98	0.97	0.96
17	04/18/2010 - 04/24/2010	0.99	0.98	0.97	0.96
18	04/25/2010 - 05/01/2010	0.99	0.98	0.97	0.96
19	05/02/2010 - 05/08/2010	0.99	0.98	0.97	0.96
20	05/09/2010 - 05/15/2010	0.99	0.98	0.97	0.96
21	05/16/2010 - 05/22/2010	0.99	0.98	0.97	0.96
22	05/23/2010 - 05/29/2010	0.99	0.98	0.97	0.96
23	05/30/2010 - 06/05/2010	0.99	0.98	0.97	0.96
24	06/06/2010 - 06/12/2010	0.99	0.98	0.97	0.96
25	06/13/2010 - 06/19/2010	0.99	0.98	0.97	0.96
26	06/20/2010 - 06/26/2010	0.99	0.98	0.97	0.96
27	06/27/2010 - 07/03/2010	0.99	0.98	0.97	0.96
28	07/04/2010 - 07/10/2010	0.99	0.98	0.97	0.96
29	07/11/2010 - 07/17/2010	0.99	0.98	0.97	0.96
30	07/18/2010 - 07/24/2010	0.99	0.98	0.97	0.96
31	07/25/2010 - 07/31/2010	0.99	0.98	0.97	0.96
32	08/01/2010 - 08/07/2010	0.99	0.98	0.97	0.96
33	08/08/2010 - 08/14/2010	0.99	0.98	0.97	0.96
34	08/15/2010 - 08/21/2010	0.99	0.98	0.97	0.96
35	08/22/2010 - 08/28/2010	0.99	0.98	0.97	0.96
36	08/29/2010 - 09/04/2010	0.99	0.98	0.97	0.96
37	09/05/2010 - 09/11/2010	0.99	0.98	0.97	0.96
38	09/12/2010 - 09/18/2010	0.99	0.98	0.97	0.96
39	09/19/2010 - 09/25/2010	0.99	0.98	0.97	0.96
40	09/26/2010 - 10/02/2010	0.99	0.98	0.97	0.96
41	10/03/2010 - 10/09/2010	0.99	0.98	0.97	0.96
42	10/10/2010 - 10/16/2010	0.99	0.98	0.97	0.96
43	10/17/2010 - 10/23/2010	0.99	0.98	0.97	0.96
44	10/24/2010 - 10/30/2010	0.99	0.98	0.97	0.96
45	10/31/2010 - 11/06/2010	0.99	0.98	0.97	0.96
46	11/07/2010 - 11/13/2010	0.99	0.98	0.97	0.96
47	11/14/2010 - 11/20/2010	0.99	0.98	0.97	0.96
48	11/21/2010 - 11/27/2010	0.99	0.98	0.97	0.96
49	11/28/2010 - 12/04/2010	0.99	0.98	0.97	0.96
50	12/05/2010 - 12/11/2010	0.99	0.98	0.97	0.96
51	12/12/2010 - 12/18/2010	0.99	0.98	0.97	0.96
52	12/19/2010 - 12/25/2010	0.99	0.99	0.97	0.96
53	12/26/2010 - 12/31/2010	0.99	0.99	0.97	0.96

2010 Weekly Axle Factor Category Report - Report Type: ALL

County: 86 - BROWARD

Week	Dates	8640 SR7/441,DADE -SR 736	8641 SR7/441,SR736-PALBC.	8643 SR 810, SR 7 - US 1	8644 SR 811, SR838-PB.CO.
1	01/01/2010 - 01/02/2010	0.97	0.98	0.98	0.99
2	01/03/2010 - 01/09/2010	0.97	0.98	0.98	0.99
3	01/10/2010 - 01/16/2010	0.97	0.98	0.98	0.99
4	01/17/2010 - 01/23/2010	0.97	0.98	0.98	0.99
5	01/24/2010 - 01/30/2010	0.97	0.98	0.98	0.99
6	01/31/2010 - 02/06/2010	0.97	0.98	0.98	0.99
7	02/07/2010 - 02/13/2010	0.97	0.98	0.98	0.99
8	02/14/2010 - 02/20/2010	0.97	0.98	0.98	0.99
9	02/21/2010 - 02/27/2010	0.97	0.98	0.98	0.99
10	02/28/2010 - 03/06/2010	0.97	0.98	0.98	0.99
11	03/07/2010 - 03/13/2010	0.97	0.98	0.98	0.99
12	03/14/2010 - 03/20/2010	0.97	0.98	0.98	0.99
13	03/21/2010 - 03/27/2010	0.97	0.98	0.98	0.99
14	03/28/2010 - 04/03/2010	0.97	0.98	0.98	0.99
15	04/04/2010 - 04/10/2010	0.97	0.98	0.98	0.99
16	04/11/2010 - 04/17/2010	0.97	0.98	0.98	0.99
17	04/18/2010 - 04/24/2010	0.97	0.98	0.98	0.99
18	04/25/2010 - 05/01/2010	0.97	0.98	0.98	0.99
19	05/02/2010 - 05/08/2010	0.97	0.98	0.98	0.99
20	05/09/2010 - 05/15/2010	0.97	0.98	0.98	0.99
21	05/16/2010 - 05/22/2010	0.97	0.98	0.98	0.99
22	05/23/2010 - 05/29/2010	0.97	0.98	0.98	0.99
23	05/30/2010 - 06/05/2010	0.97	0.98	0.98	0.99
24	06/06/2010 - 06/12/2010	0.97	0.98	0.98	0.99
25	06/13/2010 - 06/19/2010	0.97	0.98	0.98	0.99
26	06/20/2010 - 06/26/2010	0.97	0.98	0.98	0.99
27	06/27/2010 - 07/03/2010	0.97	0.98	0.98	0.99
28	07/04/2010 - 07/10/2010	0.97	0.98	0.98	0.99
29	07/11/2010 - 07/17/2010	0.97	0.98	0.98	0.99
30	07/18/2010 - 07/24/2010	0.97	0.98	0.98	0.99
31	07/25/2010 - 07/31/2010	0.97	0.98	0.98	0.99
32	08/01/2010 - 08/07/2010	0.97	0.98	0.98	0.99
33	08/08/2010 - 08/14/2010	0.97	0.98	0.98	0.99
34	08/15/2010 - 08/21/2010	0.97	0.98	0.98	0.99
35	08/22/2010 - 08/28/2010	0.97	0.98	0.98	0.99
36	08/29/2010 - 09/04/2010	0.97	0.98	0.98	0.99
37	09/05/2010 - 09/11/2010	0.97	0.98	0.98	0.99
38	09/12/2010 - 09/18/2010	0.97	0.98	0.98	0.99
39	09/19/2010 - 09/25/2010	0.97	0.98	0.98	0.99
40	09/26/2010 - 10/02/2010	0.97	0.98	0.98	0.99
41	10/03/2010 - 10/09/2010	0.97	0.98	0.98	0.99
42	10/10/2010 - 10/16/2010	0.97	0.98	0.98	0.99
43	10/17/2010 - 10/23/2010	0.97	0.98	0.98	0.99
44	10/24/2010 - 10/30/2010	0.97	0.98	0.98	0.99
45	10/31/2010 - 11/06/2010	0.97	0.98	0.98	0.99
46	11/07/2010 - 11/13/2010	0.97	0.98	0.98	0.99
47	11/14/2010 - 11/20/2010	0.97	0.98	0.98	0.99
48	11/21/2010 - 11/27/2010	0.97	0.98	0.98	0.99
49	11/28/2010 - 12/04/2010	0.97	0.98	0.98	0.99
50	12/05/2010 - 12/11/2010	0.97	0.98	0.98	0.99
51	12/12/2010 - 12/18/2010	0.97	0.98	0.98	0.99
52	12/19/2010 - 12/25/2010	0.97	0.98	0.98	0.99
53	12/26/2010 - 12/31/2010	0.97	0.98	0.98	0.99

2010 Weekly Axle Factor Category Report - Report Type: ALL

County: 86 - BROWARD

Week	Dates	8645 BROWARD CO. ROADS	8646 SR858, SR 7 - US 1	8647 SR822, US 441-US 1	8649 A1A,US1@17ST-SR 814
1	01/01/2010 - 01/02/2010	0.99	0.99	0.99	0.97
2	01/03/2010 - 01/09/2010	0.99	0.99	0.99	0.97
3	01/10/2010 - 01/16/2010	0.99	0.99	0.99	0.97
4	01/17/2010 - 01/23/2010	0.99	0.99	0.99	0.97
5	01/24/2010 - 01/30/2010	0.98	0.99	0.99	0.97
6	01/31/2010 - 02/06/2010	0.98	0.99	0.99	0.97
7	02/07/2010 - 02/13/2010	0.97	0.99	0.99	0.97
8	02/14/2010 - 02/20/2010	0.97	0.99	0.99	0.97
9	02/21/2010 - 02/27/2010	0.96	0.99	0.99	0.97
10	02/28/2010 - 03/06/2010	0.96	0.99	0.99	0.97
11	03/07/2010 - 03/13/2010	0.95	0.98	0.99	0.97
12	03/14/2010 - 03/20/2010	0.94	0.98	0.99	0.97
13	03/21/2010 - 03/27/2010	0.94	0.98	0.99	0.97
14	03/28/2010 - 04/03/2010	0.94	0.99	0.99	0.97
15	04/04/2010 - 04/10/2010	0.94	0.99	0.99	0.97
16	04/11/2010 - 04/17/2010	0.94	0.99	0.99	0.97
17	04/18/2010 - 04/24/2010	0.95	0.99	0.99	0.97
18	04/25/2010 - 05/01/2010	0.95	0.99	0.99	0.97
19	05/02/2010 - 05/08/2010	0.95	0.99	0.99	0.97
20	05/09/2010 - 05/15/2010	0.95	0.99	0.99	0.97
21	05/16/2010 - 05/22/2010	0.95	0.99	0.99	0.97
22	05/23/2010 - 05/29/2010	0.95	0.99	0.99	0.97
23	05/30/2010 - 06/05/2010	0.95	0.99	0.99	0.97
24	06/06/2010 - 06/12/2010	0.95	0.99	0.99	0.97
25	06/13/2010 - 06/19/2010	0.96	0.99	0.99	0.97
26	06/20/2010 - 06/26/2010	0.96	0.99	0.99	0.97
27	06/27/2010 - 07/03/2010	0.96	0.99	0.99	0.97
28	07/04/2010 - 07/10/2010	0.96	0.99	0.99	0.97
29	07/11/2010 - 07/17/2010	0.96	0.99	0.99	0.97
30	07/18/2010 - 07/24/2010	0.96	0.99	0.99	0.97
31	07/25/2010 - 07/31/2010	0.96	0.99	0.99	0.97
32	08/01/2010 - 08/07/2010	0.96	0.99	0.99	0.97
33	08/08/2010 - 08/14/2010	0.97	0.99	0.99	0.97
34	08/15/2010 - 08/21/2010	0.97	0.99	0.99	0.97
35	08/22/2010 - 08/28/2010	0.97	0.99	0.99	0.97
36	08/29/2010 - 09/04/2010	0.97	0.99	0.99	0.97
37	09/05/2010 - 09/11/2010	0.97	0.99	0.99	0.97
38	09/12/2010 - 09/18/2010	0.97	0.99	0.99	0.97
39	09/19/2010 - 09/25/2010	0.97	0.99	0.99	0.97
40	09/26/2010 - 10/02/2010	0.97	0.99	0.99	0.97
41	10/03/2010 - 10/09/2010	0.98	0.99	0.99	0.97
42	10/10/2010 - 10/16/2010	0.98	0.99	0.99	0.97
43	10/17/2010 - 10/23/2010	0.98	0.99	0.99	0.97
44	10/24/2010 - 10/30/2010	0.98	0.99	0.99	0.97
45	10/31/2010 - 11/06/2010	0.98	0.99	0.99	0.97
46	11/07/2010 - 11/13/2010	0.98	0.99	0.99	0.97
47	11/14/2010 - 11/20/2010	0.98	0.99	0.99	0.97
48	11/21/2010 - 11/27/2010	0.98	0.99	0.99	0.97
49	11/28/2010 - 12/04/2010	0.99	0.99	0.99	0.97
50	12/05/2010 - 12/11/2010	0.99	0.99	0.99	0.97
51	12/12/2010 - 12/18/2010	0.99	0.99	0.99	0.97
52	12/19/2010 - 12/25/2010	0.99	0.99	0.99	0.97
53	12/26/2010 - 12/31/2010	0.99	0.99	0.99	0.97

Appendix B-5

Signal Timing Sheets

Source: Broward County Traffic Engineering

BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1014	**Initial Operation Date**	5/25/70
Controller Type	NEMA 8 PHASE	**System Number**	1014
Modification Number	27	**Modification Date**	11/24/2009
Drawing/Project No	86100-3531	**FPL Grid Number**	87291521708
Intersection	SAMPLE ROAD (SR 834) and SR 7 (US 441)		
Municipality	CORAL SPRINGS		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2		4	5	6		8
Direction	EBL	WB		NBL	WBL	EB		SBL
Initial Green(MIN)	6.0	10		6.0	6.0	10		6.0
Vehicle Ext.(GAP)	1.5	3.0		1.5	1.5	3.0		1.5
Maximum Green I	20.	40		20.	20.	40		20.
Maximum Green II								
Yellow Clearance	4.0	4.0		4.0	4.0	4.0		4.0
All Red Clearance	2.0	4.0		3.0	2.0	4.0		3.0
Phase Recall	OFF	MIN		OFF	OFF	MIN		OFF
Detector Delay								
Walk		7.0				7.0		
Pedestrian Clearance								
Permissive	DUAL			DUAL	DUAL			DUAL
Flash Operation	RED	YELLOW		RED	RED	YELLOW		RED
Green Retnrn	7	1		5	8	2		6

Attachment

Channel/Drop **76 / 5** **IP Address**

NOTES:

1. VIDEO DETECTION.
2. MOD. 27 INSTALLS VIDEO DETECTION.

Submitted By _____ **Approved By** _____

System Number: 1014
Section Number: 134

Thursday, April 21, 2011
1:55:46 PM

Pattern Timing Plan Data

Sample Rd & SR 7

Pattern Number	Offset	Cycle Length	Phase Durations EW	NSL	EWL	WBL	EBL
1	80	140	78	34	29	0	0
2	105	160	88	38	34	0	0
3	155	160	100	30	30	0	0
4	43	160	91	35	34	0	0
5	80	140	78	34	29	0	0
6	47	130	80	25	25	0	0

Fixed Intervals:

Min Green	10	6	6	6	6
Flashing Don't Walk	0	0	0	0	0
Yellow	4	4	4	4	4
All Red	4	3	2	2	2
Green Returns	1,2	5,6	7,8	8	7
Command	YIELD	FO 1&2	FO 1&2	FO 2	FO 1

Time Of Day Schedule

Monday - Friday		
Pattern 2	Morning Peak Pattern	06:00 - 09:00
Pattern 3	Midday Pattern	09:00 - 15:10
Pattern 4	Evening Peak Patten	15:10 - 20:00
Pattern 3	Midday Pattern	20:00 - 00:00
Saturday		
Pattern 3	Midday Pattern	06:30 - 01:00
Sunday		
Pattern 3	Midday Pattern	06:30 - 23:00

TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

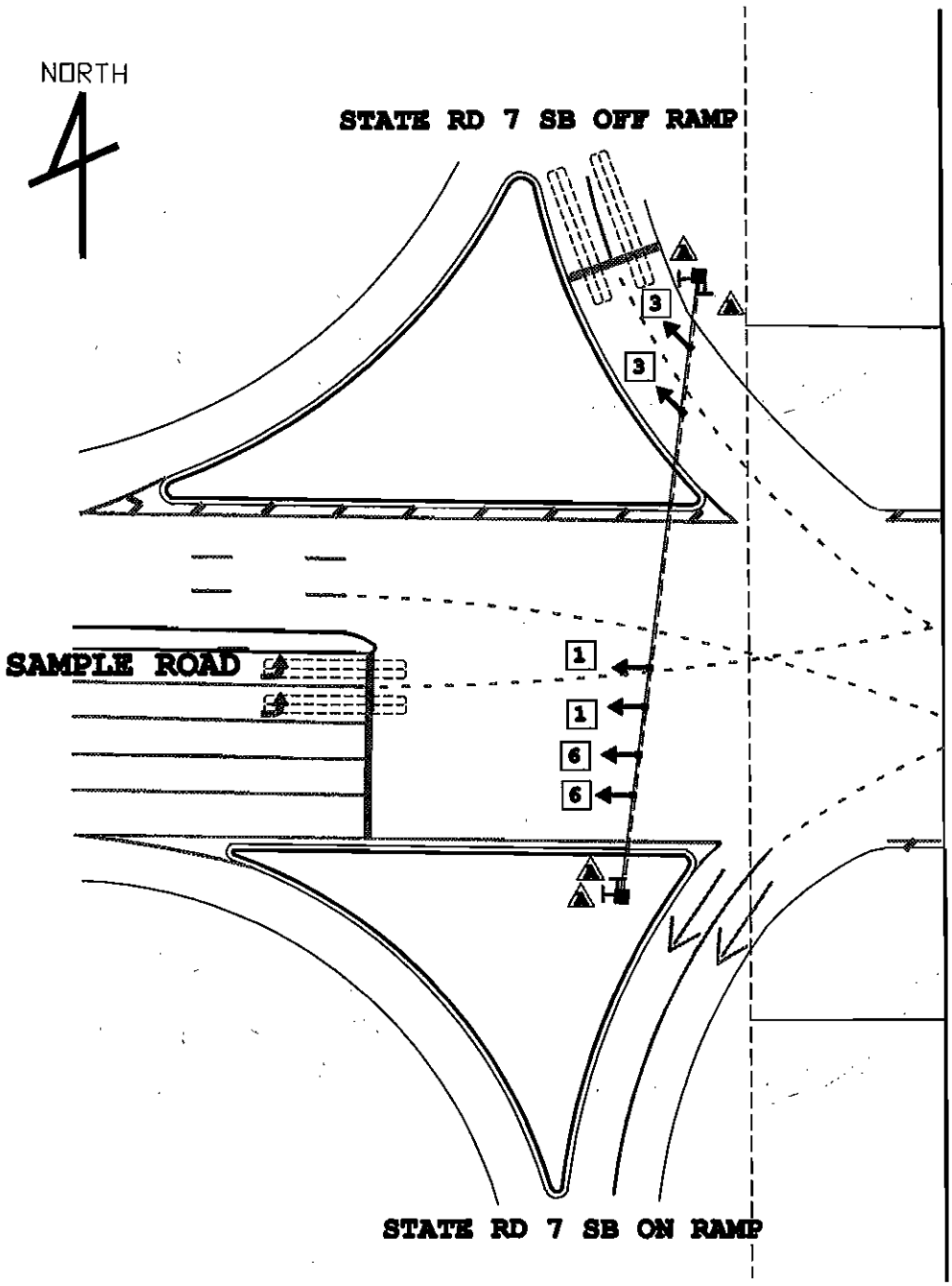
LOCATION **SAMPLE ROAD AND STATE ROAD 7**

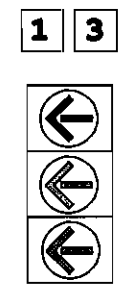
ORDER NO --- ISSUE DATE ----- REV NO. **7** COMPLETION DATE **7/6/05**

DWG. NO. **06-08-16-01** FILE NO. **A-14** CITY **CORAL SPRINGS** SCALE: 1' = 50'

DWN BY: RIO

SHEET 1 of 2





3-SECT
1-WAY
4-REQ'D

3-SECT
1-WAY
2-REQ'D

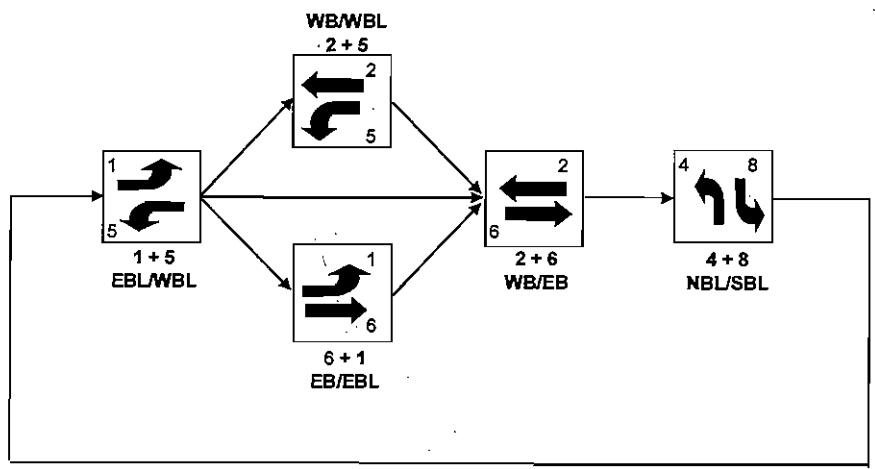
Illuminated Street name

4-REQ'D

THIS REVISION INSTALLS ILLUMINATED STREET SIGNS, BY CITY

Sequence of Operation for A-014

SAMPLE ROAD and SR 7 (US 441) (Coral Springs)



TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

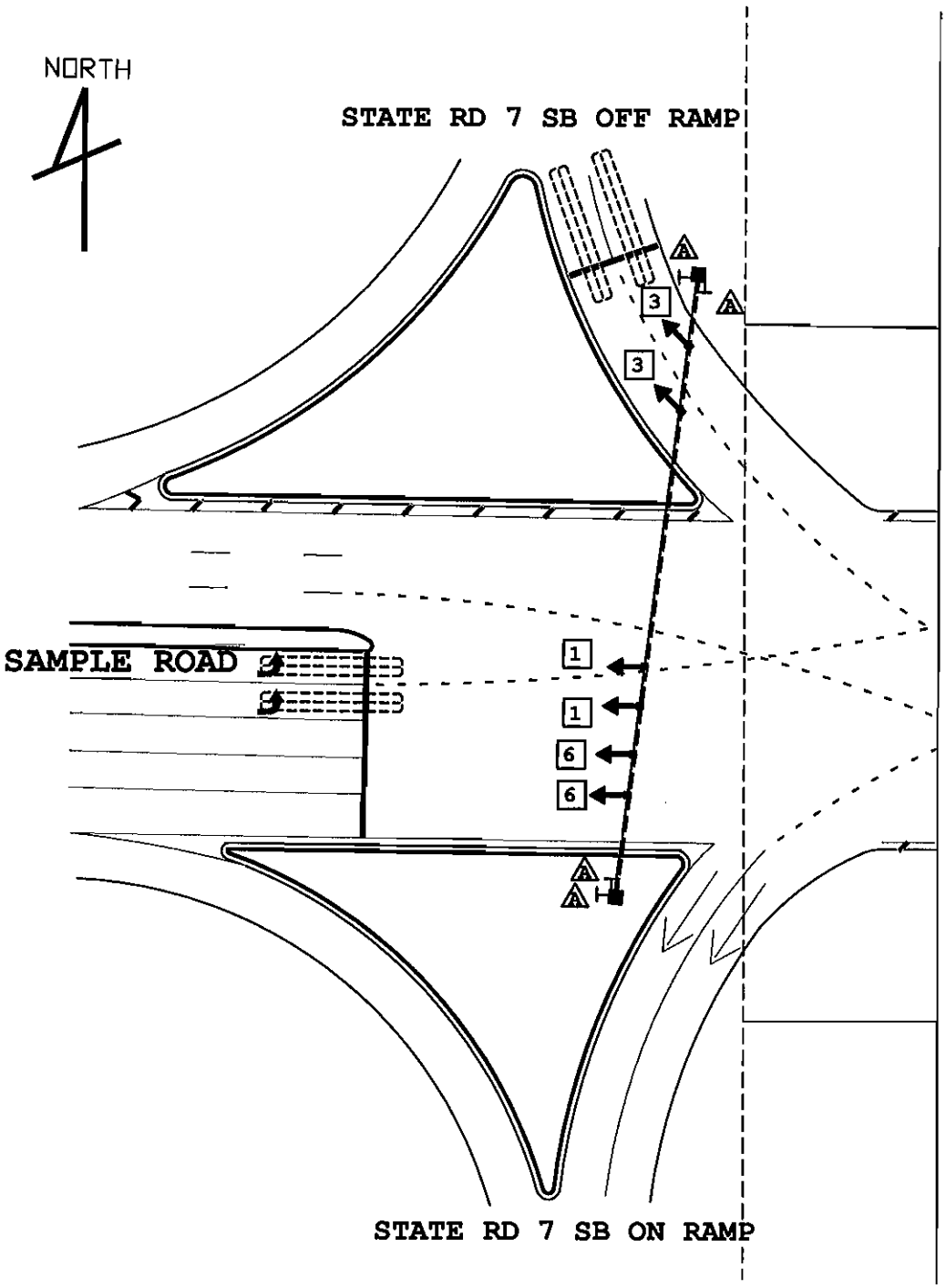
LOCATION **SAMPLE ROAD AND STATE ROAD 7**

ORDER NO --- ISSUE DATE ------ REV NO. 7 COMPLETION DATE 7/6/05

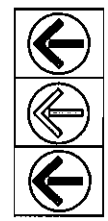
DWG. NO. 06-08-16-01 FILE NO. A-14 CITY CORAL SPRINGS SCALE: 1" = 50'

DWN BY: RIO

SHEET 1 of 2



1 3



3-SECT
1-WAY
4-REQ'D

6

3-SECT
1-WAY
2-REQ'D

A

Illuminated Street name

4-REQ'D

THIS REVISION INSTALLS ILLUMINATED STREET SIGNS, BY CITY

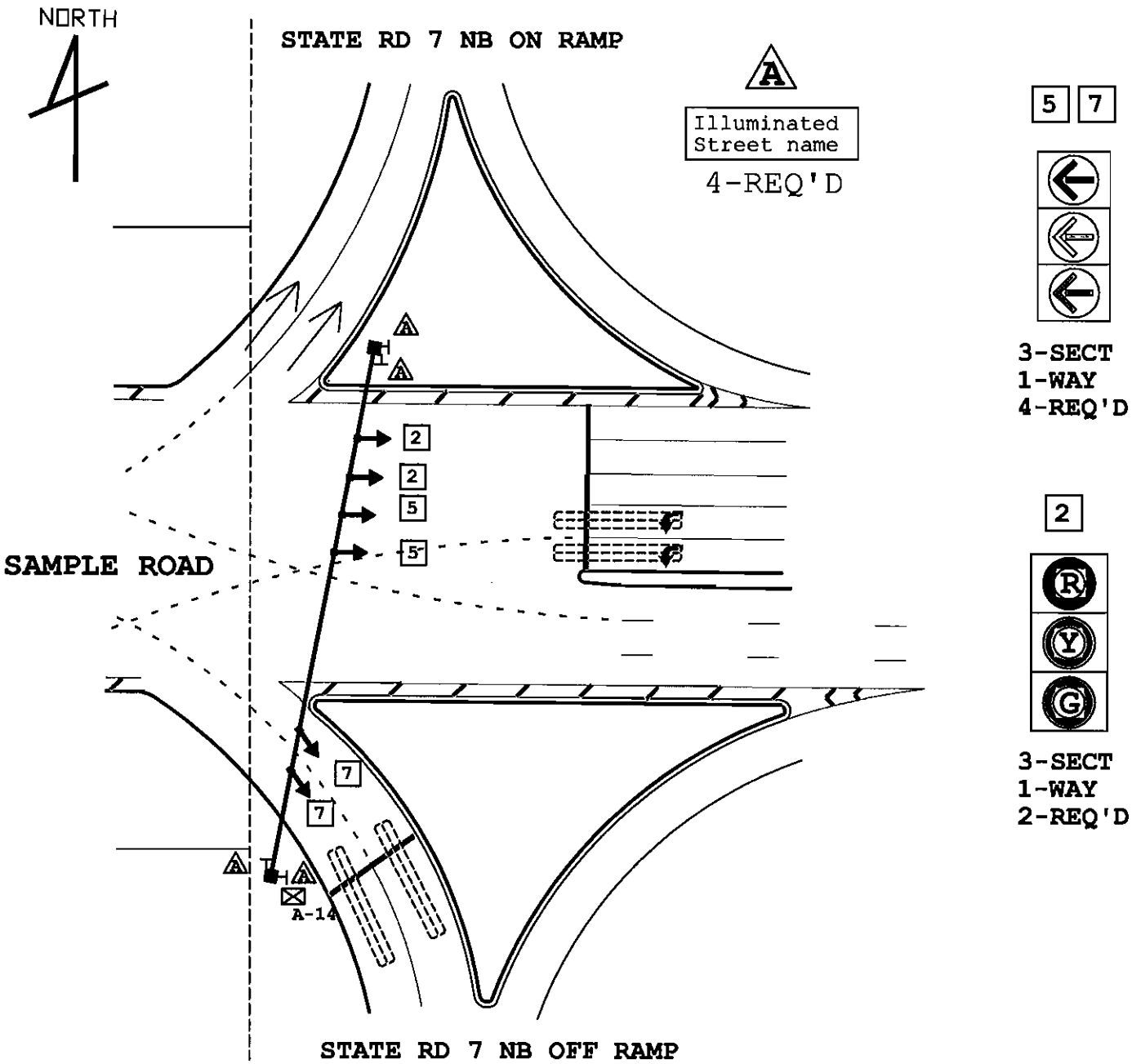
TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

LOCATION **SAMPLE ROAD AND STATE ROAD 7**

ORDER NO --- ISSUE DATE ------ REV NO. 7 COMPLETION DATE 7/6/05

DWG. NO. 06-08-16-02 FILE NO. A-14 CITY CORAL SPRINGS SCALE: 1" = 50'

DWN BY: RIO SHEET 2 OF 2



THIS REVISION INSTALLS ILLUM SNS's, BY CITY

BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1495	**Initial Operation Date**	3/7/91
Controller Type	NEMA 8 PHASE	**System Number**	1495
Modification Number	4	**Modification Date**	07/12/2005
Drawing/Project No	GROUP 5	**FPL Grid Number**	87291842105
Intersection	SAMPLE ROAD (SR 834) and NW 54 AVE./PERIMETER RD.		
Municipality	COCONUT CREEK		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2		4	5	6		8
Direction	EBL	WB		NB	WBL	EB		SB
Initial Green(MIN)	4	12		6	4	12		6
Vehicle Ext.(GAP)	1.5	3.0		2.0	1.5	3.0		2.0
Maximum Green I	12	60		25	12	60		25
Maximum Green II								
Yellow Clearance	4.0	4.0		4.0	4.0	4.0		4.0
All Red Clearance	2.0	2.0		2.0	2.0	2.0		2.0
Phase Recall	OFF	MIN/PED		OFF	OFF	MIN/P		OFF
Detector Delay				20-RT				20-RT
Walk		7		5		7		5
Pedestrian Clearance		17		21		17		21
Permissive	5 SECT				5 SECT			
Flash Operation		YELLOW		RED		YELLOW		RED
Green Return	7	1		5	8	2		6

Attachment

Channel/Drop 76 / 6 **IP Address**

NOTES:

1. ANTI-BACKDOWN DIODES EAST/WEST AND DUAL ENTRY HARDWIRED NORTH/SOUTH.
2. WITH WOIT2005070034 DATED 7/6/05, REMOVES NIGHT FLASH.
3. PHASES 2 & 6 ON PED RECALL FOR SYSTEMS PURPOSES [2/18/07].

Submitted By _____ **Approved By** _____

System Number: 1495 Thursday, April 21, 2011

Section Number: 134 1:53:47 PM

Pattern Timing Plan Data

Sample Rd & NW 54 Ave / Perimeter Rd

Pattern Number	Offset	Cycle Length	Phase Durations EW	NS	EWL	WBL	EBL
1	81	140	66	34	40	0	0
2	103	160	91	40	29	0	0
3	17	160	99	37	25	0	0
4	25	160	85	35	17	23	0
5	81	140	66	34	40	0	0
6	48	140	66	41	34	0	0

Fixed Intervals:

Min Green	12	6	4	4	4
Flashing Don't Walk	17	0	0	0	0
Yellow	4	4	4	4	4
All Red	2	2	2	2	2
Green Returns	1,2	5,6	7,8	8	7
Command	YIELD	FO 1&2	FO 1&2	FO 2	FO 1

Time Of Day Schedule

Monday - Friday

Pattern 2	Morning Peak Pattern	06:00 - 09:00
Pattern 3	Midday Pattern	09:00 - 15:10
Pattern 4	Evening Peak Patten	15:10 - 20:00
Pattern 3	Midday Pattern	20:00 - 00:00

Saturday

Pattern 3	Midday Pattern	06:30 - 01:00

Sunday

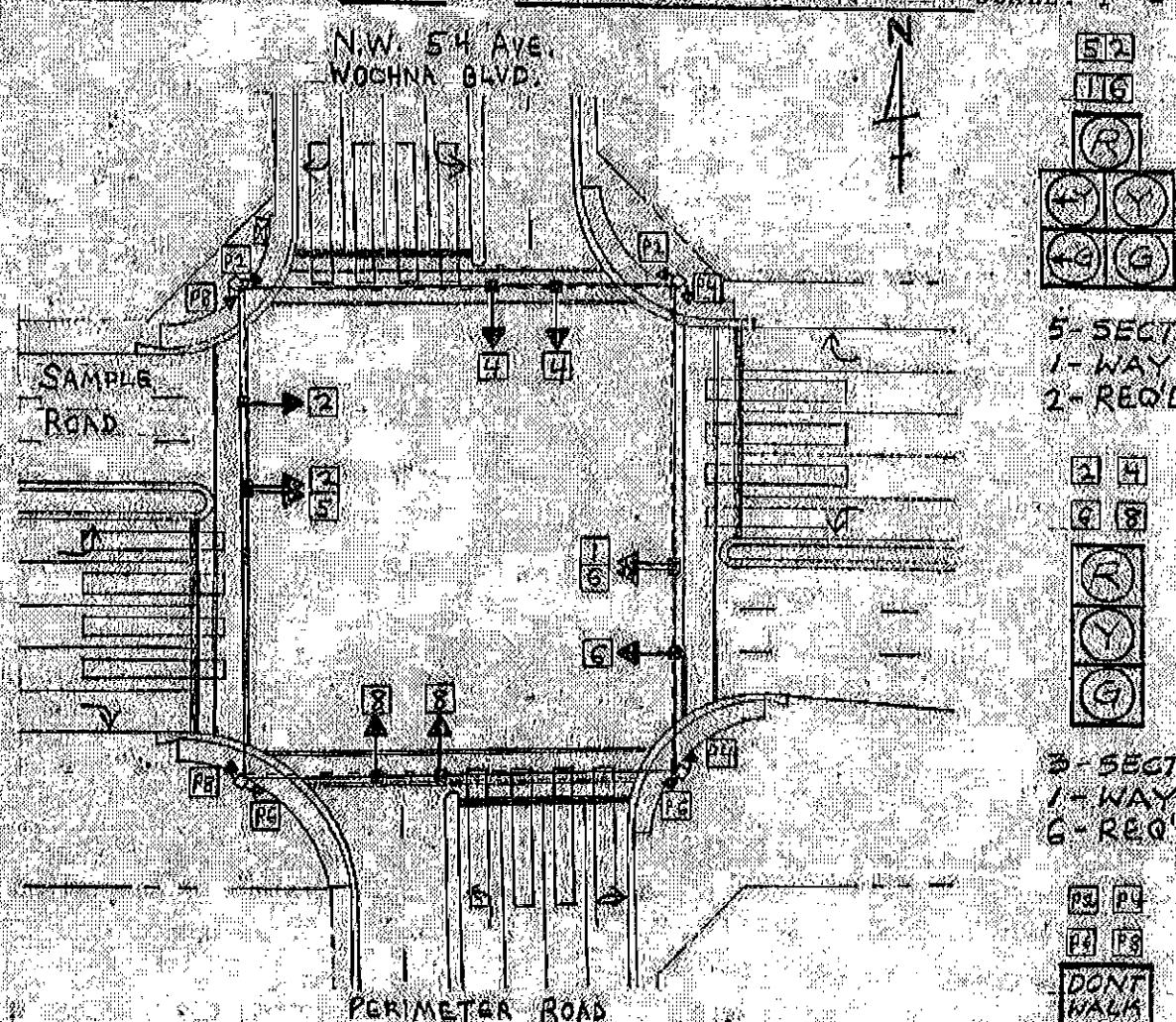
Pattern 3	Midday Pattern	06:30 - 23:00

BROWARD COUNTY TRAFFIC ENGINEERING DIVISION
TRAFFIC SIGNAL INSTALLATION ORDER

LOCATION SAMPLE ROAD AND N.W. 54 AVENUE (WOCHNA BLVD.)

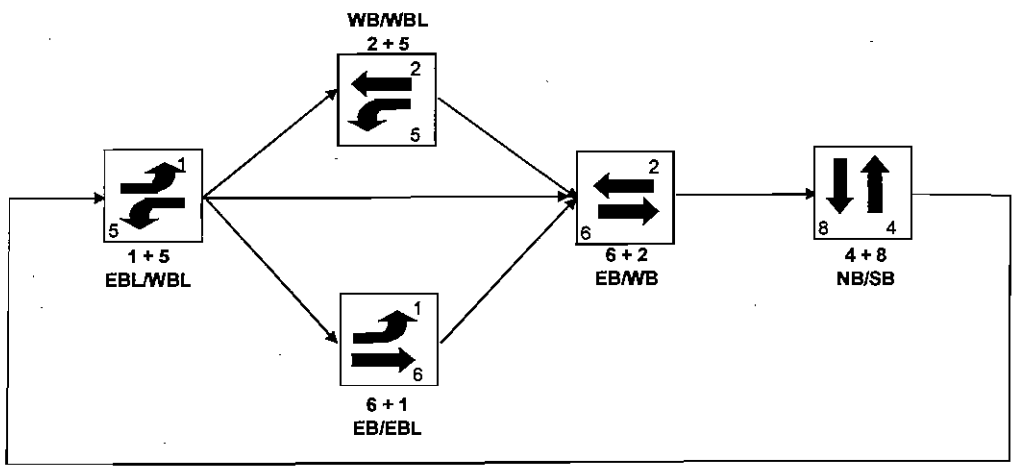
ORDER NO. _____ ISSUE DATE _____ REVISION NO. 0 COMPLETION DATE _____

DWG. NO. _____ FILE NO. A-495 CITY COCONUT CREEK SCALE: 1" = 50'



REMARKS: _____

Sequence of Operation for (1495) Sample Road (SR 834) and NW 54 Ave/Perimeter Rd, Coconut Creek



BROWARD COUNTY TRAFFIC ENGINEERING
ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1043	**Initial Operation Date**	5/19/81
Controller Type	NEMA 8 PHASE	**System Number**	1043
Modification Number	22	**Modification Date**	09/08/2008
Drawing/Project No	86028-3503	**FPL Grid Number**	87391611705
Intersection	SAMPLE ROAD (SR 834) and LYONS ROAD		
Municipality	COCONUT CREEK		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8,8R*
Direction	EBL	WB	SBL	NB	WBL	EB	NBL	SB
Initial Green(MIN)	5	7	5	6	5	7	5	6
Vehicle Ext.(GAP)	1.5	3.0	2.0	2.5	2.0	3.0	2.0	2.5
Maximum Green I	20	50	20	40	25	50	20	40
Maximum Green II								
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All Red Clearance	2.5	2.0	2.5	1.5	2.5	2.0	2.5	1.5
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay								20-RT
Walk		7		5		7		5
Pedestrian Clearance		26		24		26		24
Permissive	DUAL		DUAL		DUAL		DUAL	
Flash Operation	RED	YELLOW	RED	RED	RED	YELLOW	RED	RED
Green Return	7	1	3	5	8	2	4	6

Attachment

Channel/Drop **137 / 5** **IP Address**

NOTES:

1. DUAL ENTRY HARDWIRED NORTH/SOUTH
2. NO DETECTION EAST/WEST, SIGNAL OPERATES SEMI-ACTUATED.
3. *HEAD 8R IS 5-SECTION RIGHT TURN SIGNAL. ARROW INDICATIONS (Y-> AND G->) ARE TIED TO PH1 DIRECTLY. OVERLAP IS NOT USED.
4. MOD. 22 REFLECTS INSTALLATION OF VIDEO DETECTION.

Submitted By _____ **Approved By** _____

System Number: 1043
Section Number: 134

Thursday, April 21, 2011
1:53:10 PM

Pattern Timing Plan Data

Sample Rd & Lyons Rd

Pattern Number	Offset	Cycle Length	Phase Durations EW	NSL	SBL	NBL	NS	EWL	WBL	EBL
1	5	140	56	22	0	0	38	24	0	0
2	18	160	73	32	0	0	37	18	0	0
3	103	160	66	27	0	0	40	27	0	0
4	109	160	72	25	0	7	38	18	0	0
5	5	140	56	22	0	0	38	24	0	0
6	112	140	55	24	0	0	39	22	0	0

Fixed Intervals:

Min Green	7	5	5	5	6	5	5	5
Flashing Don't Walk	26	0	0	0	0	0	0	0
Yellow	4	4	4	4	4	4	4	4
All Red	2	3	3	3	2	3	3	3
Green Returns	1,2	3,4	3	4	5,6	7,8	8	7
Command	YIELD	FO 1&2	FO 1	FO 2	FO 1&2	FO 1&2	FO 2	FO 1

Time Of Day Schedule

Monday - Friday		
Pattern 2	Morning Peak Pattern	06:00 - 09:00
Pattern 3	Midday Pattern	09:00 - 15:10
Pattern 4	Evening Peak Patten	15:10 - 20:00
Pattern 3	Midday Pattern	20:00 - 00:00
Saturday		
Pattern 3	Midday Pattern	06:30 - 01:00
Sunday		
Pattern 3	Midday Pattern	06:30 - 23:00

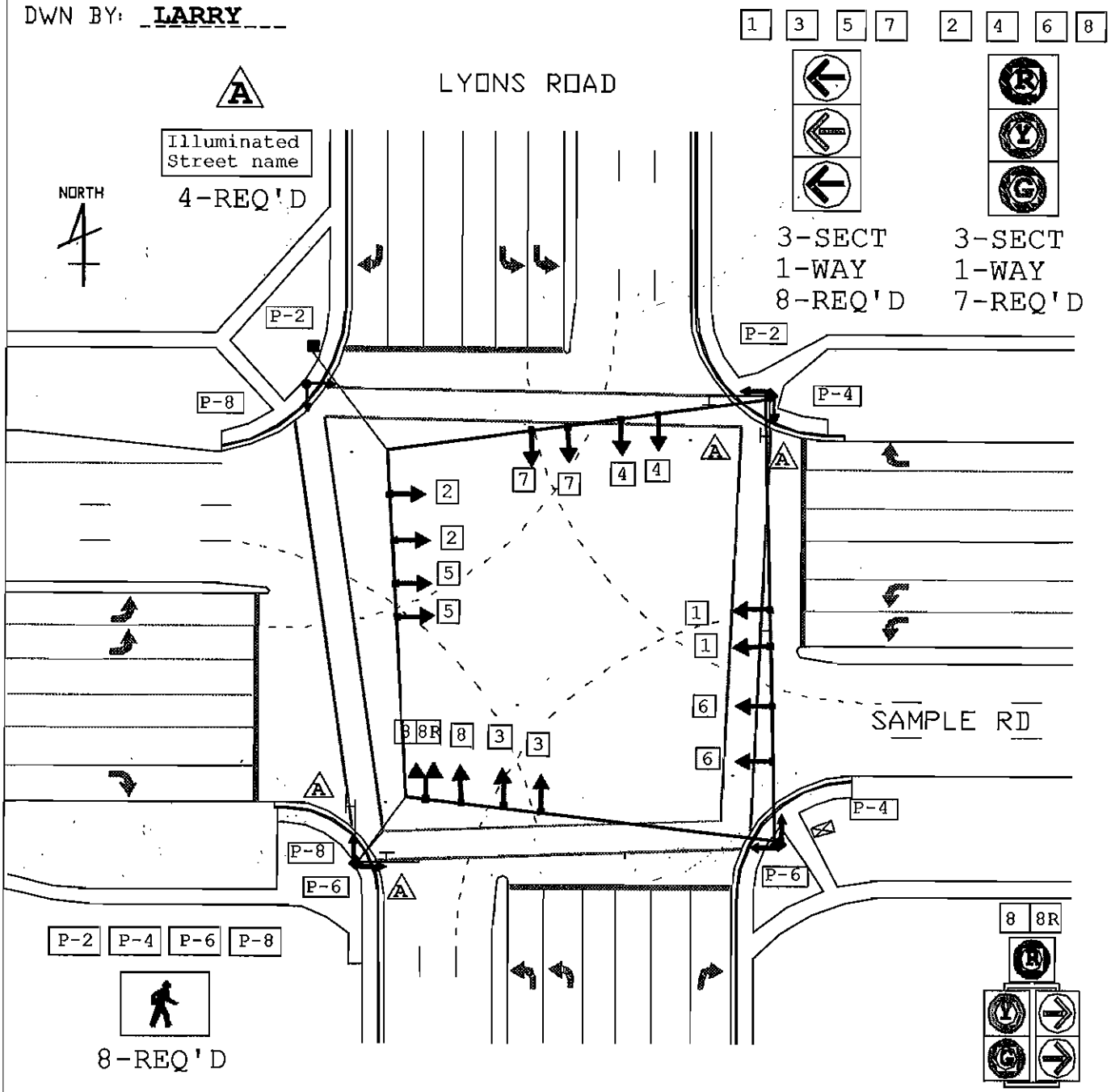
TRAFFIC ENGINEERING DIVISION
SIGNALIZED INTERSECTION

LOCATION **SAMPLE ROAD & LYONS ROAD**

ORDER NO **FDOT** ISSUE DATE ---- REV NO. **7** COMPLETION DATE **7/6/05**

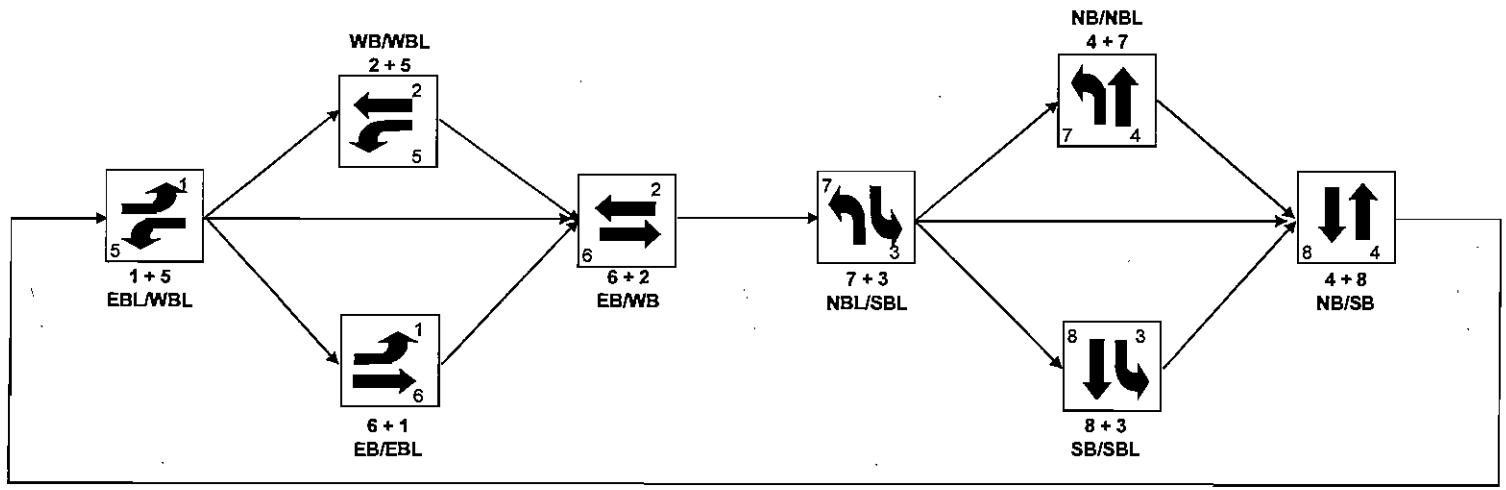
DWG. NO. **06-08-19-01** FILE NO. **1043** CITY **COCONUT CREEK** SCALE: **1" = 50'**

DWN BY: **LARRY**



1. THIS REVISION INSTALLS ILLUMINATED STREET SIGNS, BY FDOT
2. VIDEO DETECTION INSTALL 9/8/08, PER FDOT JPA

Sequence of Operation for (1043), Sample Road (SR 834) and Lyons Road
Coconut Creek



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1510	**Initial Operation Date**	4/12/94
Controller Type	NEMA 8 PHASE	**System Number**	1510
Modification Number	4	**Modification Date**	08/13/2008
Drawing/Project No	86100-3531	**FPL Grid Number**	87291486902
Intersection	SR 7 (US 441) and TURTLE CREEK DRIVE		
Municipality	COCONUT CREEK		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2		4	5	6		8
Direction	SBL	NB		EB	NBL	SB		WB
Initial Green(MIN)	5	7		6	5	7		6
Vehicle Ext.(GAP)	1.5	0.0		2.0	1.5	0.0		2.0
Maximum Green I	15	50		20	15	50		20
Maximum Green II								
Yellow Clearance	4.0	4.0		4.0	4.0	4.0		4.0
All Red Clearance	2.0	2.0		2.0	2.0	2.0		2.0
Phase Recall	OFF	MAX		OFF	OFF	MAX		OFF
Detector Delay								10-RT
Walk		7		7		7		7
Pedestrian Clearance		21		25		21		25
Permissive	DUAL				DUAL			
Flash Operation	RED	YELLOW		RED	RED	YELLOW		RED
Green Return	7	1		5	8	2		6

Attachment

Channel/Drop **37 / 0** **IP Address**

NOTES:

1. NO DETECTION NORTH/SOUTH, SIGNAL OPERATES SEMI-ACTUATED
2. DUAL ENTRY HARDWIRED EAST/WEST.
3. MOD.4 UPDATES ALL RED CLEARANCES.

Submitted By _____ **Approved By** _____

System Number: 1510 Thursday, April 21, 2011

Section Number: 4 1:52:07 PM

Pattern Timing Plan Data

SR 7 & Turtle Creek Dr

Pattern Number	Offset	Cycle Length	Phase Durations NS	EW	NSL	NBL	SBL
1	0	100	55	30	15	0	0
2	143	160	101	38	21	0	0
3	121	140	71	39	20	0	10
4	141	160	89	42	21	0	9
5	116	120	51	38	20	0	10
6	0	110	51	39	20	0	0
12	121	140	71	39	20	0	10
13	121	140	71	39	20	0	10
14	121	140	71	39	20	0	10

Fixed Intervals:

Min Green	7	8	5	5	5
Flashing Don't Walk	21	0	0	0	0
Yellow	4	4	4	4	4
All Red	2	2	2	2	2
Green Returns	1,2	5,6	7,8	8	7
Command	YIELD	FO 1&2	FO 1&2	FO 2	FO 1

Time Of Day Schedule

Monday - Friday

Pattern 2	Morning Peak Pattern	06:00 - 09:00
Pattern 3	Midday Pattern	09:00 - 15:10
Pattern 4	Evening Peak Patten	15:10 - 20:00
Pattern 3	Midday Pattern	20:00 - 00:00

Saturday

Pattern 3	Midday Pattern	06:30 - 01:00

Sunday

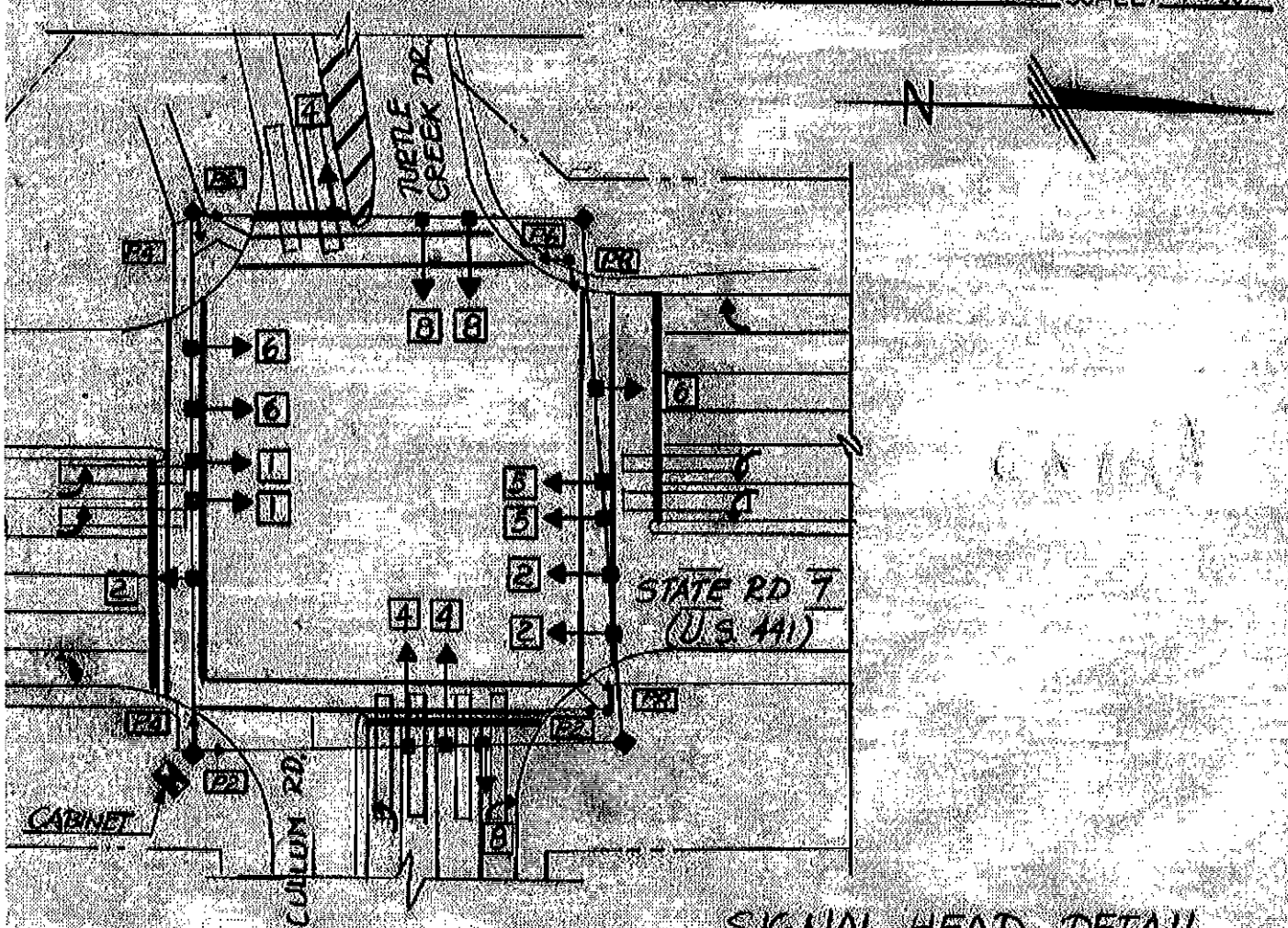
Pattern 3	Midday Pattern	06:30 - 23:00

BROWARD COUNTY TRAFFIC ENGINEERING DIVISION
TRAFFIC SIGNAL INSTALLATION ORDER

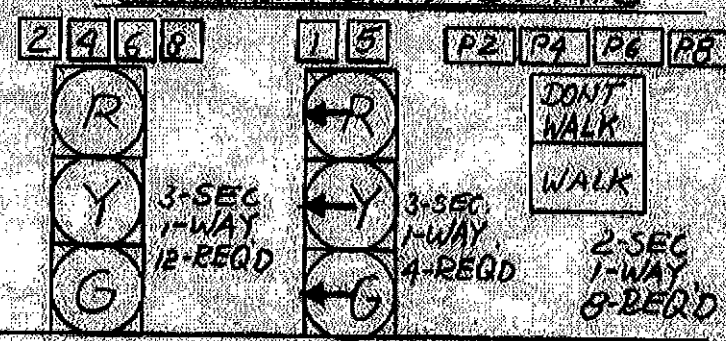
LOCATION STATE RD. 7 (U.S. 441) & TURTLE CREEK DR/CULLUM RD

ORDER NO. _____ ISSUE DATE _____ REVISION NO. 1 COMPLETION DATE _____

DWG. NO. _____ FILE NO. A-510 CITY COCONUT CREEK SCALE 1" = 50'



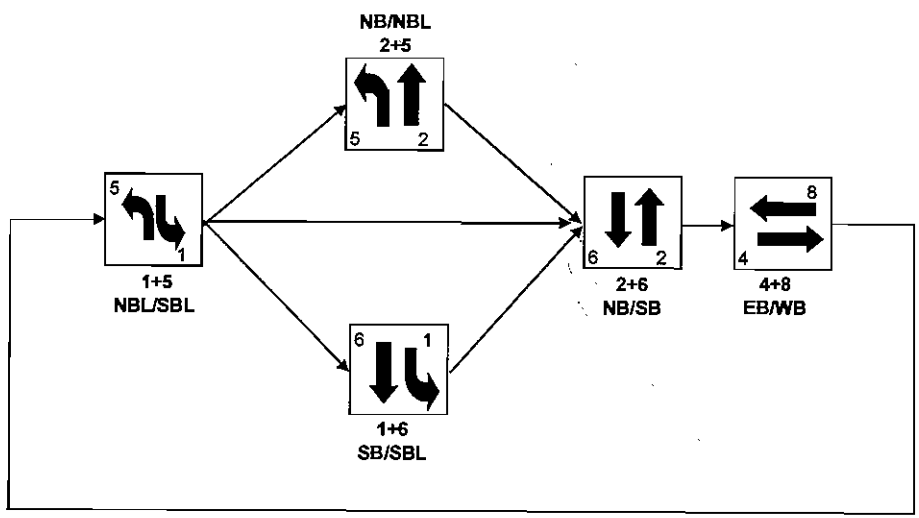
SIGNAL HEAD DETAIL



REMARKS: _____

Sequence of Operation for (1510) SR 7 (US 441) and Turtle Creek Drive

Coconut Creek



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1039	**Initial Operation Date**	4/11/79
Controller Type	2070 LN	**System Number**	1039
Modification Number	15	**Modification Date**	10/06/2010
Drawing/Project No		**FPL Grid Number**	87292490903
Intersection	SR 7 (US 441) and WILES ROAD		
Municipality	CORAL SPRINGS		

Controller Phase	1	2	3	4	5	6	7	8
Facc Number	1	2	3,2R	4	5	6	7	8
Direction	SBL	NB	WBL	EB	NBL	SB	EBL	WB
Initial Green(MIN)	5	10	5	6	5	10	5	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	20	45	25	35	25	45	35	35
Maximum Green II								
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay				20-RT				20-RT
Walk		7		5		7		5
Pedestrian Clearance		29		32		29		29
Permissive	DUAL		DUAL		DUAL		DUAL	
Flash Operation	RED	RED	RED	RED	RED	RED	RED	RED
Green Return	7	1	3	5	8	2	4	6

Attachment

Channel/Drop **37 / 1** **IP Address**

NOTES:

1. VIDEO DETECTION.
2. DUAL ENTRY HARDWIRED, EAST/WEST.
3. NBR (HEAD 2R) HARDWIRED TO WBL.
4. MOD. 15 INSTALLS VIDEO DETECTION AND UPDATES MINIMUM GREENS.

Submitted By _____ **Approved By** _____

System Number: 1039
Section Number: 4

Thursday, April 21, 2011
1:52:24 PM

Pattern Timing Plan Data

SR 7 & Wiles Rd

Pattern Number	Offset	Cycle Length	Phase Durations NS	EWL	WBL	EBL	EW	NSL	NBL	SBL
1	126	140	47	29	0	0	46	17	0	0
2	158	160	66	30	0	0	47	17	0	0
3	156	160	66	30	0	0	47	17	0	0
4	137	160	66	30	0	0	47	17	0	0
5	126	140	47	29	0	0	46	17	0	0
6	0	110	42	16	0	0	37	15	0	0
12	1	160	52	41	0	0	46	22	0	0
13	156	160	66	30	0	0	47	17	0	0
14	10	160	46	41	0	0	46	28	0	0

Fixed Intervals:

Min Green	7	5	5	5	6	5	5	5
Flashing Don't Walk	29	0	0	0	0	0	0	0
Yellow	4	4	4	4	4	4	4	4
All Red	2	2	2	2	2	2	2	2
Green Returns	1,2	3,4	3	4	5,6	7,8	8	7
Command	YIELD	FO 1&2	FO 1	FO 2	FO 1&2	FO 1&2	FO 2	FO 1

Time Of Day Schedule

Monday - Friday

Pattern 2	Morning Peak Pattern	06:00 - 09:00
Pattern 3	Midday Pattern	09:00 - 15:10
Pattern 4	Evening Peak Patten	15:10 - 20:00
Pattern 3	Midday Pattern	20:00 - 00:00

Saturday

Pattern 3	Midday Pattern	06:30 - 01:00

Sunday

Pattern 3	Midday Pattern	06:30 - 23:00

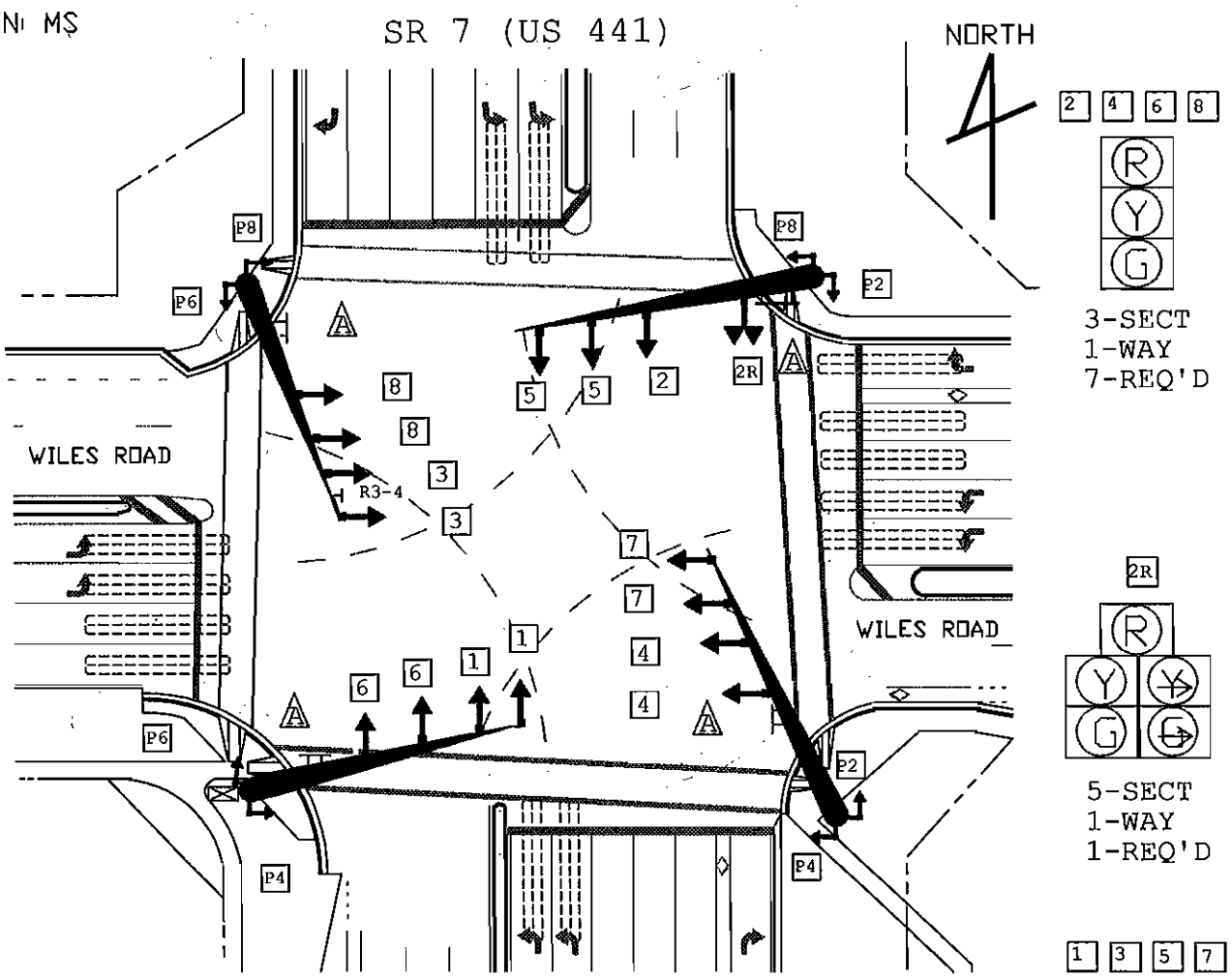
BROWARD COUNTY TRAFFIC ENGINEERING DIVISION

LOCATION **SR 7 (US 441) & WILES ROAD**

ORDER NO -- ISSUE DATE -- REV NO. 6 COMPL DATE 4/28/09

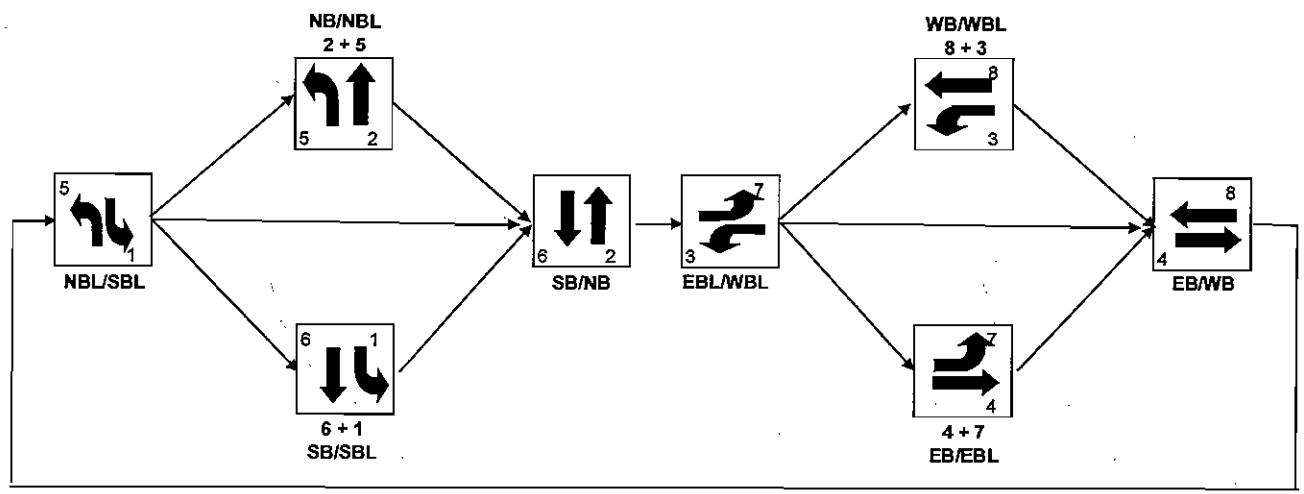
DWG. NO. 01-03-05-01 FILE NO. 1039 CITY CORAL SPRINGS SCALE: 1" = 50'

DRAWN: MS



THIS REVISION REMOVES SBRT SIGNAL,
EB U-TURN PROHIBITION, PER FDOT REQUEST

Sequence of Operation for (1039) SR 7 (US 441) and Wiles Road, Coral Springs



BROWARD COUNTY TRAFFIC ENGINEERING

ACTUATED TRAFFIC SIGNAL TIMING SHEET

Intersection Number	1569	**Initial Operation Date**	08/30/01
Controller Type	NEMA 8 PHASE	**System Number**	1569
Modification Number	5	**Modification Date**	W.O.
Drawing/Project No		**FPL Grid Number**	87392520207
Intersection	LYONS ROAD and WILES ROAD		
Municipality	COCONUT CREEK		

Controller Phase	1	2	3	4	5	6	7	8
Face Number	1	2	3	4	5	6	7	8
Direction	SBL	NB	WBL	EB	NBL	SB	EBL	WB
Initial Green(MIN)	5	12	5	6	5	12	5	6
Vehicle Ext.(GAP)	1.5	3.0	1.5	2.0	1.5	3.0	1.5	2.0
Maximum Green I	18	60	18	40	18	60	18	40
Maximum Green II								
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All Red Clearance	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Phase Recall	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
Detector Delay				20-RT				20-RT
Walk		7		7		7		7
Pedestrian Clearance		36		35		36		32
Permissive	DUAL		DUAL		DUAL		DUAL	
Flash Operation	RED	RED	RED	RED	RED	RED	RED	RED
Green Return	7	1	3	5	8	2	4	6

Attachment

Channel/Drop **37 / 6** **IP Address**

NOTES:

1. DUAL ENTRY HARDWIRED EAST/WEST.
2. WITH WOIT2006060722 DATED 6/21/06, CHANGES FLASH PATTERN TO ALL RED.

Submitted By _____ **Approved By** _____

System Number: 1569
Section Number: 170

Thursday, April 21, 2011
1:52:50 PM

Pattern Timing Plan Data

Lyons Rd & Wiles Rd

Pattern Number	Offset	Cycle Length	Phase Durations NS	EWL	WBL	EBL	EW	NSL	NBL	SBL
1	1	120	57	20	0	0	23	20	0	0
2	66	160	60	25	0	0	50	25	0	0
3	19	140	57	17	0	0	49	17	0	0
4	132	160	63	26	0	0	51	20	0	0
5	1	120	57	20	0	0	23	20	0	0
6	1	120	57	20	0	0	23	20	0	0

Fixed Intervals:

Min Green	12	5	5	5	6	5	5	5
Flashing Don't Walk	36	0	0	0	0	0	0	0
Yellow	4	4	4	4	4	4	4	4
All Red	2	2	2	2	2	2	2	2
Green Returns	1,2	3,4	3	4	5,6	7,8	8	7
Command	YIELD	FO 1&2	FO 1	FO 2	FO 1&2	FO 1&2	FO 2	FO 1

Time Of Day Schedule
Monday - Friday

Pattern 2	Morning Peak Pattern	06:00 - 09:00
Pattern 3	Midday Pattern	09:00 - 15:10
Pattern 4	Evening Peak Patten	15:10 - 20:00
Pattern 3	Midday Pattern	20:00 - 00:00
	Saturday	
Pattern 3	Midday Pattern	06:30 - 01:00
	Sunday	
Pattern 3	Midday Pattern	06:30 - 23:00

BROWARD COUNTY TRAFFIC ENGINEERING DIVISION

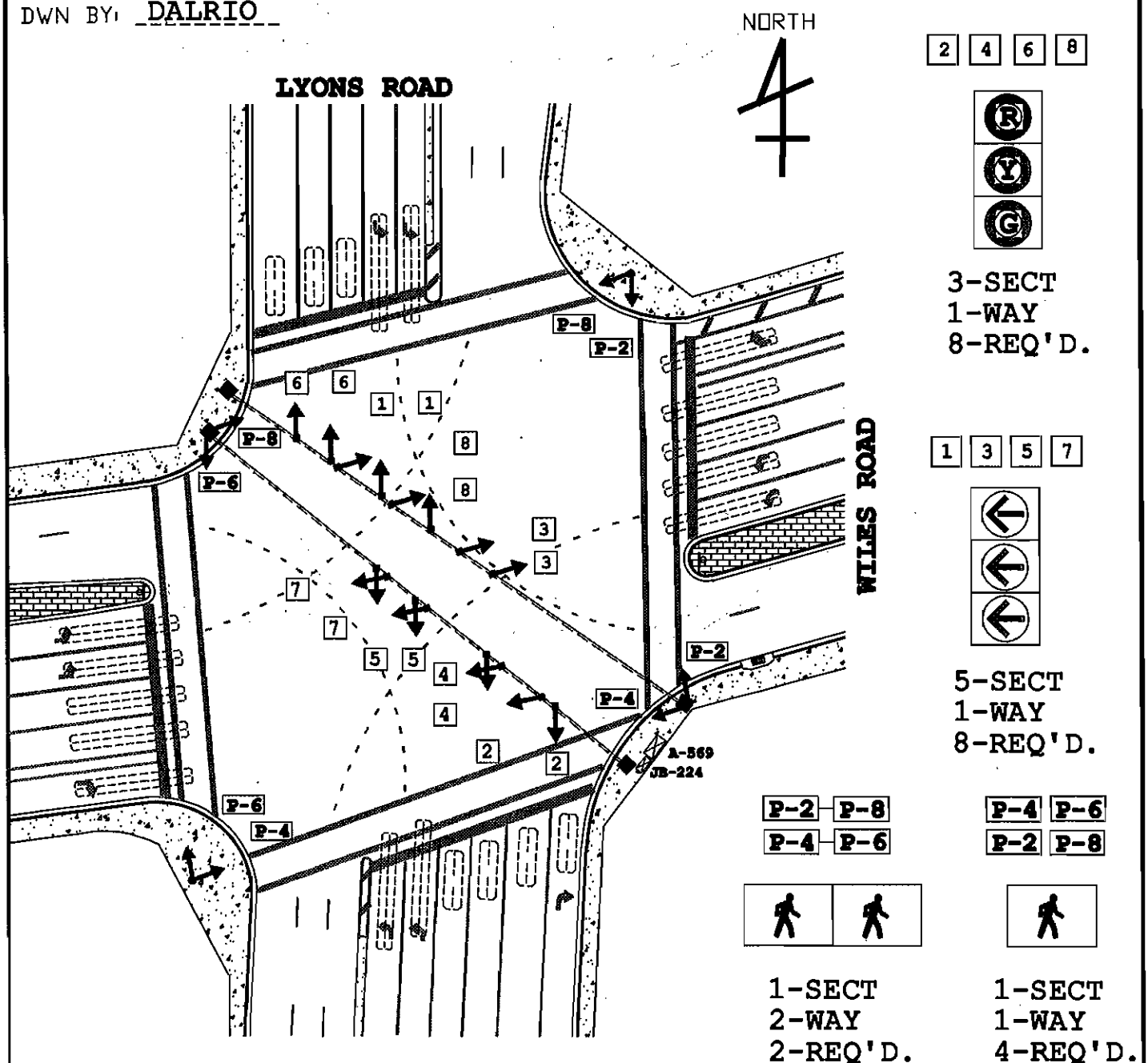
TRAFFIC SIGNAL INSTALLATION ORDER

LOCATION LYONS ROAD AND WILES ROAD

ORDER NO BCED ISSUE DATE --- REVISION NO. 0 COMPLETION DATE 8/30/01

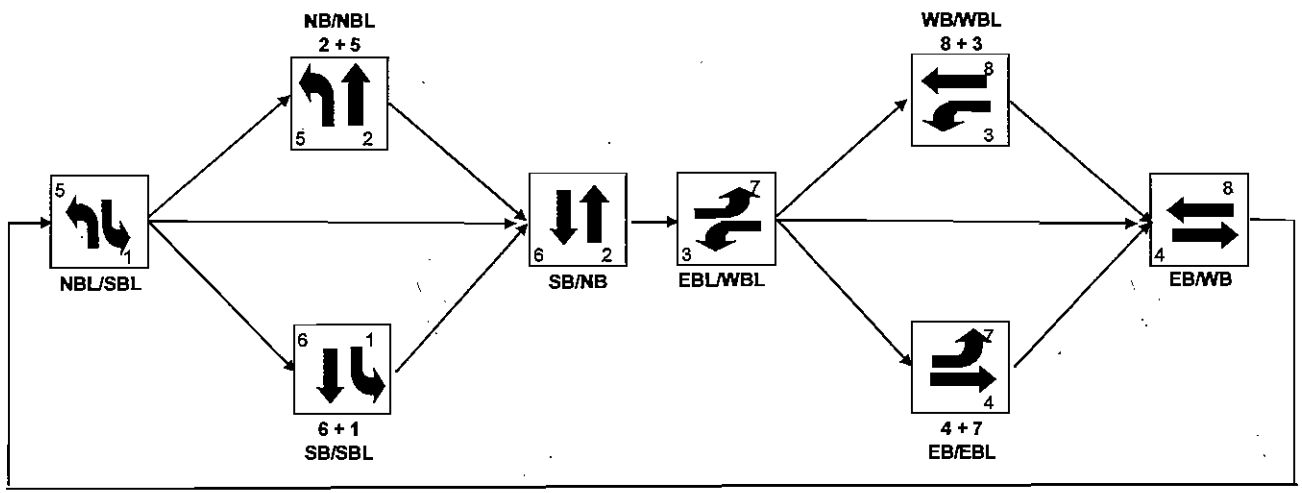
DWG. NO. 01-11-04-01 FILE NO. A-569 CITY COCONUT CREEK SCALE: 1" = 50'

DWN BY: DALRIO



REMARKS

Sequence of Operation for (1569) Lyons Road and Wiles Road, Coconut Creek Drive



Appendix C

Hollywood Hard Rock Casino Data

SEMINOLE HARD ROCK TRIP GENERATION JANUARY 2007

	19-Jan-07 Friday			20-Jan-07 Saturday			21-Jan-07 Sunday			22-Jan-07 Monday			23-Jan-07 Tuesday			24-Jan-07 Wednesday			25-Jan-07 Thursday		
HOUR	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
00:00-01:00	269	596	865	993	1144	2137	1555	1436	2991	222	492	714	160	420	580	208	517	725	181	546	727
01:00-02:00	206	455	661	671	1129	1800	906	1481	2387	126	295	421	109	254	363	116	315	431	154	356	510
02:00-03:00	135	434	569	374	1234	1608	451	1488	1939	88	260	348	79	235	314	61	224	285	112	252	364
03:00-04:00	98	283	381	238	1200	1438	270	1507	1777	67	164	231	58	156	214	61	155	216	79	231	310
04:00-05:00	124	228	352	217	814	1031	284	1234	1518	79	101	180	63	115	178	69	118	187	77	137	214
05:00-06:00	137	128	265	129	456	585	171	755	926	128	104	232	100	73	173	114	91	205	113	97	210
06:00-07:00	181	162	343	183	271	454	149	326	475	182	131	313	189	126	315	167	166	333	199	133	332
07:00-08:00	226	184	410	211	223	434	191	272	463	262	177	439	248	152	400	254	181	435	443	197	640
08:00-09:00	429	158	587	309	222	531	268	176	444	341	148	489	332	136	468	294	184	478	417	130	547
09:00-10:00	383	186	569	389	203	592	351	157	508	413	172	585	361	177	538	360	212	572	436	206	642
10:00-11:00	577	381	958	515	261	776	421	241	662	550	235	785	403	221	624	439	294	733	475	231	706
11:00-12:00	513	333	846	526	333	859	461	335	796	427	300	727	455	263	718	507	283	790	574	329	903
12:00-13:00	552	398	950	580	378	958	521	330	851	505	330	835	494	302	796	617	377	994	670	345	1015
13:00-14:00	601	503	1104	611	410	1021	638	411	1049	462	380	842	622	401	1023	584	382	966	673	520	1193
14:00-15:00	650	562	1212	658	481	1139	731	456	1187	505	516	1021	601	482	1083	641	529	1170	806	666	1472
15:00-16:00	649	671	1320	733	598	1331	726	561	1287	539	551	1090	608	546	1154	638	611	1249	833	818	1651
16:00-17:00	694	615	1309	773	660	1433	685	674	1359	499	602	1101	682	645	1327	713	625	1338	1076	641	1717
17:00-18:00	786	591	1377	828	674	1502	656	694	1350	529	603	1132	926	617	1543	808	609	1417	1352	640	1992
18:00-19:00	881	554	1435	1033	650	1683	619	666	1285	592	482	1074	945	516	1461	919	536	1455	1111	567	1678
19:00-20:00	1372	547	1919	1414	584	1998	644	572	1216	458	380	838	978	462	1440	1076	425	1501	985	441	1426
20:00-21:00	1128	558	1686	1564	702	2266	480	528	1008	389	365	754	442	506	948	527	468	995	649	526	1175
21:00-22:00	1186	759	1945	1605	856	2461	400	503	903	384	470	854	466	1091	1557	439	834	1273	598	710	1308
22:00-23:00	1187	967	2154	1716	1084	2800	438	774	1212	369	482	851	384	992	1376	433	1173	1606	591	1904	2495
23:00-24:00	1311	1068	2379	1877	1214	3091	310	632	942	288	610	898	281	699	980	303	834	1137	491	1256	1747
TOTALS	**14275**	**11321**	**25596**	**18147**	**15781**	**33928**	**12326**	**16209**	**28535**	**8404**	**8350**	**16754**	**9986**	**9587**	**19573**	**10348**	**10143**	**20491**	**13095**	**11879**	**24974**
MAX VOLU	**1372**	**1068**	**2379**	**1877**	**1234**	**3091**	**1555**	**1507**	**2991**	**592**	**610**	**1132**	**978**	**1091**	**1557**	**1076**	**1173**	**1606**	**1352**	**1904**	**2495**

Appendix D

Proposed Project Alternatives
Phased Development Trip Generation

Table D-1 Proposed Project Development Phasings, 2012 - 2020

Phase	Final Year in Phase	Use	Trust Lands	Trust Land Cumulative Total	Alternative A Fee-To-Trust	Alternative A Cumulative Total	Sub-Alternative A-1 Fee-To-Trust	Sub-Alternative A-1 Cumulative Total	Alternative B Fee-To-Trust	Alternative B Cumulative Total
Existing/ Complete Phase II	2012	Restaurant [1]	**11,206**	11,206	**41,068**	**41,068**	**41,068**	**41,068**	**41,068**	**41,068**
		Bar/Lounge [1]	**10,299**	10,299	**2,951**	**2,951**	**2,951**	**2,951**	**2,951**	**2,951**
		Casino [1]	**99,138**	99,138	**0**	0	**0**	0	**0**	0
		Garage [2]	**0**	0	**2,407**	**2,407**	**2,407**	**2,407**	**2,407**	**2,407**
		Retail [1]	**1,516**	1,516	**3,611**	**3,611**	**3,611**	**3,611**	**3,611**	**3,611**
		Showroom [2]	**0**	0	**0**	**0**	**0**	**0**	**0**	**0**
		Convention Center [1]	**0**	0	**0**	**0**	**0**	**0**	**0**	**0**
		Spa [1]	**0**	0	**0**	**0**	**0**	**0**	**0**	**0**
		Hotel [3]	**0**	0	**0**	0	**0**	0	**0**	0
Phase III	2015	Restaurant [1]	0	11,206	0	**41,068**	0	**41,068**	40,566	**81,634**
		Bar/Lounge [1]	0	10,299	0	**2,951**	0	**2,951**	14,462	**17,413**
		Casino [1]	25,650	124,788	0	0	0	0	0	0
		Garage [2]	0	0	0	**2,407**	0	**2,407**	2,426	**4,833**
		Retail [1]	0	1,516	0	**3,611**	0	**3,611**	50,053	**53,664**
		Showroom [2]	*0*	*0*	*0*	***0***	*0*	***0***	*2,500*	***2,500***
		Convention Center [1]	*0*	*0*	*0*	***0***	*0*	***0***	*78,303*	***78,303***
		Spa [1]	*0*	*0*	*0*	***0***	*0*	***0***	*0*	***0***
		Hotel [3]	500	500	0	0	0	0	500	500
Phase IV	2018	Restaurant [1]	6,700	17,906	54,532	95,600	54,532	95,600	0	**81,634**
		Bar/Lounge [1]	-6,054	4,245	15,255	18,206	15,255	18,206	0	**17,413**
		Casino [1]	19,350	144,138	0	0	0	0	0	0
		Garage [2]	0	0	1,365	**3,772**	1,365	**3,772**	0	**4,833**
		Retail [1]	-1,516	0	46,989	50,600	46,989	50,600	0	**53,664**
		Showroom [2]	*0*	*0*	*2,500*	*2,500*	*2,500*	*2,500*	*0*	***2,500***
		Convention Center [1]	*93,466*	*93,466*	*76,200*	*76,200*	*76,200*	*76,200*	*0*	***78,303***
		Spa [1]	*0*	*0*	*0*	*0*	*0*	*0*	*0*	***0***
		Hotel [3]	0	500	0	0	0	0	0	500
Phase V	2020	Restaurant [1]	0	**17,906**	0	**95,600**	0	**95,600**	0	**81,634**
		Bar/Lounge [1]	0	4,245	0	**18,206**	0	**18,206**	0	**17,413**
		Casino [1]	0	**144,138**	0	**0**	0	**0**	0	**0**
		Garage [2]	0	**0**	0	**3,772**	0	**3,772**	0	**4,833**
		Retail [1]	0	**0**	0	**50,600**	0	**50,600**	0	**53,664**
		Showroom [2]	*0*	***0***	*0*	***2,500***	*0*	***2,500***	*0*	***2,500***
		Convention Center [1]	*0*	***93,466***	*0*	***76,200***	*0*	***76,200***	*0*	***78,303***
		Spa [1]	*0*	***0***	*19,800*	*19,800*	*19,800*	*19,800*	*20,000*	***20,000***
		Hotel [3]	0	**500**	1,000	**1,000**	1,000	**1,000**	0	**500**

1 Square Feet
2 Spaces/Seats
3 Rooms

Source: Friedmutter Group, Updated March 2012.

Table D-2 PHASE III, 2013-2015: Additional Non-Casino Uses by Area

Alternative A	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	0 Rooms	N/A	500 Rooms	100.0%	0.0%
Retail	1,516 SF	3,611 SF		5,127 SF	29.6%	70.4%
Restaurant/Lounge	21,505 SF	44,019 SF		65,524 SF	32.8%	67.2%
Sub-Alternative A-1	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	0 Rooms	N/A	500 Rooms	100.0%	0.0%
Retail	1,516 SF	3,611 SF		5,127 SF	29.6%	70.4%
Restaurant/Lounge	21,505 SF	44,019 SF		65,524 SF	32.8%	67.2%
Alternative B	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	500 Rooms	N/A (1)	1,000 Rooms	50.0%	50.0%
Retail	1,516 SF	53,664 SF		55,180 SF	2.7%	97.3%
Restaurant/Lounge	21,505 SF	99,047 SF		120,552 SF	17.8%	82.2%
Alternative C	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	N/A	0 Rooms	500 Rooms	100.0%	0.0%
Retail	1,516 SF		3,611 SF	5,127 SF	29.6%	70.4%
Restaurant/Lounge	21,505 SF		44,019 SF	65,524 SF	32.8%	67.2%
Sub-Alternative C-1	Sub-Alternative C-1 assumes no further development on either Tract 65 or Non-Trust Parcels.					

Table D-3 Phase III, 2013-2015: ITE Gross Trips for Non-Casino Uses for Combined Trust and Non-Trust Properties

	Land Uses	Densities	ITE Based Trips	Percent Trips of Alternative A Gross Trips
Alternative A	Hotel	500 Rooms	245	23.05%
	Retail	5,127 SF	87	8.17%
	Lounge/ Restaurant	65,524 SF	731	68.78%
	Alternative A Gross Trips =		**1,063**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative A-1 Gross Trips**
Alternative A-1	Hotel	500 Rooms	245	23.05%
	Retail	5,127 SF	87	8.17%
	Lounge/ Restaurant	65,524 SF	731	68.78%
	Alternative A-1 Gross Trips =		**1,063**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative B Gross Trips**
Alternative B	Hotel	1,000 Rooms	537	23.27%
	Retail	55,180 SF	427	18.50%
	Lounge/ Restaurant	120,552 SF	1,344	58.22%
	Alternative B Gross Trips =		**2,308**	**99.99%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative C Gross Trips**
Alternative C	Hotel	500 Rooms	245	23.05%
	Retail	5,127 SF	87	8.18%
	Lounge/ Restaurant	65,524 SF	731	68.77%
	Alternative C Gross Trips =		**1,063**	**100.00%**
Alternative C-1	Alternative C-1 assumes no further development beyond Phase II (December 2011). The baseline 2011 two-way PM peak hour volume (Phase II) of 1,533 vehicle trips was determined based upon the Phase I traffic (1,086 PM peak hour trips) and a trip adjustment based on an increase of approximately 700 gaming units installed between March 2011 (Phase I) and December 2011 (Phase II).			

Table D-4 Phase III, 2013-2015: Non-Casino Trips for Combined Trust and Non-Trust Lands

Proposed Project Alternative Development	ITE Gross Trips	HHRC Gross Trips	Percent Alternative Gross of HHRC Gross	HHRC Non-Casino Trips	SCCC Non-Casino Trips
A	1,063	2,746	38.7%	639	247
A-1	1,063	2,746	38.7%	639	247
B	2,308	2,746	84.0%	639	537
C	1,063	2,746	38.7%	639	247
C-1	Alternative C-1 assumes no further development beyond Phase II (December 2011). The 2011 Phase II PM peak hour volume is 1,533 vehicles.				

Table D-5 Phase III, 2013-2015: Fee-To-Trust and Tract 65 Non-Casino Trips

Proposed Project Alternative	SCCC Non-casino Trips (1)	Land Use	Percent Trips Not in Tract 65 (2)	Percent of ITE based Trips (3)	Proposed Action Fee-To-Trust Trips	Non-Fee-To-Trust Non-Casino Trips	Tract 65 Non-Casino Trips
A	247	Hotel	0.00%	23.05%	0	N/A	119
		Retail	70.43%	8.17%	14		
		Restaurant/Lounge	67.18%	68.78%	114		
			Total Non-Tract 65		**128**		
A-1	247	Hotel	0.00%	23.05%	0	N/A	119
		Retail	70.43%	8.17%	14		
		Restaurant/Lounge	67.18%	68.78%	114		
			Total Non-Tract 65		**128**		
B	537	Hotel	50.00%	23.27%	62	N/A	121
		Retail	97.25%	18.50%	97		
		Restaurant/Lounge	82.16%	58.22%	257		
			Total Non-Tract 65		**416**		
C	247	Hotel	0.00%	23.05%	N/A	0	119
		Retail	70.43%	8.18%		14	
		Restaurant/Lounge	67.18%	68.77%		114	
			Total Non-Tract 65			**128**	
C-1	Alternative C-1 assumes no further development beyond what exists in 2011. The 2011 PM peak hour volume is 979 vehicles.						

Notes:

(1) From Table D-4.

(2) From Table D-2.

(3) From Table D-3.

Table D-6 Phase III, 2013-2015: Alternative Development PM Peak Hour Trips

Trip Element	Alternative A	Sub-Alternative A-1	Alternative B	Alternative C
2020 SCCC PM Peak Hour Trips (Casino Related)	1,898	1,898	1,898	1,898
Tract 65 Non-Casino Trips	119	119	121	119
Total Tract 65 Trips	**2,017**	**2,017**	**2,019**	**2,017**
Fee-To-Trust Parcels	**128**	**128**	**416**	**0**
STOF Owned Parcels	**0**	**0**	**0**	**128**

Table D-7 PHASE IV, 2016-2018: Additional Non-Casino Uses by Area

Alternative A	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	0 Rooms	N/A	500 Rooms	100.0%	0.0%
Retail	0 SF	50,600 SF		50,600 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF	113,806 SF		135,957 SF	16.3%	83.7%
Sub-Alternative A-1	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	0 Rooms	N/A	500 Rooms	100.0%	0.0%
Retail	0 SF	50,600 SF		50,600 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF	113,806 SF		135,957 SF	16.3%	83.7%
Alternative B	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	500 Rooms	N/A (1)	1,000 Rooms	50.0%	50.0%
Retail	0 SF	53,664 SF		53,664 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF	99,047 SF		121,198 SF	18.3%	81.7%
Alternative C	**Density Tract 65**	**Density Fee-To-Trust**	**Density Non-Trust Land**	**Total Tract 65 and Fee-To-Trust**	**Percent (%) Tract 65**	**Percent (%) Non-Tract 65**
Hotel	500 Rooms	N/A	0 Rooms	500 Rooms	100.0%	0.0%
Retail	0 SF		50,600 SF	50,600 SF	0.0%	100.0%
Restaurant/Lounge	22,151 SF		113,806 SF	135,957 SF	16.3%	83.7%
Sub-Alternative C-1	Alternative C-1 assumes no Federal Action and no additional development on either Tract 65 or Non-Trust Parcels.					

Table D-8 Phase IV, 2016-2018: ITE Gross Trips for Non-Casino Uses for Combined Trust and Non-Trust Properties

	Land Uses	Densities	ITE Based Trips	Percent Trips of Alternative A Gross Trips
Alternative A	Hotel	500 Rooms	245	11.32%
	Retail	50,600 SF	403	18.61%
	Lounge/ Restaurant	135,957 SF	1,516	70.07%
		Alternative A Gross Trips =	**2,164**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative A-1 Gross Trips**
Alternative A-1	Hotel	500 Rooms	245	11.32%
	Retail	50,600 SF	403	18.61%
	Lounge/ Restaurant	135,957 SF	1,516	70.07%
		Alternative A-1 Gross Trips =	**2,164**	**100.00%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative B Gross Trips**
Alternative B	Hotel	1,000 Rooms	537	23.28%
	Retail	53,664 SF	419	18.16%
	Lounge/ Restaurant	121,198 SF	1,351	58.55%
		Alternative B Gross Trips =	**2,307**	**99.99%**
	Land Uses	**Densities**	**ITE Based Trips**	**Percent Trips of Alternative C Gross Trips**
Alternative C	Hotel	500 Rooms	245	11.32%
	Retail	50,600 SF	403	18.62%
	Lounge/ Restaurant	135,957 SF	1,516	70.06%
		Alternative C Gross Trips =	**2,164**	**100.00%**
Alternative C-1	Alternative C-1 assumes no further development beyond Phase II (December 2011). The baseline 2011 two-way PM peak hour volume (Phase II) of 1,533 vehicle trips was determined based upon the Phase I traffic (1,086 PM peak hour trips) and a trip adjustment based on an increase of approximately 700 gaming units installed between March 2011 (Phase I) and December 2011 (Phase II).			

Table D-9 Phase IV, 2016-2018: Non-Casino Trips for Combined Trust and Non-Trust Lands

Proposed Project Alternative Development	ITE Gross Trips	HHRC Gross Trips	Percent Alternative Gross of HHRC Gross	HHRC Non-Casino Trips	SCCC Non-Casino Trips
A	2,164	2,746	78.8%	639	504
A-1	2,164	2,746	78.8%	639	504
B	2,307	2,746	84.0%	639	537
C	2,164	2,746	78.8%	639	504
C-1	Alternative C-1 assumes no further development beyond Phase II (December 2011). The 2011 Phase II PM peak hour volume is 1,533 vehicles.				

Table D-10 Phase IV, 2016-2018: Fee-To-Trust and Tract 65 Non-Casino Trips

Proposed Project Alternative	SCCC Non-casino Trips (1)	Land Use	Percent Trips Not in Tract 65 (2)	Percent of ITE based Trips (3)	Proposed Action Fee-To-Trust Trips	Non-Fee-To-Trust Non-Casino Trips	Tract 65 Non-Casino Trips
A	504	Hotel	0.00%	11.32%	0	N/A	115
		Retail	100.00%	18.61%	94		
		Restaurant/Lounge	83.71%	70.07%	295		
			Total Non-Tract 65		**389**		
A-1	504	Hotel	0.00%	11.32%	0	N/A	115
		Retail	100.00%	18.61%	94		
		Restaurant/Lounge	83.71%	70.07%	295		
			Total Non-Tract 65		**389**		
B	537	Hotel	50.00%	23.28%	62	N/A	121
		Retail	100.00%	18.16%	97		
		Restaurant/Lounge	81.72%	58.55%	257		
			Total Non-Tract 65		**416**		
C	504	Hotel	0.00%	11.32%	N/A	0	115
		Retail	100.00%	18.62%		94	
		Restaurant/Lounge	83.71%	70.06%		295	
			Total Non-Tract 65			**389**	
C-1	Alternative C-1 assumes no further development beyond what exists in 2011. The 2011 PM peak hour volume is 979 vehicles.						

Notes:

(1) From Table D-9

(2) From Table D-7

(3) From Table D-8

Table D-11 Phase IV, 2016-2018: Alternative Development PM Peak Hour Trips

Trip Element	Alternative A	Sub-Alternative A-1	Alternative B	Alternative C
2020 SCCC PM Peak Hour Trips (Casino Related)	1,898	2,250	1,898	1,898
Tract 65 Non-Casino Trips	115	115	121	115
Total Tract 65 Trips	**2,364**	**2,364**	**2,017**	**2,364**
Fee-To-Trust Parcels	**390**	**390**	**418**	**0**
STOF Owned Parcels	**0**	**0**	**0**	**390**

Appendix E

Growth Rates

TABLE E-1
SEMINOLE FEE-TO-TRUST CASINO DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
GROWTH RATES BASED ON FDOT HISTORICAL COUNTS

2-Apr-12

ROADWAY	[1] COUNT STATION	TREND ANNUAL HISTORIC GROWTH RATE	TREND R SQUARE	[2] ADJUSTED TREND ANNUAL HISTORIC GROWTH RATE
SAMPLE ROAD				
EAST OF SR 7/US 441	FDOT-0467	0.09%	0.45%	0.50%
WEST OF SR 7/US 442	FDOT-0123	-0.49%	11.82%	0.50%
WEST OF SR 91/ FLA TURNPIKE	FDOT-0053	2.51%	46.51%	2.51%
AVERAGE GROWTH RATE =		**0.70%**		**1.17%**
NW 31 STREET				
EAST OF SR 7/US 441	FDOT-9769	-9.17%	82.08%	0.50%
AVERAGE GROWTH RATE =		**-9.17%**		**0.50%**
WILES ROAD				
EAST OF SR 7/US 441	FDOT-9581	1.52%	2.55%	1.52%
WEST OF SR 7/US 442	FDOT-7116	-2.76%	45.92%	0.50%
EAST OF LYONS ROAD	FDOT-9694	-3.22%	89.02%	0.50%
AVERAGE GROWTH RATE =		**-1.49%**		**0.84%**
US 441/SR7				
NORTH OF SR 834/SAMPLE RD	FDOT-5112	-0.73%	21.85%	0.50%
SOUTH OF SR 834/SAMPLE RD	FDOT-0427	1.71%	31.83%	1.71%
RAMP FROM SB SR7/US 441 TO SR 834 SAMPLE RD	FDOT-4506	-2.16%	75.01%	0.50%
RAMP FROM SR 834 SAMPLE RD TO NB SR7/US 441	FDOT-4505	-2.03%	70.31%	0.50%
AVERAGE GROWTH RATE =		**-0.80%**		**0.80%**
BANKS ROAD				
SOUTH OF SAMPLE ROAD	FDOT-9108	-5.54%	69.66%	0.50%
AVERAGE GROWTH RATE =		**-5.54%**		**0.50%**
TURTLE CREEK DRIVE				
NORTH OF SAMPLE ROAD	FDOT-9768	-1.11%	1.78%	0.50%
AVERAGE GROWTH RATE =		**-1.11%**		**0.50%**
LYONS ROAD				
SOUTH OF SAWGRASS EXPRESSWAY	FDOT-9145	-4.75%	47.09	0.50%
NORTH OF SAMPLE ROAD	FDOT-8054 [3]	0.00%	59.76%	0.50%
NORTH OF COPANS ROAD	FDOT-9143	-1.06%	11.52%	0.50%
AVERAGE GROWTH RATE =		**-1.94%**		**0.50%**
TOTAL AVERAGE GROWTH RATE =		**-1.70%**		**0.77%**

NOTES:
[1] COUNT STATION OBTAINED FROM 2010 TRAFFIC INFORMATION CD PUBLISHED BY FDOT.
[2] MINIMUM GROWTH RATE IS 0.5%.
[3] DATA OBTAINED FROM 2009 TRAFFIC INFORMATION CD PUBLISHED BY FDOT.

TABLE E-2
SEMINOLE FEE-TO-TRUST CASINO DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
MODEL DERIVED GROWTH RATE

15-May-10

ROADWAY FROM	TO	2005 AADT	2035 AADT	MODEL DERIVED GROWTH RATE	[1] ADJUSTED MODEL DERIVED GROWTH RATE
Sample Road (E/W)					
University Drive	Riverside Drive	18,579	22,747	0.68%	0.68%
Riverside Drive	Rock Island Road	57,364	68,792	0.61%	0.61%
Rock Island Road	SR 7	51,441	52,631	0.08%	0.50%
SR 7	NW 54th Avenue	40,981	49,453	0.63%	0.63%
NW 54th Avenue	Banks Road	40,584	49,453	0.66%	0.66%
Banks Road	Lyons Road	36,741	52,537	1.20%	1.20%
Lyons Road	Florida's Turnpike	52,124	52,757	0.04%	0.50%
Florida's Turnpike	Blount Road	60,598	75,883	0.75%	0.75%
Blount Road	Powerline Road	61,128	72,453	0.57%	0.57%
AVERAGE GROWTH RATE =				**0.58%**	**0.68%**
Wiles Road (E/W)					
University Drive	Riverside Drive	31,557	30,467	-0.12%	0.50%
Riverside Drive	Rock Island Road	38,341	49,907	0.88%	0.88%
Rock Island Road	SR 7	46,094	70,934	1.45%	1.45%
SR 7	Banks Road	29,456	40,318	1.05%	1.05%
Banks Road	Lyons Road	29,714	40,950	1.07%	1.07%
Lyons Road	Powerline Road	N/A	43,468	---	0.50%
AVERAGE GROWTH RATE =				**0.87%**	**0.91%**
Riverside Drive (N/S)					
Atlantic Boulevard	Royal Palm Boulevard	39,117	42,166	0.25%	0.50%
Royal Palm Boulevard	Sample Road	37,749	42,410	0.39%	0.50%
Sample Road	Wiles Road	14,500	19,953	1.07%	1.07%
Wiles Road	Holmberg Road	7,763	16,449	2.53%	2.53%
AVERAGE GROWTH RATE =				**1.06%**	**1.15%**
Rock Island Road (N/S)					
Atlantic Boulevard	Margate Boulevard	26,230	32,176	0.68%	0.68%
Margate Boulevard	Royal Palm Boulevard	39,623	46,237	0.52%	0.52%
Royal Palm Boulevard	Sample Road	23,457	30,997	0.93%	0.93%
Sample Road	Wiles Road	20,165	31,007	1.44%	1.44%
AVERAGE GROWTH RATE =				**0.89%**	**0.89%**
SR 7 (N/S)					
Southgate Blvd	Atlantic Boulevard	63,019	80,563	0.82%	0.82%
Atlantic Boulevard	Margate Boulevard	63,846	78,610	0.70%	0.70%
Margate Boulevard	Coconut Creek Parkway	54,884	70,108	0.82%	0.82%
Coconut Creek Parkway	Copans Road	54,297	65,856	0.65%	0.65%
Copans Road	NW 31 Street	38,050	58,584	1.45%	1.45%
NW 31 Street	Sample Road	23,182	41,195	1.93%	1.93%
Sample Road	NW 40 Street	41,566	38,015	-0.30%	0.50%
NW 40 Street	Cullum Road	46,175	38,015	-0.65%	0.50%
Cullum Road	Wiles Road	46,175	46,091	-0.01%	0.50%
Wiles Road	Sawgrass Expressway	50,879	63,760	0.76%	0.76%
Sawgrass Expressway	Holmberg Road	61,250	77,849	0.80%	0.80%
Holmberg Road	Hillsboro Boulevard	60,535	66,943	0.34%	0.50%
Hillsboro Boulevard	Palm Beach County Line	60,103	65,208	0.27%	0.50%
AVERAGE GROWTH RATE =				**0.58%**	**0.80%**
Banks Road (N/S)					
Atlantic Boulevard	Coconut Creek Parkway	17,252	22,983	0.96%	0.96%
Coconut Creek Parkway	Copans Road	22,267	31,125	1.12%	1.12%
Copans Road	Sample Road	18,213	21,625	0.57%	0.57%
Sample Road	Cullum Road	N/A	38,015	---	0.50%
Cullum Road	Wiles Road	N/A	46,091	---	0.50%
AVERAGE GROWTH RATE =				**0.89%**	**0.73%**
Lyons Road (N/S)					
Atlantic Boulevard	NW 6th Manor	37,347	47,562	0.81%	0.81%
NW 6th Manor	Coconut Creek Parkway	35,431	44,405	0.76%	0.76%
Coconut Creek Parkway	Copans Road	31,188	36,164	0.49%	0.50%
Copans Road	Sample Road	35,471	39,088	0.32%	0.50%
Sample Road	Wiles Road	51,010	57,520	0.40%	0.50%
Wiles Road	Sawgrass Expressway	57,252	58,214	0.06%	0.50%
Sawgrass Expressway	Johnson Road	59,313	69,054	0.51%	0.51%
Johnson Road	Hillsboro Boulevard	56,567	66,629	0.55%	0.55%
Hillsboro Boulevard	Palm Beach County Line	48,427	63,309	0.90%	0.90%
AVERAGE GROWTH RATE =				**0.53%**	**0.61%**
Powerline Road (N/S)					
Atlantic Boulevard	Coconut Creek Parkway	34,034	42,944	0.78%	0.78%
Coconut Creek Parkway	Copans Road	52,153	68,355	0.91%	0.91%
Copans Road	Sample Road	47,208	57,426	0.66%	0.66%
Sample Road	Wiles Road	48,104	50,249	0.15%	0.50%
Wiles Road	SW 10th Street	44,083	68,540	1.48%	1.48%
SW 10th Street	Hillsboro Boulevard	43,583	64,777	1.33%	1.33%
Hillsboro Boulevard	Palm Beach County Line	36,722	59,055	1.60%	1.60%
AVERAGE GROWTH RATE =				**0.98%**	**1.04%**
TOTAL AVERAGE GROWTH RATE =				**0.73%**	**0.82%**

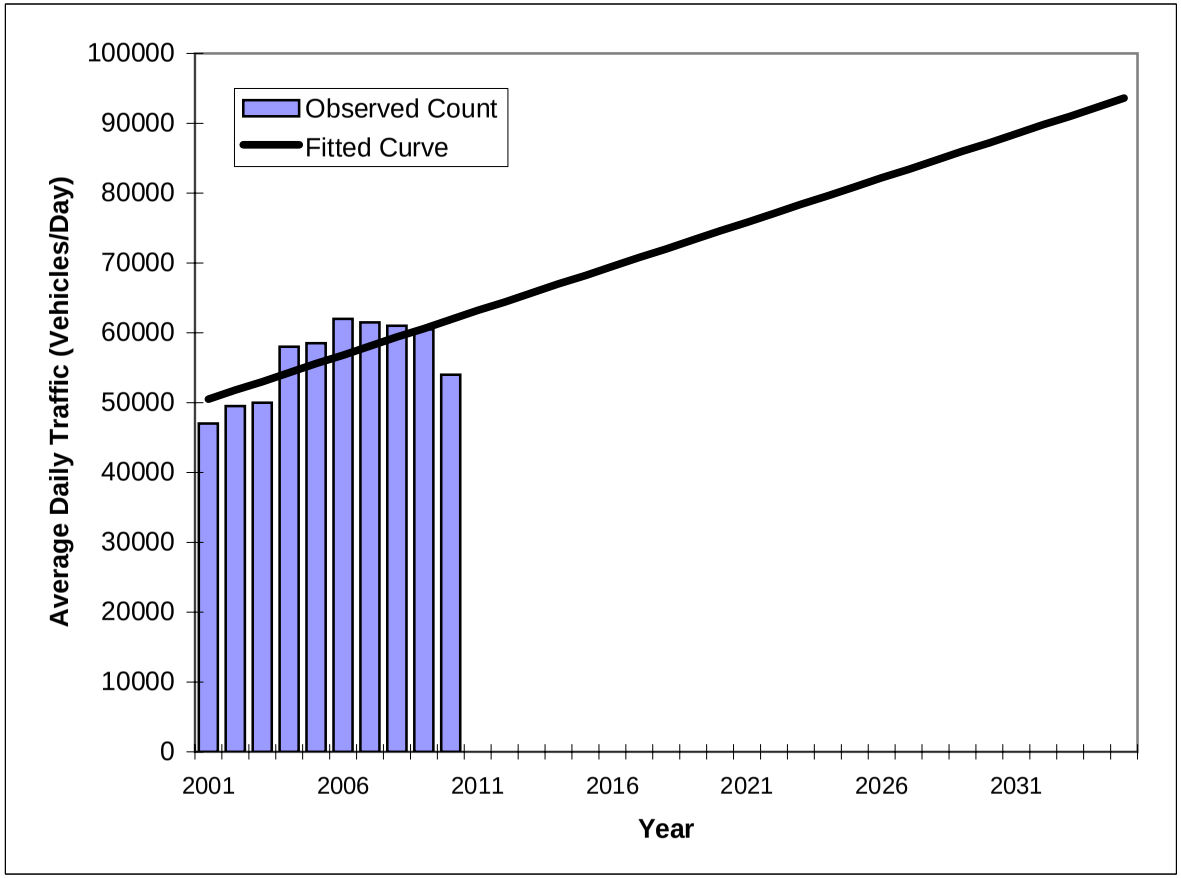
[1] MINIMUM GROWTH RATE IS 0.5%.

Traffic Trends - V2.0

SAMPLE RD -- - W OF SR 91/FLA TPK

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	0053
Highway:	SAMPLE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2001	47000	50500
2002	49500	51800
2003	50000	53000
2004	58000	54300
2005	58500	55600
2006	62000	56800
2007	61500	58100
2008	61000	59400
2009	60500	60600
2010	54000	61900
2015 Opening Year Trend		
2015	N/A	68200
2020 Mid-Year Trend		
2020	N/A	74600
2035 Design Year Trend		
2035	N/A	93600
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	1,267
Trend R-squared:	46.51%
Trend Annual Historic Growth Rate:	2.51%
Trend Growth Rate (2010 to Design Year):	2.05%
Printed:	2-Apr-12

Straight Line Growth Option

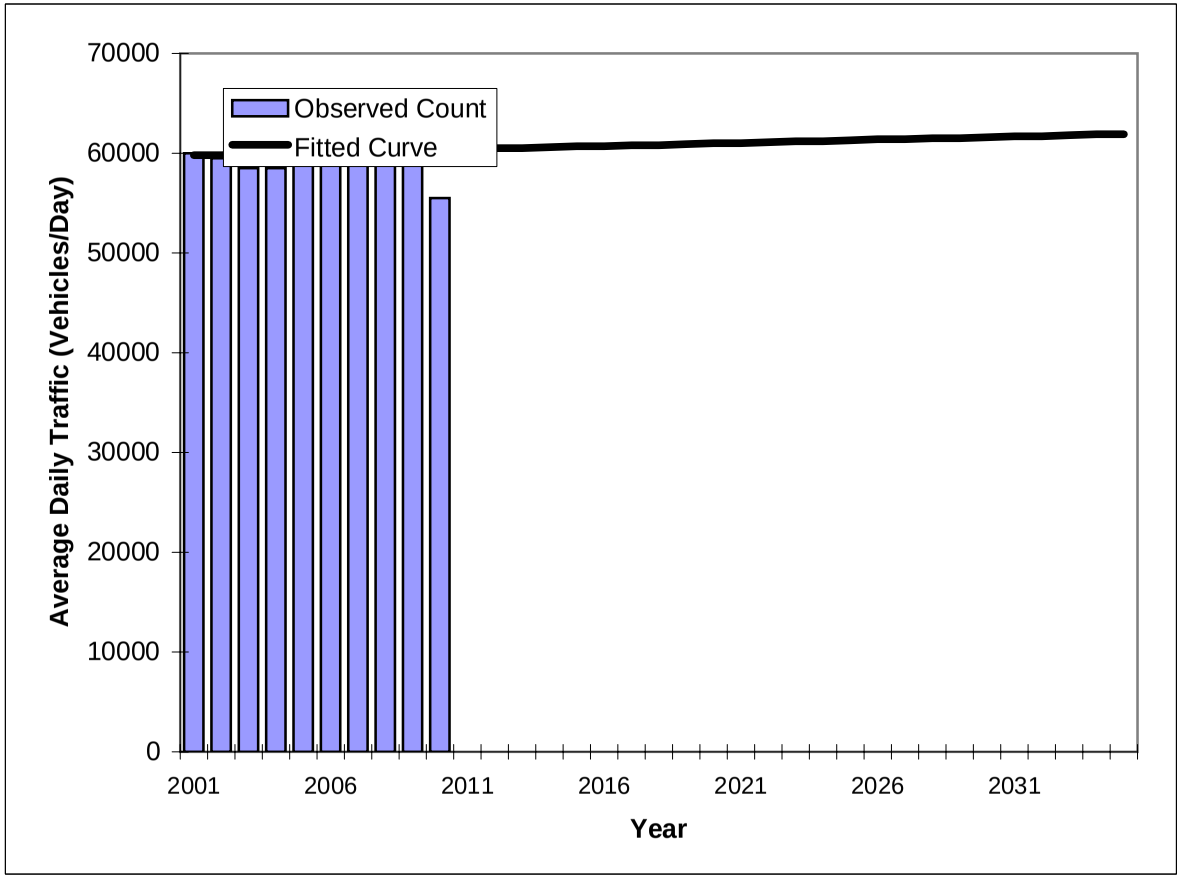
*Axle-Adjusted

Traffic Trends - V2.0

SAMPLE RD -- E OF SR 7/US 441

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	0467
Highway:	SAMPLE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2001	60000	59800
2002	59500	59800
2003	58500	59900
2004	58500	60000
2005	59500	60000
2006	59500	60100
2007	66000	60100
2008	63500	60200
2009	60000	60300
2010	55500	60300
2015 Opening Year Trend		
2015	N/A	60700
2020 Mid-Year Trend		
2020	N/A	61000
2035 Design Year Trend		
2035	N/A	61900
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	64
Trend R-squared:	0.45%
Trend Annual Historic Growth Rate:	0.09%
Trend Growth Rate (2010 to Design Year):	0.11%
Printed:	2-Apr-12

Straight Line Growth Option

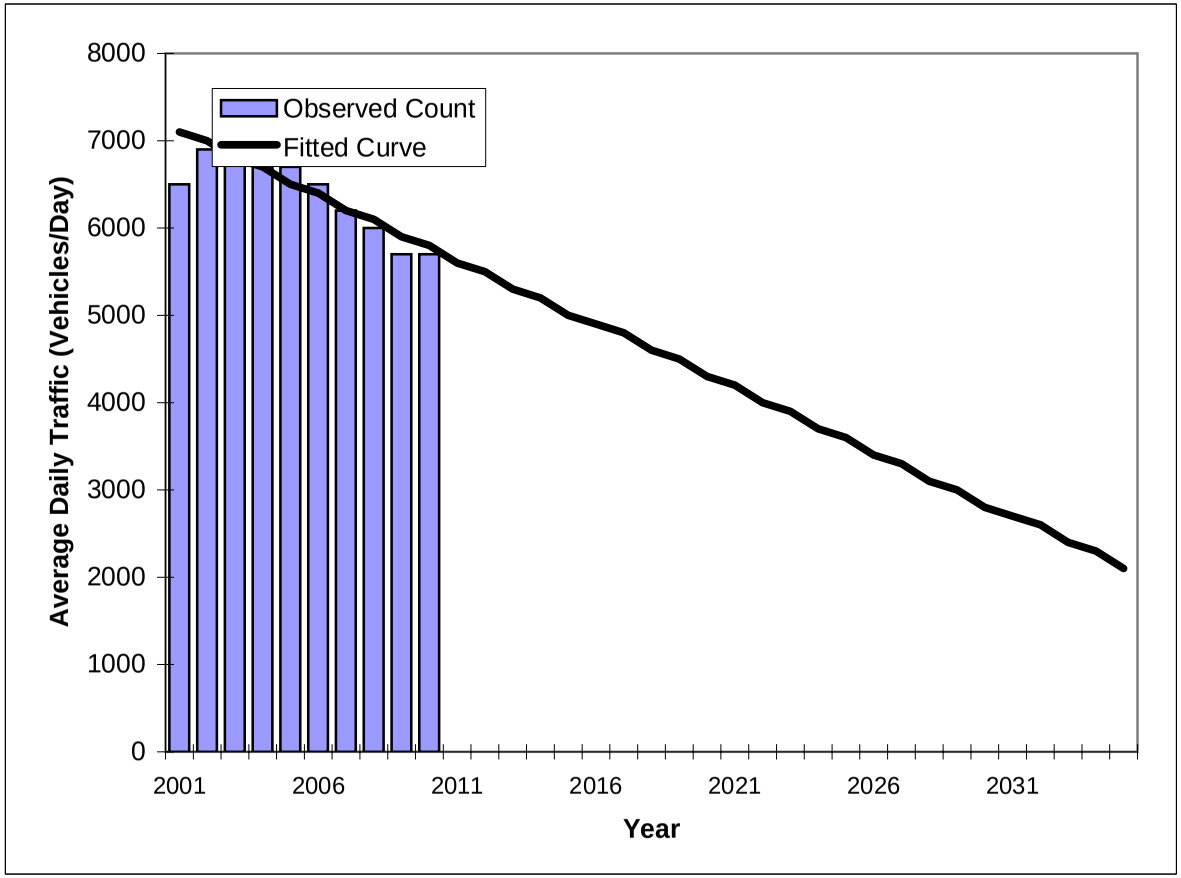
*Axle-Adjusted

Traffic Trends - V2.0

RAMP FROM SR 834/SAMPLE RD -- TO NB SR 7/US 441

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	4505
Highway:	RAMP FROM SR 834/SAMPLE RD



Year	Traffic (ADT/AADT) Count*	Trend**
2001	6500	7100
2002	6900	7000
2003	7200	6800
2004	7000	6700
2005	6700	6500
2006	6500	6400
2007	6200	6200
2008	6000	6100
2009	5700	5900
2010	5700	5800
2015 Opening Year Trend		
2015	N/A	5000
2020 Mid-Year Trend		
2020	N/A	4300
2035 Design Year Trend		
2035	N/A	2100
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-147
Trend R-squared:	70.31%
Trend Annual Historic Growth Rate:	-2.03%
Trend Growth Rate (2010 to Design Year):	-2.55%
Printed:	2-Apr-12

Straight Line Growth Option

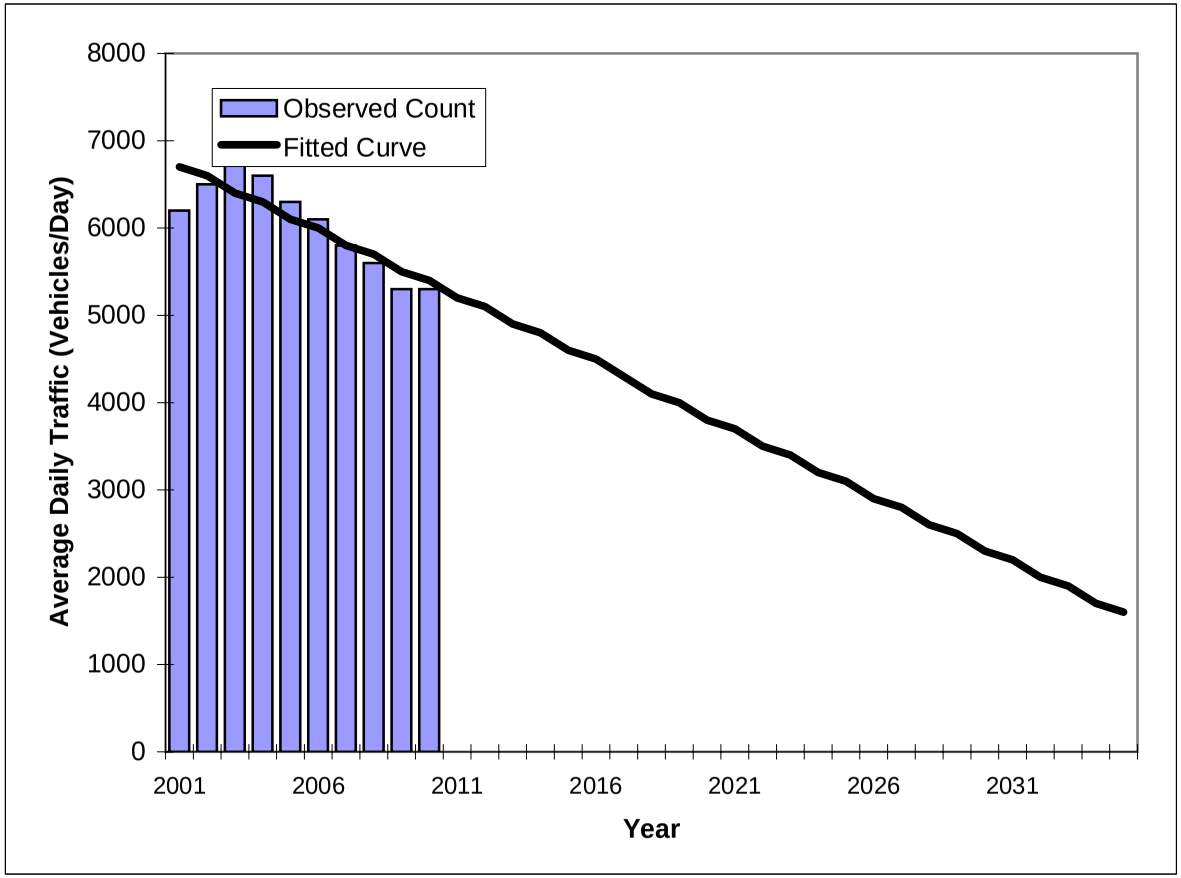
*Axle-Adjusted

Traffic Trends - V2.0

RAMP FROM SB SR 7/US 441 -- TO SR 834/SAMPLE RD.

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	4506
Highway:	RAMP FROM SB SR 7/US 441



Year	Traffic (ADT/AADT) Count*	Trend**
2001	6200	6700
2002	6500	6600
2003	6800	6400
2004	6600	6300
2005	6300	6100
2006	6100	6000
2007	5800	5800
2008	5600	5700
2009	5300	5500
2010	5300	5400
2015 Opening Year Trend		
2015	N/A	4600
2020 Mid-Year Trend		
2020	N/A	3800
2035 Design Year Trend		
2035	N/A	1600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-152
Trend R-squared:	75.01%
Trend Annual Historic Growth Rate:	-2.16%
Trend Growth Rate (2010 to Design Year):	-2.81%
Printed:	2-Apr-12

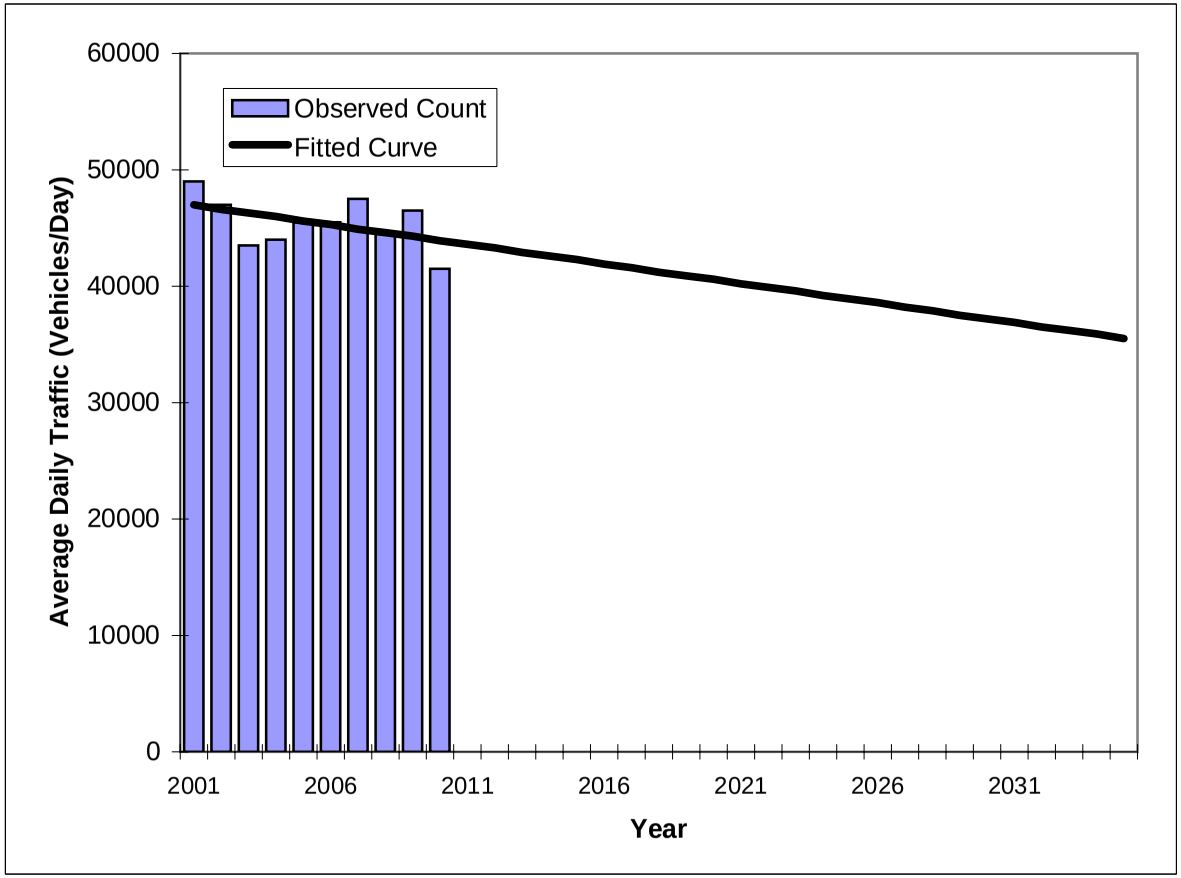
Straight Line Growth Option

Traffic Trends - V2.0

US 441/SR 7 -- N OF SR 834/SAMPLE RD

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	5112
Highway:	US 441/SR 7



Year	Traffic (ADT/AADT) Count*	Trend**
2001	49000	47000
2002	47000	46600
2003	43500	46300
2004	44000	46000
2005	45500	45600
2006	45500	45300
2007	47500	44900
2008	44500	44600
2009	46500	44300
2010	41500	43900
2015 Opening Year Trend		
2015	N/A	42300
2020 Mid-Year Trend		
2020	N/A	40600
2035 Design Year Trend		
2035	N/A	35500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-336
Trend R-squared:	21.85%
Trend Annual Historic Growth Rate:	-0.73%
Trend Growth Rate (2010 to Design Year):	-0.77%
Printed:	2-Apr-12

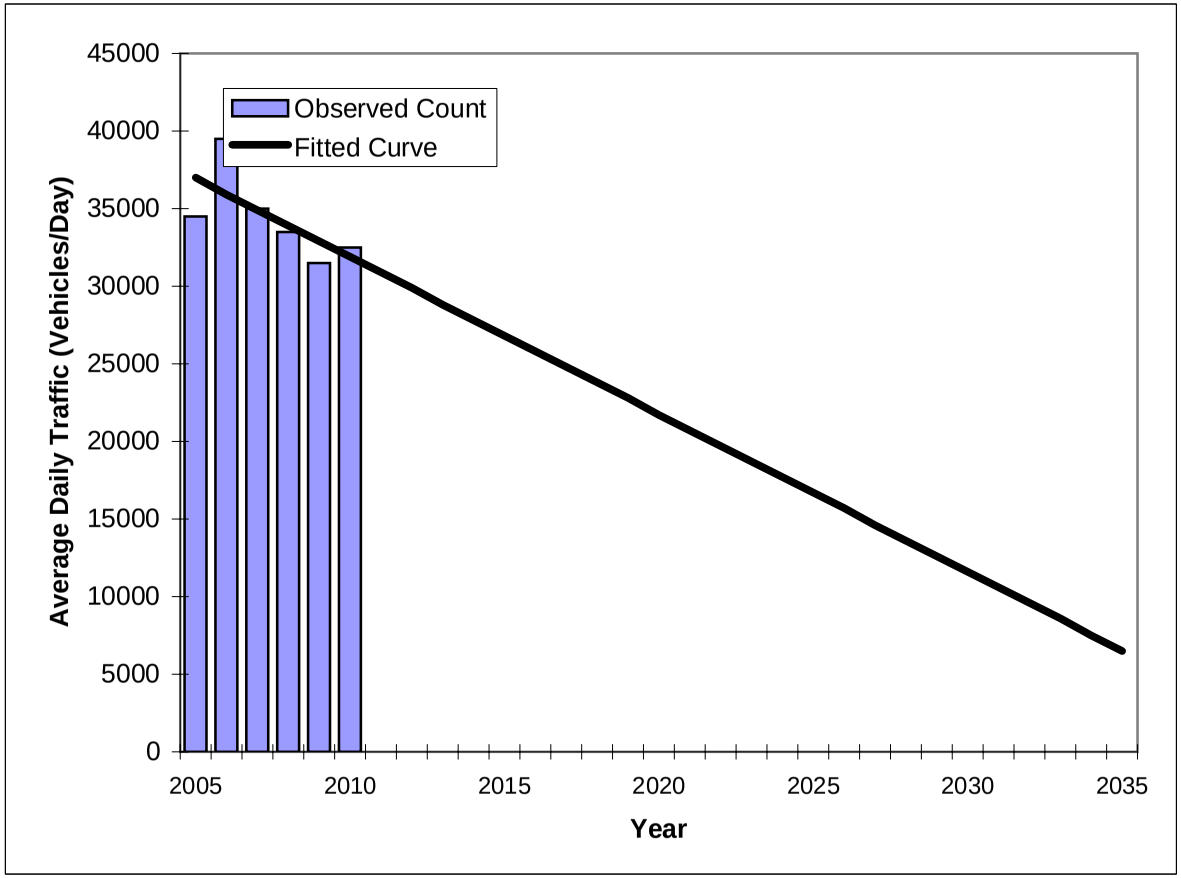
Straight Line Growth Option

Traffic Trends - V2.0

WILES RD -- W OF SR 7

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	7116
Highway:	WILES RD



Year	Traffic (ADT/AADT) Count*	Trend**
2005	34500	37000
2006	39500	35900
2007	35000	34900
2008	33500	33900
2009	31500	32900
2010	32500	31900
2015 Opening Year Trend		
2015	N/A	26800
2020 Mid-Year Trend		
2020	N/A	21700
2035 Design Year Trend		
2035	N/A	6500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-1,014
Trend R-squared:	45.92%
Trend Annual Historic Growth Rate:	-2.76%
Trend Growth Rate (2010 to Design Year):	-3.18%
Printed:	2-Apr-12

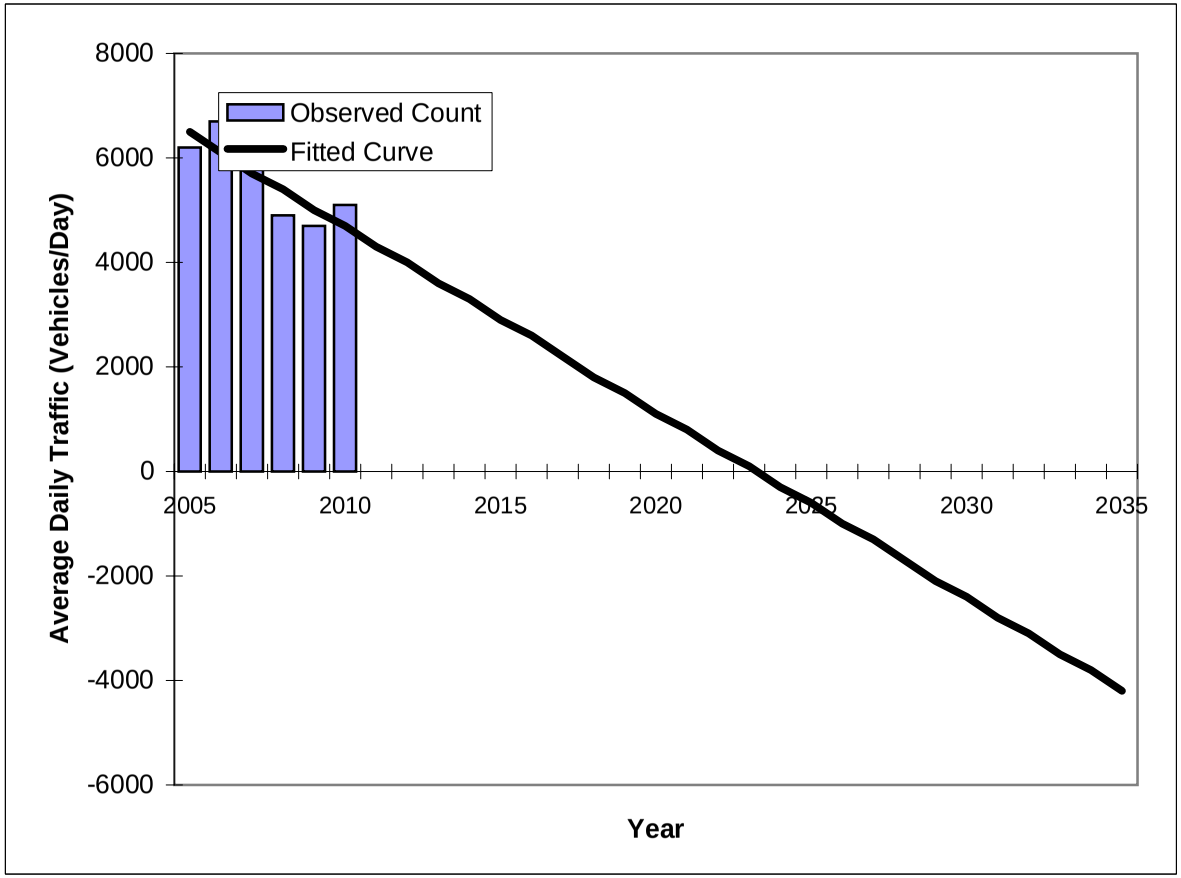
Straight Line Growth Option

Traffic Trends - V2.0

BANKS RD. -- S OF SAMPLE RD.

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	9108
Highway:	BANKS RD.



Year	Traffic (ADT/AADT) Count*	Trend**
2005	6200	6500
2006	6700	6100
2007	5800	5700
2008	4900	5400
2009	4700	5000
2010	5100	4700
2015 Opening Year Trend		
2015	N/A	2900
2020 Mid-Year Trend		
2020	N/A	1100
2035 Design Year Trend		
2035	N/A	-4200
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-354
Trend R-squared:	69.66%
Trend Annual Historic Growth Rate:	-5.54%
Trend Growth Rate (2010 to Design Year):	-7.57%
Printed:	2-Apr-12

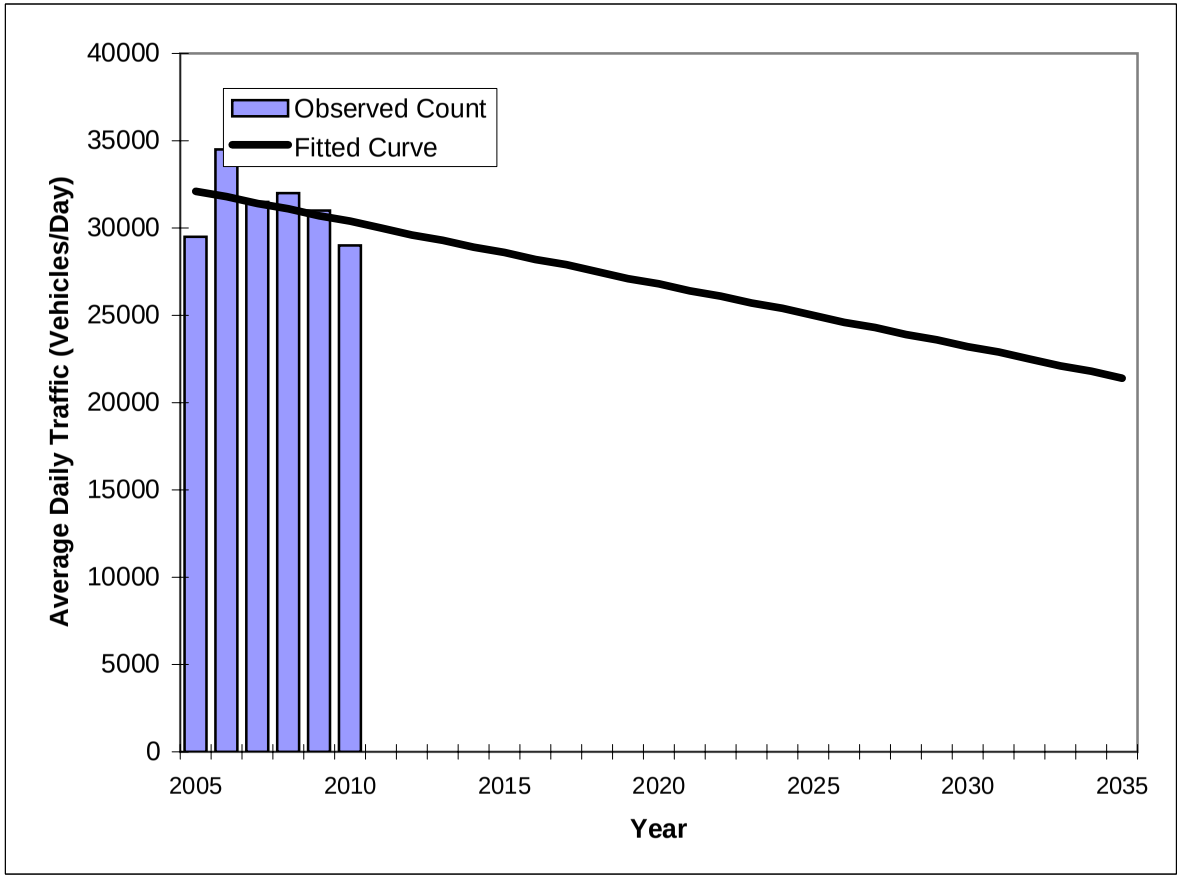
Straight Line Growth Option

Traffic Trends - V2.0

LYONS ROAD -- N OF COPANS RD.

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	9143
Highway:	LYONS ROAD



Year	Traffic (ADT/AADT) Count*	Trend**
2005	29500	32100
2006	34500	31800
2007	31500	31400
2008	32000	31100
2009	31000	30700
2010	29000	30400
2015 Opening Year Trend		
2015	N/A	28600
2020 Mid-Year Trend		
2020	N/A	26800
2035 Design Year Trend		
2035	N/A	21400
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-357
Trend R-squared:	11.52%
Trend Annual Historic Growth Rate:	-1.06%
Trend Growth Rate (2010 to Design Year):	-1.18%
Printed:	2-Apr-12

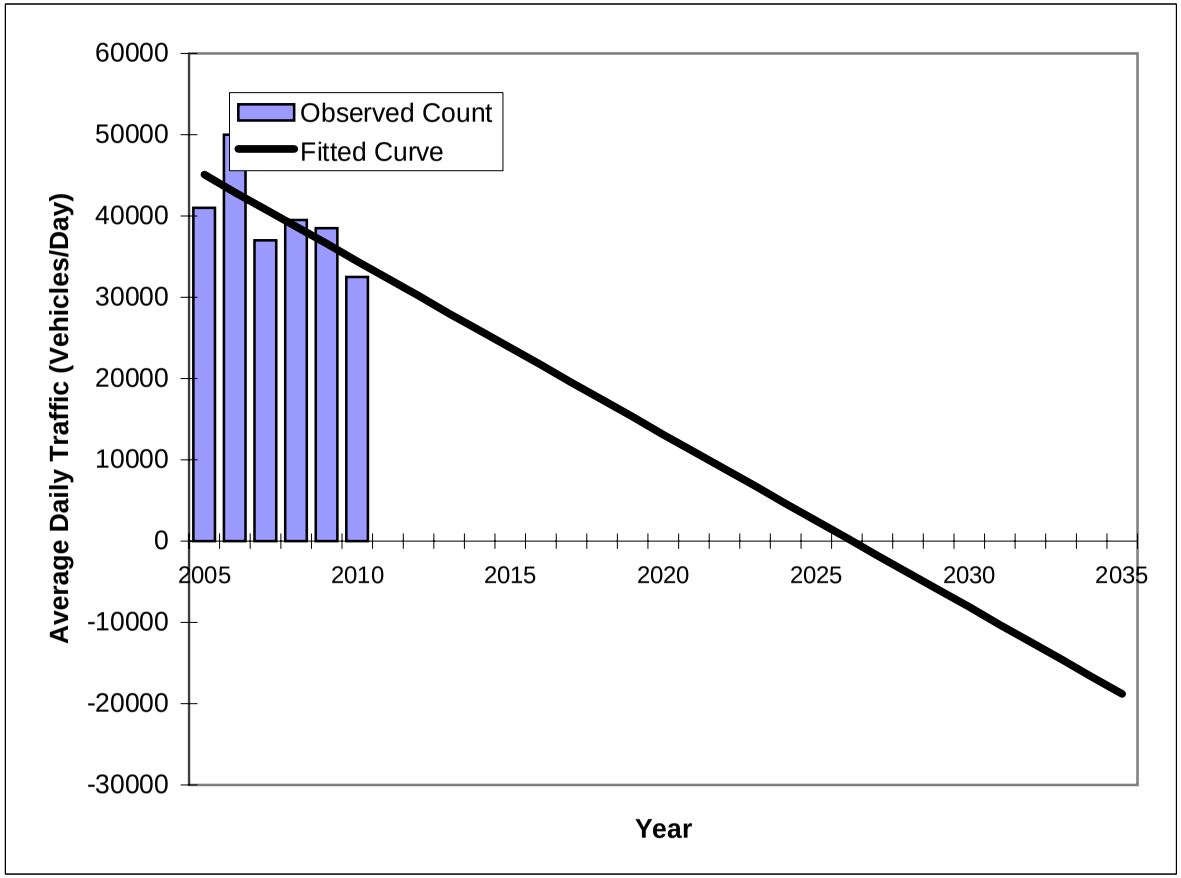
Straight Line Growth Option

Traffic Trends - V2.0

LYONS ROAD -- S OF SAWGRASS EXPRESSWAY

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	9145
Highway:	LYONS ROAD



Year	Traffic (ADT/AADT) Count*	Trend**
2005	41000	45100
2006	50000	42900
2007	37000	40800
2008	39500	38700
2009	38500	36600
2010	32500	34400
2015 Opening Year Trend		
2015	N/A	23800
2020 Mid-Year Trend		
2020	N/A	13100
2035 Design Year Trend		
2035	N/A	-18800
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-2,129
Trend R-squared:	47.09%
Trend Annual Historic Growth Rate:	-4.75%
Trend Growth Rate (2010 to Design Year):	-6.19%
Printed:	2-Apr-12

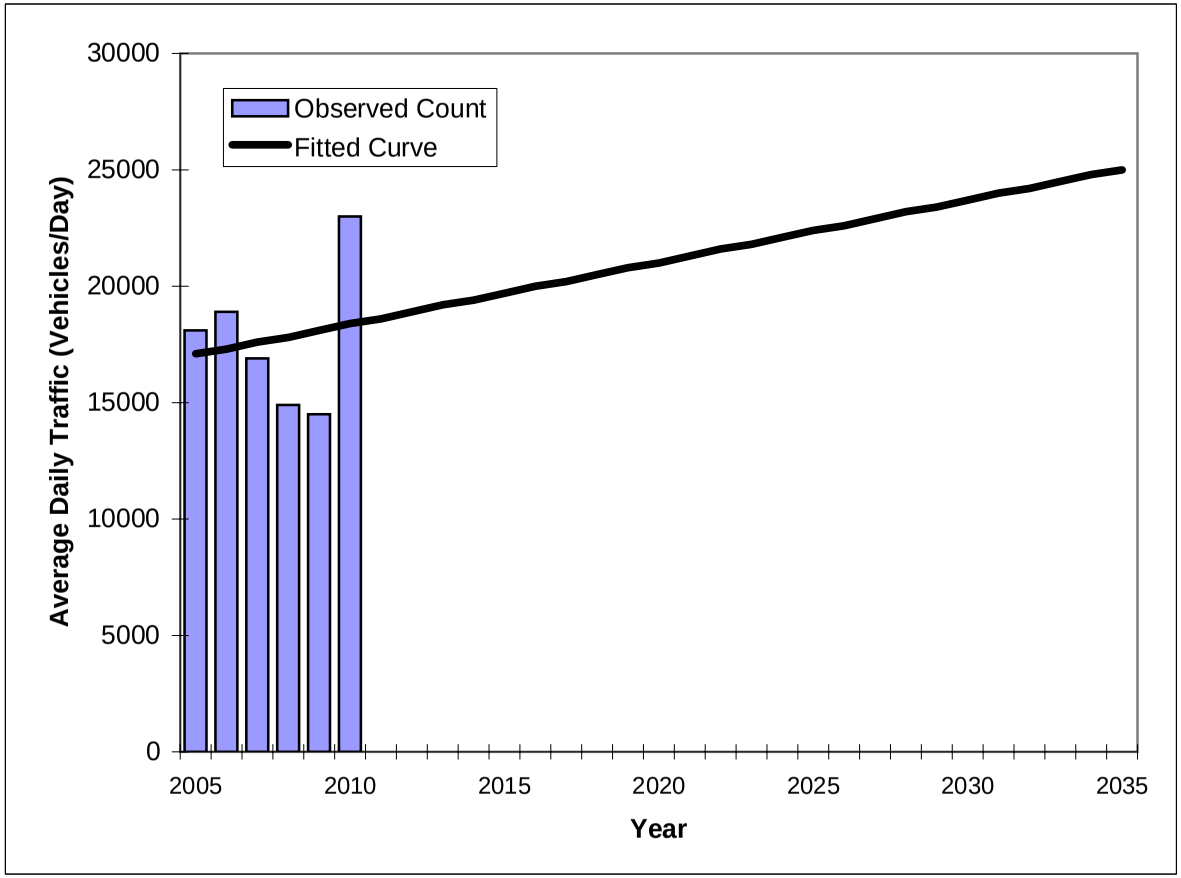
Straight Line Growth Option

Traffic Trends - V2.0

WILES ROAD -- , E OF SR 7

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	9581
Highway:	WILES ROAD



Year	Traffic (ADT/AADT) Count*	Trend**
2005	18100	17100
2006	18900	17300
2007	16900	17600
2008	14900	17800
2009	14500	18100
2010	23000	18400
2015 Opening Year Trend		
2015	N/A	19700
2020 Mid-Year Trend		
2020	N/A	21000
2035 Design Year Trend		
2035	N/A	25000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	266
Trend R-squared:	2.55%
Trend Annual Historic Growth Rate:	1.52%
Trend Growth Rate (2010 to Design Year):	1.43%
Printed:	2-Apr-12

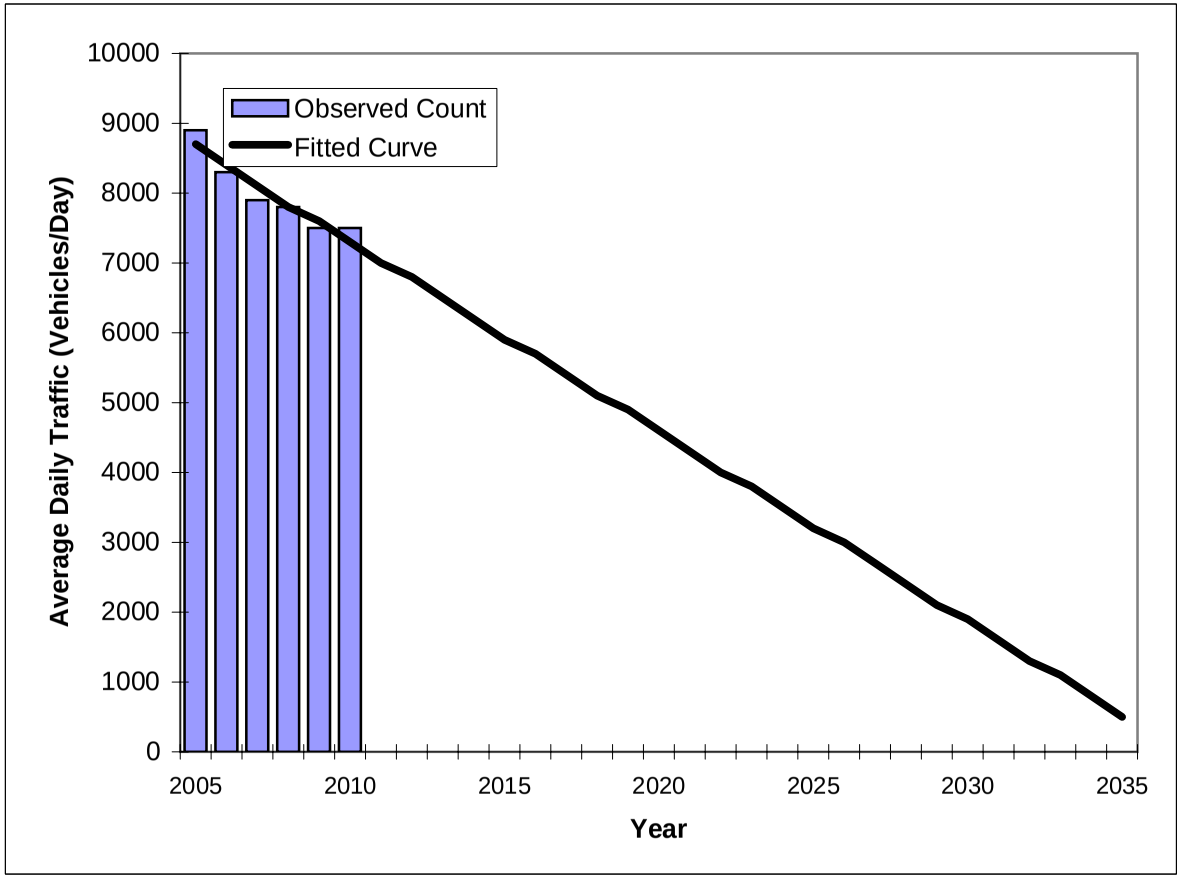
Straight Line Growth Option

Traffic Trends - V2.0

WILES RD -- E OF LYONS

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	9694
Highway:	WILES RD



Year	Traffic (ADT/AADT) Count*	Trend**
2005	8900	8700
2006	8300	8400
2007	7900	8100
2008	7800	7800
2009	7500	7600
2010	7500	7300
2015 Opening Year Trend		
2015	N/A	5900
2020 Mid-Year Trend		
2020	N/A	4600
2035 Design Year Trend		
2035	N/A	500
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-271
Trend R-squared:	89.02%
Trend Annual Historic Growth Rate:	-3.22%
Trend Growth Rate (2010 to Design Year):	-3.73%
Printed:	2-Apr-12

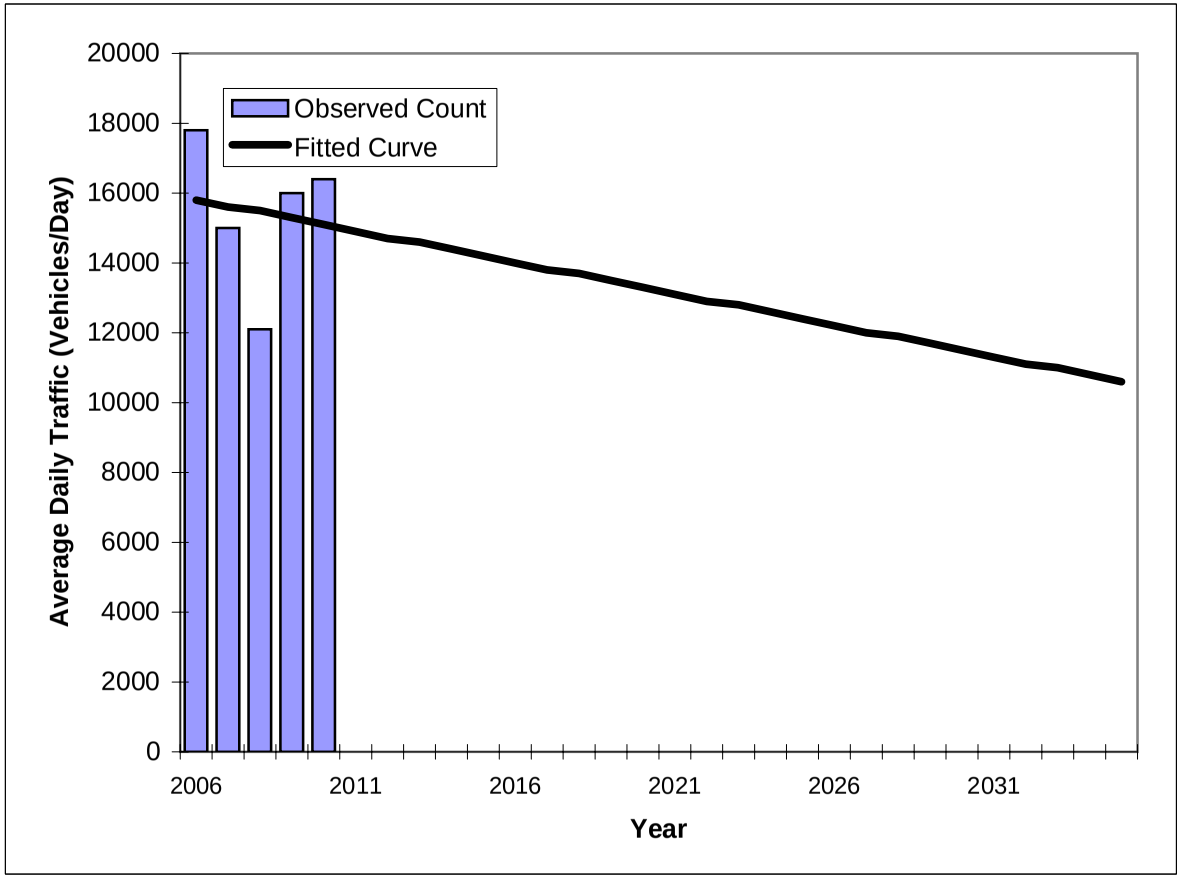
Straight Line Growth Option

Traffic Trends - V2.0

TURTLE CREEK DR -- N OF SAMPLE RD

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	9768
Highway:	TURTLE CREEK DR



Year	Traffic (ADT/AADT) Count*	Trend**
2006	17800	15800
2007	15000	15600
2008	12100	15500
2009	16000	15300
2010	16400	15100
2015 Opening Year Trend		
2015	N/A	14200
2020 Mid-Year Trend		
2020	N/A	13300
2035 Design Year Trend		
2035	N/A	10600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-180
Trend R-squared:	1.78%
Trend Annual Historic Growth Rate:	-1.11%
Trend Growth Rate (2010 to Design Year):	-1.19%
Printed:	2-Apr-12

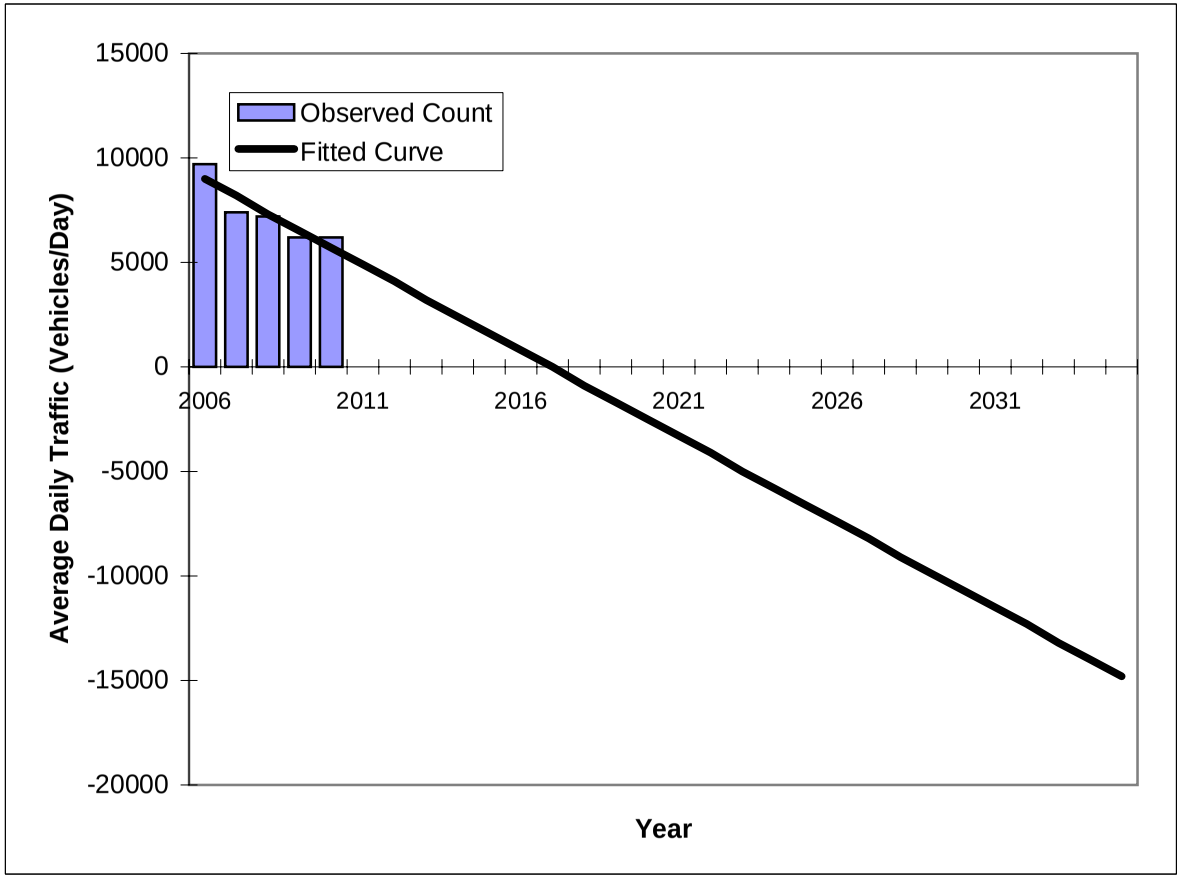
Straight Line Growth Option

Traffic Trends - V2.0

: SR 7

PIN#	**973215-1**
Location	**1**

County:	Broward (86)
Station #:	9769
Highway:	NW 31 ST



Year	Traffic (ADT/AADT) Count*	Trend**
2006	9700	9000
2007	7400	8200
2008	7200	7300
2009	6200	6500
2010	6200	5700
2015 Opening Year Trend		
2015	N/A	1600
2020 Mid-Year Trend		
2020	N/A	-2500
2025 Design Year Trend		
2025	N/A	-6600
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	-820
Trend R-squared:	82.08%
Trend Annual Historic Growth Rate:	-9.17%
Trend Growth Rate (2010 to Design Year):	-14.39%
Printed:	2-Apr-12

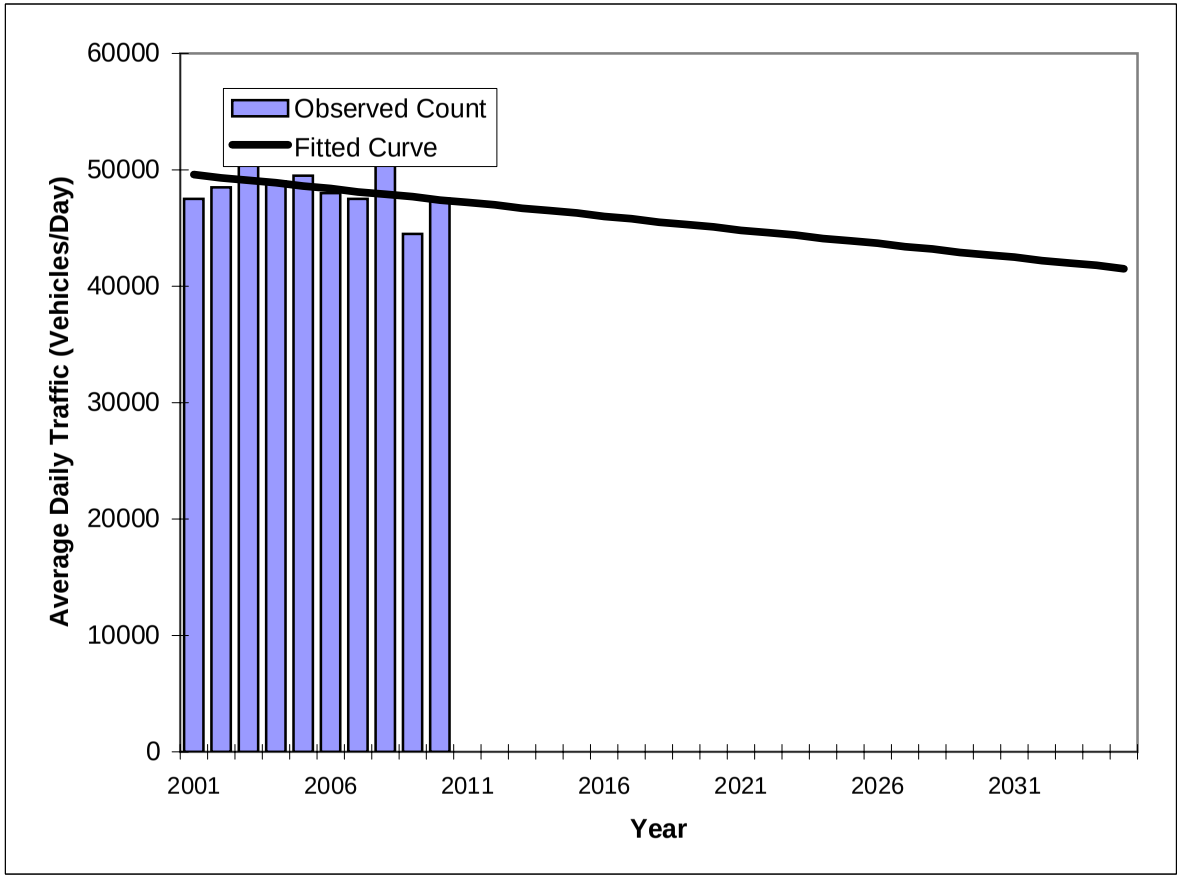
Straight Line Growth Option

Traffic Trends - V2.0

SAMPLE ROAD -- W OF SR 7/US 441

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	0123
Highway:	SAMPLE ROAD



Year	Traffic (ADT/AADT) Count*	Trend**
2001	47500	49600
2002	48500	49300
2003	52000	49100
2004	49000	48900
2005	49500	48600
2006	48000	48400
2007	47500	48100
2008	51000	47900
2009	44500	47700
2010	47500	47400
2015 Opening Year Trend		
2015	N/A	46300
2020 Mid-Year Trend		
2020	N/A	45100
2035 Design Year Trend		
2035	N/A	41500
TRANPLAN Forecasts/Trends		

** Annual Trend Increase:	-236
Trend R-squared:	11.82%
Trend Annual Historic Growth Rate:	-0.49%
Trend Growth Rate (2010 to Design Year):	-0.50%
Printed:	2-Apr-12

Straight Line Growth Option

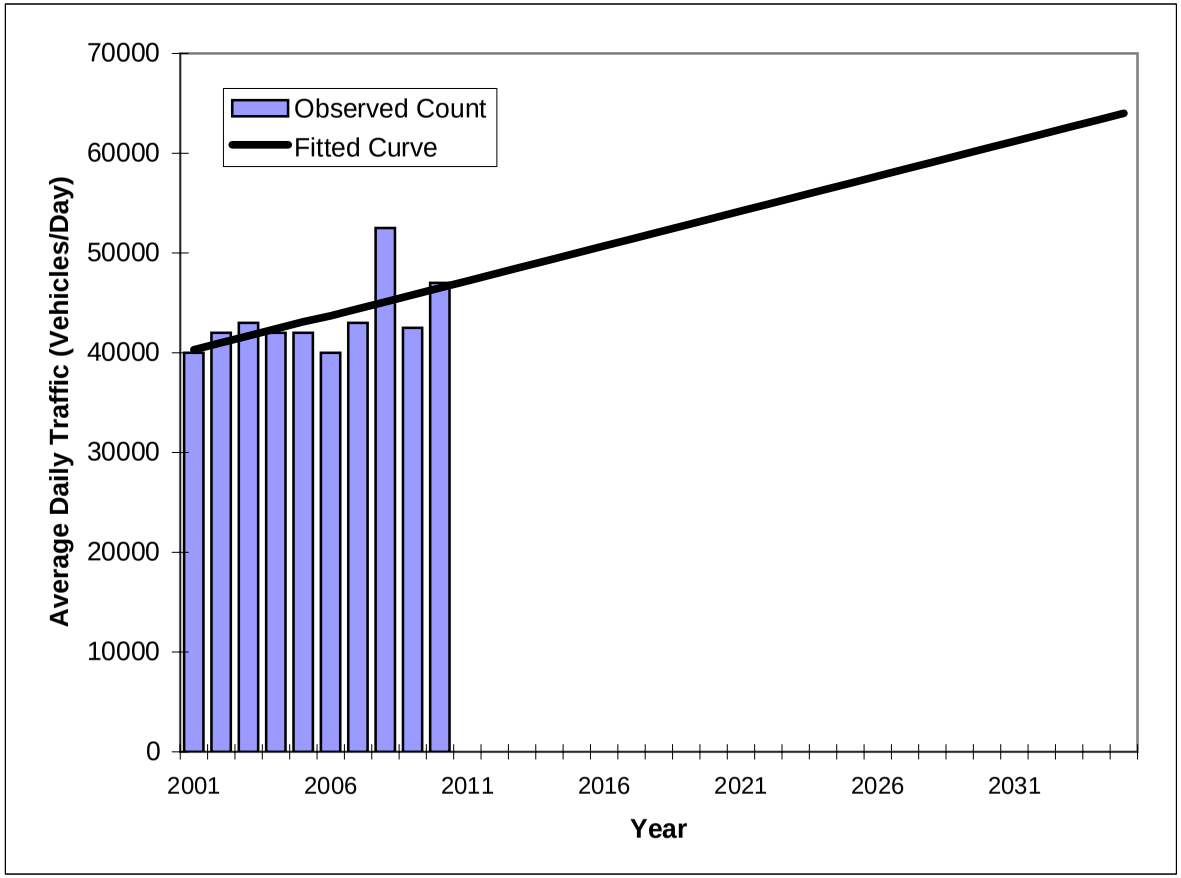
*Axle-Adjusted

Traffic Trends - V2.0

US 441/SR 7 -- S OF SR 834/SAMPLE RD

PIN#	973215-1
Location	1

County:	Broward (86)
Station #:	0427
Highway:	US 441/SR 7



Year	Traffic (ADT/AADT) Count*	Trend**
2001	40000	40300
2002	42000	41000
2003	43000	41700
2004	42000	42400
2005	42000	43100
2006	40000	43700
2007	43000	44400
2008	52500	45100
2009	42500	45800
2010	47000	46500
2015 Opening Year Trend		
2015	N/A	50000
2020 Mid-Year Trend		
2020	N/A	53500
2035 Design Year Trend		
2035	N/A	64000
TRANPLAN Forecasts/Trends		

*Axle-Adjusted

** Annual Trend Increase:	697
Trend R-squared:	31.83%
Trend Annual Historic Growth Rate:	1.71%
Trend Growth Rate (2010 to Design Year):	1.51%
Printed:	2-Apr-12

Straight Line Growth Option

Appendix F

SERPM Model
(Southeast Florida Regional Planning Model)

Appendix F-1

2035 Socio-Economic Data

TABLE F-1

SEMINOLE FEE-TO-TRUST CASINO DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY

ORIGINAL 2035 SOCIO-ECONOMIC DATA BASED ON 2035 SOUTHEAST FLORIDA REGIONAL PLANNING MODEL (SERPM) COST FEASIBLE

6/1/2011

PROJECT	TAZ #	HHC0	HHC1	WC0	WC1	PC0	PC1	HMR	POP	INDE	COME	SVCE	TOTE
Promenade	1815	890	1785	832	3125	2051	6742	1300	8793	2432	2743	2669	7844
Monterey	2155	2426	671	1330	1110	4713	2395	0	7108	36	570	1610	2216
Sabal Palm	2206	1463	469	1036	752	2804	1625	0	4429	16	120	178	314
Sabal Palm	2207	779	80	634	128	1474	165	0	1639	0	28	37	65
Charter School	1837	1686	1461	1189	2564	3369	5791	0	9160	56	1749	3111	4916
Coral Landings III	1837	1686	1461	1189	2564	3369	5791	0	9160	56	1749	3111	4916
IPIC Plaza at Coral Springs II	2652	73	128	68	224	152	446	0	598	17	2223	1226	3466
Celebration Pointe	1833	1304	585	1411	979	2312	1928	0	4240	292	2452	1107	3851
AZTEC luxury RV Resort	1900	245	342	274	653	503	1446	0	1949	21	1	13	35
AZTEC luxury RV Resort	1901	1199	756	1210	1379	2463	3154	0	5617	44	478	438	960

PROJECT	TAZ #	EL_ENRL	MD_ENRL	HI_ENRL	PRVENRL	CU_ENRL
Monarch High School	**1815**	**0**	0	1971	0	0
Charter School	1837	0	0	0	0	0

LEGEND

HHCO = HOUSEHOLDS WITHOUT CHILDREN HHC1 = HOUSEHOLDS WITH CHILDREN

WC0 = WORKERS IN HOUSEHOLDS WITHOUT CHILDREN WC1 = WORKERS IN HOUSEHOLDS WITH CHILDREN

PC0 = PERSONS IN HOUSEHOLDS WITHOUT CHILDREN PC1 = PERSONS IN HOUSEHOLDS WITH CHILDREN

HMR = TOTAL OCCUPIED HOTEL / MOTEL ROOMS POP = TOTAL POPULATION

INDE = INDUSTRIAL EMPLOYMENT COME = COMMERCIAL EMPLOYMENT SVCE = SERVICE EMPLOYMENT TOTE = TOTAL EMPLOYMENT

EL_ENRL = ENROLLMENT FOR GRADE (PUBLIC) SCHOOL MD_ENRL = ENROLLMENT FOR MIDDLE (PUBLIC) SCHOOL

HI_ENRL = ENROLLMENT FOR HIGH (PUBLIC) SCHOOL PRVENRL = ENROLLMENT FOR PRIVATE SCHOOL CU_ENRL = COLLEGE/UNIVERSITY ENROLLMENTS

TABLE F-2

SEMINOLE FEE-TO-TRUST CASINO DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY

ADJUSTED 2035 SOCIO-ECONOMIC DATA

6/1/2011

PROJECT	TAZ #	HHC0	HHC1	WC0	WC1	PC0	PC1	HMR	POP	INDE	COME	SVCE	TOTE
Promenade	1815	890	1785	832	3125	2051	6742	1300	8793	2432	2222	2669	2755
Monterey	2155	2426	671	1330	1110	4713	2395	0	7108	36	570	1610	2216
Sabal Palm	2206	1463	469	1036	752	2804	1625	0	4429	16	120	178	314
Sabal Palm	2207	779	80	634	128	1474	165	0	1639	0	28	37	65
Coral Landings III	1837	1686	1461	1189	2564	3369	5791	0	9160	56	1749	3111	4916
IPIC Plaza at Coral Springs II	2652	73	128	68	224	152	446	0	598	17	2223	1226	3466
Celebration Pointe	1833	1704	765	1411	979	2312	1928	0	4240	292	2452	1107	3851
AZTEC luxury RV Resort	1900	278	389	274	653	503	1446	0	1949	21	1	13	35
AZTEC luxury RV Resort	1901	1546	975	1210	1379	2463	3154	0	5617	44	478	438	960

PROJECT	TAZ #	EL_ENRL	MD_ENRL	HI_ENRL	PRVENRL	CU_ENRL
Monarch High School	1815	**0**	0	2895	0	0
Charter School	1837	750	750	0	0	0

LEGEND

HHCO = HOUSEHOLDS WITHOUT CHILDREN HHC1 = HOUSEHOLDS WITH CHILDREN

WC0 = WORKERS IN HOUSEHOLDS WITHOUT CHILDREN WC1 = WORKERS IN HOUSEHOLDS WITH CHILDREN

PC0 = PERSONS IN HOUSEHOLDS WITHOUT CHILDREN PC1 = PERSONS IN HOUSEHOLDS WITH CHILDREN

HMR = TOTAL OCCUPIED HOTEL / MOTEL ROOMS POP = TOTAL POPULATION

INDE = INDUSTRIAL EMPLOYMENT COME = COMMERCIAL EMPLOYMENT SVCE = SERVICE EMPLOYMENT TOTE = TOTAL EMPLOYMENT

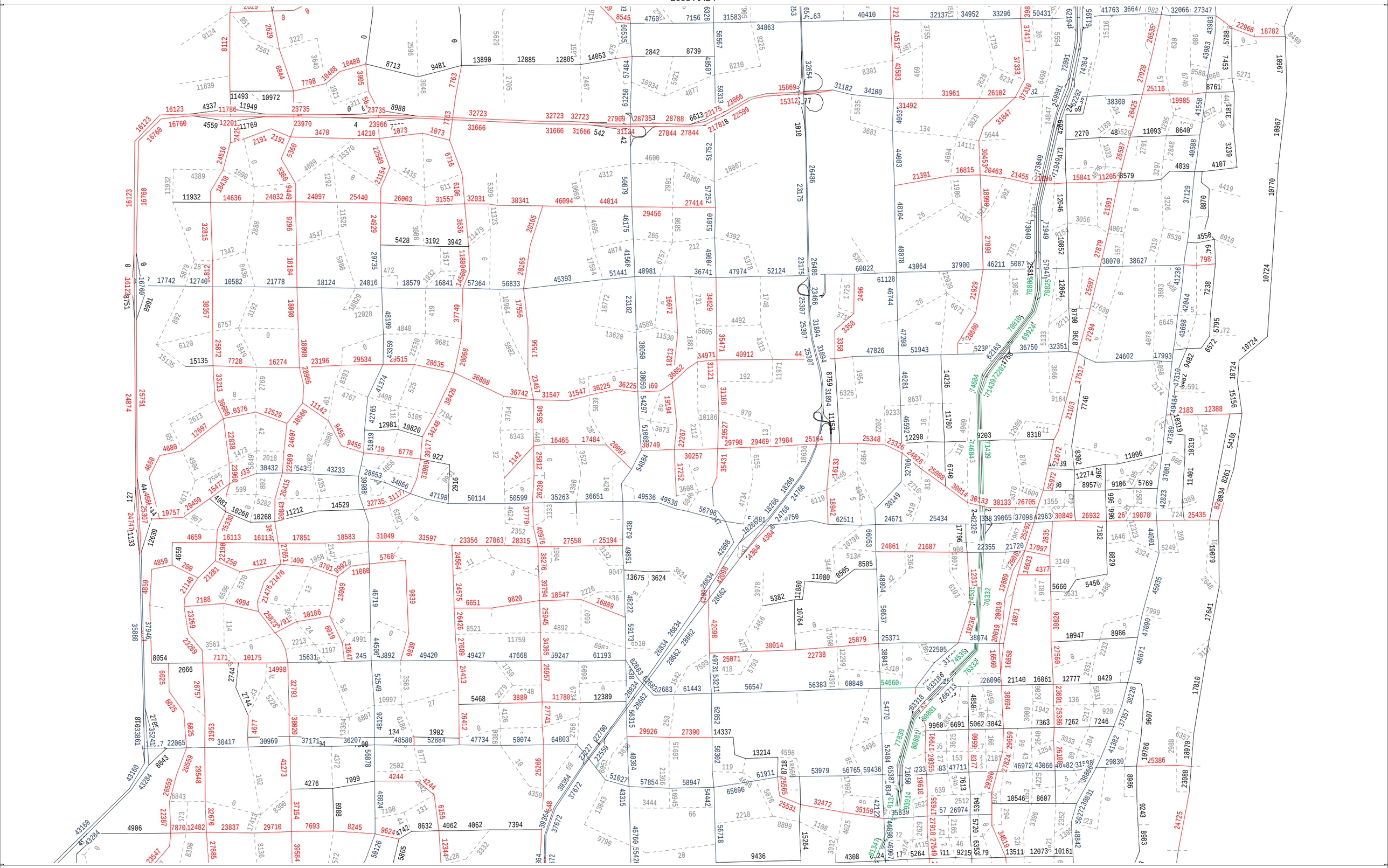
EL_ENRL = ENROLLMENT FOR GRADE (PUBLIC) SCHOOL MD_ENRL = ENROLLMENT FOR MIDDLE (PUBLIC) SCHOOL

HI_ENRL = ENROLLMENT FOR HIGH (PUBLIC) SCHOOL PRVENRL = ENROLLMENT FOR PRIVATE SCHOOL CU_ENRL = COLLEGE/UNIVERSITY ENROLLMENTS

Appendix F-2

2005 Volume Plot

2005 AADT



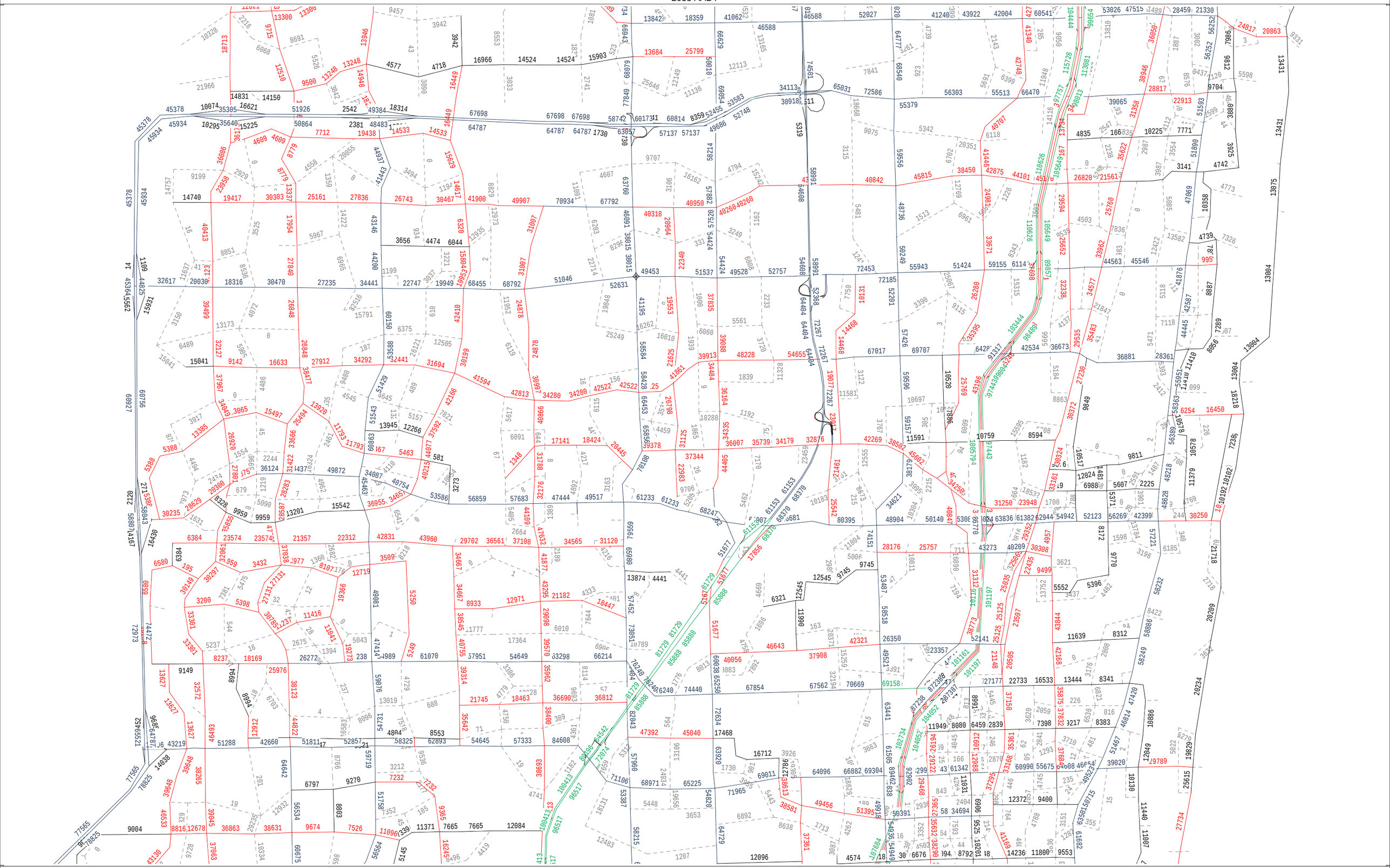
cube

Licensed to Keith & Schnars, Inc.

Appendix F-3

2035 Volume Plot

2035 AADT



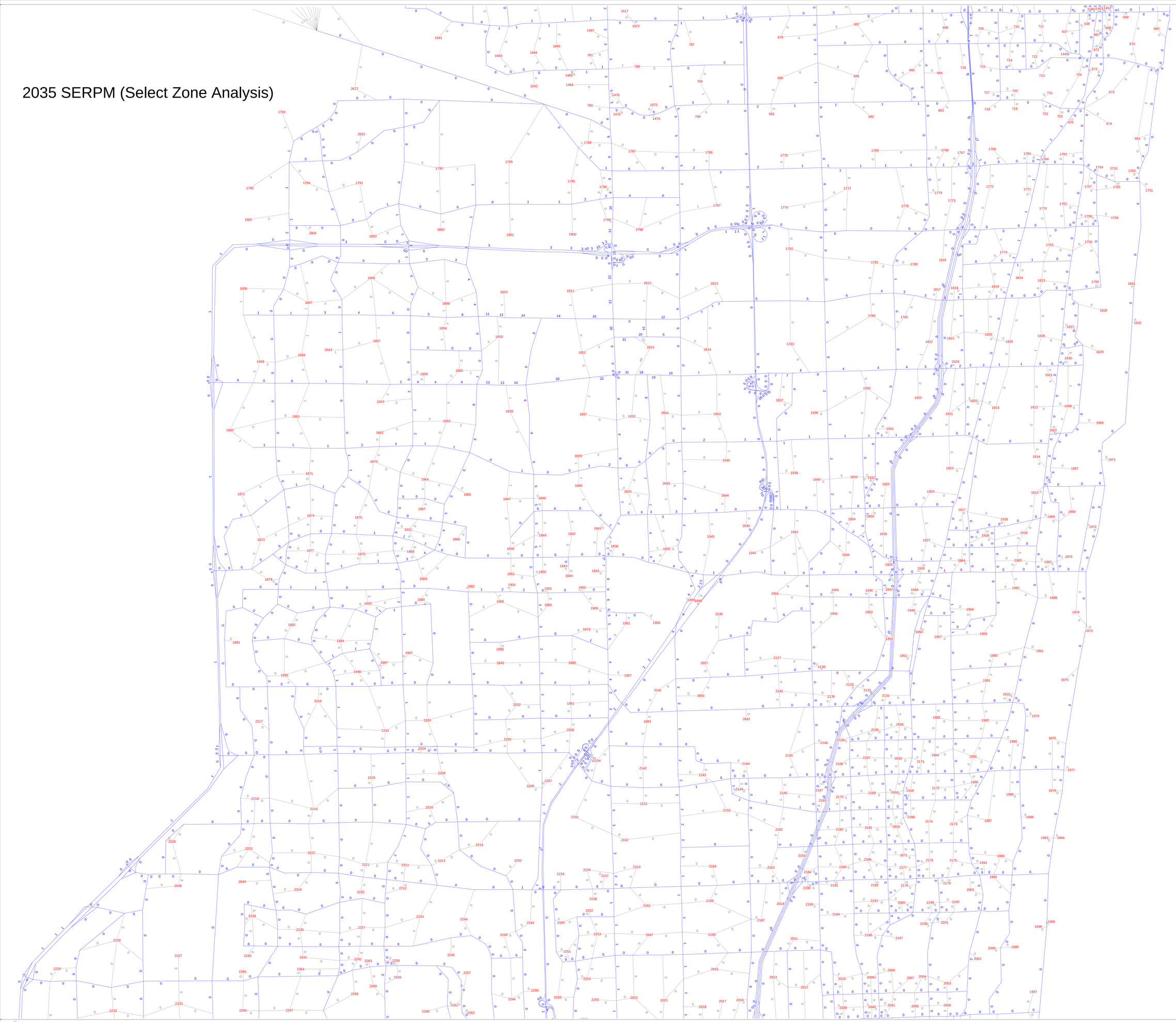
cube

Licensed to Keith & Schnars, Inc.

Appendix F-4

2035 Distribution Percentages Plot

2035 SERPM (Select Zone Analysis)



授权给 Keith & Schnars, Inc.

Appendix G

Committed Developments

Appendix G-1

Main Street at Coconut Creek
Development of Regional Impact (DRI)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Riverside Drive
COUNT DATE: September 23, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements	20	116	1,244	128		356	1,439	170		119	361	313		127	527	125
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
EXISTING CONDITIONS	**22**	**126**	**1,356**	**140**		**388**	**1,569**	**185**		**130**	**393**	**341**		**138**	**574**	**136**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI		3	178	2			110			1						2
Seminole Casino/Commerce Center DRI			74			36	107					25				
Cocomar			4				4									
Promenade at Coconut Creek			1			3	1					2				
Lyons Corporate Park DRI							1									
Sawgrass Exchange DRI			7				9									
Pompano Industrial Park DRI			4				7									
Coral Landings III			12			10	13	3				9		3		

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	3	280	2	0	49	252	3	0	1	0	36	0	3	0	2	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	24	139	1,746	153	0	468	1,948	203	0	142	425	405	0	152	620	149	**6,574**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)	4	21	227	23		65	263	31		22	66	57		23	96	23	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)	26	147	1,583	163		453	1,832	216		152	459	398		161	670	159	**6,419**
NON-PROJECT TRAFFIC[1]	**24**	**139**	**1,746**	**153**	**0**	**468**	**1,948**	**203**	**0**	**142**	**425**	**405**	**0**	**152**	**620**	**149**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**			3.0%									2.0%		1.0%		
	Exiting						2.0%	3.0%	1.0%								

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			56			43	64	21				37		19		
TOTAL PROJECT TRAFFIC		**0**	**0**	**56**	**0**	**0**	**43**	**64**	**21**	**0**	**0**	**0**	**37**	**0**	**19**	**0**	**0**
TOTAL TRAFFIC		**24**	**139**	**1,802**	**153**	**0**	**511**	**2,012**	**224**	**0**	**142**	**425**	**442**	**0**	**171**	**620**	**149**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Holiday Springs Boulevard
COUNT DATE: March 4, 2009
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements	50	124	1,393	81		104	1,667	238		103	41	65		176	58	127
Peak Season Correction Factor	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
EXISTING CONDITIONS	**49**	**122**	**1,365**	**79**		**102**	**1,634**	**233**		**101**	**40**	**64**		**172**	**57**	**124**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			178				110									
Seminole Casino/Commerce Center DRI			99				143									
Cocomar			4				4									
Promenade at Coconut Creek			3				4									
Lyons Corporate Park DRI							1									
Sawgrass Exchange DRI			10				12									
Pompano Industrial Park DRI			4				7									
Coral Landings III			24				27									

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	322	0	0	0	308	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	53	132	1,797	85	0	110	2,074	252	0	109	43	69	0	186	62	134	**5,106**
Years To Buildout	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)	7	19	208	12		16	249	36		15	6	10		26	9	19	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)	56	141	1,573	91		118	1,883	269		116	46	74		198	66	143	**4,774**
NON-PROJECT TRAFFIC[1]	**53**	**132**	**1,797**	**85**	**0**	**110**	**2,074**	**252**	**0**	**109**	**43**	**69**	**0**	**186**	**62**	**134**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**			6.0%									1.0%		2.0%		
	Exiting						1.0%	6.0%	2.0%								

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			112			21	128	43				19		37		
TOTAL PROJECT TRAFFIC		**0**	**0**	**112**	**0**	**0**	**21**	**128**	**43**	**0**	**0**	**0**	**19**	**0**	**37**	**0**	**0**
TOTAL TRAFFIC		**53**	**132**	**1,909**	**85**	**0**	**131**	**2,202**	**295**	**0**	**109**	**43**	**88**	**0**	**223**	**62**	**134**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Rock Island Road
COUNT DATE: September 23, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		108	1,271	307		472	1,813	106		208	243	304		77	324	81
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
EXISTING CONDITIONS		**118**	**1,385**	**335**		**514**	**1,976**	**116**		**227**	**265**	**331**		**84**	**353**	**88**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI		16	122	20			76			12						10
Seminole Casino/Commerce Center DRI			99				143									
Cocomar			4				4									
Promenade at Coconut Creek			5				6									
Lyons Corporate Park DRI							1									
Sawgrass Exchange DRI			10				12									
Pompano Industrial Park DRI			4				7									
Coral Landings III			27				30									

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	16	271	20	0	0	279	0	0	12	0	0	0	0	0	10	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	144	1,768	382	0	556	2,415	125	0	257	286	358	0	91	382	105	**6,869**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		20	232	56		86	331	19		38	44	55		14	59	15	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		138	1,617	391		600	2,307	135		265	309	386		98	412	103	**6,761**
NON-PROJECT TRAFFIC[1]	**0**	**144**	**1,768**	**382**	**0**	**556**	**2,415**	**125**	**0**	**257**	**286**	**358**	**0**	**91**	**382**	**105**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**			9.0%									2.0%				
	Exiting						2.0%	9.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			169			43	192					37				
TOTAL PROJECT TRAFFIC		**0**	**0**	**169**	**0**	**0**	**43**	**192**	**0**	**0**	**0**	**0**	**37**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**144**	**1,937**	**382**	**0**	**599**	**2,607**	**125**	**0**	**257**	**286**	**395**	**0**	**91**	**382**	**105**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Turtle Run Boulevard
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		94	1,699	33		71	2,362	122		7		25		43	7	107
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
EXISTING CONDITIONS		**102**	**1,852**	**36**		**77**	**2,575**	**133**		**8**		**27**		**47**	**8**	**117**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			122				63									
Seminole Casino/Commerce Center DRI			105				152									
Cocomar			4				4									
Promenade at Coconut Creek			5				6									
Lyons Corporate Park DRI							1									
Sawgrass Exchange DRI			12				15									
Pompano Industrial Park DRI			4				7									
Coral Landings III			27				30					6				

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	279	0	0	0	278	0	0	0	0	6	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	110	2,281	39	0	83	3,061	144	0	9	0	35	0	51	9	126	**5,948**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		17	310	6		13	432	22		1		5		8	1	20	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		119	2,162	42		90	3,007	155		9		32		55	9	137	**5,817**
NON-PROJECT TRAFFIC[1]	**0**	**110**	**2,281**	**39**	**0**	**83**	**3,061**	**144**	**0**	**9**	**0**	**35**	**0**	**51**	**9**	**126**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**			11.0%													
	Exiting							11.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			206				235									
TOTAL PROJECT TRAFFIC		**0**	**0**	**206**	**0**	**0**	**0**	**235**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**110**	**2,487**	**39**	**0**	**83**	**3,296**	**144**	**0**	**9**	**0**	**35**	**0**	**51**	**9**	**126**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and NW 62nd Avenue/Turtle Creek Drive
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		164	1,155	190		146	1,746	272	12	267	157	74		146	201	230
Peak Season Correction Factor	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090	1.090
EXISTING CONDITIONS		**179**	**1,259**	**207**		**159**	**1,903**	**296**	**13**	**291**	**171**	**81**		**159**	**219**	**251**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			122				63									
Seminole Casino/Commerce Center DRI			105			9	152					6				
Cocomar			4				4									
Promenade at Coconut Creek			5				6									
Lyons Corporate Park DRI							1									
Sawgrass Exchange DRI			12				15									
Pompano Industrial Park DRI			4				7									
Coral Landings III				33		51				37	13	56			12	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	252	33	0	60	248	0	0	37	13	62	0	0	12	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	193	1,613	257	0	232	2,305	320	14	352	198	150	0	172	249	271	**6,326**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		30	211	35		27	319	50	2	49	29	14		27	37	42	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		209	1,470	242		186	2,222	346	15	340	200	95		186	256	293	**6,060**
NON-PROJECT TRAFFIC[1]	**0**	**193**	**1,613**	**257**	**0**	**232**	**2,305**	**320**	**14**	**352**	**198**	**150**	**0**	**172**	**249**	**271**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**			11.0%													
	Exiting							11.0%									

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			206				235									
TOTAL PROJECT TRAFFIC		**0**	**0**	**206**	**0**	**0**	**0**	**235**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**193**	**1,819**	**257**	**0**	**232**	**2,540**	**320**	**14**	**352**	**198**	**150**	**0**	**172**	**249**	**271**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and SR 7
COUNT DATE: September 10, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		165	1,265	80	21	204	2,140	307		203		168		227		206
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS		**178**	**1,366**	**86**	**23**	**220**	**2,311**	**332**		**219**		**181**		**245**		**222**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI		11	70	10			43			6						7
Seminole Casino/Commerce Center DRI		37	74			63	161									
Cocomar			4				4									
Promenade at Coconut Creek			5			3	6					2				
Lyons Corporate Park DRI																1
Sawgrass Exchange DRI			12				15									
Pompano Industrial Park DRI			4			9	7	3				4		1		
Coral Landings III		22	35				32									20

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	70	204	10	0	75	268	3	0	6	0	6	0	1	0	28	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	263	1,681	103	25	313	2,767	362	0	243	0	202	0	266	0	268	**6,493**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		30	229	14	4	37	387	56		37		30		41		37	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		208	1,595	100	27	257	2,698	388		256		211		286		259	**6,285**
BACKGROUND TRAFFIC[1]	0	263	1,681	103	25	313	2,767	362	0	243	0	202	0	266	0	268	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]		4.90%	-4.90%				-5.70%									5.70%	
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	13	-82	0	0	0	-158	0	0	0	0	0	0	0	0	15	
NON-PROJECT TRAFFIC[3]	**0**	**276**	**1,599**	**103**	**25**	**313**	**2,609**	**362**	**0**	**243**	**0**	**202**	**0**	**266**	**0**	**283**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**		4.0%	7.0%									1.0%		1.0%		
	Exiting						3.0%	8.0%	2.0%								3.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New		75	131			64	171	43				19		19		64
TOTAL PROJECT TRAFFIC		**0**	**75**	**131**	**0**	**0**	**64**	**171**	**43**	**0**	**0**	**0**	**19**	**0**	**19**	**0**	**64**
TOTAL TRAFFIC		**0**	**351**	**1,730**	**103**	**25**	**377**	**2,780**	**405**	**0**	**243**	**0**	**221**	**0**	**285**	**0**	**347**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and NW 54th Avenue
COUNT DATE: August 27, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements	14	39	1,193	28		310	1,960	212		123	93	279		217	80	129
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS	**15**	**42**	**1,277**	**30**		**332**	**2,097**	**227**		**132**	**100**	**299**		**232**	**86**	**138**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			70				43									
Seminole Casino/Commerce Center DRI		74						167			25			242	36	224
Cocomar			4							4						
Promenade at Coconut Creek			7				8									
Lyons Corporate Park DRI																
Sawgrass Exchange DRI			12				15									
Pompano Industrial Park DRI			9				19									
Coral Landings III			35				32									

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	74	137	0	0	0	117	167	0	4	25	0	0	242	36	224	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	16	119	1,517	32	0	359	2,384	412	0	147	133	323	0	493	129	373	**6,437**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)	3	7	214	5		56	352	38		22	17	50		39	14	23	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)	18	49	1,491	35		388	2,449	265		154	117	349		271	100	161	**5,847**
BACKGROUND TRAFFIC[1]	16	119	1,517	32	0	359	2,384	412	0	147	133	323	0	493	129	373	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-4.90%				-5.70%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-74	0	0	0	-136	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**16**	**119**	**1,443**	**32**	**0**	**359**	**2,248**	**412**	**0**	**147**	**133**	**323**	**0**	**493**	**129**	**373**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**		7.0%	-7.0%				-7.0%	7.0%								
	Exiting														7.0%		7.0%
Net New Distribution	**Entering**		3.0%	6.0%					4.0%								
	Exiting							9.0%							4.0%		4.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**		20	-20				-20	20						22		22
	Net New		56	112				192	75						85		85
TOTAL PROJECT TRAFFIC		**0**	**76**	**92**	**0**	**0**	**0**	**172**	**95**	**0**	**0**	**0**	**0**	**0**	**107**	**0**	**107**
TOTAL TRAFFIC		**16**	**195**	**1,535**	**32**	**0**	**359**	**2,420**	**507**	**0**	**147**	**133**	**323**	**0**	**600**	**129**	**480**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Banks Road
COUNT DATE: September 3, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.99

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		9	1,740	143	17	181	2,713	6				171				10
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS		**10**	**1,879**	**154**	**18**	**195**	**2,930**	**6**				**185**				**11**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			70				43									
Seminole Casino/Commerce Center DRI			224	18			167									
Cocomar				4												
Promenade at Coconut Creek			7			4	8					3				
Lyons Corporate Park DRI																
Sawgrass Exchange DRI			12				15									
Pompano Industrial Park DRI			9				19									
Coral Landings III			35				32									

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	357	22	0	4	284	0	0	0	0	3	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	11	2,388	188	19	215	3,451	6	0	0	0	203	0	0	0	12	**6,493**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (13% GROWTH RATE)		2	315	26	3	33	491	1				31				2	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		12	2,194	180	21	228	3,421	7				216				13	**6,292**
BACKGROUND TRAFFIC[1]	0	11	2,388	188	19	215	3,451	6	0	0	0	203	0	0	0	12	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-4.90%				-5.70%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-117	0	0	0	-197	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**11**	**2,271**	**188**	**19**	**215**	**3,254**	**6**	**0**	**0**	**0**	**203**	**0**	**0**	**0**	**12**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**		8.0%	-8.0%				-12.0%	12.0%								
	Exiting														8.0%		12.0%
Net New Distribution	**Entering**		4.0%	2.0%				4.0%	7.0%			3.0%					
	Exiting			4.0%				4.0%							7.0%	3.0%	5.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**		23	-23				-35	35						25		37
	Net New		75	122				160	131			51			149	59	107
TOTAL PROJECT TRAFFIC		**0**	**98**	**99**	**0**	**0**	**0**	**125**	**166**	**0**	**0**	**51**	**0**	**0**	**174**	**59**	**144**
TOTAL TRAFFIC		**0**	**109**	**2,370**	**188**	**19**	**215**	**3,379**	**172**	**0**	**0**	**51**	**203**	**0**	**174**	**59**	**156**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Lyons Road
COUNT DATE: August 27, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		246	1,065	320	10	189	1,862	525		484	1,183	97	15	276	865	277
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**263**	**1,140**	**342**	**11**	**202**	**1,992**	**562**		**518**	**1,266**	**104**	**16**	**295**	**926**	**296**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI		10	39	21			24			13						6
Seminole Casino/Commerce Center DRI			170	54			136	12		37	12			18	18	
Cocomar											20				19	
Promenade at Coconut Creek		10						15			26			18	32	12
Lyons Corporate Park DRI														1	1	
Sawgrass Exchange DRI		12						12			20			15	24	15
Pompano Industrial Park DRI			9			6	19	7				3		4		
Coral Landings III		5	25	5			23			5						5

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	37	243	80	0	6	202	46	0	55	78	3	0	56	94	38	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	321	1,475	450	12	224	2,355	653	0	615	1,446	115	17	375	1,095	358	**9,511**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		44	191	57	2	34	334	94		87	212	17	3	49	155	50	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		307	1,331	399	13	236	2,326	656		605	1,478	121	19	344	1,081	346	**9,262**
BACKGROUND TRAFFIC[1]	0	321	1,475	450	12	224	2,355	653	0	615	1,446	115	17	375	1,095	358	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-4.90%			-0.70%	-5.70%	0.70%				-0.60%		-0.60%			
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-72	0	0	-2	-134	5	0	0	0	-1	0	-2	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**321**	**1,403**	**450**	**12**	**222**	**2,221**	**658**	**0**	**615**	**1,446**	**114**	**17**	**373**	**1,095**	**358**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**							9.0%	6.0%		6.0%	5.0%					
	Exiting		4.0%	10.0%	4.0%										5.0%	7.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New		85	213	85			169	112		112	94			107	149	
TOTAL PROJECT TRAFFIC		**0**	**85**	**213**	**85**	**0**	**0**	**169**	**112**	**0**	**112**	**94**	**0**	**0**	**107**	**149**	**0**
TOTAL TRAFFIC		**0**	**406**	**1,616**	**535**	**12**	**222**	**2,390**	**770**	**0**	**727**	**1,540**	**114**	**17**	**480**	**1,244**	**358**

[1] Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
[2] Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
[3] Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and NW 42nd Avenue
COUNT DATE: November 12, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements	12	49	1,555	104		183	2,911	146		79	26	89		86	37	61
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS	**13**	**52**	**1,648**	**110**		**194**	**3,086**	**155**		**84**	**28**	**94**		**91**	**39**	**65**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			39				24									
Seminole Casino/Commerce Center DRI			215				149									
Cocomar																
Promenade at Coconut Creek			18				15									
Lyons Corporate Park DRI			1													
Sawgrass Exchange DRI			15				12									
Pompano Industrial Park DRI			14				29									
Coral Landings III			25				23									

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	327	0	0	0	252	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	14	56	2,108	119	0	210	3,588	168	0	91	30	102	0	98	42	70	**6,696**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)	2	9	276	18		33	517	26		14	5	16		15	7	11	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)	15	61	1,924	128		227	3,603	181		98	33	110		106	46	76	**6,608**
BACKGROUND TRAFFIC[1]	14	56	2,108	119	0	210	3,588	168	0	91	30	102	0	98	42	70	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-6.20%				-7.20%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-131	0	0	0	-258	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**14**	**56**	**1,977**	**119**	**0**	**210**	**3,330**	**168**	**0**	**91**	**30**	**102**	**0**	**98**	**42**	**70**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**							15.0%									
	Exiting			15.0%													

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			320				281									
TOTAL PROJECT TRAFFIC		**0**	**0**	**320**	**0**	**0**	**0**	**281**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**14**	**56**	**2,297**	**119**	**0**	**210**	**3,611**	**168**	**0**	**91**	**30**	**102**	**0**	**98**	**42**	**70**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Tradewinds Park Road
COUNT DATE: November 12, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		11	1,730	8	12	12	3,287	3		29	1	31		6	2	10
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**12**	**1,834**	**8**	**13**	**13**	**3,484**	**3**		**31**	**1**	**33**		**6**	**2**	**11**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			39				24									
Seminole Casino/Commerce Center DRI			215				149									
Cocomar																
Promenade at Coconut Creek			18				15									
Lyons Corporate Park DRI			1													
Sawgrass Exchange DRI			15				12									
Pompano Industrial Park DRI			14				29									
Coral Landings III			25				23									

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	327	0	0	0	252	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	13	2,309	9	14	14	4,018	3	0	34	1	36	0	6	2	12	**6,471**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		2	307	1	2	2	584	1		5	0	6		1	0	2	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		14	2,141	9	15	15	4,068	4		36	1	39		7	2	13	**6,364**
BACKGROUND TRAFFIC[1]	0	13	2,309	9	14	14	4,018	3	0	34	1	36	0	6	2	12	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-6.20%				-7.20%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-143	0	0	0	-289	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**13**	**2,166**	**9**	**14**	**14**	**3,729**	**3**	**0**	**34**	**1**	**36**	**0**	**6**	**2**	**12**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**							15.0%									
	Exiting			15.0%													

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			320				281									
TOTAL PROJECT TRAFFIC		**0**	**0**	**320**	**0**	**0**	**0**	**281**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**13**	**2,486**	**9**	**14**	**14**	**4,010**	**3**	**0**	**34**	**1**	**36**	**0**	**6**	**2**	**12**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Florida's Turnpike
COUNT DATE: October 1, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.91

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,260	508		1,031	2,534			596		463				
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS			**1,348**	**544**		**1,103**	**2,711**			**638**		**495**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			36	3			22			2						
Seminole Casino/Commerce Center DRI			72	143			50			99						
Cocomar																
Promenade at Coconut Creek			15	3			12			2						
Lyons Corporate Park DRI			1													
Sawgrass Exchange DRI			15				12									
Pompano Industrial Park DRI			14			22	29					11				
Coral Landings III			12	12			11			11						

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	165	161	0	22	136	0	0	114	0	11	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	1,622	749	0	1,214	3,066	0	0	804	0	546	0	0	0	0	**8,001**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)			226	91		185	455			107		83					
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)			1,574	635		1,288	3,166			745		578					**7,986**
BACKGROUND TRAFFIC[1]	0	0	1,622	749	0	1,214	3,066	0	0	804	0	546	0	0	0	0	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-6.20%				-7.20%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-101	0	0	0	-221	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**0**	**1,521**	**749**	**0**	**1,214**	**2,845**	**0**	**0**	**804**	**0**	**546**	**0**	**0**	**0**	**0**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**							6.0%			9.0%						
	Exiting			6.0%	9.0%												

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			128	192			112			169						
TOTAL PROJECT TRAFFIC		**0**	**0**	**128**	**192**	**0**	**0**	**112**	**0**	**0**	**169**	**0**	**0**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**0**	**1,649**	**941**	**0**	**1,214**	**2,957**	**0**	**0**	**973**	**0**	**546**	**0**	**0**	**0**	**0**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: NW 40th Street and NW 54th Avenue
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		12	1	99		1	4	11		202	111	4	12	7	195	26
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**13**	**1**	**106**		**1**	**4**	**12**		**216**	**119**	**4**	**13**	**7**	**209**	**28**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI		116		304						267						
Cocomar																
Promenade at Coconut Creek																
Lyons Corporate Park DRI																
Sawgrass Exchange DRI																
Pompano Industrial Park DRI																
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	116	0	304	0	0	0	0	0	267	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	130	1	419	0	1	4	13	0	500	129	4	14	8	226	30	**1,479**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		2	0	18		0	1	2		36	20	1	2	1	35	5	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		15	1	124		1	5	14		252	139	5	15	8	244	33	**856**
NON-PROJECT TRAFFIC[1]	**0**	**130**	**1**	**419**	**0**	**1**	**4**	**13**	**0**	**500**	**129**	**4**	**14**	**8**	**226**	**30**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Inter-DRI Distribution[2]	**Entering**							50.0%			20.0%						20.0%
	Exiting		20.0%	50.0%	20.0%												
Net New Distribution	**Entering**		1.0%	1.0%	1.0%										5.0%	2.0%	
	Exiting							3.0%	2.0%			2.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Inter - DRI Trips**		60	151	60			148			59						59
	Net New		22	22	22			73	49			49			108	43	
TOTAL PROJECT TRAFFIC		**0**	**82**	**173**	**82**	**0**	**0**	**221**	**49**	**0**	**59**	**49**	**0**	**0**	**108**	**43**	**59**
TOTAL TRAFFIC		**0**	**212**	**174**	**501**	**0**	**1**	**225**	**62**	**0**	**559**	**178**	**4**	**14**	**116**	**269**	**89**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
[2] Inter-DRI Traffic between project and Commerce Center of Coconut Creek DRI (10% of net new volumes)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Cullum Road/Turtle Creek Drive and NW 54th Avenue
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.8

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											148				204	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS											**158**				**218**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI				248		105				161		152				
Cocomar																
Promenade at Coconut Creek																
Lyons Corporate Park DRI																
Sawgrass Exchange DRI																
Pompano Industrial Park DRI																
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	248	0	105	0	0	0	161	0	152	0	0	0	0	Σ Vol
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	248	0	105	0	0	0	161	171	152	0	0	236	0	**1,073**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)											26				37		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)											184				255		**439**
NON-PROJECT TRAFFIC[1]	**0**	**0**	**0**	**248**	**0**	**105**	**0**	**0**	**0**	**161**	**171**	**152**	**0**	**0**	**236**	**0**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Inter-DRI Distribution[2]	**Entering**						20.0%	10.0%									
	Exiting			10.0%									20.0%				
Net New Distribution	**Entering**			2.0%									1.0%		3.0%	9.0%	
	Exiting								3.0%			6.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Inter - DRI Trips**			26			59	26					60				
	Net New			43					73			147	22		65	194	
TOTAL PROJECT TRAFFIC		**0**	**0**	**69**	**0**	**0**	**59**	**26**	**73**	**0**	**0**	**147**	**82**	**0**	**65**	**194**	**0**
TOTAL TRAFFIC		**0**	**0**	**69**	**248**	**0**	**164**	**26**	**73**	**0**	**161**	**318**	**234**	**0**	**65**	**430**	**0**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
[2] Inter-DRI Traffic between project and Commerce Center of Coconut Creek DRI (10% of net new volumes)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Wiles Road and SR 7
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		540	427	222		251	614	186	73	462	1,410	166	22	163	1,263	639
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**578**	**457**	**238**		**269**	**657**	**199**	**78**	**494**	**1,509**	**178**	**24**	**174**	**1,351**	**684**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI		18		11						7						11
Seminole Casino/Commerce Center DRI				31						45	125				87	
Cocomar				4						4						
Promenade at Coconut Creek			12			6	15	17				5		14		
Lyons Corporate Park DRI															2	1
Sawgrass Exchange DRI						6					10	5			12	
Pompano Industrial Park DRI											3				1	
Coral Landings III				9						10	10				9	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	18	12	55	0	12	15	17	0	66	148	10	0	14	111	12	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	643	506	312	0	303	725	232	84	600	1,779	202	26	202	1,571	751	**7,936**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		97	77	40		45	110	33	13	83	253	30	4	29	226	115	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		675	534	278		314	767	232	91	577	1,762	208	28	203	1,577	799	**8,045**
BACKGROUND TRAFFIC[1]	0	675	534	278	0	314	767	232	91	577	1,762	208	28	203	1,577	799	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]						5.70%						4.90%					
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	0	0	0	18	0	0	0	0	0	10	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**675**	**534**	**278**	**0**	**332**	**767**	**232**	**91**	**577**	**1,762**	**218**	**28**	**203**	**1,577**	**799**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**			3.0%	2.0%										3.0%	8.0%	
	Exiting							2.0%	5.0%		3.0%	6.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New			56	37			43	107		64	128			56	150	
TOTAL PROJECT TRAFFIC		**0**	**0**	**56**	**37**	**0**	**0**	**43**	**107**	**0**	**64**	**128**	**0**	**0**	**56**	**150**	**0**
TOTAL TRAFFIC		**0**	**675**	**590**	**315**	**0**	**332**	**810**	**339**	**91**	**641**	**1,890**	**218**	**28**	**259**	**1,727**	**799**

[1] Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
[2] Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
[3] Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Wiles Road and Banks Road
COUNT DATE: October 2, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.88

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			720	20		28	749			11		32				
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS			**770**	**21**		**30**	**801**			**12**		**34**				

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI																
Cocomar																
Promenade at Coconut Creek			31				37									
Lyons Corporate Park DRI																
Sawgrass Exchange DRI			5				6									
Pompano Industrial Park DRI																
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	36	0	0	0	43	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	868	23	0	32	909	0	0	13	0	37	0	0	0	0	**1,882**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)			129	4		5	134			2		6					
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)			899	25		35	935			14		40					**1,948**
BACKGROUND TRAFFIC[1]	0	0	899	25	0	35	935	0	0	14	0	40	0	0	0	0	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			4.90%				5.70%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	44	0	0	0	53	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**0**	**943**	**25**	**0**	**35**	**988**	**0**	**0**	**14**	**0**	**40**	**0**	**0**	**0**	**0**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**			-5.0%	5.0%		5.0%	-5.0%									
	Exiting										5.0%		5.0%				
Net New Distribution	**Entering**				6.0%		13.0%										
	Exiting										7.0%		6.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**			-14	14		14	-14			16		16				
	Net New				112		243				149		128				
TOTAL PROJECT TRAFFIC		**0**	**0**	**-14**	**126**	**0**	**257**	**-14**	**0**	**0**	**165**	**0**	**144**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**0**	**929**	**151**	**0**	**292**	**974**	**0**	**0**	**179**	**0**	**184**	**0**	**0**	**0**	**0**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Wiles Road and Lyons Road
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		296	115	203		123	90	41		395	1,424	212		37	1,135	326
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**317**	**123**	**217**		**132**	**96**	**44**		**423**	**1,524**	**227**		**40**	**1,214**	**349**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											10				6	
Seminole Casino/Commerce Center DRI						43					54	63			37	
Cocomar											16				15	
Promenade at Coconut Creek						6					15	7			12	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI		5									45				53	6
Pompano Industrial Park DRI											7				4	
Coral Landings III											5				5	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	5		0	0				0	0	153		0		135	6	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	348		235	0				0	457	1,800		0		1,447	383	**4,670**
Years To Buildout	12	12		12	12				12	12	12		12		12	12	
Yearly Growth Rate	1.3%	1.3%		1.3%	1.3%				1.3%	1.3%	1.3%		1.3%		1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		53		36						71	256				204	59	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		**370**		**253**						**494**	**1,780**				**1,418**	**408**	**4,723**
NON-PROJECT TRAFFIC[(1)(2)]		**370**	***1,085***	**253**		***171***	***1,367***	***171***		**494**	**1,780**	***136***		***136***	**1,418**	**408**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**						3.0%	6.0%								12.0%	7.0%
	Exiting		3.0%	2.0%	1.0%							16.0%	7.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New		64	43	21		56	112				341	149			225	131
TOTAL PROJECT TRAFFIC			**64**	**43**	**21**		**56**	**112**	**0**		**0**	**341**	**149**		**0**	**225**	**131**
TOTAL TRAFFIC			**434**	**1,128**	**274**		**227**	**1,479**	**171**		**494**	**2,121**	**285**		**136**	**1,643**	**539**

(1) Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.
Italicized numbers reflect adjusted turning movement volumes based upon 2020 SERPM forecast volumes. Numbers adjusted by appropriate factors. (See Appendix 21-G)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Wiles Road and Powerline Road
COUNT DATE: November 20, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		58	40	128	16	398	20	312		33	1,338	377	20	282	983	16
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**61**	**42**	**136**	**17**	**422**	**21**	**331**		**35**	**1,418**	**400**	**21**	**299**	**1,042**	**17**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI		18	27	18			19			12						12
Cocomar											4				4	
Promenade at Coconut Creek		3	4				3									2
Lyons Corporate Park DRI																
Sawgrass Exchange DRI											7				9	
Pompano Industrial Park DRI											10				5	
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
COMMITTED TRAFFIC (SUBTOTAL)	0				0	0		0	0		21	0	0	0	18		Σ Vol
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0				18	898		358	0		1,554	432	23	323	1,144		**4,750**
Years To Buildout	12				12	12		12	12		12	12	12	12	12		
Yearly Growth Rate	1.3%				1.3%	1.3%		1.3%	1.3%		1.3%	1.3%	1.3%	1.3%	1.3%		
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)					3	71		55			238	67	4	50	175		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)					**20**	**493**		**386**			**1,656**	**467**	**25**	**349**	**1,217**		**4,613**
NON-PROJECT TRAFFIC[(1)(2)]	**0**	***134***	***1,075***	***134***	**18**	**898**	***1,355***	**358**	**0**	***169***	**1,554**	**432**	**23**	**323**	**1,144**	***169***	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**							3.0%									2.0%
	Exiting		2.0%	3.0%													

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New		43	64				56									37
TOTAL PROJECT TRAFFIC		**0**	**43**	**64**	**0**	**0**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**37**
TOTAL TRAFFIC		**0**	**177**	**1,139**	**134**	**18**	**898**	**1,411**	**358**	**0**	**169**	**1,554**	**432**	**23**	**323**	**1,144**	**206**

(1) Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.
Italicized numbers reflect adjusted turning movement volumes based upon 2020 SERPM forecast volumes. Numbers adjusted by appropriate factors. (See Appendix 21-G)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: NW 31st Street and SR 7
COUNT DATE: August 27, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		76	43	382		168	91	30		392	1,683	118	14	29	1,192	111
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**81**	**46**	**409**		**180**	**97**	**32**		**419**	**1,801**	**126**	**15**	**31**	**1,275**	**119**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											6				10	
Seminole Casino/Commerce Center DRI		6				27	9				74	19			107	
Cocomar											31					
Promenade at Coconut Creek											2				3	
Lyons Corporate Park DRI															1	
Sawgrass Exchange DRI											12				15	
Pompano Industrial Park DRI											4				9	
Coral Landings III			5	28			5			26						

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	6	5	28	0	27	14	0	0	26	129	19	0	0	145	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	94	55	470	0	222	119	35	0	479	2,076	155	16	34	1,523	129	**5,407**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		14	8	69		30	16	5		70	302	21	3	5	214	20	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		95	54	478		210	113	37		489	2,103	147	18	36	1,489	139	**5,408**
NON-PROJECT TRAFFIC[1]		**95**	**54**	**478**		**210**	**113**	**37**		**489**	**2,103**	**147**	**18**	**36**	**1,489**	**139**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**											4.0%					
	Exiting															4.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New											75				85	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**	**0**	**0**		**0**	**75**	**0**	**0**	**0**	**85**	**0**
TOTAL TRAFFIC			**95**	**54**	**478**		**210**	**113**	**37**		**489**	**2,178**	**147**	**18**	**36**	**1,574**	**139**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: NW 40th Street and SR 7
COUNT DATE: September 3, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements								105			1,781	47			1,510	
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS								**113**			**1,923**	**51**			**1,631**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											11				7	
Seminole Casino/Commerce Center DRI								72				74				
Cocomar											8					
Promenade at Coconut Creek											5				6	
Lyons Corporate Park DRI															2	
Sawgrass Exchange DRI											15				18	
Pompano Industrial Park DRI											3				1	
Coral Landings III											22				20	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	72	0	0	64	74	0	0	54	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	0	0	0	0	194	0	0	2,142	129	0	0	1,817	0	**4,282**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)								19			322	9			273		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)								132			2,245	60			1,904		**4,341**
BACKGROUND TRAFFIC[1]	0	0	0	0	0	0	0	132	0	0	2,245	60	0	0	1,904	0	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]											4.90%				5.70%		
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	0	0	0	0	0	0	0	0	110	0	0	0	109	0	
NON-PROJECT TRAFFIC[3]	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**132**	**0**	**0**	**2,355**	**60**	**0**	**0**	**2,013**	**0**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**											-2.0%	2.0%				
	Exiting								2.0%								
Net New Distribution	**Entering**											2.0%	5.0%				
	Exiting								3.0%			2.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**								6			-6	6				
	Net New								64			80	94				
TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**70**	**0**	**0**	**74**	**100**	**0**	**0**	**0**	**0**
TOTAL TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**202**	**0**	**0**	**2,429**	**160**	**0**	**0**	**2,013**	**0**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Cullum Road/Turtle Creek Drive and SR 7
COUNT DATE: August 27, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.98

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		216	12	24		29	25	142	36	94	1,749	22	37	102	1,386	258
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**231**	**13**	**26**		**31**	**27**	**152**	**39**	**101**	**1,871**	**24**	**40**	**109**	**1,483**	**276**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											11				7	
Seminole Casino/Commerce Center DRI		45	37	98						9	72	161		118		
Cocomar											8					
Promenade at Coconut Creek											5				6	
Lyons Corporate Park DRI															2	
Sawgrass Exchange DRI											15				18	
Pompano Industrial Park DRI											3				1	
Coral Landings III											22				20	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	45	37	98	0	0	0	0	0	9	136	161	0	118	54	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	295	51	126	0	34	29	164	42	118	2,158	187	43	236	1,657	298	**5,438**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		39	2	4		5	5	25	7	17	314	4	7	18	249	46	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		270	15	30		36	32	177	46	118	2,185	28	47	127	1,732	322	**5,165**
BACKGROUND TRAFFIC(1)	0	295	51	126	0	34	29	164	42	118	2,158	187	43	236	1,657	298	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)(2)											4.90%				5.70%		
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)(2)	0	0	0	0	0	0	0	0	0	0	106	0	0	0	94	0	
NON-PROJECT TRAFFIC(3)	**0**	**295**	**51**	**126**	**0**	**34**	**29**	**164**	**42**	**118**	**2,264**	**187**	**43**	**236**	**1,751**	**298**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**											-9.0%	9.0%		5.0%	-5.0%	
	Exiting						5.0%		9.0%								
Net New Distribution	**Entering**			1.0%									2.0%		9.0%	1.0%	
	Exiting						4.0%	1.0%	4.0%			5.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**						16		28			-26	26		14	-14	
	Net New			15			85	16	85			107	37		169	19	
TOTAL PROJECT TRAFFIC		**0**	**0**	**15**	**0**	**0**	**101**	**16**	**113**	**0**	**0**	**81**	**63**	**0**	**183**	**5**	**0**
TOTAL TRAFFIC		**0**	**295**	**66**	**126**	**0**	**135**	**45**	**277**	**42**	**118**	**2,345**	**250**	**43**	**419**	**1,756**	**298**

(1) Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
(2) Percentages based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
(3) Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Winston Park Boulevard and SR 7
COUNT DATE: November 19, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.97

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		107	44	33		202	125	135	64	42	1,823	211	29	136	1,996	282
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**113**	**47**	**35**		**214**	**133**	**143**	**68**	**45**	**1,932**	**224**	**31**	**144**	**2,116**	**299**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											18				11	
Seminole Casino/Commerce Center DRI											125				87	
Cocomar																
Promenade at Coconut Creek											17				14	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI											10				12	
Pompano Industrial Park DRI											3				1	
Coral Landings III											10				9	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	184	0	0	0	137	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	122	51	38	0	231	144	155	73	49	2,272	242	34	156	2,424	323	**6,314**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		19	8	6		36	22	24	11	8	324	38	5	24	355	50	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		132	55	41		250	155	167	79	53	2,256	262	36	168	2,471	349	**6,474**
NON-PROJECT TRAFFIC[1]		**132**	**55**	**41**		**250**	**155**	**167**	**79**	**53**	**2,256**	**262**	**36**	**168**	**2,471**	**349**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**						1.0%									10.0%	
	Exiting											10.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New						19					213	21			187	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**19**	**0**	**0**	**0**	**0**	**213**	**21**	**0**	**0**	**187**	**0**
TOTAL TRAFFIC			**132**	**55**	**41**		**269**	**155**	**167**	**79**	**53**	**2,469**	**283**	**36**	**168**	**2,658**	**349**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sawgrass Expressway (NB) and SR 7
COUNT DATE: September 24, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.91

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				156				545			1,739	187		143	1,935	
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS				**168**				**589**			**1,878**	**202**		**154**	**2,090**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											16	2			11	
Seminole Casino/Commerce Center DRI				37							125				50	
Cocomar																
Promenade at Coconut Creek											14				10	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI												10		7	12	
Pompano Industrial Park DRI											3				1	
Coral Landings III				3							7	3			6	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	40	0	0	0	0	0	0	166	15	0	7	93	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	222	0	0	0	637	0	0	2,196	233	0	173	2,352	0	**5,813**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)				28				99			315	34		26	350		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)				196				688			2,193	236		180	2,440		**5,933**
NON-PROJECT TRAFFIC[1]				**196**				**688**			**2,193**	**236**		**180**	**2,440**		

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**				2.0%											8.0%	
	Exiting											8.0%	2.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New				37							171	43			150	
TOTAL PROJECT TRAFFIC					**37**				**0**			**171**	**43**		**0**	**150**	
TOTAL TRAFFIC					**233**				**688**			**2,364**	**279**		**180**	**2,590**	

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sawgrass Expressway (SB) and SR 7
COUNT DATE: September 24, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements				285				263	11	182	2,125				1,835	443
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS				**308**				**284**	**12**	**197**	**2,295**				**1,982**	**478**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI						1					16				10	
Seminole Casino/Commerce Center DRI										54	72				50	
Cocomar																
Promenade at Coconut Creek											14				10	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI						12		9							7	
Pompano Industrial Park DRI											3				1	
Coral Landings III						3				3	3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	16	0	9	0	57	109	0	0	0	84	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	333	0	16	0	316	13	270	2,590	0	0	0	2,226	517	**6,281**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)				52				48	2	33	385				332	80	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)				360				332	14	230	2,680				2,314	558	**6,488**
NON-PROJECT TRAFFIC[1]				**360**				**332**	**14**	**230**	**2,680**				**2,314**	**558**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**				2.0%											6.0%	
	Exiting										2.0%	6.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New				37						43	128				112	
TOTAL PROJECT TRAFFIC					**37**				**0**	**0**	**43**	**128**				**112**	**0**
TOTAL TRAFFIC					**397**				**332**	**14**	**273**	**2,808**				**2,426**	**558**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Coconut Creek Parkway and Lyons Road
COUNT DATE: September 24, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		140	708	165		222	1,053	209		295	1,145	233		302	733	198
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS		**151**	**765**	**178**		**240**	**1,137**	**226**		**319**	**1,237**	**252**		**326**	**792**	**214**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI		12						6			12			9	18	18
Cocomar				4		11				4	36	12			34	
Promenade at Coconut Creek								2			7			3	8	
Lyons Corporate Park DRI															1	
Sawgrass Exchange DRI											10				12	
Pompano Industrial Park DRI																
Coral Landings III											3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	12	0	4	0	11	0	8	0	4	68	12	0	12	76	18	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	175	827	196	0	270	1,229	252	0	349	1,405	284	0	364	932	249	**6,532**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		25	128	30		40	191	38		53	207	42		55	133	36	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		176	893	208		280	1,328	264		372	1,444	294		381	925	250	**6,815**
NON-PROJECT TRAFFIC[1]		**176**	**893**	**208**		**280**	**1,328**	**264**		**372**	**1,444**	**294**		**381**	**925**	**250**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**								2.0%			4.0%					
	Exiting														2.0%	4.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New								37			75			43	85	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**	**0**	**37**		**0**	**75**	**0**		**43**	**85**	**0**
TOTAL TRAFFIC			**176**	**893**	**208**		**280**	**1,328**	**301**		**372**	**1,519**	**294**		**424**	**1,010**	**250**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Lyons Plaza and Lyons Road
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		204		16						52	1,416				1,251	91
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**216**		**17**						**55**	**1,501**				**1,326**	**96**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI											31				45	
Cocomar											36				34	
Promenade at Coconut Creek											9				11	
Lyons Corporate Park DRI															1	
Sawgrass Exchange DRI											10				12	
Pompano Industrial Park DRI																
Coral Landings III											3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	89	0	0	0	106	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	233	0	18	0	0	0	0	0	59	1,711	0	0	0	1,539	104	**3,664**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		36		3						9	252				222	16	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		252		20						64	1,753				1,548	112	**3,749**
NON-PROJECT TRAFFIC[1]		**252**		**20**						**64**	**1,753**				**1,548**	**112**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**											6.0%					
	Exiting															6.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New											112				128	
TOTAL PROJECT TRAFFIC			**0**		**0**						**0**	**112**				**128**	**0**
TOTAL TRAFFIC			**252**		**20**						**64**	**1,865**				**1,676**	**112**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Wynmoor Way and Lyons Road
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.93

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		11		52		94		107		98	1,489	122		93	1,277	50
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**12**		**55**		**100**		**113**		**104**	**1,578**	**129**		**99**	**1,354**	**53**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI											31				45	
Cocomar											24				23	
Promenade at Coconut Creek											9				11	
Lyons Corporate Park DRI															1	
Sawgrass Exchange DRI											10				12	
Pompano Industrial Park DRI																
Coral Landings III											3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	77	0	0	0	95	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	13	0	59	0	108	0	122	0	112	1,783	139	0	107	1,558	57	**4,058**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		2		9		17		19		17	265	22		17	227	9	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		14		64		117		132		121	1,843	151		116	1,581	62	**4,201**
NON-PROJECT TRAFFIC[1]		**14**		**64**		**117**		**132**		**121**	**1,843**	**151**		**116**	**1,581**	**62**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**								1.0%			6.0%					
	Exiting														1.0%	6.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New								19			112			21	128	
TOTAL PROJECT TRAFFIC			**0**		**0**		**0**		**19**		**0**	**112**	**0**		**21**	**128**	**0**
TOTAL TRAFFIC			**14**		**64**		**117**		**151**		**121**	**1,955**	**151**		**137**	**1,709**	**62**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Copans Road and Lyons Road
COUNT DATE: October 1, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		226	599	201		296	1,116	338		188	1,128	80		218	886	227
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS		**242**	**641**	**215**		**317**	**1,194**	**362**		**201**	**1,207**	**86**		**233**	**948**	**243**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI			26	2			17	13						21		
Seminole Casino/Commerce Center DRI		6						12			31			18	45	9
Cocomar											24				23	
Promenade at Coconut Creek		8						8			9			10	11	10
Lyons Corporate Park DRI															1	
Sawgrass Exchange DRI											20				24	
Pompano Industrial Park DRI																
Coral Landings III											5				5	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	14	26	2	0	0	17	33	0	0	89	0	0	49	109	19	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	276	719	234	0	343	1,308	424	0	217	1,394	93	0	301	1,134	282	**6,725**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		41	107	36		53	200	61		34	202	14		39	159	41	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		283	748	251		370	1,394	423		235	1,409	100		272	1,107	284	**6,876**
NON-PROJECT TRAFFIC[1]		**283**	**748**	**251**		**370**	**1,394**	**423**		**235**	**1,409**	**100**		**272**	**1,107**	**284**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**								3.0%			7.0%					
	Exiting														3.0%	7.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New								56			131			64	149	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**	**0**	**56**		**0**	**131**	**0**		**64**	**149**	**0**
TOTAL TRAFFIC			**283**	**748**	**251**		**370**	**1,394**	**479**		**235**	**1,540**	**100**		**336**	**1,256**	**284**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: NW 34th Street and Lyons Road
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		29	4	31		41	8	53		51	1,557	64		77	1,227	41
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**31**	**4**	**33**		**43**	**8**	**56**		**54**	**1,650**	**68**		**82**	**1,301**	**43**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI							13								21	
Seminole Casino/Commerce Center DRI											50				72	
Cocomar											20				19	
Promenade at Coconut Creek											26				32	
Lyons Corporate Park DRI															1	
Sawgrass Exchange DRI											20				24	
Pompano Industrial Park DRI											3				6	
Coral Landings III											5				5	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	13	0	0	0	124	0	0	0	180	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	34	4	36	0	46	22	61	0	58	1,907	73	0	89	1,586	46	**3,962**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		5	1	6		7	1	9		9	277	11		14	218	7	
NON-PROJECT TRAFFIC (13% GROWTH RATE)		36	5	39		50	9	65		63	1,927	79		96	1,519	50	**3,938**
NON-PROJECT TRAFFIC[1]	**0**	**34**	**4**	**36**	**0**	**46**	**22**	**61**	**0**	**58**	**1,907**	**73**	**0**	**89**	**1,586**	**46**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**								1.0%			10.0%					
	Exiting														1.0%	10.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New								19			187			21	213	
TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**187**	**0**	**0**	**21**	**213**	**0**
TOTAL TRAFFIC		**0**	**34**	**4**	**36**	**0**	**46**	**22**	**80**	**0**	**58**	**2,094**	**73**	**0**	**110**	**1,799**	**46**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Winston Park Boulevard and Lyons Road
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.92

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		171	123	108		118	122	121		228	1,265	139		289	1,445	267
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**181**	**130**	**114**		**125**	**129**	**128**		**242**	**1,341**	**147**		**306**	**1,532**	**283**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											10				6	
Seminole Casino/Commerce Center DRI											54				37	
Cocomar											16				15	
Promenade at Coconut Creek															27	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI											62				74	
Pompano Industrial Park DRI											7				4	
Coral Landings III											3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	153	0	0	0	169	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	196	141	123	0	135	139	138	0	262	1,602	159	0	331	1,825	306	**5,357**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		30	22	19		21	22	21		41	225	25		51	257	47	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		211	152	133		146	151	149		283	1,566	172		357	1,789	330	**5,439**
NON-PROJECT TRAFFIC[1]		**211**	**152**	**133**		**146**	**151**	**149**		**283**	**1,566**	**172**		**357**	**1,789**	**330**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**						2.0%									17.0%	
	Exiting											17.0%	2.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New						37					362	43			318	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**37**	**0**	**0**		**0**	**362**	**43**		**0**	**318**	**0**
TOTAL TRAFFIC			**211**	**152**	**133**		**183**	**151**	**149**		**283**	**1,928**	**215**		**357**	**2,107**	**330**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sawgrass Expressway (NB) and Lyons Road
COUNT DATE: September 24, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.88

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		236		160							1,409	132		235	1,937	
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS		**255**		**173**							**1,522**	**143**		**254**	**2,092**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											5				3	
Seminole Casino/Commerce Center DRI											27	27			37	
Cocomar											12				11	
Promenade at Coconut Creek											8	3			7	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI		50									62			97	74	
Pompano Industrial Park DRI											7				4	
Coral Landings III											3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	50	0	0	0	0	0	0	0	0	125	30	0	97	142	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	326	0	187	0	0	0	0	0	0	1,770	185	0	372	2,403	0	**5,243**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		43		29							255	24		43	351		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		298		202							1,777	167		297	2,443		**5,184**
NON-PROJECT TRAFFIC[1]	**0**	**326**	**0**	**187**	**0**	**0**	**0**	**0**	**0**	**0**	**1,770**	**185**	**0**	**372**	**2,403**	**0**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**															17.0%	
	Exiting											11.0%	6.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New											235	128			318	
TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**235**	**128**	**0**	**0**	**318**	**0**
TOTAL TRAFFIC		**0**	**326**	**0**	**187**	**0**	**0**	**0**	**0**	**0**	**0**	**2,005**	**313**	**0**	**372**	**2,721**	**0**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sawgrass Expressway (SB) and Lyons Road
COUNT DATE: September 24, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.91

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements						274		214		129	1,674				1,701	321
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS						**296**		**231**		**139**	**1,808**				**1,837**	**347**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											5				3	
Seminole Casino/Commerce Center DRI						19					27				19	
Cocomar											12				11	
Promenade at Coconut Creek						2					6				5	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI								82			112				162	59
Pompano Industrial Park DRI											7				4	
Coral Landings III											3				3	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	21	0	82	0	0	173	0	0	0	210	59	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	0	0	341	0	332	0	150	2,127	0	0	0	2,196	434	**5,580**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)						50		39		23	303				308	58	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)						346		270		162	2,111				2,145	405	**5,439**
NON-PROJECT TRAFFIC[1]	**0**	**0**	**0**	**0**	**0**	**341**	**0**	**332**	**0**	**150**	**2,127**	**0**	**0**	**0**	**2,196**	**434**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**						6.0%									11.0%	
	Exiting											11.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New						112					235				206	
TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**0**	**0**	**112**	**0**	**0**	**0**	**0**	**235**	**0**	**0**	**0**	**206**	**0**
TOTAL TRAFFIC		**0**	**0**	**0**	**0**	**0**	**453**	**0**	**332**	**0**	**150**	**2,362**	**0**	**0**	**0**	**2,402**	**434**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sawgrass Boulevard and Lyons Road
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.94

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		70	4	96		151	6	22	15	165	1,475	263		48	2,214	89
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**74**	**4**	**102**		**160**	**6**	**23**	**16**	**175**	**1,564**	**279**		**51**	**2,347**	**94**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											5				3	
Seminole Casino/Commerce Center DRI											27				19	
Cocomar											12				11	
Promenade at Coconut Creek											6				5	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI											65				55	
Pompano Industrial Park DRI											6				3	
Coral Landings III											2				2	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	124	0	0	0	101	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	80	4	110	0	173	6	25	17	189	1,814	302	0	55	2,638	102	**5,515**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		12	1	17		27	1	4	3	29	262	47		9	393	16	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		86	5	119		187	7	27	19	204	1,826	326		60	2,740	110	**5,716**
NON-PROJECT TRAFFIC[1]		**86**	**5**	**119**		**187**	**7**	**27**	**19**	**204**	**1,826**	**326**		**60**	**2,740**	**110**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**															11.0%	
	Exiting											11.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New											235				206	
TOTAL PROJECT TRAFFIC			**0**	**0**	**0**		**0**	**0**	**0**	**0**	**0**	**235**	**0**		**0**	**206**	**0**
TOTAL TRAFFIC			**86**	**5**	**119**		**187**	**7**	**27**	**19**	**204**	**2,061**	**326**		**60**	**2,946**	**110**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Holmberg Road and Lyons Road
COUNT DATE: November 18, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.95

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements		274	6	224		29	53	23		179	1,388	9		14	2,008	254
Peak Season Correction Factor	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060	1.060
EXISTING CONDITIONS		**290**	**6**	**237**		**31**	**56**	**24**		**190**	**1,471**	**10**		**15**	**2,128**	**269**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											5				3	
Seminole Casino/Commerce Center DRI											27				19	
Cocomar											12				11	
Promenade at Coconut Creek											6				5	
Lyons Corporate Park DRI				3						1						
Sawgrass Exchange DRI											65				55	
Pompano Industrial Park DRI											4				2	
Coral Landings III											2				2	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	3	0	0	0	0	0	1	121	0	0	0	97	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	313	6	259	0	34	61	26	0	206	1,711	11	0	16	2,397	291	**5,331**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)		49	1	40		5	9	4		32	247	2		3	357	45	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)		339	7	277		36	65	28		222	1,718	12		18	2,485	314	**5,521**
NON-PROJECT TRAFFIC[1]		**339**	**7**	**277**		**36**	**65**	**28**		**222**	**1,718**	**12**		**18**	**2,485**	**314**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**				2.0%											7.0%	
	Exiting										2.0%	7.0%					

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New				37						43	149				131	
TOTAL PROJECT TRAFFIC			**0**	**0**	**37**		**0**	**0**	**0**		**43**	**149**	**0**		**0**	**131**	**0**
TOTAL TRAFFIC			**339**	**7**	**314**		**36**	**65**	**28**		**265**	**1,867**	**12**		**18**	**2,616**	**314**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Hillsboro Boulevard and Lyons Road
COUNT DATE: March 4, 2009
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements	27	234	650	141	19	726	958	264	19	150	994	498		208	1,340	173
Peak Season Correction Factor	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980	0.980
EXISTING CONDITIONS	**26**	**229**	**637**	**138**	**19**	**711**	**939**	**259**	**19**	**147**	**974**	**488**		**204**	**1,313**	**170**

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											5				3	
Seminole Casino/Commerce Center DRI						6					18	9			12	
Cocomar				4						4	4				4	
Promenade at Coconut Creek						1					4	1			3	
Lyons Corporate Park DRI						1					3	2			1	
Sawgrass Exchange DRI				7		15				9	24	18			20	
Pompano Industrial Park DRI											3				1	
Coral Landings III											2				2	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	11	0	23	0	0	0	13	63	30	0	0	46	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	28	248	689	160	21	791	1,015	280	21	172	1,116	557	0	220	1,465	184	**6,967**
Years To Buildout	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)	4	35	97	21	3	109	143	40	3	22	149	75		31	200	26	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)	30	264	734	159	22	820	1,082	299	22	169	1,123	563		235	1,513	196	**7,231**
NON-PROJECT TRAFFIC[1]	**30**	**264**	**734**	**159**	**22**	**820**	**1,082**	**299**	**22**	**169**	**1,123**	**563**		**235**	**1,513**	**196**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**																
	Exiting																
Net New Distribution	**Entering**				1.0%		1.0%									5.0%	
	Exiting										1.0%	5.0%	1.0%				

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**																
	Net New				19		19				21	107	21			94	
TOTAL PROJECT TRAFFIC		**0**	**0**	**0**	**19**	**0**	**19**	**0**	**0**	**0**	**21**	**107**	**21**		**0**	**94**	**0**
TOTAL TRAFFIC		**30**	**264**	**734**	**178**	**22**	**839**	**1,082**	**299**	**22**	**190**	**1,230**	**584**		**235**	**1,607**	**196**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Cullum Road and Lyons Road
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											2,031				1,433	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS											**2,173**				**1,533**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											98				6	
Seminole Casino/Commerce Center DRI		116		36						25						81
Cocomar											20				19	
Promenade at Coconut Creek											51				62	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI											45				53	
Pompano Industrial Park DRI											7				4	
Coral Landings III											5				5	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
COMMITTED TRAFFIC (SUBTOTAL)	0	116	0	36	0	0	0	0	0	25	227	0	0	0	152	81	**Σ Vol**
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	116	0	36	0	0	0	0	0	25	2,576	0	0	0	1,809	81	**4,643**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)											364				257		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)											2,537				1,790		**4,327**
NON-PROJECT TRAFFIC[1]	**0**	**116**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**25**	**2,576**	**0**	**0**	**0**	**1,809**	**81**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**										1.0%	-1.0%				-2.0%	2.0%
	Exiting		1.0%		2.0%												
Net New Distribution	**Entering**							1.0%			1.0%					13.0%	2.0%
	Exiting		3.0%	1.0%	1.0%							20.0%				1.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**		3		6						3	-3				-6	6
	Net New		64	16	21			15			19	426				264	37
TOTAL PROJECT TRAFFIC		**0**	**67**	**16**	**27**	**0**	**0**	**15**	**0**	**0**	**22**	**423**	**0**	**0**	**0**	**258**	**43**
TOTAL TRAFFIC		**0**	**183**	**16**	**63**	**0**	**0**	**15**	**0**	**0**	**47**	**2,999**	**0**	**0**	**0**	**2,067**	**124**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Jardin Driveway and Lyons Road
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											2,031				1,433	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS											**2,173**				**1,533**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI																
Cocomar																
Promenade at Coconut Creek																
Lyons Corporate Park DRI																
Sawgrass Exchange DRI																
Pompano Industrial Park DRI																
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	0	0	0	0	0	0	0	2,349	0	0	0	1,657	0	**4,006**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)											364				257		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)											2,537				1,790		**4,327**
NON-PROJECT TRAFFIC[1]											**2,537**				**1,790**		

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**										3.0%	-3.0%				-2.0%	2.0%
	Exiting		3.0%		2.0%												
Net New Distribution	**Entering**										3.0%	1.0%				11.0%	2.0%
	Exiting		4.0%		2.0%							16.0%				2.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**		9		6						9	-9				-6	6
	Net New		85		43						56	360				249	37
TOTAL PROJECT TRAFFIC			**94**		**49**						**65**	**351**				**243**	**43**
TOTAL TRAFFIC			**94**		**49**						**65**	**2,888**				**2,033**	**43**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Uptown Driveway and Lyons Road
COUNT DATE: August 26, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.96

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements											2,031				1,433	
Peak Season Correction Factor	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070	1.070
EXISTING CONDITIONS											**2,173**				**1,533**	

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI											98				6	
Seminole Casino/Commerce Center DRI		116		36						25						81
Cocomar											20				19	
Promenade at Coconut Creek											51				62	
Lyons Corporate Park DRI											1				3	
Sawgrass Exchange DRI											45				53	
Pompano Industrial Park DRI											7				4	
Coral Landings III											5				5	

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	
COMMITTED TRAFFIC (SUBTOTAL)	0	116	0	36	0	0	0	0	0	25	227	0	0	0	152	81	Σ Vol
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	116	0	36	0	0	0	0	0	25	2,576	0	0	0	1,809	81	**4,643**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (13% GROWTH RATE)											364				257		
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)											2,537				1,790		**4,327**
NON-PROJECT TRAFFIC[1]	**0**	**116**	**0**	**36**	**0**	**0**	**0**	**0**	**0**	**25**	**2,576**	**0**	**0**	**0**	**1,809**	**81**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**										7.0%	-7.0%				-11.0%	11.0%
	Exiting		7.0%		11.0%												
Net New Distribution	**Entering**										7.0%	4.0%					11.0%
	Exiting		12.0%		8.0%							4.0%				4.0%	

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**		22		34						20	-20				-32	32
	Net New		256		171						131	160				85	206
TOTAL PROJECT TRAFFIC		**0**	**278**	**0**	**205**	**0**	**0**	**0**	**0**	**0**	**151**	**140**	**0**	**0**	**0**	**53**	**238**
TOTAL TRAFFIC		**0**	**394**	**0**	**241**	**0**	**0**	**0**	**0**	**0**	**176**	**2,716**	**0**	**0**	**0**	**1,862**	**319**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Sample Road and Fisherman's Landing Driveway
COUNT DATE: September 3, 2008
TIME PERIOD: PM Period
PEAK HOUR FACTOR: 0.99

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements			1,911				2,917									
Peak Season Correction Factor	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080	1.080
EXISTING CONDITIONS			**2,064**				**3,150**									

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI																
Cocomar																
Promenade at Coconut Creek																
Lyons Corporate Park DRI																
Sawgrass Exchange DRI																
Pompano Industrial Park DRI																
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	2,231	0	0	0	3,405	0	0	0	0	0	0	0	0	0	**5,636**
Years To Buildout	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)			346				528										
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)			2,410				3,678										**6,088**
BACKGROUND TRAFFIC[1]	0	0	2,410	0	0	0	3,678	0	0	0	0	0	0	0	0	0	
ADJUSTMENT FOR WILES ROAD EXTENSION (%)[2]			-4.90%				-5.70%										
ADJUSTMENT FOR WILES ROAD EXTENSION (VOLUME)[2]	0	0	-118	0	0	0	-210	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC[3]	**0**	**0**	**2,292**	**0**	**0**	**0**	**3,468**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	

"PROJECT DISTRIBUTION"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Pass-By Distribution	**Entering**		7.0%	-7.0%				-7.0%	7.0%								
	Exiting														7.0%		7.0%
Net New Distribution	**Entering**		2.0%					11.0%	4.0%								
	Exiting			11.0%											7.0%		4.0%

"PROJECT TRAFFIC"

LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Pass - By**		20	-20				-20	20						22		22
	Net New		37	235				206	75						149		85
TOTAL PROJECT TRAFFIC		**0**	**57**	**215**	**0**	**0**	**0**	**186**	**95**	**0**	**0**	**0**	**0**	**0**	**171**	**0**	**107**
TOTAL TRAFFIC		**0**	**57**	**2,507**	**0**	**0**	**0**	**3,654**	**95**	**0**	**0**	**0**	**0**	**0**	**171**	**0**	**107**

[1] Background traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
[2] Based on comparison of 2020 SERPM Model with/without Wiles Road between Lyons Road and Powerline Road.
[3] Non-project traffic is the sum of background traffic and adjustment for Wiles Road extension.

TRAFFIC VOLUMES
AT STUDY INTERSECTIONS

INTERSECTION: Cullum Road and Banks Road
COUNT DATE:
TIME PERIOD: PM Period
PEAK HOUR FACTOR:

"EXISTING TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Raw Turning Movements																
Peak Season Correction Factor																
EXISTING CONDITIONS																

"BACKGROUND TRAFFIC"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Downtown Coral Springs DRI																
Seminole Casino/Commerce Center DRI																
Cocomar																
Promenade at Coconut Creek																
Lyons Corporate Park DRI																
Sawgrass Exchange DRI																
Pompano Industrial Park DRI																
Coral Landings III																

"NON-PROJECT TRAFFIC CALCULATIONS"	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	Σ Vol
COMMITTED TRAFFIC (SUBTOTAL)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NON-PROJECT TRAFFIC (COMMITTED DEVELOPMENT + 0.65% GROWTH RATE)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Years To Buildout																	
Yearly Growth Rate	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	1.3%	
NON-PROJECT TRAFFIC GROWTH (1.3% GROWTH RATE)																	
NON-PROJECT TRAFFIC (1.3% GROWTH RATE)																	**0**
NON-PROJECT TRAFFIC[1]																	

"PROJECT DISTRIBUTION" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Inter-DRI Distribution[2]	**Entering**																
	Exiting																
Net New Distribution	**Entering**						3.0%	1.0%							4.0%	10.0%	5.0%
	Exiting		3.0%	2.0%					3.0%			7.0%	3.0%				

"PROJECT TRAFFIC" LAND USE	TYPE	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Project Trips	**Inter - DRI Trips**																
	Net New		73	49			65	22	73			171	73		86	216	108
TOTAL PROJECT TRAFFIC			**73**	**49**			**65**	**22**	**73**			**171**	**73**		**86**	**216**	**108**
TOTAL TRAFFIC			**73**	**49**			**65**	**22**	**73**			**171**	**73**		**86**	**216**	**108**

[1] Non-Project Traffic is the sum of existing and the higher of (Committed Development + 0.65% growth rate (half of growth rate)) or (1.3% growth rate)
[2] Inter-DRI Traffic between project and Commerce Center of Coconut Creek DRI (10% of net new volumes)

Main Street @ Coconut Creek
Total Committed Development Traffic

Roadway		Dowtown Coral Springs DRI (5% Built)		Seminole Coconut Creek Casino (28% Built)		Cocomar Plaza (0% Built)		Promenade at Coconut Creek (77% Built)		Lyons Corporate Park (97% Built)		Sawgrass Exchange DRI (53% Built)		Pompano Industrial Park DRI (80% Built)		Coral Landings III (0% Built)		Total Committed Development	
From	**To**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**	**NB/EB**	**SB/WB**
Sample Road																			
Riverside Drive	Rock Island Road	307	193	99	143	4	4	5	6	0	1	10	12	4	7	27	30	**455**	**395**
Rock Island Road	SR 7	205	125	112	161	4	4	5	6	0	1	12	15	4	7	33	37	**374**	**355**
SR 7	Banks Road	120	74	167	242	4	4	7	8	0	0	12	15	12	24	35	32	**357**	**399**
Banks Road	Lyons Road	115	71	155	224	0	0	10	12	0	0	12	15	12	24	35	32	**339**	**378**
Lyons Road	Florida's Turnpike	73	43	215	149	0	0	18	15	1	0	15	12	14	29	25	23	**360**	**270**
Wiles Road																			
SR 7	Lyons Road	0	0	0	0	0	0	42	51	0	0	0	0	0	0	0	0	**42**	**51**
Lyons Road	Powerline Road	0	0	63	43	0	0	7	6	0	0	0	0	0	0	0	0	**70**	**49**
Turtle Creek Drive/Cullum Road																			
SR 7	Lyons Road	0	0	248	358	0	0	0	0	0	0	0	0	0	0	0	0	**248**	**358**
SR 7																			
Sample Road	Wiles Road	23	14	118	170	4	4	5	6	0	2	15	18	3	1	22	20	**189**	**234**
Wiles Road	Sawgrass Expressway	37	22	125	87	0	0	17	14	1	3	10	12	3	1	10	9	**202**	**147**
NW 54th Avenue																			
Sample Road	Cullum Road	0	0	510	353	0	0	0	0	0	0	0	0	0	0	0	0	**510**	**353**
Banks Road																			
Sample Road	Wiles Road	0	0	12	18	8	8	11	0	0	0	0	0	0	0	0	0	**32**	**25**
Lyons Road																			
Coconut Creek Parkway	Copans Road	1	2	31	45	36	34	9	11	0	1	10	12	0	0	3	3	**90**	**107**
Copans Road	Sample Road	14	25	50	72	24	23	26	32	0	1	20	24	3	6	5	5	**141**	**186**
Sample Road	Wiles Road	17	9	116	81	20	19	69	84	1	3	45	53	7	4	5	5	**279**	**257**
Wiles Road	Sawgrass Expressway	17	9	54	37	16	15	15	12	1	3	62	74	7	4	3	3	**175**	**156**
Sawgrass Expressway	Johnson Road	0	0	27	19	12	11	6	5	1	3	55	65	7	4	2	2	**109**	**107**
Johnson Road	Hillsboro Boulevard	0	0	27	19	4	4	4	3	6	1	65	55	7	4	0	0	**113**	**85**

Appendix G-2
Celebration Pointe

EXHIBIT F-5
CELEBRATION POINTE
TRIP GENERATION

Land Use	Intensity	PM Peak Hour		
		Total	In	Out
Approved				
Residential Townhouse/Condominiums	412 d.u.	214	143	71
Total Approved		**214**	**143**	**71**
Proposed				
Apartments	580 d.u.	360	234	126
Total Proposed		**360**	**234**	**126**
Net Trip Increase		***146***	***91***	***55***

Notes: Trip generation was calculated using the following data:

PM Peak Hour Traffic Generation

Residential Townhouse/Condominiums	[ITE 230]	=	T = 0.52 trips per d.u.; (67% in, 33% out)
Apartments	[ITE 240]	=	T = 0.62 trips per d.u.; (65% in, 35% out)

Kimley-Horn and Associates, Inc.

Kimley-Horn
and Associates, Inc.

TABLE 1
CELEBRATION POINTE
COMPARISON OF TRIP GENERATION POTENTIAL

Land Use	Intensity	PM Peak Hour		
		Total	In	Out
Approved				
Residential Townhouse/Condominiums	412 d.u.	214	143	71
Total Approved		**214**	**143**	**71**
Proposed				
Apartments	580 d.u.	360	234	126
Total Proposed		**360**	**234**	**126**
Net Trip Increase		***146***	***91***	***55***

Notes: Trip generation was calculated using the following data:

PM Peak Hour Traffic Generation

Residential Townhouse/Condominiums	[ITE 230]	=	T = 0.52 trips per d.u.; (67% in, 33% out)
Apartments	[ITE 240]	=	T = 0.62 trips per d.u.; (65% in, 35% out)

Kimley-Horn
and Associates, Inc.

TABLE 2
CELEBRATION POINTE
ASSIGNMENT AND PERCENT IMPACT ON ROADWAY NETWORK

Roadway From	To	Adopted LOS 'D' Peak Hour Volume (1)	Percent Project Assignment	Project Trips	Percent Impact
Sample Road					
Rock Island Rd.	US 441 / SR 7	5,080	15%	22	0.43%
US 441 / SR 7	Lyons Rd.	5,080	10%	15	0.30%
Royal Palm Boulevard					
Rock Island Rd.	US 441 / SR 7	3,390	15%	22	0.65%
US 441 / SR 7	Lyons Rd.	3,390	20%	29	0.86%
Coconut Creek Parkway					
US 441 / SR 7	Lyons Road	2,950	15%	22	0.75%
US 441 / SR 7					
Wiles Rd.	Sample Rd.	5,080	15%	22	0.43%
Sample Rd.	Site Access	5,080	40%	58	1.14%
Site Access	Royal Palm Blvd.	5,080	60%	88	1.73%
Royal Palm Blvd.	Coconut Creek Pkwy.	5,080	25%	37	0.73%
Coconut Creek Pkwy.	Atlantic Blvd.	5,080	10%	15	0.30%

Notes:
(1) Based on FDOT 2007 service volume tables from 2007 Quality/Level of Service white paper.

Appendix G-3

The Village of Marbella at Creek Commons

TABLE 2A
THE VILLAGE OF MARBELLA AT CREEK COMMONS
TRIP GENERATION FOR SCHEME A

01-Nov-06

LAND USE	UNITS	ITE LUC	ITE 7TH EDITION RATE OR FORMULA	DAILY TRIPS	IN %	IN TRIPS	OUT %	OUT TRIPS
LIVE WORK UNITS	37 DU	230	Ln (T) = 0.85 Ln (X) + 2.55	276	50%	138	50%	138
TOWNHOMES	55 DU	230	Ln (T) = 0.85 Ln (X) + 2.55	386	50%	193	50%	193
TOWER UNITS	672 DU	232	T = 3.77 (X) + 223.66	2,757	50%	1,379	50%	1,378
HOTEL	150 ROOMS	310	T = 8.92 (X)	1,338	50%	669	50%	669
WORK SPACE FOR LW UNITS [1]	26,620 SQ. FT.	710	Ln (T) = 0.77 Ln (X) + 3.65	481	50%	241	50%	240
RETAIL	74,529 SQ. FT.	820	Ln (T) = 0.65 Ln (X) + 5.83	5,610	50%	2,805	50%	2,805
OFFICE	112,804 SQ. FT.	710	Ln (T) = 0.77 Ln (X) + 3.65	1464	50%	732	50%	732
GROSS TOTAL TRIPS				**12,312**	50%	**6,157**	50%	**6,155**
INTERNALIZATION		**20.00%**		2,462	50%	1,231	50%	1,231
NET EXTERNAL TRIPS				**9,850**	50%	**4,926**	50%	**4,924**

LAND USE	UNITS	ITE LUC	ITE 7TH EDITION TRIP RATE OR FORMULA	AM TRIPS	IN %	IN TRIPS	OUT %	OUT TRIPS
LIVE WORK UNITS	37 DU	230	Ln (T) = 0.80 Ln (X) + 0.26	23	17%	4	83%	19
TOWNHOMES	55 DU	230	Ln (T) = 0.80 Ln (X) + 0.26	32	17%	5	83%	27
TOWER UNITS	672 DU	232	T = 0.29 (X) + 28.86	224	19%	43	81%	181
HOTEL	150 ROOMS	310	T = 0.78 (X) - 29.80	87	58%	51	42%	36
WORK SPACE FOR LW UNITS [1]	26,620 SQ. FT.	710	Ln (T) = 0.80 Ln (X) + 1.55	65	88%	57	12%	8
RETAIL	74,529 SQ. FT.	820	Ln (T) = 0.60 Ln (X) + 2.29	131	61%	80	39%	51
OFFICE	112,804 SQ. FT.	710	Ln (T) = 0.80 Ln (X) + 1.55	207	88%	182	12%	25
GROSS TOTAL TRIPS				**769**	55%	**422**	45%	**347**
INTERNALIZATION		**20.00%**		154	55%	85	45%	69
NET EXTERNAL TRIPS				**615**	55%	**337**	45%	**278**

LAND USE	UNITS	ITE LUC	ITE 7TH EDITION TRIP RATE OR FORMULA	PM TRIPS	IN %	IN TRIPS	OUT %	OUT TRIPS
LIVE WORK UNITS	37 DU	230	Ln (T) = 0.82 Ln (X) + 0.32	27	67%	18	33%	9
TOWNHOMES	55 DU	230	Ln (T) = 0.82 Ln (X) + 0.32	37	87%	25	33%	12
TOWER UNITS	672 DU	232	T = 0.34 (X) + 15.47	244	62%	151	38%	93
HOTEL	150 ROOMS	310	Ln (T) = 1.20 Ln (X) - 1.55	87	49%	43	51%	44
WORK SPACE FOR LW UNITS [1]	26,620 SQ. FT.	710	T = 1.12 (X) + 78.81	109	17%	18	83%	91
RETAIL	74,529 SQ. FT.	820	Ln (T) = 0.86 Ln (X) + 3.40	516	48%	248	52%	268
OFFICE	112,804 SQ. FT.	710	T = 1.12 (X) + 78.81	205	17%	35	83%	170
GROSS TOTAL TRIPS				**1,225**	44%	**538**	56%	**687**
INTERNALIZATION		**20.00%**		245	44%	108	56%	137
NET EXTERNAL TRIPS				**980**	44%	**430**	56%	**550**

[1] Trips for the Live Work Space has been generated using ITE LUC 710 for Office Uee. A trip comparison between the Specialty Retail and Office Use is provided below.

LIVE WORK SPACE AS RETAIL	26,620 SQ. FT.	814	T = 2.40 (X) + 21.48	85	44%	38	56%	47
LIVE WORK SPACE AS OFFICE	26,620 SQ. FT.	710	T = 1.12 (X) + 78.81	109	17%	18	83%	91

TABLE 2B
THE VILLAGE OF MARBELLA AT CREEK COMMONS
TRIP GENERATION FOR SCHEME B

26-Sep-06

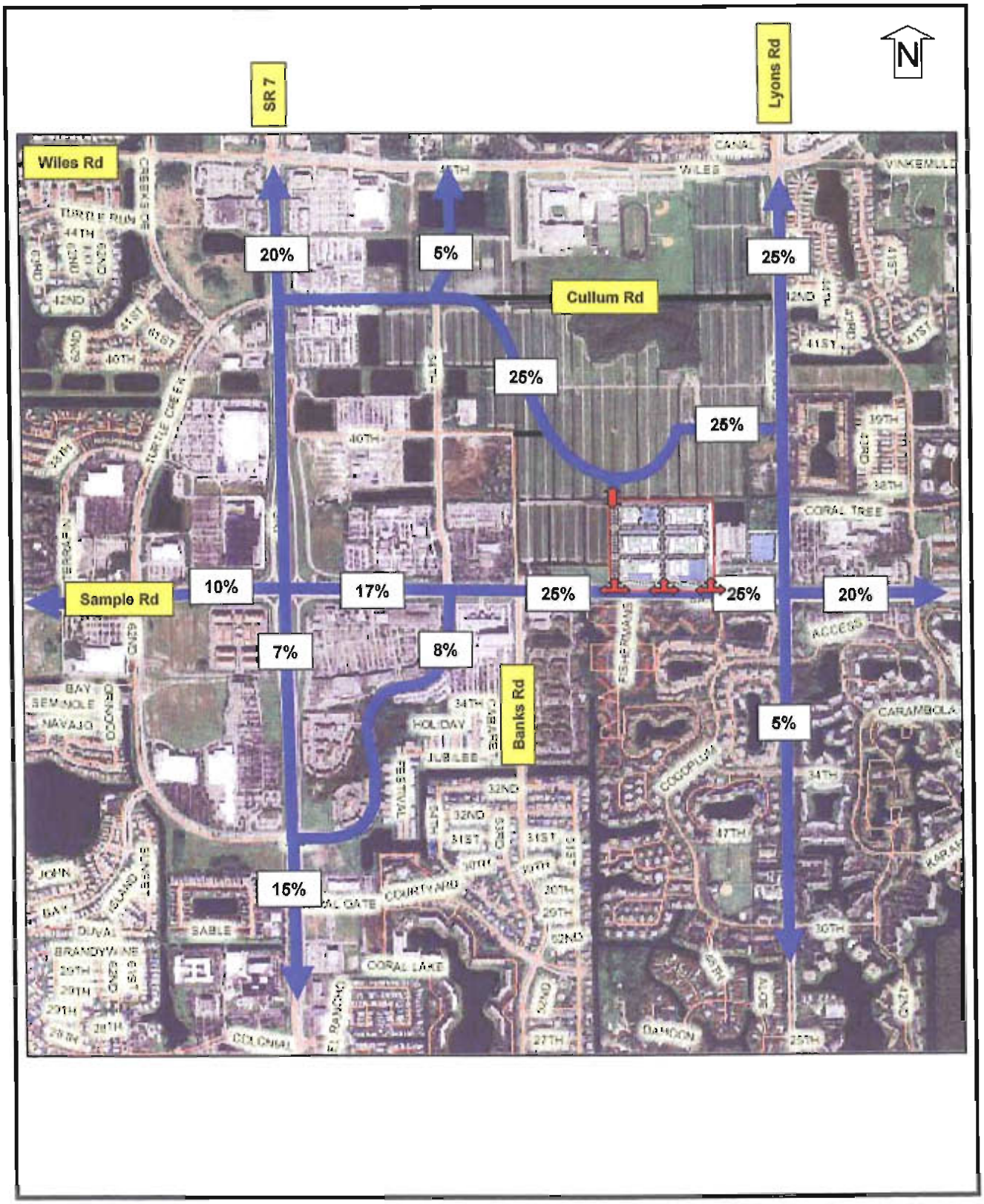
LAND USE	UNITS	ITE LUC	ITE 7TH EDITION RATE OR FORMULA	DAILY TRIPS	IN %	IN TRIPS	OUT %	OUT TRIPS
LIVE WORK UNITS	27 DU	230	Ln (T) = 0.85 Ln (X) + 2.55	211	50%	106	50%	105
TOWNHOMES	65 DU	230	Ln (T) = 0.85 Ln (X) + 2.55	445	50%	223	50%	222
TOWER UNITS	672 DU	232	T = 3.77 (X) + 223.66	2,757	50%	1,379	50%	1,378
HOTEL	150 ROOMS	310	T = 8.92 (X)	1,338	50%	669	50%	669
WORK SPACE FOR LW UNITS [1]	20,415 SQ. FT.	710	Ln (T) = 0.77 Ln (X) + 3.65	392	50%	196	50%	196
RETAIL	51,720 SQ. FT.	820	Ln (T) = 0.65 Ln (X) + 5.83	4,424	50%	2,212	50%	2,212
AUTO DEALERSHIP	114,552 SQ. FT.	841	T = 33.34 (X)	3,819	50%	1,910	50%	1,909
GROSS TOTAL TRIPS				**13,386**	50%	**6,695**	50%	**6,691**
INTERNALIZATION		20.00%		2,677	50%	1,339	50%	1,338
NET EXTERNAL TRIPS				**10,709**	50%	**5,356**	50%	**5,353**

LAND USE	UNITS	ITE LUC	ITE 7TH EDITION TRIP RATE OR FORMULA	AM TRIPS	IN %	IN TRIPS	OUT %	OUT TRIPS
LIVE WORK UNITS	27 DU	230	Ln (T) = 0.80 Ln (X) + 0.26	18	17%	3	83%	15
TOWNHOMES	65 DU	230	Ln (T) = 0.80 Ln (X) + 0.26	37	17%	6	83%	31
TOWER UNITS	672 DU	232	T = 0.29 (X) + 28.86	224	19%	43	81%	181
HOTEL	150 ROOMS	310	T = 0.78 (X) - 29.80	87	58%	51	42%	36
WORK SPACE FOR LW UNITS [1]	20,415 SQ. FT.	710	Ln (T) = 0.80 Ln (X) + 1.55	53	88%	47	12%	6
RETAIL	51,720 SQ. FT.	820	Ln (T) = 0.60 Ln (X) + 2.29	105	61%	64	39%	41
AUTO DEALERSHIP	114,552 SQ. FT.	841	T = 2.05 (X)	235	74%	174	26%	61
GROSS TOTAL TRIPS				**759**	51%	**388**	49%	**371**
INTERNALIZATION		20.00%		152	51%	77	49%	75
NET EXTERNAL TRIPS				**607**	51%	**311**	49%	**296**

LAND USE	UNITS	ITE LUC	ITE 7TH EDITION TRIP RATE OR FORMULA	PM TRIPS	IN %	IN TRIPS	OUT %	OUT TRIPS
LIVE WORK UNITS	27 DU	230	Ln (T) = 0.82 Ln (X) + 0.32	21	67%	14	33%	7
TOWNHOMES	65 DU	230	Ln (T) = 0.82 Ln (X) + 0.32	42	67%	28	33%	14
TOWER UNITS	672 DU	232	T = 0.34 (X) + 15.47	244	62%	151	38%	93
HOTEL	150 ROOMS	310	Ln (T) = 1.20 Ln (X) - 1.55	87	49%	43	51%	44
WORK SPACE FOR LW UNITS [1]	20,415 SQ. FT.	710	T = 1.12 (X) + 78.81	102	17%	17	83%	85
RETAIL	51,720 SQ. FT.	820	Ln (T) = 0.68 Ln (X) + 3.40	405	48%	194	52%	211
AUTO DEALERSHIP	114,552 SQ. FT.	841	T = 2.64 (X)	302	39%	118	61%	184
GROSS TOTAL TRIPS				**1,203**	47%	**565**	53%	**638**
INTERNALIZATION		20.00%		241	47%	113	53%	128
NET EXTERNAL TRIPS				**962**	47%	**452**	53%	**510**

[1] Trips for the Live Work Space has been generated using ITE LUC 710 for Office Use. A trip comparison between the Specialty Retail and Office Use is provided below.

LIVE WORK SPACE AS RETAIL	20,415 SQ. FT.	814	T = 2.40 (X) + 21.48	70	44%	31	56%	39
LIVE WORK SPACE AS OFFICE	20,415 SQ. FT.	710	T = 1.12 (X) + 78.81	102	17%	17	83%	85



Site Location

20% Project Distribution Percentage

Figure 5C
Project Distribution Percentage
The Village of Marbella at Creek Commons
Revised September 2006

Source: Cathy Sweetapple & Associates

Table 6A - Year 2010 Total Traffic Conditions - Scheme A

The Village of Marbella at Creek Commons

ROAD	2010 TRAVEL LANES	[1] TWO-WAY PEAK HOUR CAPACITY	[2] 2010 TWO-WAY PM PEAK HR BACKGROUND TRAFFIC	[3] Project Traffic - Scheme A: Distribution Percent	[3] Project Traffic - Scheme A: 980 PM Peak Hour Trips	[3] Project Traffic - Scheme A: Percent of Capacity	2010 TWO-WAY PM PEAK HR TOTAL TRAFFIC	2010 TWO-WAY PEAK HOUR LOS	2010 V/C
SAWGRASS EPXY									
University to SR 7	6L EXPY	10,050	9,532	5.00%	49	0.49%	9,581	D	0.95
SR 7 to Lyons Road	6L EXPY	10,050	9,041	5.00%	49	0.49%	9,090	D	0.90
WILES ROAD									
Rock Island Road to SR 7	6LD	4,680	3,542	3.00%	29	0.63%	3,572	C	0.76
SR 7 to Lyons Road	4LD	3,221	2,216	5.00%	49	1.52%	2,265	C	0.70
SAMPLE ROAD									
Rock Island Road to SR 7	6LD	5,080	4,042	10.00%	98	1.93%	4,140	C	0.82
SR 7 to Perimeter Road	6LD	5,080	4,792	17.00%	167	3.28%	4,958	D	0.98
Perimeter Road to Banks Road	6LD	5,080	4,792	25.00%	245	4.82%	5,037	D	0.99
Banks Road to Project Entrance	6LD	5,080	4,792	25.00%	245	4.82%	5,037	D	0.99
Project Entrance to Lyons Road	6LD	5,080	4,792	25.00%	245	4.82%	5,037	D	0.99
Lyons Road to Turnpike	6LD	5,080	4,552	20.00%	196	3.86%	4,748	C	0.93
COPANS ROAD									
Rock Island Road to SR 7	4LD	3,221	2,992	1.00%	10	0.30%	3,002	D	0.93
SR 7 to Lyons Road	4LD	3,221	2,887	2.00%	20	0.61%	2,907	D	0.90
Lyons Road to Turnpike	4LD	3,221	2,613	3.00%	29	0.91%	2,643	D	0.88
COCONUT CREEK PARKWAY									
SR 7 to Lyons Road	4LD	3110	2,322	1.00%	10	0.32%	2,332	C	0.75
Lyons Road to Turnpike	4LD	3110	2,785	1.00%	10	0.32%	2,795	D	0.90
ROCK ISLAND ROAD									
Wiles Road to Sample Road	4LD	3221	1,035	2.00%	20	0.61%	1,054	C	0.33
Sample Road to Copans Road	4LD	3221	2,136	2.00%	20	0.61%	2,155	C	0.67
SR 7									
Sawgrass Expy to Wiles Road	6LD	5,080	4,574	20.00%	196	3.86%	4,770	C	0.94
Wiles Road to Sample Road	6LD	5,080	3,525	20.00%	196	3.86%	3,721	B	0.73
Sample Road to Perimeter Road	6LD	5,080	3,176	7.00%	69	1.35%	3,244	B	0.64
Perimeter Road to Copans Road	6LD	5,080	3,814	15.00%	147	2.89%	3,961	B	0.78
Copans Road to Coconut Creek Pkwy	6LD	5,080	4,004	12.00%	118	2.31%	4,122	B	0.81
BANKS ROAD									
North of Sample Road	2LU	1,390	56	1.00%	10	0.71%	67	C	0.05
Sample Road to Copans Road	4LD	2,950	593	1.00%	10	0.33%	603	C	0.20
Copans Road to Coconut Creek Pkwy	4LD	2,950	1,765	1.00%	10	0.33%	1,775	C	0.60
LYONS ROAD									
Sawgrass Expy to Wiles Road	6LD	4,826	4,046	25.00%	245	5.08%	4,291	D	0.89
Wiles Road to Sample Road	6LD	4,826	3,829	25.00%	245	5.08%	4,074	D	0.84
Sample Road to Copans Road	4LD	3,110	3,049	5.00%	49	1.58%	3,098	D	1.00
Copans Road to Coconut Creek Pkwy	4LD	3,110	3,014	1.00%	10	0.32%	3,024	D	0.97
FLORIDA'S TURNPIKE									
Sawgrass Expy to Sample Road	8L EXPY	13,600	10,621	7.00%	69	0.50%	10,690	C	0.79
Sample Road to Coconut Creek Pkwy	8L EXPY	13,600	11,715	7.00%	69	0.50%	11,783	D	0.87

[1] Maximum service volumes were obtained from the FDOT 2002 Quality/LOS Handbook. The Sawgrass interchange spacing is greater than 2 miles.
The maximum service volumes for SR 7 and Sample Road are consistent with those used by the City of Coconut Creek in their Main Street (RAC) Land Use Plan Amendment.

[2] See Table 4 for the future background plus committed development traffic volumes for the study area.

[3] Trip generation is provided on Table 2A. Project distribution is illustrated on Figure 5C.

Appendix G-4
Coral Landings III

Traffic Impact Analysis for Submittal to the City of Coral Springs

Coral Landings III
Coral Springs, Florida

Prepared for:

Monroe's Prestige Group, Inc.
Safety Harbor, Florida

Prepared by:

Kimley-Horn and Associates, Inc.
Fort Lauderdale, Florida

©2006 Kimley-Horn and Associates, Inc.
November 2006
043053000

J. Suzanne Danielsen, P.E.
Florida Registration Number 42533
Kimley-Horn and Associates, Inc.
5200 NW 33rd Avenue, Suite 109
Fort Lauderdale, FL 33309
CA # 00000696

INTRODUCTION

Monroe's Prestige Group, Inc. is proposing to development property located along the south side of Sample Road between N.W. 62nd Avenue and State Road 7 (U.S. 441) within municipal limits of the City of Coral Springs, Florida. The project is expected to encompass 55,097 square feet of retail use that should be complete and fully occupied by 2008. Development Review Committee (DRC) comments indicate the need for a Traffic Impact Analysis assessing potential transportation-related impacts created by the proposed development. Figure 1 shows the general location of the project site.

This report includes an assessment of existing conditions, an estimation of trip generation characteristics associated with the proposed development, and an analysis of anticipated operating conditions of area roadways and intersections. The methodology incorporated is consistent with requirements of the City of Coral Springs for traffic studies and was discussed and mutually agreed upon in a methodology meeting held Wednesday October 4th, 2006 at the offices of TrafTech Engineering, Inc.

The study area includes the following roadways: W. Sample Road (S.R. 834), a six-lane divided arterial roadway traversing Broward County in an east-west direction, S.R. 7, also a six-lane divided arterial but extending in a north-south direction, N.W. 62nd Avenue, a four-lane divided north-south local roadway, and N.W. 31st Street, a four-lane divided local east-west facility. The study area also includes two signalized locations: Sample Road at N.W. 62nd Avenue and S.R. 7 at N.W. 31st Street. Other study intersections include N.W. 62nd Avenue at N. Bay Drive and N.W. 62nd Avenue at an existing access roadway both, of which, are under minor street stop sign control. Lane configurations for all study area intersections are provided in Figure 2.

PROJECT TRAFFIC

For purposes of this study project traffic is defined as vehicle trips expected to be generated by the development proposed and the distribution and assignment of that traffic over the study area roadway network.

Existing and Proposed Land Uses

The project site is located along the south side of Sample Road between N.W. 62nd Avenue and S.R. 7 within municipal limits of the City of Coral Springs, Florida. Although the project site is currently vacant, a current site plan proposes construction of 55,097 square feet of retail use. A reduced site plan is provided as Figure 3.

Project Access

The project site will have access to the external roadway network at two (2) locations along N.W. 62nd Avenue. The north driveway will allow right-turn ingress and egress maneuvers exclusively while the south driveway (actually an access roadway) currently allows full turning maneuvers at its intersection with N.W. 62nd Avenue. The area proposed for development with this application is located along the north side of the subject access roadway and will connect to this facility at two locations. Both project-specific driveways connecting to the access roadway from the project site are proposed as two-lane, two-way facilities.

Trip Generation

Trip generation characteristics for proposed uses were quantified through use of data available from the Institute of Transportation Engineers (ITE) in their report *Trip Generation*, 7th Edition. These documents provide trip generation data for a variety of development types based on daily and peak-hour scenarios often indicating the percentage split between entering and exiting trips. Table 1 summarizes trip generation characteristics of the proposed development. Site traffic volumes shown in this table were derived using rates provided in land use category 'Shopping Center' (Land Use Code 820). As shown in Table 1 the proposed development should produce 422 P.M. peak hour vehicle trips (203 entering and 219 exiting).

Pass-By Capture Volumes

The expected pass-by capture volume for the proposed development was verified to not exceed two conditions of maximum allowable pass-by capture percentages specified in the Florida Department of Transportation (FDOT) *Site Impact Handbook*, published in April 1997: (1) 10% of adjacent roadway volumes; or (2) 25% of the project's external trip generation potential. Based on these parameters we determined that limiting pass-by capture to 25% was appropriate for the levels of development proposed. Adjusted P.M. peak hour pass-by trip percentages and pass-by volumes specific to the Coral Landings III development are shown in Table 1.

Net New Project Trips

Net new, external project trips for the proposed development are calculated by subtracting pass-by capture trips from the gross project trip estimate. Table 1 summarizes net new external trips expected to be generated by the project as proposed.

TABLE 1

P.M. Peak Hour Proposed Trip Generation

Proposed Land Use	ITE Code	Scale	Gross Project Trips			Internal Capture Trips		External trips			Pass-By Capture Trips[1]		Net New Project Trips		
			Enter	Exit	Total	%	Trips	Enter	Exit	Total	%	Trips	Enter	Exit	Total
Shopping Center	820	55.097 ksf	203	219	422	0%	0	203	219	422	25%	106	150	166	316
Development Totals			**203**	**219**	**422**	**-**	**-**	**16**	**8**	**422**	**25%**	**106**	**150**	**166**	**316**

[1] Pass-by Trip Restriction per guidelines of FDOT's *Site Impact Handbook*
10% of adjacent street traffic (Sample Road & NW 62nd Avenue) during the peak hour (5,323) = 532
25% of project's external trip generation potential (422) = 106

Trip Distribution and Assignment

Site traffic distribution characteristics were achieved through review of existing travel patterns noted on roadways within the study area. Net new vehicular trips were assigned to intersections and roadway segments under study. Figures 4 shows project traffic distribution percentages and P.M. peak hour trip assignment while Figure 5 depicts pass-by trip distribution and assignment.

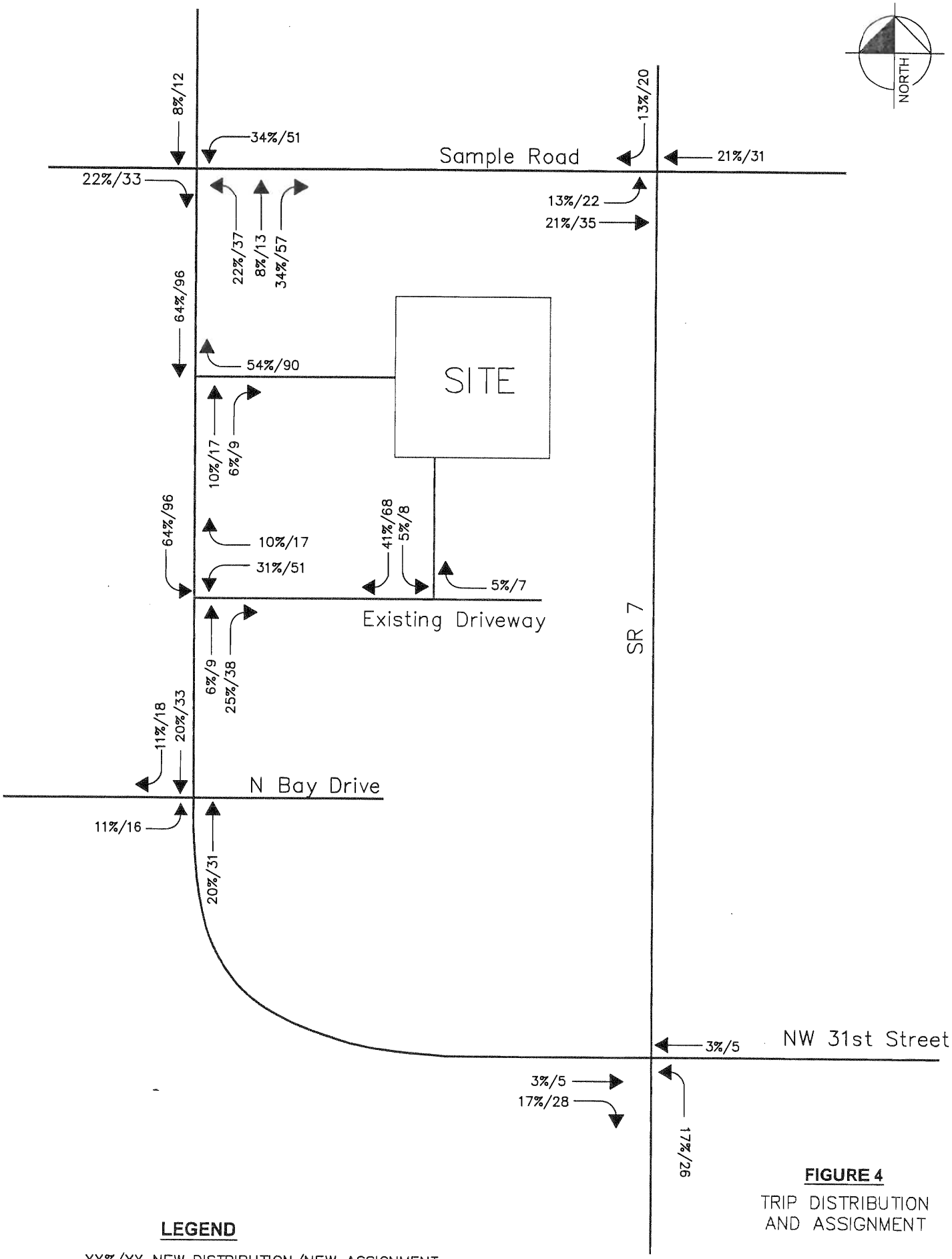


FIGURE 4

TRIP DISTRIBUTION AND ASSIGNMENT

LEGEND

XX%/XX NEW DISTRIBUTION/NEW ASSIGNMENT

Kimley-Horn and Associates, Inc.

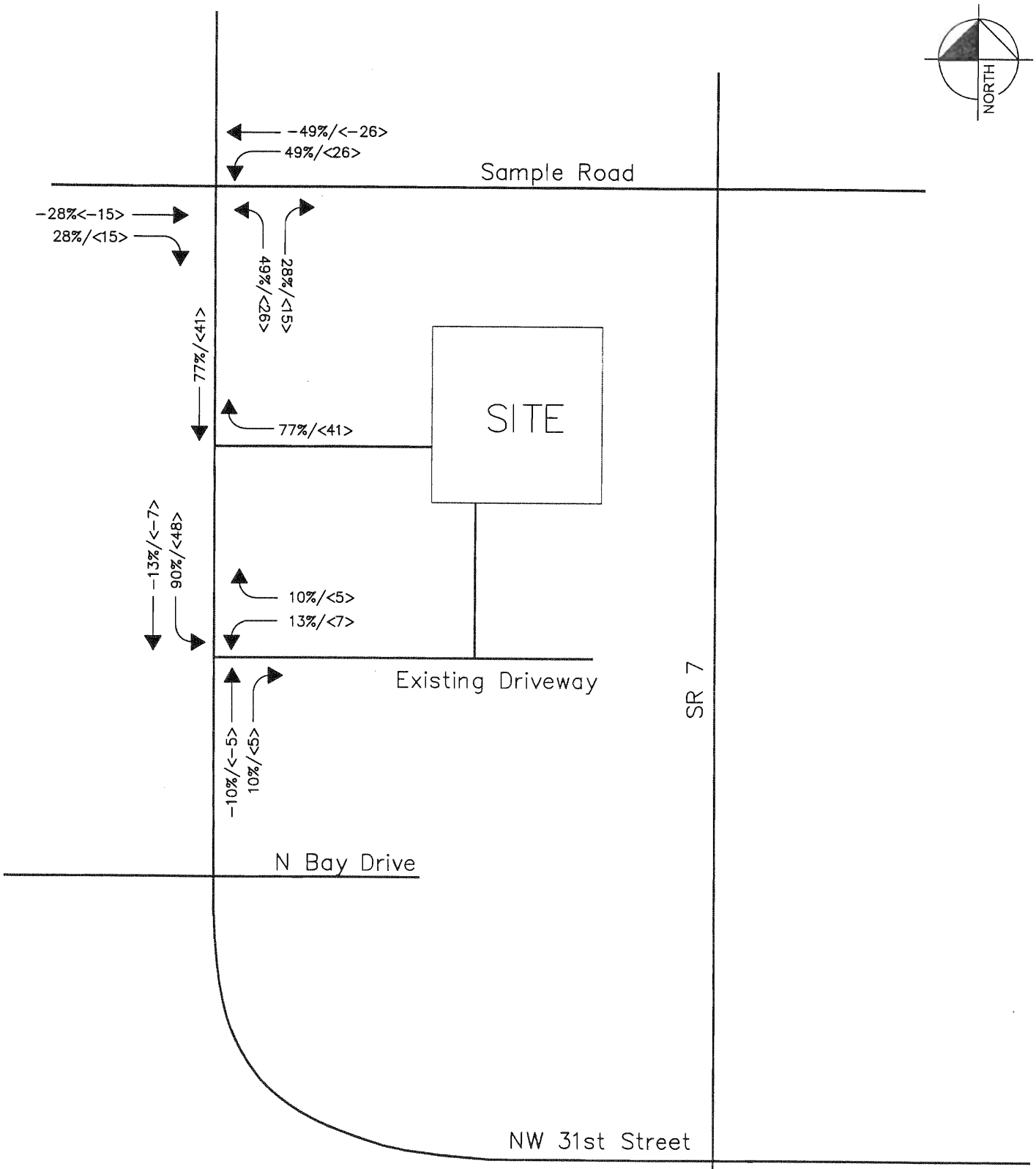


FIGURE 5

PASS-BY TRIP DISTRIBUTION AND ASSIGNMENT

LEGEND

XX%/<XX> PASS-BY DISTRIBUTION/<PASS-BY ASSIGNMENT>

Kimley-Horn and Associates, Inc.

Appendix G-5

Committed Developments
Link and Intersection Tables

TABLE G-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III (2011-2015) PM PEAK HOUR COMMITTED DEVELOPMENTS DIRECTIONAL VOLUMES

25-May-11

ROADWAY		1 MAINSTREET DRI		2 DOWNTOWN CORAL SPRINGS DRI		3 SAWGRASS EXCHANGE DRI		4 POMPANO INDUSTRIAL PARK DRI		5 CORAL LANDINGS III		6 COCONUT TRACT "E" OFFICE		7 CELEBRATION POINTE		8 THE VILLAGE OF MARBELLA PMDD		TOTAL COMMITTED DEVELOPMENTS	
FROM	TO	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																			
SR 7	NW 54th Ave	94	92	40	25	4	5	4	8	35	32	16	80	13	23	24	31	**230**	**296**
NW 54th Avenue	Banks Road	65	92	40	25	4	5	4	8	35	32	13	5	13	23	36	46	**210**	**236**
Banks Road	Lyons Road	128	97	50	24	4	5	4	8	35	32	53	11	13	23	46	36	**333**	**236**
Wiles Road (E/W)																			
SR 7	Banks Road	43	80	0	0	0	0	0	0	0	0	0	0			7	9	**50**	**89**
Banks Road	Lyons Road	43	80	0	0	0	0	0	0	0	0	13	3			9	7	**168**	**186**
Cullum Road (E/W)																			
SR7	NW 54th Ave	180	102	0	0	0	0	0	0	0	0	11	53					**191**	**155**
NW 54th Avenue	Banks Road	136	79	0	0	0	0	0	0	0	0	0	0					**136**	**79**
Banks Road	Lyons Road	63	79	0	0	0	0	0	0	0	0	40	8					**103**	**87**
NW 54thAvenue (N/S)																			
SR 7	Sample Road	0	0	0	0	0	0	0	0	0	0	3	13					**3**	**13**
Sample Road	NW 40th Str	86	71	0	0	0	0	0	0	0	0	19	80					**105**	**151**
NW 40th Street	Cullum Road	92	128	0	0	0	0	0	0	0	0	53	11					**145**	**139**
SR 7 (N/S)																			
Sample Road	NW 40 Stree	166	63	8	5	5	6	1	0	22	20	0	0	19	35	37	29	**258**	**158**
NW 40 Street	Cullum Road	176	63	8	5	5	6	1	0	22	20	0	0	19	35	37	29	**268**	**158**
Cullum Road	Wiles Road	106	63	8	5	5	6	1	0	22	20	51	10	19	35	37	29	**249**	**168**
Banks Road (N/S)																			
Sample Road	Cullum Road	107	201	0	0	0	0	0	0	0	0	14	80			2	1	**123**	**282**
Cullum Road	Wiles Road	107	128	0	0	0	0	0	0	0	0	13	3			2	1	**122**	**132**
Lyons Road (N/S)																			
Sample Road	Collum Road	164	100	6	3	15	18	2	1	5	5	3	13					**195**	**140**
Collum Road	Wiles Road	164	100	6	3	15	18	2	1	5	5	27	5					**219**	**132**

TABLE G-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV (2016-2018) PM PEAK HOUR COMMITTED DEVELOPMENTS DIRECTIONAL VOLUMES

25-May-11

ROADWAY FROM	TO	1 MAINSTREET DRI		2 DOWNTOWN CORAL SPRINGS DRI		3 SAWGRASS EXCHANGE DRI		4 POMPANO INDUSTRIAL PARK DRI		5 CORAL LANDINGS III		6 COCONUT TRACT "E" OFFICE		7 CELEBRATION POINTE		8 THE VILLAGE OF MARBELLA PMDD		TOTAL COMMITTED DEVELOPMENTS	
		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																			
SR 7	NW 54th Avenue	189	184	80	49	8	10	8	16	35	32	16	80	13	23	49	63	**398**	**457**
NW 54th Avenue	Banks Road	131	184	80	49	8	10	8	16	35	32	13	5	13	23	72	91	**360**	**410**
Banks Road	Lyons Road	256	195	101	47	8	10	8	16	35	32	53	11	13	23	91	72	**565**	**406**
Wiles Road (E/W)																			
SR 7	Banks Road	85	160	0	0	0	0	0	0	0	0	0	0			15	18	**100**	**178**
Banks Road	Lyons Road	85	160	0	0	0	0	0	0	0	0	13	3			18	15	**177**	**234**
Cullum Road (E/W)																			
SR7	NW 54th Avenue	361	204	0	0	0	0	0	0	0	0	11	53					**372**	**257**
NW 54th Avenue	Banks Road	273	157	0	0	0	0	0	0	0	0	0	0					**394**	**270**
Banks Road	Lyons Road	127	157	0	0	0	0	0	0	0	0	40	8					**228**	**221**
NW 54thAvenue (N/S)																			
SR 7	Sample Road	0	0	0	0	0	0	0	0	0	0	3	13					**3**	**13**
Sample Road	NW 40th Street	172	143	0	0	0	0	0	0	0	0	19	80					**191**	**223**
NW 40th Street	Cullum Road	184	257	0	0	0	0	0	0	0	0	53	11					**237**	**268**
SR 7 (N/S)																			
Sample Road	NW 40 Street	333	125	15	9	10	12	2	1	22	20	0	0	19	35	73	57	**474**	**259**
NW 40 Street	Cullum Road	353	125	15	9	10	12	2	1	22	20	0	0	19	35	73	57	**494**	**259**
Cullum Road	Wiles Road	212	125	15	9	10	12	2	1	22	20	51	10	19	35	73	57	**404**	**269**
Banks Road (N/S)																			
Sample Road	Cullum Road	213	401	0	0	0	0	0	0	0	0	14	80			4	3	**231**	**484**
Cullum Road	Wiles Road	213	255	0	0	0	0	0	0	0	0	13	3			4	3	**230**	**261**
Lyons Road (N/S)																			
Sample Road	Collum Road	329	200	11	6	30	35	5	3	5	5	3	13					**383**	**262**
Collum Road	Wiles Road	329	200	11	6	30	35	5	3	5	5	27	5					**407**	**254**

TABLE G-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 PM PEAK HOUR COMMITTED DEVELOPMENTS DIRECTIONAL VOLUMES

25-May-11

ROADWAY FROM	TO	1 MAINSTREET DRI		2 DOWNTOWN CORAL SPRINGS DRI		3 SAWGRASS EXCHANGE DRI		4 POMPANO INDUSTRIAL PARK DRI		5 CORAL LANDINGS III		6 COCONUT TRACT "E" OFFICE		7 CELEBRATION POINTE		8 THE VILLAGE OF MARBELLA PMDD		TOTAL COMMITTED DEVELOPMENTS	
		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																			
SR 7	NW 54th Avenue	283	276	120	74	12	15	12	24	35	32	16	80	13	23	73	94	**564**	**618**
NW 54th Avenue	Banks Road	196	276	120	74	12	15	12	24	35	32	13	5	13	23	108	137	**509**	**586**
Banks Road	Lyons Road	384	292	151	71	12	15	12	24	35	32	53	11	13	23	137	108	**797**	**576**
Wiles Road (E/W)																			
SR 7	Banks Road	128	240	0	0	0	0	0	0	0	0	0	0			22	27	**150**	**267**
Banks Road	Lyons Road	128	240	0	0	0	0	0	0	0	0	13	3			27	22	**171**	**291**
Cullum Road (E/W)																			
SR7	NW 54th Avenue	541	306	0	0	0	0	0	0	0	0	11	53					**552**	**359**
NW 54th Avenue	Banks Road	409	236	0	0	0	0	0	0	0	0	0	0					**416**	**287**
Banks Road	Lyons Road	190	236	0	0	0	0	0	0	0	0	40	8					**233**	**270**
NW 54thAvenue (N/S)																			
SR 7	Sample Road											3	13					**3**	**13**
Sample Road	NW 40th Street	258	214	0	0	0	0	0	0	0	0	19	80					**277**	**294**
NW 40th Street	Cullum Road	276	385	0	0	0	0	0	0	0	0	53	11					**329**	**396**
SR 7 (N/S)																			
Sample Road	NW 40 Street	499	188	23	14	15	18	3	1	22	20	0	0	19	35	110	86	**691**	**362**
NW 40 Street	Cullum Road	529	188	23	14	15	18	3	1	22	20	0	0	19	35	110	86	**721**	**362**
Cullum Road	Wiles Road	318	188	23	14	15	18	3	1	22	20	51	10	19	35	110	86	**561**	**372**
Banks Road (N/S)																			
Sample Road	Cullum Road	320	602	0	0	0	0	0	0	0	0	14	80			6	4	**340**	**686**
Cullum Road	Wiles Road	320	383	0	0	0	0	0	0	0	0	13	3			6	4	**339**	**390**
Lyons Road (N/S)																			
Sample Road	Collum Road	493	300	17	9	45	53	7	4	5	5	3	13					**570**	**384**
Collum Road	Wiles Road	493	300	17	9	45	53	7	4	5	5	27	5					**594**	**376**

TABLE G-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III (2012-2015) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
1 Sample Rd	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			25			4			0			0			22			0			0			0	1.6%	I	5	56
SR-7		T			44			23			4			1			35			11			0			14	13.9%	I	44	176
		R			0			3			0			0			0			0			35			0			0	38
Signalized	WB	U			0			0			0			0			0			0			0			0			0	0
		L			21			0			0			3			0			27			23			13	1.5%	O	-1	86
		T			57			14			5			2			32			53			0			18	15.9%	O	-7	174
		R			14			0			0			1			0			0			0			0			0	15
	NB	L			0			2			0			0			0			0			19			0			0	21
		T			0			0			0			0			0			0			19			0	11.4%	I	36	55
		R			35			0			0			1			0			5			13			10	1.7%	I	5	69
	SB	L			6			0			0			0			0			0			0			0			0	6
		T			0			0			0			0			0			0			35			0	1.8%	O	-1	34
		R			21			2			0			0			20			0			0			0			0	43
2 Sample Rd	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			85			23			4			3			35			16			0			24	15.6%	I	49	239
SW Service Rd		R			0			0			0			0			0			0			0			0			0	0
	WB	L			0			0			0			0			0			0			0			0			0	0
Unsignalized		T			93			14			5			6			32			80			0			31	10.3%	O	-5	256
		R			0			0			0			0			0			0			0			0	3.1%	I	10	10
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0	7.1%	O	-3	-3
3 Sample Rd	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			54			0			0			0			0			16			0			0	15.6%	I	49	119
NW 54th Ave		T			31			23			4			3			35			0			0			24			0	120
		R			0			0			0			0			0			0			0			0			0	0
Signalized	WB	L			0			0			0			0			0			0			0			15			0	15
		T			57			14			5			6			32			27			0			31	3.1%	I	10	182
		R			32			0			0			0			0			0			0			0	27.5%	I	87	119
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			3			0			0	7.7%	I	24	27
		R			0			0			0			0			0			0			0			11			0	11
	SB	L			36			0			0			0			0			13			0			0	33.8%	O	-15	34
		T			0			0			0			0			0			13			0			0	5.8%	O	-3	10
		R			36			0			0			0			0			53			0			0	10.3%	O	-5	84
4 Sample Rd	EB	L			33			0			0			0			0			0			0			0			0	33
and		T			33			23			4			3			35			13			0			36	31.8%	O	-14	133
Banks Rd		R			0			0			0			0			0			0			0			0	2.0%	O	-1	-1
	WB	U			0			0			0			0			0			0			0			0			0	0
Unsignalized		L			0			0			0			0			0			0			0			0			0	0
		T			42			14			5			6			32			0			0			46	30.6%	I	97	242
		R			55			0			0			0			0			11			0			0	0.9%	I	3	69
	NB	U			0			0			0			0			0			0			0			0			0	0
		L			0			0			0			0			0			0			0			0			0	0
		T			17			0			0			0			0			3			0			1			0	21
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			58			0			0			0			0			40			0			0			0	98
		T			20			0			0			0			0			13			0			2			0	35
		R			48			0			0			0			0			27			0			0			0	75

TABLE G-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III (2012-2015) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
5 Sample Rd	EB	L			28			3			4			0			5			0			0			0			0	40
and		T			71			13			0			3			25			27			0			37	23.9%	O	-11	165
Lyons		R			28			7			0			0			5			27			0			9	7.9%	O	-4	72
	WB	U			0			0			0			0			0			0			0			0			0	0
Signalized		L			0			0			0			2			0			0			0			0			0	2
		T			56			8			0			6			23			5			0			29	25.6%	I	81	208
		R			37			0			4			2			0			0			0			0			0	43
	NB	L			37			4			0			0			5			5			0			7	5.9%	I	19	77
		T			31			0			7			0			0			3			0			0			0	41
		R			0			0			0			1			0			0			0			0			0	1
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			36			0			5			1			0			0			0			0			0	42
		T			50			0			8			0			0			13			0			0			0	71
		R			0			2			5			0			5			0			0			0			0	12
6 SR-7	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			0			0			0			0			0			0			0			0			0	0
NW 40th St		R			0			0			0			0			0			0			0			0			0	0
	WB	L			0			0			0			0			0			0			0			0			0	0
Signalized		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0	26.9%	O	-12	-12
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			142			4			5			1			22			0			19			0			0	193
		R			0			0			0			0			0			0			0			0	13.0%	I	41	41
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
7 SR-7	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			5			0			0			0			0			1			0			0	1.0%	I	3	9
Cullum Rd		R			0			0			0			0			0			0			0			0			0	0
	WB	L			34			0			0			0			0			0			0			0	1.0%	O	0	34
Unsignalized		T			5			0			0			0			0			3			0			0	1.0%	O	0	8
		R			61			0			0			0			0			51			0			37	4.9%	O	-2	147
	NB	U			0			0			0			0			0			0			0			0	0.8%	O	0	0
		L			0			0			0			0			0			0			0			0	1.1%	O	0	0
		T			27			4			5			1			22			0			19			0	25.0%	O	-11	67
		R			138			0			0			0			0			0			0			0			0	138
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			61			0			0			0			0			10			0			29	21.8%	I	69	169
		T			2			2			6			0			20			0			35			0			0	65
		R			0			0			0			0			0			0			0			0			0	0
8 SR-7	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			0			6			0			0			0			0			0			0			0	6
Wiles Rd		T			19			0			0			0			0			0			0			7			0	26
		R			12			4			0			0			9			3			0			0	3.8%	I	12	40
Signalized	WB	L			0			0			2			0			0			0			0			0			0	2
		T			14			0			0			0			0			0			0			9			0	23
		R			36			0			0			0			0			0			0			0			0	36
	NB	U			0			0			0			0			0			0			0			0			0	0
		L			21			2			0			0			10			13			0			0	2.5%	O	-1	45
		T			43			0			3			1			10			37			0			37	25.4%	O	-11	120
		R			0			0			2			0			0			0			0			0	2.0%	O	-1	1
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			19			0			0			0			0			0			0			0			0	19
		T			50			0			4			0			9			8			0			29	18.0%	I	57	157
		R			0			4			0			0			0			0			0			0			0	4

TABLE G-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III (2012-2015) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT	1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
		[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
9 Lyons Rd	EB L			22			0			0			0			0			27			0			0			0	49
and	T			5			0			0			0			0			0			0			0			0	5
Cullum Rd	R			9			0			0			0			0			13			0			0			0	22
	WB L			0			0			0			0			0			0			0			0			0	0
Signalized	T			5			0			0			0			0			0			0			0			0	5
	R			0			0			0			0			0			0			0			0			0	0
	NB L			7			0			0			0			0			3			0			0			0	10
	T			141			33			15			2			5			0			0			46			0	242
	R			0			0			0			0			0			0			0			0			0	0
	SB U			0			0			0			0			0			0			0			0			0	0
	L			0			0			0			0			0			0			0			0			0	0
	T			86			2			18			1			5			0			0			36			0	148
	R			14			0			0			0			0			5			0			0	4.0%	I	13	32
10 Lyons Rd	EB L			21			0			2			0			0			0			0			0	6.8%	O	-3	20
and	T			14			0			0			0			0			13			0			0	4.4%	O	-2	25
Wiles Rd	R			7			0			0			0			0			0			0			0			0	7
	WB L			19			0			0			0			0			3			0			0	2.0%	I	6	28
signalized	T			37			0			0			0			0			0			0			0	2.1%	I	7	44
	R			0			0			0			0			0			0			0			0			0	0
	NB L			0			0			0			0			0			0			0			0			0	0
	T			114			3			15			2			5			27			0			46			0	212
	R			50			0			0			0			0			0			0			0			0	50
	SB L			0			0			0			0			0			0			0			0			0	0
	T			75			2			18			1			5			3			0			36	2.0%	I	6	146
	R			44			0			2			0			0			3			0			0	3.3%	I	10	59
11 NW 54th Ave	EB L			0			0			0			0			0			0			0			0			0	0
and	T			0			0			0			0			0			0			0			0			0	0
South Casino Access	R			0			0			0			0			0			0			0			0			0	0
	WB L			0			0			0			0			0			0			0			0			0	0
Unsignalized	T			0			0			0			0			0			0			0			0			0	0
	R			0			0			0			0			0			0			0			0			0	0
	NB L			0			0			0			0			0			0			0			0			0	0
	T			86			0			0			0			0			19			0			0	50.8%	I	161	266
	R			0			0			0			0			0			0			0			0			0	0
	SB L			0			0			0			0			0			0			0			0			0	0
	T			71			0			0			0			0			80			0			0	49.9%	O	-22	129
	R			0			0			0			0			0			0			0			0			0	0
12 NW 54th Ave	EB L			0			0			0			0			0			0			0			0			0	0
and	T			0			0			0			0			0			0			0			0			0	0
NW 40th St	R			0			0			0			0			0			0			0			0			0	0
	WB L			37			0			0			0			0			0			0			0			0	37
Unsignalized	T			0			0			0			0			0			0			0			0			0	0
	R			53			0			0			0			0			53			0			0	0.8%	I	3	109
	NB L			0			0			0			0			0			0			0			0			0	0
	T			36			0			0			0			0			0			0			0	50.8%	I	161	197
	R			29			0			0			0			0			0			0			0			0	29
	SB L			80			0			0			0			0			11			0			0			0	91
	T			34			0			0			0			0			0			0			0	49.9%	O	-22	12
	R			0			0			0			0			0			0			0			0			0	0

TABLE G-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III (2012-2015) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
13 NW 54th Ave	EB	L			0			0			0			0			0			0			0			0	16.1%	O	-7	-7
and		T			0			0			0			0			0			0			0			0			0	0
North Casino Access		R			0			0			0			0			0			0			0			0	49.9%	O	-22	-22
	WB	L			0			0			0			0			0			0			0			0			0	0
Signalized		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
	NB	L			0			0			0			0			0			0			0			0	51.6%	I	163	163
		T			92			0			0			0			0			53			0			0			0	145
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			128			0			0			0			0			11			0			0			0	139
		R			0			0			0			0			0			0			0			0	32.2%	I	102	102
14 NW 54th Ave	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			96			0			0			0			0			0			0			0			0	96
Cullum Rd		R			44			0			0			0			0			11			0			0	22.8%	I	72	127
	WB	L			20			0			0			0			0			0			0			0	9.4%	I	30	50
Unsignalized		T			9			0			0			0			0			0			0			0			0	9
		R			24			0			0			0			0			0			0			0			0	24
	NB	L			0			0			0			0			0			53			0			0	6.9%	O	-3	50
		T			92			0			0			0			0			0			0			0			0	92
		R			27			0			0			0			0			0			0			0	9.2%	O	-4	23
	SB	L			22			0			0			0			0			0			0			0			0	22
		T			65			0			0			0			0			0			0			0			0	65
		R			0			0			0			0			0			0			0			0			0	0
15 Banks Rd	EB	L			24			0			0			0			0			0			0			0	9.2%	O	-4	20
and		T			16			0			0			0			0			0			0			0			0	16
Cullum Rd		R			73			0			0			0			0			0			0			0			0	73
	WB	L			22			0			0			0			0			8			0			0			0	30
Unsignalized		T			7			0			0			0			0			0			0			0	4.0%	I	13	20
		R			24			0			0			0			0			0			0			0			0	24
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			57			0			0			0			0			13			0			0			0	70
		R			24			0			0			0			0			40			0			0			0	64
	SB	L			29			0			0			0			0			0			0			0			0	29
		T			72			0			0			0			0			3			0			0			0	75
		R			36			0			0			0			0			0			0			0	5.4%	I	17	53
16 Banks Rd	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			-5			0			2			0			0			0			0			7	2.0%	O	-1	3
Wiles Rd		R			42			0			0			0			0			0			0			0			0	42
	WB	L			86			0			0			0			0			3			0			0	5.4%	I	17	106
Unsignalized		T			-5			0			2			0			0			0			0			9			0	6
		R			0			0			0			0			0			0			0			0			0	0
	NB	L			55			0			0			0			0			0			0			0			0	55
		T			0			0			0			0			0			0			0			0			0	0
		R			48			0			0			0			0			13			0			0	9.2%	O	-4	57
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0

NOTES:
DIST = DISTRIBUTION
[1] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

TABLE G-6
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
1 Sample Rd	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			75			11			0			0			22			0			0			0	1.6%	I	9	117
SR-7		T			131			70			12			4			35	20%	I	11			0	10%	I	43	13.9%	I	76	382
		R			0			10			0			0			0			0	15%	I	35			0	1.6%	I	9	54
Signalized	WB	U			0			0			0			0			0			0			0			0			0	0
		L			64			0			0			9			0	10%	O	27	10%	I	23	7%	O	39	1.5%	O	1	163
		T			171			43			15			7			32	20%	O	53			0	10%	O	55	15.9%	O	10	386
		R			43			0			0			3			0			0			0			0			0	46
	NB	L			0			6			0			0			0			0	15%	O	19			0			0	25
		T			0			0			0			0			0			0	15%	O	19			0	11.4%	I	62	81
		R			106			0			0			4			0	10%	I	5	10%	O	13	7%	I	30	1.7%	I	9	167
	SB	L			19			0			0			1			0			0			0			0			0	20
		T			0			0			0			0			0			0	15%	I	35			0	1.8%	O	1	36
		R			64			7			0			0			20			0			0			0			0	91
2 Sample Rd	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			256			70			12			9			35	30%	I	16			0	17%	I	73	15.6%	I	85	556
SW Service Rd		R			0			0			0			0			0			0			0			0			0	0
	WB	L			0			0			0			0			0			0			0			0			0	0
Unsignalized		T			279			43			15			19			32	30%	O	80			0	17%	O	94	10.3%	O	6	568
		R			0			0			0			0			0			0			0			0	3.1%	I	17	17
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0	7.1%	O	4	4
3 Sample Rd	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			163			0			0			0			0	30%	I	16			0			0	15.6%	I	85	264
NW 54th Ave		T			92			70			12			9			35			0			0	17%	I	73			0	291
		R			0			0			0			0			0			0			0			0			0	0
Signalized	WB	L			0			0			0			0			0			0			0	8%	O	44			0	44
		T			172			43			15			19			32	10%	O	27			0	17%	O	94	3.1%	I	17	419
		R			95			0			0			0			0			0			0			0	27.5%	I	150	245
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0	5%	I	3			0			0	7.7%	I	42	45
		R			0			0			0			0			0			0			0	8%	I	34			0	34
	SB	L			107			0			0			0			0	5%	O	13			0			0	33.8%	O	21	141
		T			0			0			0			0			0	5%	O	13			0			0	5.8%	O	4	17
		R			107			0			0			0			0	20%	O	53			0			0	10.3%	O	6	166
4 Sample Rd	EB	L			98			0			0			0			0			0			0			0			0	98
and		T			99			70			12			9			35	5%	O	13			0	25%	I	108	31.8%	O	20	366
Banks Rd		R			0			0			0			0			0			0			0			0	2.0%	O	1	1
	WB	U			0			0			0			0			0			0			0			0			0	0
Unsignalized		L			0			0			0			0			0			0			0			0			0	0
		T			125			43			15			19			32			0			0	25%	O	138	30.6%	I	167	539
		R			166			0			0			0			0	20%	I	11			0			0	0.9%	I	5	182
	NB	U			0			0			0			0			0			0			0			0			0	0
		L			0			0			0			0			0			0			0			0			0	0
		T			51			0			0			0			0	5%	I	3			0	1%	I	4			0	58
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			174			0			0			0			0	15%	O	40			0			0			0	214
		T			59			0			0			0			0	5%	O	13			0	1%	O	6			0	78
		R			144			0			0			0			0	10%	O	27			0			0			0	171

TABLE G-6
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
5 Sample Rd	EB	L			85			10			12			0			5			0			0			0			0	112
and		T			213			39			0			9			25	10%	O	27			0	20%	O	110	23.9%	O	15	438
Lyons		R			85			21			0			0			5	10%	O	27			0	5%	O	28	7.9%	O	5	171
	WB	U			0			0			0			0			0			0			0			0			0	0
Signalized		L			0			0			0			6			0			0			0			0			0	6
		T			169			24			0			19			23	10%	I	5			0	20%	I	86	25.6%	I	140	466
		R			112			0			12			7			0			0			0			0			0	131
	NB	L			112			13			0			0			5	10%	I	5			0	5%	I	22	5.9%	I	32	189
		T			94			0			20			0			0	5%	I	3			0			0			0	117
		R			0			0			0			3			0			0			0			0			0	3
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			107			0			15			4			0			0			0			0			0	126
		T			149			0			24			0			0	5%	O	13			0			0			0	186
		R			0			6			15			0			5			0			0			0			0	26
6 SR-7	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			0			0			0			0			0			0			0			0			0	0
NW 40th St		R			0			0			0			0			0			0			0			0			0	0
	WB	L			0			0			0			0			0			0			0			0			0	0
Signalized		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0	26.9%	O	17	17
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			425			11			15			3			22			0	15%	O	19			0			0	495
		R			0			0			0			0			0			0			0			0	13.0%	I	71	71
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
7 SR-7	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			15			0			0			0			0	1%	I	1			0			0	1.0%	I	5	21
Cullum Rd		R			0			0			0			0			0			0			0			0			0	0
	WB	L			101			0			0			0			0			0			0			0	1.0%	O	1	102
Unsignalized		T			16			0			0			0			0	1%	O	3			0			0	1.0%	O	1	20
		R			183			0			0			0			0	19%	O	51			0	20%	O	110	4.9%	O	3	347
	NB	U			0			0			0			0			0			0			0			0	0.8%	O	1	1
		L			0			0			0			0			0			0			0			0	1.1%	O	1	1
		T			81			11			15			3			22			0	15%	O	19			0	25.0%	O	16	167
		R			414			0			0			0			0			0			0			0			0	414
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			183			0			0			0			0	19%	I	10			0	20%	I	86	21.8%	I	119	398
		T			5			7			18			1			20			0	15%	I	35			0			0	86
		R			0			0			0			0			0			0			0			0			0	0
8 SR-7	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			0			18			0			0			0			0			0			0			0	18
Wiles Rd		T			56			0			0			0			0			0			0	5%	I	22			0	78
		R			37			11			0			0			9	5%	I	3			0			0	3.8%	I	21	81
Signalized	WB	L			0			0			6			0			0			0			0			0			0	6
		T			43			0			0			0			0			0			0	5%	O	28			0	71
		R			107			0			0			0			0			0			0			0			0	107
	NB	U			0			0			0			0			0			0			0			0			0	0
		L			64			7			0			0			10	5%	O	13			0			0	2.5%	O	2	96
		T			128			0			10			3			10	14%	O	37			0	20%	O	110	25.4%	O	16	314
		R			0			0			5			0			0			0			0			0	2.0%	O	1	6
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			56			0			0			0			0			0			0			0			0	56
		T			150			0			12			1			9	14%	I	8			0	20%	I	86	18.0%	I	98	364
		R			0			11			0			0			0			0			0			0			0	11

TABLE G-6
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT	1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
		[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
9 Lyons Rd	EB L			67			0			0			0			0	10%	O	27			0			0			0	94
and	T			16			0			0			0			0			0			0			0			0	16
Cullum Rd	R			27			0			0			0			0	5%	O	13			0			0			0	40
	WB L			0			0			0			0			0			0			0			0			0	0
Signalized	T			15			0			0			0			0			0			0			0			0	15
	R			0			0			0			0			0			0			0			0			0	0
	NB L			22			0			0			0			0	5%	I	3			0			0			0	25
	T			423			98			45			7			5			0			0	25%	O	138			0	716
	R			0			0			0			0			0			0			0			0			0	0
	SB U			0			0			0			0			0			0			0			0			0	0
	L			0			0			0			0			0			0			0			0			0	0
	T			258			6			53			4			5			0			0	25%	I	108			0	434
	R			43			0			0			0			0	10%	I	5			0			0	4.0%	I	22	70
10 Lyons Rd	EB L			64			0			5			0			0			0			0			0	6.8%	O	4	73
and	T			43			0			0			0			0	5%	O	13			0			0	4.4%	O	3	59
Wiles Rd	R			21			0			0			0			0			0			0			0			0	21
	WB L			56			0			0			0			0	5%	I	3			0			0	2.0%	I	11	70
signalized	T			112			0			0			0			0			0			0			0	2.1%	I	11	123
	R			0			0			0			0			0			0			0			0			0	0
	NB L			0			0			0			0			0			0			0			0			0	0
	T			341			10			45			7			5	10%	O	27			0	25%	O	138			0	573
	R			149			0			0			0			0			0			0			0			0	149
	SB L			0			0			0			0			0			0			0			0			0	0
	T			225			6			53			4			5	5%	I	3			0	25%	I	108	2.0%	I	11	415
	R			131			0			6			0			0	5%	I	3			0			0	3.3%	I	18	158
11 NW 54th Ave	EB L			0			0			0			0			0			0			0			0			0	0
and	T			0			0			0			0			0			0			0			0			0	0
South Casino Access	R			0			0			0			0			0			0			0			0			0	0
	WB L			0			0			0			0			0			0			0			0			0	0
Unsignalized	T			0			0			0			0			0			0			0			0			0	0
	R			0			0			0			0			0			0			0			0			0	0
	NB L			0			0			0			0			0			0			0			0			0	0
	T			258			0			0			0			0	35%	I	19			0			0	50.8%	I	278	555
	R			0			0			0			0			0			0			0			0			0	0
	SB L			0			0			0			0			0			0			0			0			0	0
	T			214			0			0			0			0	30%	O	80			0			0	49.9%	O	31	325
	R			0			0			0			0			0			0			0			0			0	0
12 NW 54th Ave	EB L			0			0			0			0			0			0			0			0			0	0
and	T			0			0			0			0			0			0			0			0			0	0
NW 40th St	R			0			0			0			0			0			0			0			0			0	0
	WB L			111			0			0			0			0			0			0			0			0	111
Unsignalized	T			0			0			0			0			0			0			0			0			0	0
	R			159			0			0			0			0	20%	O	53			0			0	0.8%	I	4	216
	NB L			0			0			0			0			0			0			0			0			0	0
	T			108			0			0			0			0			0			0			0	50.8%	I	278	386
	R			87			0			0			0			0			0			0			0			0	87
	SB L			240			0			0			0			0	20%	I	11			0			0			0	251
	T			102			0			0			0			0			0			0			0	49.9%	O	31	133
	R			0			0			0			0			0			0			0			0			0	0

TABLE G-6
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
13 NW 54th Ave	EB	L			0			0			0			0			0			0			0			0	16.1%	O	10	10
and		T			0			0			0			0			0			0			0			0			0	0
North Casino Access		R			0			0			0			0			0			0			0			0	49.9%	O	31	31
	WB	L			0			0			0			0			0			0			0			0			0	0
Signalized		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
	NB	L			0			0			0			0			0			0			0			0	51.6%	I	282	282
		T			276			0			0			0			0	20%	O	53			0			0			0	329
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			385			0			0			0			0	20%	I	11			0			0			0	396
		R			0			0			0			0			0			0			0			0	32.2%	I	176	176
14 NW 54th Ave	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			288			0			0			0			0			0			0			0			0	288
Cullum Rd		R			132			0			0			0			0	20%	I	11			0			0	22.8%	I	125	268
	WB	L			59			0			0			0			0			0			0			0	9.4%	I	51	110
Unsignalized		T			26			0			0			0			0			0			0			0			0	26
		R			73			0			0			0			0			0			0			0			0	73
	NB	L			0			0			0			0			0	20%	O	53			0			0	6.9%	O	4	57
		T			276			0			0			0			0			0			0			0			0	276
		R			82			0			0			0			0			0			0			0	9.2%	O	6	88
	SB	L			65			0			0			0			0			0			0			0			0	65
		T			194			0			0			0			0			0			0			0			0	194
		R			0			0			0			0			0			0			0			0			0	0
15 Banks Rd	EB	L			73			0			0			0			0			0			0			0			0	73
and		T			49			0			0			0			0			0			0			0			0	49
Cullum Rd		R			219			0			0			0			0			0			0			0			0	219
	WB	L			65			0			0			0			0	15%	I	8			0			0			0	73
Unsignalized		T			22			0			0			0			0			0			0			0	4.0%	I	22	44
		R			73			0			0			0			0			0			0			0			0	73
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			171			0			0			0			0	5%	O	13			0			0			0	184
		R			73			0			0			0			0	15%	O	40			0			0			0	113
	SB	L			86			0			0			0			0			0			0			0			0	86
		T			216			0			0			0			0	5%	I	3			0			0			0	219
		R			108			0			0			0			0			0			0			0	5.4%	I	30	138
16 Banks Rd	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			-14			0			5			0			0			0			0	5%	I	22	2.0%	O	1	14
Wiles Rd		R			126			0			0			0			0			0			0			0			0	126
	WB	L			257			0			0			0			0	5%	I	3			0			0	5.4%	I	30	290
Unsignalized		T			-14			0			6			0			0			0			0	5%	O	28			0	20
		R			0			0			0			0			0			0			0			0			0	0
	NB	L			165			0			0			0			0			0			0			0			0	165
		T			0			0			0			0			0			0			0			0			0	0
		R			144			0			0			0			0	5%	O	13			0			0	9.2%	O	6	163
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0

NOTES:
DIST = DISTRIBUTION
[1] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

TABLE G-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV (2016-2018) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
1 Sample Rd	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			50			7			0			0			22			0			0			0	1.6%	I	9	88
SR-7		T			87			47			8			3			35			11			0			29	13.9%	I	76	296
		R			0			7			0			0			0			0			35			0			0	42
Signalized	WB	U			0			0			0			0			0			0			0			0			0	0
		L			43			0			0			6			0			27			23			26	1.5%	O	1	126
		T			114			29			10			5			32			53			0			37	15.9%	O	10	290
		R			29			0			0			2			0			0			0			0			0	31
	NB	L			0			4			0			0			0			0			19			0			0	23
		T			0			0			0			0			0			0			19			0	11.4%	I	62	81
		R			71			0			0			3			0			5			13			20	1.7%	I	9	121
	SB	L			13			0			0			1			0			0			0			0			0	14
		T			0			0			0			0			0			0			35			0	1.8%	O	1	36
		R			43			5			0			0			20			0			0			0			0	68
2 Sample Rd	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			171			47			8			6			35			16			0			49	15.6%	I	85	417
SW Service Rd		R			0			0			0			0			0			0			0			0			0	0
	WB	L			0			0			0			0			0			0			0			0			0	0
Unsignalized		T			186			29			10			13			32			80			0			63	10.3%	O	6	419
		R			0			0			0			0			0			0			0			0	3.1%	I	17	17
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0	7.1%	O	4	4
3 Sample Rd	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			109			0			0			0			0			16			0			0	15.6%	I	85	210
NW 54th Ave		T			61			47			8			6			35			0			0			49			0	206
		R			0			0			0			0			0			0			0			0			0	0
Signalized	WB	L			0			0			0			0			0			0			0			29			0	29
		T			115			29			10			13			32			27			0			63	3.1%	I	17	306
		R			63			0			0			0			0			0			0			0	27.5%	I	150	213
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			3			0			0	7.7%	I	42	45
		R			0			0			0			0			0			0			0			23			0	23
	SB	L			71			0			0			0			0			13			0			0	33.8%	O	21	105
		T			0			0			0			0			0			13			0			0	5.8%	O	4	17
		R			71			0			0			0			0			53			0			0	10.3%	O	6	130
4 Sample Rd	EB	L			65			0			0			0			0			0			0			0			0	65
and		T			66			47			8			6			35			13			0			72	31.8%	O	20	267
Banks Rd		R			0			0			0			0			0			0			0			0	2.0%	O	1	1
	WB	U			0			0			0			0			0			0			0			0			0	0
Unsignalized		L			0			0			0			0			0			0			0			0			0	0
		T			83			29			10			13			32			0			0			92	30.6%	I	167	426
		R			111			0			0			0			0			11			0			0	0.9%	I	5	127
	NB	U			0			0			0			0			0			0			0			0			0	0
		L			0			0			0			0			0			0			0			0			0	0
		T			34			0			0			0			0			3			0			3			0	40
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			116			0			0			0			0			40			0			0			0	156
		T			39			0			0			0			0			13			0			4			0	56
		R			96			0			0			0			0			27			0			0			0	123

TABLE G-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV (2016-2018) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
5 Sample Rd	EB	L			57			7			8			0			5			0			0			0			0	77
and		T			142			26			0			6			25			27			0			73	23.9%	O	15	314
Lyons		R			57			14			0			0			5			27			0			19	7.9%	O	5	127
	WB	U			0			0			0			0			0			0			0			0			0	0
Signalized		L			0			0			0			4			0			0			0			0			0	4
		T			113			16			0			13			23			5			0			57	25.6%	I	140	367
		R			75			0			8			5			0			0			0			0			0	88
	NB	L			75			9			0			0			5			5			0			15	5.9%	I	32	141
		T			63			0			13			0			0			3			0			0			0	79
		R			0			0			0			2			0			0			0			0			0	2
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			71			0			10			3			0			0			0			0			0	84
		T			99			0			16			0			0			13			0			0			0	128
		R			0			4			10			0			5			0			0			0			0	19
6 SR-7	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			0			0			0			0			0			0			0			0			0	0
NW 40th St		R			0			0			0			0			0			0			0			0			0	0
	WB	L			0			0			0			0			0			0			0			0			0	0
Signalized		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0	26.9%	O	17	17
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			283			7			10			2			22			0			19			0			0	343
		R			0			0			0			0			0			0			0			0	13.0%	I	71	71
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
7 SR-7	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			10			0			0			0			0			1			0			0	1.0%	I	5	16
Cullum Rd		R			0			0			0			0			0			0			0			0			0	0
	WB	L			67			0			0			0			0			0			0			0	1.0%	O	1	68
Unsignalized		T			11			0			0			0			0			3			0			0	1.0%	O	1	15
		R			122			0			0			0			0			51			0			73	4.9%	O	3	249
	NB	U			0			0			0			0			0			0			0			0	0.8%	O	1	1
		L			0			0			0			0			0			0			0			0	1.1%	O	1	1
		T			54			7			10			2			22			0			19			0	25.0%	O	16	130
		R			276			0			0			0			0			0			0			0			0	276
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			122			0			0			0			0			10			0			57	21.8%	I	119	308
		T			3			5			12			1			20			0			35			0			0	76
		R			0			0			0			0			0			0			0			0			0	0
8 SR-7	EB	U			0			0			0			0			0			0			0			0			0	0
and		L			0			12			0			0			0			0			0			0			0	12
Wiles Rd		T			37			0			0			0			0			0			0			15			0	52
		R			25			7			0			0			9			3			0			0	3.8%	I	21	65
Signalized	WB	L			0			0			4			0			0			0			0			0			0	4
		T			29			0			0			0			0			0			0			19			0	48
		R			71			0			0			0			0			0			0			0			0	71
	NB	U			0			0			0			0			0			0			0			0			0	0
		L			43			5			0			0			10			13			0			0	2.5%	O	2	73
		T			85			0			7			2			10			37			0			73	25.4%	O	16	230
		R			0			0			3			0			0			0			0			0	2.0%	O	1	4
	SB	U			0			0			0			0			0			0			0			0			0	0
		L			37			0			0			0			0			0			0			0			0	37
		T			100			0			8			1			9			8			0			57	18.0%	I	98	281
		R			0			7			0			0			0			0			0			0			0	7

TABLE G-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV (2016-2018) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT	1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
		[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
9 Lyons Rd	EB L			45			0			0			0			0			27			0			0			0	72
and	T			11			0			0			0			0			0			0			0			0	11
Cullum Rd	R			18			0			0			0			0			13			0			0			0	31
	WB L			0			0			0			0			0			0			0			0			0	0
Signalized	T			10			0			0			0			0			0			0			0			0	10
	R			0			0			0			0			0			0			0			0			0	0
	NB L			15			0			0			0			0			3			0			0			0	18
	T			282			65			30			5			5			0			0			92			0	479
	R			0			0			0			0			0			0			0			0			0	0
	SB U			0			0			0			0			0			0			0			0			0	0
	L			0			0			0			0			0			0			0			0			0	0
	T			172			4			35			3			5			0			0			72			0	291
	R			29			0			0			0			0			5			0			0	4.0%	I	22	56
10 Lyons Rd	EB L			43			0			3			0			0			0			0			0	6.8%	O	4	50
and	T			29			0			0			0			0			13			0			0	4.4%	O	3	45
Wiles Rd	R			14			0			0			0			0			0			0			0			0	14
	WB L			37			0			0			0			0			3			0			0	2.0%	I	11	51
signalized	T			75			0			0			0			0			0			0			0	2.1%	I	11	86
	R			0			0			0			0			0			0			0			0			0	0
	NB L			0			0			0			0			0			0			0			0			0	0
	T			227			7			30			5			5			27			0			92			0	393
	R			99			0			0			0			0			0			0			0			0	99
	SB L			0			0			0			0			0			0			0			0			0	0
	T			150			4			35			3			5			3			0			72	2.0%	I	11	283
	R			87			0			4			0			0			3			0			0	3.3%	I	18	112
11 NW 54th Ave	EB L			0			0			0			0			0			0			0			0			0	0
and	T			0			0			0			0			0			0			0			0			0	0
South Casino Access	R			0			0			0			0			0			0			0			0			0	0
	WB L			0			0			0			0			0			0			0			0			0	0
Unsignalized	T			0			0			0			0			0			0			0			0			0	0
	R			0			0			0			0			0			0			0			0			0	0
	NB L			0			0			0			0			0			0			0			0			0	0
	T			172			0			0			0			0			19			0			0	50.8%	I	278	469
	R			0			0			0			0			0			0			0			0			0	0
	SB L			0			0			0			0			0			0			0			0			0	0
	T			143			0			0			0			0			80			0			0	49.9%	O	31	254
	R			0			0			0			0			0			0			0			0			0	0
12 NW 54th Ave	EB L			0			0			0			0			0			0			0			0			0	0
and	T			0			0			0			0			0			0			0			0			0	0
NW 40th St	R			0			0			0			0			0			0			0			0			0	0
	WB L			74			0			0			0			0			0			0			0			0	74
Unsignalized	T			0			0			0			0			0			0			0			0			0	0
	R			106			0			0			0			0			53			0			0	0.8%	I	4	163
	NB L			0			0			0			0			0			0			0			0			0	0
	T			72			0			0			0			0			0			0			0	50.8%	I	278	350
	R			58			0			0			0			0			0			0			0			0	58
	SB L			160			0			0			0			0			11			0			0			0	171
	T			68			0			0			0			0			0			0			0	49.9%	O	31	99
	R			0			0			0			0			0			0			0			0			0	0

TABLE G-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV (2016-2018) PM PEAK HOUR COMMITTED DEVELOPMENTS INTERSECTION TURNING MOVEMENT VOLUMES

10-Jul-11

INTERSECTION	MVNT		1 MAINSTREET DRI			2 DOWNTOWN CORAL SPRINGS DRI			3 SAWGRASS EXCHANGE DRI			4 POMPANO INDUSTRIAL PARK DRI			5 CORAL LANDINGS III			6 COCONUT TRACT "E" OFFICE			7 CELEBRATION POINTE			8 The Village of Marbella PMDD			9 [1] EXISTING TRUST LAND (TRACT 65)			TOTAL PM PK HR COMM. PROJECT TRIPS
			[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	[1] DIST	IN / OUT	PM PEAK	
13 NW 54th Ave	EB	L			0			0			0			0			0			0			0			0	16.1%	O	10	10
and		T			0			0			0			0			0			0			0			0			0	0
North Casino Access		R			0			0			0			0			0			0			0			0	49.9%	O	31	31
	WB	L			0			0			0			0			0			0			0			0			0	0
Signalized		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0
	NB	L			0			0			0			0			0			0			0			0	51.6%	I	282	282
		T			184			0			0			0			0			53			0			0			0	237
		R			0			0			0			0			0			0			0			0			0	0
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			257			0			0			0			0			11			0			0			0	268
		R			0			0			0			0			0			0			0			0	32.2%	I	176	176
14 NW 54th Ave	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			192			0			0			0			0			0			0			0			0	192
Cullum Rd		R			88			0			0			0			0			11			0			0	22.8%	I	125	224
	WB	L			39			0			0			0			0			0			0			0	9.4%	I	51	90
Unsignalized		T			17			0			0			0			0			0			0			0			0	17
		R			49			0			0			0			0			0			0			0			0	49
	NB	L			0			0			0			0			0			53			0			0	6.9%	O	4	57
		T			184			0			0			0			0			0			0			0			0	184
		R			55			0			0			0			0			0			0			0	9.2%	O	6	61
	SB	L			43			0			0			0			0			0			0			0			0	43
		T			129			0			0			0			0			0			0			0			0	129
		R			0			0			0			0			0			0			0			0			0	0
15 Banks Rd	EB	L			49			0			0			0			0			0			0			0	9.2%	O	6	55
and		T			33			0			0			0			0			0			0			0			0	33
Cullum Rd		R			146			0			0			0			0			0			0			0			0	146
	WB	L			43			0			0			0			0			8			0			0			0	51
Unsignalized		T			15			0			0			0			0			0			0			0	4.0%	I	22	37
		R			49			0			0			0			0			0			0			0			0	49
	NB	L			0			0			0			0			0			0			0			0			0	0
		T			114			0			0			0			0			13			0			0			0	127
		R			49			0			0			0			0			40			0			0			0	89
	SB	L			57			0			0			0			0			0			0			0			0	57
		T			144			0			0			0			0			3			0			0			0	147
		R			72			0			0			0			0			0			0			0	5.4%	I	30	102
16 Banks Rd	EB	L			0			0			0			0			0			0			0			0			0	0
and		T			-9			0			3			0			0			0			0			15	2.0%	O	1	10
Wiles Rd		R			84			0			0			0			0			0			0			0			0	84
	WB	L			171			0			0			0			0			3			0			0	5.4%	I	30	204
Unsignalized		T			-9			0			4			0			0			0			0			19			0	14
		R			0			0			0			0			0			0			0			0			0	0
	NB	L			110			0			0			0			0			0			0			0			0	110
		T			0			0			0			0			0			0			0			0			0	0
		R			96			0			0			0			0			13			0			0	9.2%	O	6	115
	SB	L			0			0			0			0			0			0			0			0			0	0
		T			0			0			0			0			0			0			0			0			0	0
		R			0			0			0			0			0			0			0			0			0	0

NOTES:
DIST = DISTRIBUTION
[1] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

Appendix H

Significance and Link Analysis Tables

TABLE H-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
SIGNIFICANCE -- FINAL IMPACT STUDY AREA DETERMINATION - PM PEAK HOUR

Fee-To-Trust Property Full Build-Out Trips
Inbound 264
Outbound 257

ROADWAY FROM	TO	[1] E+C ROADWAY NUMBER OF LANES	[2] ROADWAY CLASSIFICATION	[2] ADOPTED LOS	[3] DIR PEAK HOUR MAXIMUM SERVICE VOLUME	PROJECT TRAFFIC AND SIGNIFICANCE DETERMINATION: PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		PERCENT SIGNIFICANCE		[4] SIGNIFICANT IMPACT (YES/NO)	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Atlantic Boulevard (E/W)															
University Drive	Riverside Drive	6LD	Class II Arterial	D	2,680	1.0%	1.0%	I	O	3	3	0.1%	0.1%	NO	NO
Riverside Drive	Ramblewood Drive	6LD	Class II Arterial	D	2,680	1.0%	1.0%	I	O	3	3	0.1%	0.1%	NO	NO
Ramblewood Drive	Rock Island Road	6LD	Class II Arterial	D	2,680	1.0%	1.0%	I	O	3	3	0.1%	0.1%	NO	NO
Rock Island Road	NW 66th Avenue	6LD	Class II Arterial	D	2,680	3.0%	3.0%	I	O	8	8	0.3%	0.3%	NO	NO
NW 66th Avenue	SR 7	6LD	Class II Arterial	D	2,680	3.0%	3.0%	I	O	8	8	0.3%	0.3%	NO	NO
SR 7	Banks Road	6LD	Class II Arterial	D	2,680	4.0%	4.0%	O	I	10	11	0.4%	0.4%	NO	NO
Banks Road	Lyons Road	6LD	Class II Arterial	D	2,680	7.0%	7.0%	O	I	18	18	0.7%	0.7%	NO	NO
Lyons Road	Florida's Turnpike	6LD	Class II Arterial	D	2,680	4.0%	4.0%	O	I	10	11	0.4%	0.4%	NO	NO
Florida's Turnpike	NW 31th Avenue	6LD	Class II Arterial	D	2,680	2.0%	2.0%	O	I	5	5	0.2%	0.2%	NO	NO
NW 31th Avenue	Powerline Road	6LD	Class II Arterial	D	2,680	1.0%	1.0%	O	I	3	3	0.1%	0.1%	NO	NO
Margate Boulevard (E/W)															
Rock Island Road	NW 66th Avenue	4LD	Other Urban Non-State Roadway	D	1,200	1.0%	1.0%	I	O	3	3	0.3%	0.3%	NO	NO
NW 66th Avenue	SR 7	4LD	Other Urban Non-State Roadway	D	1,200	1.0%	1.0%	I	O	3	3	0.3%	0.3%	NO	NO
Coconut Creek Parkway/Hammondvill Road (E/W)															
SR 7	Banks Road	4LD	Class II Arterial	D	1,770	3.0%	3.0%	O	I	8	8	0.5%	0.5%	NO	NO
Banks Road	Lyons Road	4LD	Class II Arterial	D	1,770	2.0%	2.0%	O	I	5	5	0.3%	0.3%	NO	NO
Lyons Road	NW 31st Avenue-FTPK	4LD	Class II Arterial	D	1,770	2.0%	2.0%	O	I	5	5	0.3%	0.3%	NO	NO
NW 31st Avenue-FTPK	Powerline Road	4LD	Class II Arterial	D	1,770	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO
Royal Palm Boulevard/Copans Road (E/W)															
University Drive	Riverside Drive	4LD	Class I Arterial	D	1,960	1.0%	1.0%	I	O	3	3	0.2%	0.2%	NO	NO
Riverside Drive	Rock Island Road	4LD	Class I Arterial	D	1,960	1.0%	1.0%	I	O	3	3	0.2%	0.2%	NO	NO
Rock Island Road	SR 7	4LD	Class I Arterial	D	1,960	2.0%	2.0%	I	O	5	5	0.3%	0.3%	NO	NO
SR 7	Banks Road	4LD	Class I Arterial	D	1,960	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Banks Road	Lyons Road	4LD	Class I Arterial	D	1,960	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO
Lyons Road	Blount Road	4LD	Class I Arterial	D	1,960	2.0%	2.0%	O	I	5	5	0.3%	0.3%	NO	NO
Blount Road	Powerline Road	6LD	Class I Arterial	D	2,940	1.0%	1.0%	O	I	3	3	0.1%	0.1%	NO	NO
Sample Road (E/W)															
University Drive	Riverside Drive	6LD	Class II Arterial	D	2,680	3.0%	3.0%	I	O	8	8	0.3%	0.3%	NO	NO
Riverside Drive	Rock Island Road	6LD	Class II Arterial	D	2,680	10.0%	10.0%	I	O	26	26	1.0%	1.0%	NO	NO
Rock Island Road	SR 7	6LD	Class II Arterial	D	2,680	15.5%	15.9%	I	O	41	41	1.5%	1.5%	NO	NO
SR 7	NW 54th Avenue	6LD	Class II Arterial	D	2,680	15.6%	18.2%	I	O	41	47	1.5%	1.8%	NO	NO
NW 54th Avenue	Banks Road	6LD	Class II Arterial	D	2,680	29.8%	26.7%	O	I	77	70	2.9%	2.6%	NO	NO
Banks Road	Lyons Road	6LD	Class II Arterial	D	2,680	31.8%	29.5%	O	I	82	78	3.1%	2.9%	NO	NO
Lyons	Florida's Turnpike	6LD	Class II Arterial	D	2,680	23.9%	25.6%	O	I	61	68	2.3%	2.5%	NO	NO
Florida's Turnpike	Blount Road	6LD	Class II Arterial	D	2,680	10.0%	10.0%	O	I	26	26	1.0%	1.0%	NO	NO
Blount Road	Powerline Road	6LD	Class I Arterial	D	2,940	9.0%	9.0%	O	I	23	24	0.8%	0.8%	NO	NO
Wiles Road (E/W)															

TABLE H-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
SIGNIFICANCE -- FINAL IMPACT STUDY AREA DETERMINATION - PM PEAK HOUR

Fee-To-Trust Property Full Build-Out Trips
Inbound 264
Outbound 257

ROADWAY FROM	TO	[1] E+C ROADWAY NUMBER OF LANES	[2] ROADWAY CLASSIFICATION	[2] ADOPTED LOS	[3] DIR PEAK HOUR MAXIMUM SERVICE VOLUME	PROJECT TRAFFIC AND SIGNIFICANCE DETERMINATION: PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		PERCENT SIGNIFICANCE		[4] SIGNIFICANT IMPACT (YES/NO)	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
University Drive	Riverside Drive	4LD	Class II Arterial	D	1,770	2.0%	2.0%	I	O	5	5	0.3%	0.3%	NO	NO
Riverside Drive	Rock Island Road	4LD	Class II Arterial	D	1,770	3.0%	3.0%	I	O	8	8	0.5%	0.5%	NO	NO
Rock Island Road	SR 7	6LD	Class II Arterial	D	2,680	3.8%	2.5%	I	O	10	6	0.4%	0.2%	NO	NO
SR 7	Banks Road	6LD	Class I Arterial	D	1,960	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Banks Road	Lyons Road	4LD	Class I Arterial	D	1,960	5.2%	4.7%	O	I	13	12	0.7%	0.6%	NO	NO
Lyons Road	Powerline Road	4LD	Class I Arterial	D	1,960	4.4%	4.1%	O	I	11	11	0.6%	0.6%	NO	NO
Cullum Road (E/W)															
SR7	NW 54th Avenue	4LD	Other Urban Non-State Roadway	D	1,200	22.8%	6.2%	I	O	60	16	5.0%	1.3%	**YES**	NO
NW 54th Avenue	Banks Road	4LD	Other Urban Non-State Roadway	D	1,200	10.4%	9.4%	O	I	27	25	2.3%	2.1%	NO	NO
Banks Road	Lyons Road	4LD	Other Urban Non-State Roadway	D	1,200	5.2%	4.7%	O	I	13	12	1.1%	1.0%	NO	NO
Sawgrass Expressway (E/W)															
University Drive	SR 7	6LF	Freeway	D	5,580	8.0%	8.0%	I	O	21	21	0.4%	0.4%	NO	NO
SR 7	Lyons Road	6LF	Freeway	D	5,580	1.0%	1.0%	O	I	3	3	0.1%	0.1%	NO	NO
Lyons Road	Florida's Turnpike	6LF	Freeway	D	5,580	2.0%	2.0%	O	I	5	5	0.1%	0.1%	NO	NO
SW 10th Street (E/W)															
Florida's Turnpike	Powerline Road	6LD	Class II Arterial	D	2,680	2.0%	2.0%	O	I	5	5	0.2%	0.2%	NO	NO
Holmberg Road/Johnson Road (E/W)															
University Drive	Riverside Drive	2L	Other Urban Non-State Roadway	D	500	1.0%	1.0%	I	O	3	3	0.6%	0.6%	NO	NO
Riverside Drive	SR 7	2L	Urban Non-State Major City/County Roadway	D	500	1.0%	1.0%	I	O	3	3	0.6%	0.6%	NO	NO
SR 7	Lyons Road	4LD	Urban Non-State Major City/County Roadway	D	1,200	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Hillsboro Boulevard (E/W)															
Loxahatchee Road	SR 7	4LD	Other Urban Non-State Roadway	D	1,200	1.0%	1.0%	I	O	3	3	0.3%	0.3%	NO	NO
SR 7	Lyons Road	6LD	Class I Arterial	D	2,940	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Lyons Road	Powerline Road	6LD	Class I Arterial	D	2,940	1.0%	1.0%	O	I	3	3	0.1%	0.1%	NO	NO
University Drive (N/S)															
Atlantic Boulevard	Royal Palm Boulevard	6LD	Class II Arterial	D	2,680	1.0%	1.0%	I	O	3	3	0.1%	0.1%	NO	NO
Royal Palm Boulevard	Sample Road	6LD	Class II Arterial	D	2,680	2.0%	2.0%	I	O	5	5	0.2%	0.2%	NO	NO
Sample Road	NW 40th Street	6LD	Class II Arterial	D	2,680	1.0%	1.0%	O	I	3	3	0.1%	0.1%	NO	NO
NW 40th Street	Wiles Road	4LD	Class II Arterial	D	1,770	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO
Wiles Road	Sawgrass Expressway	4LD	Class II Arterial	D	1,770	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO
Sawgrass Expressway	Holmberg Road	4LD	Urban Non-State Major City/County Roadway	D	1,600	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Riverside Drive (N/S)															
Atlantic Boulevard	Royal Palm Boulevard	4LD	Urban Non-State Major City/County Roadway	D	1,900	4.0%	4.0%	I	O	11	10	0.6%	0.5%	NO	NO
Royal Palm Boulevard	Sample Road	4LD	Urban Non-State Major City/County Roadway	D	1,900	5.0%	5.0%	I	O	13	13	0.7%	0.7%	NO	NO
Sample Road	Wiles Road	4LD	Class II Arterial	D	1,770	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO
Wiles Road	Holmberg Road	4LD	Class II Arterial	D	1,770	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO

TABLE H-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
SIGNIFICANCE -- FINAL IMPACT STUDY AREA DETERMINATION - PM PEAK HOUR

Fee-To-Trust Property Full Build-Out Trips Inbound 264 Outbound 257		[1] E+C ROADWAY NUMBER OF LANES	[2] ROADWAY CLASSIFICATION	[2] ADOPTED LOS	[3] DIR PEAK HOUR MAXIMUM SERVICE VOLUME	PROJECT TRAFFIC AND SIGNIFICANCE DETERMINATION									
						PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		PERCENT SIGNIFICANCE		[4] SIGNIFICANT IMPACT (YES/NO)	
ROADWAY FROM	TO					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Rock Island Road (N/S)															
Atlantic Boulevard	Margate Boulevard	4LD	Class II Arterial	D	1,770	4.0%	4.0%	I	O	11	10	0.6%	0.6%	NO	NO
Margate Boulevard	Royal Palm Boulevard	4LD	Class II Arterial	D	1,770	3.0%	3.0%	I	O	8	8	0.5%	0.5%	NO	NO
Royal Palm Boulevard	Sample Road	4LD	Class I Arterial	D	1,960	6.1%	5.9%	I	O	16	15	0.8%	0.8%	NO	NO
Sample Road	Wiles Road	4LD	Class I Arterial	D	1,960	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
NW 66th Avenue (N/S)															
Atlantic Boulevard	NW 18th Street	2LU	Other Urban Non-State Roadway	D	500	1.0%	1.0%	I	O	3	3	0.6%	0.6%	NO	NO
				D											
Turtle Creek Drive (N/S)															
Sample Road	SR 7	4LD	Other Urban Non-State Roadway	D	1,200	1.0%	2.1%	I	O	3	5	0.3%	0.4%	NO	NO
NW 62nd Avenue/NW 31Street St (N/S)															
SR 7	Sample Road	4LD	Other Urban Non-State Roadway	D	1,200	0.0%	0.0%	I	O	0	0	0.0%	0.0%	NO	NO
NW 54thAvenue (N/S)															
SR 7	Sample Road	4LD	Other Urban Non-State Roadway	D	1,200	7.7%	5.8%	I	O	20	15	1.7%	1.3%	NO	NO
Sample Road	NW 40th Street	4LD	Other Urban Non-State Roadway	D	1,200	47.1%	47.8%	I	O	124	123	10.3%	10.3%	**YES**	**YES**
NW 40th Street	N.Casino Access	4LD	Other Urban Non-State Roadway	D	1,200	51.9%	51.8%	I	O	137	133	11.4%	11.1%	**YES**	**YES**
N.Casino Access	Cullum Road	4LD	Other Urban Non-State Roadway	D	1,200	16.6%	32.2%	O	I	43	85	3.6%	7.1%	NO	**YES**
SR 7 (N/S)															
Atlantic Boulevard	Margate Boulevard	6LD	Class II Arterial	D	2,680	13.0%	5.0%	I	O	40	15	1.5%	0.6%	NO	NO
Margate Boulevard	Coconut Creek Parkway	6LD	Class II Arterial	D	2,680	15.0%	6.0%	I	O	50	20	1.9%	0.7%	NO	NO
Coconut Creek Parkway	Copans Road	6LD	Class II Arterial	D	2,680	18.8%	7.9%	I	O	50	20	1.9%	0.7%	NO	NO
Copans Road	NW 31 Street	6LD	Class II Arterial	D	2,680	20.8%	9.9%	I	O	55	25	2.1%	0.9%	NO	NO
NW 31 Street	Sample Road	6LD	Class II Arterial	D	2,680	13.1%	4.1%	I	O	35	11	1.3%	0.4%	NO	NO
Sample Road	NW 40th Street	6LD	Class II Arterial	D	2,680	13.0%	1.8%	I	O	34	5	1.3%	0.2%	NO	NO
NW 40th Street	Cullum Road	6LD	Class II Arterial	D	2,680	25.6%	1.8%	O	O	66	5	2.5%	0.2%	NO	NO
Cullum Road	Wiles Road	6LD	Class II Arterial	D	2,680	27.9%	21.8%	O	I	72	58	2.7%	2.2%	NO	NO
Wiles Road	Sawgrass Expressway	6LD	Class II Arterial	D	2,680	25.4%	18.0%	O	I	65	48	2.4%	1.8%	NO	NO
Sawgrass Expressway	Holmberg Road	6LD	Class II Arterial	D	2,680	16.4%	9.0%	O	I	42	24	1.6%	0.9%	NO	NO
Holmberg Road	Hillsboro Boulevard	6LD	Class II Arterial	D	2,680	10.0%	10.0%	O	I	26	26	1.0%	1.0%	NO	NO
Hillsboro Boulevard	Palm Beach County Line	6LD	Class II Arterial	D	2,680	9.0%	9.0%	O	I	23	24	0.9%	0.9%	NO	NO
Banks Road (N/S)															
Atlantic Boulevard	Coconut Creek Parkway	4LD	Urban Non-State Major City/County Roadway	D	1,600	3.0%	3.0%	I	O	8	8	0.5%	0.5%	NO	NO
Coconut Creek Parkway	Copans Road	4LD	Urban Non-State Major City/County Roadway	D	1,600	6.0%	6.0%	I	O	16	15	1.0%	0.9%	NO	NO
Copans Road	Sample Road	4LD	Urban Non-State Major City/County Roadway	D	1,600	2.0%	2.0%	I	O	5	5	0.3%	0.3%	NO	NO
Sample Road	NW 40th Street	4LD	Other Urban Non-State Rodway	D	1,200	4.8%	4.0%	I	O	13	10	1.1%	0.8%	NO	NO
Cullum Road	Wiles Road	4LD	Other Urban Non-State Rodway	D	1,200	5.2%	4.7%	O	I	13	12	1.1%	1.0%	NO	NO
Lyons Road (N/S)															
Atlantic Boulevard	NW 6th Manor	6LD	Class II Arterial	D	2,680	4.0%	4.0%	I	O	11	10	0.4%	0.4%	NO	NO

TABLE H-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
SIGNIFICANCE -- FINAL IMPACT STUDY AREA DETERMINATION - PM PEAK HOUR

Fee-To-Trust Property Full Build-Out Trips
Inbound 264
Outbound 257

ROADWAY FROM	TO	[1] E+C ROADWAY NUMBER OF LANES	[2] ROADWAY CLASSIFICATION	[2] ADOPTED LOS	[3] DIR PEAK HOUR MAXIMUM SERVICE VOLUME	PROJECT TRAFFIC AND SIGNIFICANCE DETERMINATION									
						PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		PERCENT SIGNIFICANCE		[4] SIGNIFICANT IMPACT (YES/NO)	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
NW 6th Manor	Coconut Creek Parkway	4LD	Class II Arterial	D	1,770	6.0%	6.0%	I	O	16	15	0.9%	0.8%	NO	NO
Coconut Creek Parkway	Copans Road	4LD	Class II Arterial	D	1,770	6.0%	6.0%	I	O	16	15	0.9%	0.8%	NO	NO
Copans Road	Sample Road	4LD	Class II Arterial	D	1,770	3.9%	7.9%	I	O	10	20	0.6%	1.1%	NO	NO
Sample Road	Collum Road	6LD	Class II Arterial	D	2,680	0.0%	0.0%	I	O	0	0	0.0%	0.0%	NO	NO
Collum Road	Wiles Road	6LD	Class II Arterial	D	2,680	5.2%	4.7%	O	I	13	12	0.5%	0.4%	NO	NO
Wiles Road	Sawgrass Expressway	6LD	Class II Arterial	D	2,680	6.0%	5.3%	O	I	15	14	0.6%	0.5%	NO	NO
Sawgrass Expressway	Johnson Road	6LD	Class I Arterial	D	2,940	4.0%	4.0%	O	I	10	11	0.3%	0.4%	NO	NO
Johnson Road	Hillsboro Boulevard	6LD	Class I Arterial	D	2,940	3.0%	3.0%	O	I	8	8	0.3%	0.3%	NO	NO
Hillsboro Boulevard	Palm Beach County Line	6LD	Class I Arterial	D	2,940	2.0%	2.0%	O	I	5	5	0.2%	0.2%	NO	NO
Florida Turnpike (N/S)															
Atlantic Boulevard	Coconut Creek Parkway	6LF	Freeway	D	5,580	8.0%	8.0%	I	O	21	21	0.4%	0.4%	NO	NO
Coconut Creek Parkway	Sample Road	6LF	Freeway	D	5,580	8.0%	8.0%	I	O	21	21	0.4%	0.4%	NO	NO
Sample Road	Sawgrass Expressway	6LF	Freeway	D	5,580	7.0%	7.0%	O	I	18	18	0.3%	0.3%	NO	NO
Sawgrass Expressway	Palm Beach County Line	6LF	Freeway	D	5,580	7.0%	7.0%	O	I	18	18	0.3%	0.3%	NO	NO
NW 31st Ave/Atlantic Boulevard Extension (N/S)															
Atlantic Boulevard	Coconut Creek Parkway	4LD	Class I Arterial	D	1,960	1.0%	1.0%	I	O	3	3	0.2%	0.2%	NO	NO
Blount Road (N/S)															
Copans Road	Sample Road	4LD	Other Urban Non-State Roadway	D	1,200	1.0%	1.0%	I	O	3	3	0.3%	0.3%	NO	NO
Powerline Road (N/S)															
Atlantic Boulevard	Coconut Creek Parkway	6LD	Class I Arterial	D	2,940	1.0%	1.0%	I	O	3	3	0.1%	0.1%	NO	NO
Coconut Creek Parkway	Copans Road	6LD	Class I Arterial	D	2,940	2.0%	2.0%	I	O	5	5	0.2%	0.2%	NO	NO
Copans Road	Sample Road	6LD	Class I Arterial	D	2,940	3.0%	3.0%	I	O	8	8	0.3%	0.3%	NO	NO
Sample Road	Wiles Road	6LD	Class I Arterial	D	2,940	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Wiles Road	SW 10th Street	6LD	Class I Arterial	D	2,940	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
SW 10th Stret	Hillsboro Boulevard	4LD	Class II Arterial	D	1,770	0.0%	0.0%	O	I	0	0	0.0%	0.0%	NO	NO
Hillsboro	Palm Beach County Line	4LD	Class II Arterial	D	1,770	1.0%	1.0%	O	I	3	3	0.2%	0.2%	NO	NO

NOTES:

[1] EXISTING PLUS COMMITTED NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., FDOT FIVE-YEAR WORK PROGRAM AND COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY CLASSIFICATION AND ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DISTRICT IV OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[3] DAILY MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
EXISTING 2011 PHASE II CONDITIONS ANALYSIS - VOLUME AND LEVEL OF SERVICE

ROADWAY FROM	TO	[1] 2011 ROADWAY NUMBER OF LANES	[2] ROADWAY CLASSIFICATION	[2] ADOPTED LOS	COUNT SOURCE	FDOT COUNT STATION	AADT COUNT DATE	2010 FDOT AADT OR 2011 DAILY RAW COUNT	[3] SF	[3] AXLE FACTOR	2011 AADT	[4] DAILY MAXIMUM SERVICE VOLUME	2011 DAILY LOS	PEAK HOUR COUNT DATE	[3] PSCF	[3] AXLE FACTOR	NORTHBOUND/EASTBOUND 2010 OR 2011 PEAK HOUR VOLUME	[5] PEAK SEASON VOLUME	ADJUSTED FOR PHASE II 2011	[4] PEAK HOUR MAXIMUM SERVICE VOLUME	PEAK HOUR LOS	SOUTHBOUND/WESTBOUND 2010 OR 2011 PEAK HOUR VOLUME	[5] PEAK SEASON VOLUME	ADJUSTED FOR PHASE II 2011	[4] PEAK HOUR MAXIMUM SERVICE VOLUME	PEAK HOUR LOS
Sample Road (E/W)																										
SR 7	NW 54th Avenue	6LD	Class II Arterial	D	APPLICANT	N/A	4/14/2011	54,987	0.98	0.98	52,810	50,300	E	4/14/2011	1.02	0.98	1,601	1,600	1,635	2,680	C	2,364	2363	2,404	2,680	D
NW 54th Avenue	Banks Road	6LD	Class II Arterial	D	FDOT	86-0467	2010	55,000	1.00	1.00	55,000	50,300	F	4/6/2010	1.01	0.98	1,680	1,663	1,738	2,680	C	2,795	2766	2,766	2,680	E
Banks Road	Lyons Road	6LD	Class II Arterial	D	APPLICANT	N/A	4/14/2011	60,954	0.98	0.98	58,540	50,300	F	4/14/2011	1.02	0.98	2,003	2,002	2,072	2,680	C	2,796	2795	2,795	2,680	E
Wiles Road (E/W)																										
SR 7	Banks Road	4LD	Class I Arterial	D	APPLICANT	N/A	4/14/2011	29,383	0.98	0.94	27,068	36,700	B	4/14/2011	1.02	0.94	1,475	1,414	1,437	1,960	B	1,403	1,345	1,366	1,960	B
Banks Road	Lyons Road	4LD	Class I Arterial			Adjacent	---	---			27,068	36,700	B	Adjacent	---	---	---	1,414	1,437	1,960	B	---	1,345	1,366	1,960	B
Cullum Road (E/W)																										
SR7	NW 54th Avenue	4LD	ther Urban Non-State Roadwa	D	APPLICANT	---	---	---	1.00	1.00		21,600	A	4/14/2011	1.02	0.94	207	198	271	1,200	C	239	229	255	1,200	C
NW 54th Avenue	Banks Road	---	Does not exists																							
Banks Road	Lyons Road	4LD	ther Urban Non-State Roadwa	D		Adjacent	---	---				21,600	A	Adjacent	---	---	---	198	198	1,200	C	---	229	229	1,200	C
NW 54thAvenue (N/S)																										
SR 7	Sample Road	4LD	ther Urban Non-State Roadwa	D	FDOT	86-9769	2010	6,200	1.00	1.00	6,200	21,600	C	Adjacent	---	---	---	477	495	1,200	C	---	449	462	1,200	C
Sample Road	NW 40th Street	4LD	ther Urban Non-State Roadwa	D	APPLICANT	N/A	4/14/2011	13,022	0.98	0.94	11,996	21,600	C	4/14/2011	1.02	0.94	472	453	568	1,200	C	445	427	542	1,200	C
NW 40th Street	Cullum Road	4ILD	ther Urban Non-State Roadwa	D	APPLICANT	N/A	4/14/2011	5,210	0.98	0.94	4,799	21,600	C	4/14/2011	1.02	0.94	201	193	217	1,200	C	227	218	291	1,200	C
SR 7 (N/S)																										
Sample Road	NW 40 Street	6LD	Class II Arterial	D	FDOT	86-5112	2010	41,500	1.00	1.00	41,500	50,300	D	4/6/2010	1.01	0.98	1,631	1,614	1,643	2,680	C	1,546	1530	1,534	2,680	C
NW 40 Street	Cullum Road	6LD	Class II Arterial	D	APPLICANT	N/A	4/14/2011	43,650	0.98	0.98	41,921	50,300	D	4/14/2011	1.02	0.98	1,640	1,639	1,706	2,680	C	1,492	1491	1,495	2,680	C
Cullum Road	Wiles Road	6LD	Class II Arterial	D	APPLICANT	N/A	4/14/2011	50,074	0.98	0.98	48,091	50,300	D	4/14/2011	1.02	0.98	1,143	1,143	1,228	2,680	C	1,891	1890	1,960	2,680	C
Banks Road (N/S)																										
Sample Road	NW 40th Street	2LU	ther Urban Non-State Roadwa	D		Adjacent	---	---			0	9,900	A	Adjacent	---	---	---	203	205	500	C	---	289	289	500	C
Cullum Road	Wiles Road	2LU	ther Urban Non-State Roadwa	D		Adjacent	---	---			0	9,900	A	Adjacent	---	---	---	203	203	500	C	---	289	293	500	C
											0															
Lyons Road (N/S)											0															
Sample Road	Collum Road	6LD	Class II Arterial	D	APPLICANT	N/A	4/14/2011	39,115	0.98	0.94	36,033	50,300	C	4/14/2011	1.02	0.94	1,917	1,838	1,838	2,680	C	1,781	1708	1,708	2,680	C
Cullum Road	Wiles Road	6LD	Class II Arterial	D	APPLICANT	N/A	4/14/2011	39,115	0.98	0.94	36,033	50,300	C	4/15/2011	1.02	0.94	1,917	1,838	1,838	2,680	C	1,781	1708	1,708	2,680	C

AADT = ANNUAL AVERAGE DAILY TRAFFIC SF = SEASONAL FACTOR PSCF = PEAK SEASON CONVERSION FACTOR LOS = LEVEL OF SERVICE

NOTES

[1] EXISTING NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A.
[2] ROADWAY CLASSIFICATION AND ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) DISTRICT IV OR FROM BROWARD COUNTY.
[3] SF, PSCF AND AXLE FACTOR OBTAINED FROM THE 2010 TRAFFIC INFORMATION CD PUBLISHED BY FDOT.
[4] DAILY AND PM PEAK HOUR MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.
[5] PM PEAK HOUR PEAK SEASON DIRECTIONAL VOLUMES DERIVED BY APPLYING THE PSCF AND AXLE FACTOR TO THE DIRECTIONAL LINK COUNT.

TABLE H-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2015 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] 2015 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2015 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2015 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
										[4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,735	2,539	230	296	1,965	2,835	C	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,838	2,902	210	236	2,049	3,139	C	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,222	2,955	333	236	2,555	3,191	D	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,413	1,346	50	89	1,463	1,435	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,465	1,394	168	186	1,633	1,580	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	255	236	191	155	446	391	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	103	96	136	79	239	175	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	258	286	103	87	361	373	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	532	493	3	13	534	506	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	660	631	105	151	765	782	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	665	558	145	139	810	697	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,738	1,600	258	158	1,996	1,758	C	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,789	1,559	268	158	2,057	1,717	C	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,253	2,011	249	168	1,502	2,179	C	D
Banks Road (N/S)													
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	256	341	123	282	379	623	C	C
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	263	336	122	132	385	467	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,607	2,395	195	140	1,802	2,535	B	C
Collum Road	Wiles Road	6LD	D	2,940	1.0%	1,607	2,395	219	132	1,826	2,527	B	C

NOTES:

[1] 2015 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

TABLE H-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2018 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] 2018 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2018 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2018 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE [4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,810	2,610	398	457	2,208	3,067	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,885	3,029	360	410	2,246	3,440	D	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,280	3,087	565	406	2,845	3,493	F	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,456	1,387	100	178	1,556	1,565	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,508	1,443	177	234	1,685	1,677	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	296	241	372	257	668	498	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	103	113	394	270	497	383	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	264	301	228	221	492	522	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	559	506	3	13	562	519	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	748	636	191	223	939	859	D	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	760	559	237	268	997	827	D	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,810	1,648	474	259	2,284	1,907	D	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,836	1,606	494	259	2,330	1,865	D	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,283	2,103	404	269	1,687	2,373	C	D
Banks Road (N/S)													
Sample Road	Cullum Road	4LD	D	1,200	1.0%	271	350	231	484	501	834	C	C
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	269	345	230	261	499	605	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,656	2,467	383	262	2,039	2,729	B	C
Collum Road	Wiles Road	6LD	D	2,940	1.0%	1,655	2,474	407	254	2,061	2,729	B	C

NOTES:

[1] 2018 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] (E+C) 2020 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2020 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2020 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
										[4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,844	2,691	564	618	2,408	3,309	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,970	3,084	509	586	2,479	3,671	D	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,375	3,143	797	576	3,172	3,719	F	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,485	1,415	150	267	1,635	1,682	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,546	1,472	171	291	1,717	1,762	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	297	256	552	359	849	615	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	122	113	416	287	538	400	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	277	307	233	270	510	577	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	569	525	3	13	571	538	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	754	723	277	294	1,031	1,017	D	D
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	765	651	329	396	1,095	1,047	D	D
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,843	1,684	691	362	2,534	2,046	D	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,914	1,641	721	362	2,635	2,003	D	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,352	2,141	561	372	1,913	2,514	C	D
Banks Road (N/S)													
Sample Road	Cullum Road	4LD	D	1,200	1.0%	275	363	340	686	614	1,049	C	D
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	282	359	339	390	621	749	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	2,080	2,784	570	384	2,650	3,168	C	F
Collum Road	Wiles Road	6LD	D	2,940	1.0%	2,111	2,783	594	376	2,704	3,159	C	F

NOTES:

[1] 2020 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-6
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2035 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] LRTP 2035 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2020 BACKGROUND VOLUME		2035 SERPM BACKGOUND VOLUME						FINAL BACKGROUND VOLUME		COMMITTED DEVELOPMENT TRIPS		2030 FINAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
							2035 SERPM AADT	K-30	PEAK DIREC-TION	D-30	DIRECTIONAL BACKGROUND VOLUME						[4] VOLUME		LOS	
					NB/EB	SB/WB					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																				
SR 7	NW 54th Avenue	6LD	D	2,680	2,408	3,309	49,453	9.0%	SB/WB	55.0%	2,003	2,448	2,111	3,090	564	618	2,675	3,708	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	2,479	3,671	49,453	9.0%	SB/WB	55.0%	2,003	2,448	2,231	3,529	509	586	2,740	4,116	E	F
Banks Road	Lyons Road	6LD	D	2,680	3,172	3,719	52,537	9.0%	SB/WB	55.0%	2,128	2,601	2,697	3,592	797	576	3,494	4,168	F	F
Wiles Road (E/W)																				
SR 7	Banks Road	4LD	D	1,770	1,635	1,682	40,318	9.0%	NB/EB	55.0%	1,996	1,633	1,724	1,643	150	267	1,874	1,910	F	F
Banks Road	Lyons Road	4LD	D	1,770	1,717	1,762	40,950	9.0%	NB/EB	55.0%	2,027	1,658	1,785	1,700	171	291	1,956	1,990	F	F
Cullum Road (E/W)																				
SR7	NW 54th Avenue	4LD	D	1,200	849	615	N/A	---	SB/WB	---	N/A	N/A	301	285	552	359	853	644	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	538	400	N/A	---	SB/WB	---	N/A	N/A	122	113	416	287	538	400	C	C
Banks Road	Lyons Road	4LD	D	1,200	510	577	N/A	---	SB/WB	---	N/A	N/A	312	347	233	270	545	617	C	C
NW 54thAvenue (N/S)																				
SR 7	Sample Road	4LD	D	1,200	571	538	N/A	---	NB/EB	---	N/A	N/A	646	599	3	13	648	612	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1,031	1,017	N/A	---	NB/EB	---	N/A	N/A	784	749	277	294	1,061	1,043	D	D
NW 40th Street	Cullum Road	4LD	D	1,200	1,095	1,047	N/A	---	SB/WB	---	N/A	N/A	788	658	329	396	1,118	1,054	D	D
SR 7 (N/S)																				
Sample Road	NW 40 Street	6LD	D	2,680	2,534	2,046	38,015	9.0%	NB/EB	55.0%	1,882	1,540	2,115	1,952	691	362	2,806	2,314	E	D
NW 40 Street	Cullum Road	6LD	D	2,680	2,635	2,003	38,015	9.0%	NB/EB	55.0%	1,882	1,540	2,174	1,902	721	362	2,895	2,264	F	D
Cullum Road	Wiles Road	6LD	D	2,680	1,913	2,514	46,091	9.0%	SB/WB	55.0%	1,867	2,282	1,517	2,443	561	372	2,078	2,816	C	E
Banks Road (N/S)																				
Sample Road	Cullum Road	4LD	D	1,200	614	1,049	38,015	9.0%	SB/WB	55.0%	1,540	1,882	310	414	340	686	649	1,100	C	D
Cullum Road	Wiles Road	4LD	D	1,200	621	749	46,091	9.0%	SB/WB	55.0%	1,867	2,282	318	408	339	390	657	798	C	C
Lyons Road (N/S)																				
Sample Road	Collum Road	6LD	D	2,940	2,650	3,168	57,520	9.0%	NB/EB	55.0%	2,847	2,330	2,415	3,232	570	384	2,985	3,616	F	F
Collum Road	Wiles Road	6LD	D	2,940	2,704	3,159	58,214	9.0%	NB/EB	55.0%	2,882	2,358	2,441	3,222	594	376	3,034	3,598	F	F

NOTES:

[1] 2035 ROADWAY NUMBER OF LANES OBTAINED FROM 2035 BROWARD COUNTY'S LONG RANG TRANSPORTATION PLAN.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-7
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III YEAR 2015 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] (E+C) 2015 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2015 TOTAL BACKGROUND VOLUME		2015 PROJECT TRIP ASSIGNMENT						2015 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
							[4] PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																		
SR 7	NW 54th Avenue	6LD	D	2,680	1,965	2,835	15.6%	18.2%	I	O	10	11	1,975	2,846	C	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,049	3,139	29.8%	26.7%	O	I	19	17	2,068	3,156	C	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	2,555	3,191	31.8%	29.5%	O	I	20	19	2,575	3,210	D	F	No	No
Wiles Road (E/W)																		
SR 7	Banks Road	4LD	D	1,770	1,463	1,435	0.0%	0.0%	O	I	0	0	1,463	1,435	D	D	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,633	1,580	5.2%	4.7%	O	I	3	3	1,636	1,583	D	D	No	No
Cullum Road (E/W)																		
SR7	NW 54th Avenue	4LD	D	1,200	446	391	22.8%	6.2%	I	O	15	4	461	395	C	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	239	175	10.4%	9.4%	O	I	7	6	246	181	C	C	No	No
Banks Road	Lyons Road	2LU	D	500	361	373	5.2%	4.7%	O	I	3	3	364	376	C	C	No	No
NW 54thAvenue (N/S)																		
SR 7	Sample Road	4LD	D	1,200	534	506	7.7%	5.8%	I	O	5	4	539	510	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	765	782	47.1%	47.8%	I	O	31	30	796	812	C	C	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	810	697	51.9%	51.8%	I	O	34	33	844	730	C	C	No	No
SR 7 (N/S)																		
Sample Road	NW 40 Street	6LD	D	2,680	1,996	1,758	13.0%	1.8%	I	O	8	1	2,004	1,759	C	C	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,057	1,717	25.6%	1.8%	O	O	16	1	2,073	1,718	C	C	No	No
Cullum Road	Wiles Road	6LD	D	2,680	1,502	2,179	27.9%	21.8%	O	I	18	14	1,520	2,193	C	D	No	No
Banks Road (N/S)																		
Sample Road	Cullum Road	4LD	D	1,200	379	623	4.8%	4.0%	I	O	3	3	382	626	C	C	No	No
Cullum Road	Wiles Road	4LD	D	1,200	385	467	5.2%	4.7%	O	I	3	3	388	470	C	C	No	No
Lyons Road (N/S)																		
Sample Road	Collum Road	6LD	D	2,940	1,802	2,535	0.0%	0.0%	O	I	0	0	1,802	2,535	B	C	No	No
Collum Road	Wiles Road	6LD	D	2,940	1,826	2,527	5.2%	4.7%	O	I	3	3	1,829	2,530	B	C	No	No

NOTES:

[1] 2015 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.

[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-8
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV YEAR 2018 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY		[1] (E+C) 2018 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2018 TOTAL BACKGROUND VOLUME		2018 PROJECT TRIP ASSIGNMENT						2018 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
							[4] PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
FROM	TO				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																		
SR 7	NW 54th Avenue	6LD	D	2,680	2,208	3,067	15.6%	18.2%	I	O	31	35	2,239	3,102	D	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,246	3,440	29.8%	26.7%	O	I	57	53	2,303	3,493	D	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	2,845	3,493	31.8%	29.5%	O	I	61	58	2,906	3,551	F	F	No	No
Wiles Road (E/W)																		
SR 7	Banks Road	4LD	D	1,770	1,556	1,565	0.0%	0.0%	O	I	0	0	1,556	1,565	D	D	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,685	1,677	5.2%	4.7%	O	I	10	9	1,695	1,686	D	D	No	No
Cullum Road (E/W)																		
SR7	NW 54th Avenue	4LD	D	1,200	668	498	22.8%	6.2%	I	O	45	12	713	510	C	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	497	383	10.4%	9.4%	O	I	20	19	517	402	C	C	No	No
Banks Road	Lyons Road	4LD	D	1,200	492	522	5.2%	4.7%	O	I	10	9	502	531	C	C	No	No
NW 54thAvenue (N/S)																		
SR 7	Sample Road	4LD	D	1,200	562	519	7.7%	5.8%	I	O	15	11	577	530	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	939	859	47.1%	47.8%	I	O	93	92	1,032	951	D	D	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	997	827	51.9%	51.8%	I	O	103	99	1,100	926	D	D	No	No
SR 7 (N/S)																		
Sample Road	NW 40 Street	6LD	D	2,680	2,284	1,907	13.0%	1.8%	I	O	26	3	2,310	1,910	D	C	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,330	1,865	25.6%	1.8%	O	O	49	3	2,379	1,868	D	C	No	No
Cullum Road	Wiles Road	6LD	D	2,680	1,687	2,373	27.9%	21.8%	O	I	54	43	1,741	2,416	C	D	No	No
Banks Road (N/S)																		
Sample Road	Cullum Road	4LD	D	1,200	501	834	4.8%	4.0%	I	O	10	8	511	842	C	C	No	No
Cullum Road	Wiles Road	4LD	D	1,200	499	605	5.2%	4.7%	O	I	10	9	509	614	C	C	No	No
Lyons Road (N/S)																		
Sample Road	Collum Road	6LD	D	2,940	2,039	2,729	0.0%	0.0%	O	I	0	0	2,039	2,729	B	C	No	No
Collum Road	Wiles Road	6LD	D	2,940	2,061	2,729	5.2%	4.7%	O	I	10	9	2,071	2,738	B	C	No	No

NOTES:

[1] 2018 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.

[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-9
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE V YEAR 2020 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY		[1] (E+C) 2020 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2020 TOTAL BACKGROUND VOLUME		2020 PROJECT TRIP ASSIGNMENT						2020 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
							[4] PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
FROM	TO				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																		
SR 7	NW 54th Avenue	6LD	D	2,680	2,408	3,309	15.6%	18.2%	I	O	41	47	2,449	3,356	D	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,479	3,671	29.8%	26.7%	O	I	77	70	2,556	3,741	D	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	3,172	3,719	31.8%	29.5%	O	I	82	78	3,254	3,797	F	F	No	No
Wiles Road (E/W)																		
SR 7	Banks Road	4LD	D	1,770	1,635	1,682	0.0%	0.0%	O	I	0	0	1,635	1,682	D	D	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,717	1,762	5.2%	4.7%	O	I	13	12	1,730	1,774	D	E	No	No
Cullum Road (E/W)																		
SR7	NW 54th Avenue	4LD	D	1,200	849	615	22.8%	6.2%	I	O	60	16	909	631	D	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	538	400	10.4%	9.4%	O	I	27	25	565	425	C	C	No	No
Banks Road	Lyons Road	4LD	D	1,200	510	577	5.2%	4.7%	O	I	13	12	523	589	C	C	No	No
NW 54thAvenue (N/S)																		
SR 7	Sample Road	4LD	D	1,200	571	538	7.7%	5.8%	I	O	20	15	591	553	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	1,031	1,017	47.1%	47.8%	I	O	124	123	1,155	1,140	D	D	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	1,095	1,047	51.9%	51.8%	I	O	137	133	1,232	1,180	F	D	**Yes+F**	No
SR 7 (N/S)																		
Sample Road	NW 40 Street	6LD	D	2,680	2,534	2,046	13.0%	1.8%	I	O	34	5	2,568	2,051	D	C	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,635	2,003	25.6%	1.8%	O	O	66	5	2,701	2,008	E	C	No	No
Cullum Road	Wiles Road	6LD	D	2,680	1,913	2,514	27.9%	21.8%	O	I	72	58	1,985	2,572	C	D	No	No
Banks Road (N/S)																		
Sample Road	Cullum Road	4LD	D	1,200	614	1,049	4.8%	4.0%	I	O	13	10	627	1,059	C	D	No	No
Cullum Road	Wiles Road	4LD	D	1,200	621	749	5.2%	4.7%	O	I	13	12	634	761	C	C	No	No
Lyons Road (N/S)																		
Sample Road	Collum Road	6LD	D	2,940	2,650	3,168	0.0%	0.0%	O	I	0	0	2,650	3,168	C	F	No	No
Collum Road	Wiles Road	6LD	D	2,940	2,704	3,159	5.2%	4.7%	O	I	13	12	2,717	3,171	C	F	No	No

NOTES:

[1] 2020 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2010 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S 2009-2035 ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.

[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-10
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2035 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] LRTP 2035 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2035 TOTAL BACKGROUND VOLUME		[4] 2035 PROJECT TRIPS		2035 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
									[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)														
SR 7	NW 54th Avenue	6LD	D	2,680	2,675	3,708	41	47	2,716	3,755	E	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,740	4,116	77	70	2,817	4,186	E	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	3,494	4,168	82	78	3,576	4,246	F	F	No	No
Wiles Road (E/W)														
SR 7	Banks Road	4LD	D	1,770	1,874	1,910	0	0	1,874	1,910	F	F	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,956	1,990	13	12	1,969	2,002	F	F	No	No
Cullum Road (E/W)														
SR7	NW 54th Avenue	4LD	D	1,200	853	644	60	16	913	660	D	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	538	400	27	25	565	425	C	C	No	No
Banks Road	Lyons Road	4LD	D	1,200	545	617	13	12	558	629	C	C	No	No
NW 54thAvenue (N/S)														
SR 7	Sample Road	4LD	D	1,200	648	612	20	15	668	627	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	1,061	1,043	124	123	1,185	1,166	D	D	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	1,118	1,054	137	133	1,255	1,187	F	D	**Yes+F**	No
SR 7 (N/S)														
Sample Road	NW 40 Street	6LD	D	2,680	2,806	2,314	34	5	2,840	2,319	F	D	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,895	2,264	66	5	2,961	2,269	F	D	No	No
Cullum Road	Wiles Road	6LD	D	2,680	2,078	2,816	72	58	2,150	2,874	D	F	No	No
Banks Road (N/S)														
Sample Road	Cullum Road	4LD	D	1,200	649	1,100	13	10	662	1,110	C	D	No	No
Cullum Road	Wiles Road	4LD	D	1,200	657	798	13	12	670	810	C	C	No	No
Lyons Road (N/S)														
Sample Road	Collum Road	6LD	D	2,940	2,985	3,616	0	0	2,985	3,616	F	F	No	No
Collum Road	Wiles Road	6LD	D	2,940	3,034	3,598	13	12	3,047	3,610	F	F	No	No

NOTES:

[1] 2035 ROADWAY NUMBER OF LANES OBTAINED FROM 2035 BROWARD COUNTY'S LONG RANGE TRANSPORTATION PLAN.
[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.
[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.
[4] 2035 PROJECT TRIPS ARE EQUAL TO 2020 PROJECT TRIPS.
[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.
[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-11
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2015 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] 2015 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2015 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2015 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
										[4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,735	2,540	230	296	1,966	2,836	C	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,840	2,903	210	236	2,050	3,140	C	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,224	2,956	333	236	2,557	3,192	D	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,413	1,346	50	89	1,463	1,435	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,465	1,394	168	186	1,633	1,580	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	256	236	191	155	447	391	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	104	97	136	79	240	176	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	258	286	103	87	361	373	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	532	493	3	13	535	506	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	538	574	105	151	643	724	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	300	374	145	139	445	513	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,739	1,600	258	158	1,997	1,758	C	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,791	1,559	268	158	2,059	1,717	C	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,255	2,012	249	168	1,503	2,180	C	D
Banks Road (N/S)													
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	256	341	123	282	379	623	C	C
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	263	336	122	132	385	468	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,607	2,395	195	140	1,802	2,535	B	C
Collum Road	Wiles Road	6LD	D	2,940	1.0%	1,607	2,395	219	132	1,826	2,527	B	C

NOTES:

[1] 2015 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-12
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2018 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] 2018 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2018 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2018 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE [4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,781	2,608	398	457	2,179	3,065	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,883	2,979	360	410	2,243	3,390	D	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,277	3,032	565	406	2,842	3,437	F	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,456	1,387	100	178	1,556	1,565	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,507	1,435	177	234	1,685	1,668	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	254	240	372	257	626	497	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	102	95	394	270	496	365	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	263	293	228	221	491	514	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	545	505	3	13	548	518	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	537	573	191	223	728	796	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	302	370	237	268	539	638	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,786	1,648	474	259	2,260	1,907	D	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,834	1,606	494	259	2,328	1,865	D	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,281	2,063	404	269	1,684	2,332	C	D
Banks Road (N/S)													
Sample Road	Cullum Road	4LD	D	1,200	1.0%	262	349	231	484	492	833	C	C
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	268	344	230	261	499	605	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,656	2,467	383	262	2,039	2,729	B	C
Collum Road	Wiles Road	6LD	D	2,940	1.0%	1,653	2,465	407	254	2,060	2,719	B	C

NOTES:

[1] 2018 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-13
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] (E+C) 2020 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2020 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2020 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE [4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,845	2,692	564	618	2,409	3,310	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,971	3,086	509	586	2,481	3,672	D	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,377	3,145	797	576	3,174	3,721	F	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,485	1,415	150	267	1,635	1,682	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,546	1,472	171	291	1,717	1,763	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	299	256	552	359	851	615	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	122	114	416	287	538	401	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	277	307	233	270	510	577	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	569	525	3	13	572	539	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	611	656	277	294	887	949	C	D
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	336	435	329	396	665	830	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,844	1,684	691	362	2,535	2,046	D	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,915	1,641	721	362	2,636	2,003	D	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,354	2,143	561	372	1,915	2,515	C	D
Banks Road (N/S)													
Sample Road	Cullum Road	4LD	D	1,200	1.0%	275	363	340	686	615	1,049	C	D
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	282	359	339	390	621	749	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	2,080	2,784	570	384	2,650	3,168	C	F
Collum Road	Wiles Road	6LD	D	2,940	1.0%	2,110	2,782	594	376	2,704	3,158	C	F

NOTES:

[1] 2020 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPOR

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-14
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2035 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] LRTP 2035 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2020 BACKGROUND VOLUME		2035 SERPM BACKGOUND VOLUME						FINAL BACKGROUND VOLUME		COMMITTED DEVELOPMENT TRIPS		2030 FINAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
							2035 SERPM AADT	K-30	PEAK DIREC-TION	D-30	DIRECTIONAL BACKGROUND VOLUME						[4] VOLUME		LOS	
					NB/EB	SB/WB					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																				
SR 7	NW 54th Avenue	6LD	D	2,680	2,409	3,310	49,453	9.0%	SB/WB	55.0%	2,003	2,448	2,111	3,090	564	618	2,675	3,708	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	2,481	3,672	49,453	9.0%	SB/WB	55.0%	2,003	2,448	2,231	3,529	509	586	2,740	4,116	E	F
Banks Road	Lyons Road	6LD	D	2,680	3,174	3,721	52,537	9.0%	SB/WB	55.0%	2,128	2,601	2,697	3,592	797	576	3,494	4,168	F	F
Wiles Road (E/W)																				
SR 7	Banks Road	4LD	D	1,770	1,635	1,682	40,318	9.0%	NB/EB	55.0%	1,996	1,633	1,724	1,643	150	267	1,874	1,910	F	F
Banks Road	Lyons Road	4LD	D	1,770	1,717	1,763	40,950	9.0%	NB/EB	55.0%	2,027	1,658	1,785	1,700	171	291	1,956	1,990	F	F
Cullum Road (E/W)																				
SR7	NW 54th Avenue	4LD	D	1,200	851	615	N/A	---	SB/WB	---	N/A	N/A	301	285	552	359	853	644	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	538	401	N/A	---	SB/WB	---	N/A	N/A	122	113	416	287	538	400	C	C
Banks Road	Lyons Road	4LD	D	1,200	510	577	N/A	---	SB/WB	---	N/A	N/A	312	347	233	270	545	617	C	C
NW 54thAvenue (N/S)																				
SR 7	Sample Road	4LD	D	1,200	572	539	N/A	---	NB/EB	---	N/A	N/A	646	599	3	13	648	612	C	C
Sample Road	NW 40th Street	4LD	D	1,200	887	949	N/A	---	NB/EB	---	N/A	N/A	638	679	277	294	915	973	D	D
NW 40th Street	Cullum Road	4LD	D	1,200	665	830	N/A	---	SB/WB	---	N/A	N/A	358	439	329	396	687	835	C	C
SR 7 (N/S)																				
Sample Road	NW 40 Street	6LD	D	2,680	2,535	2,046	38,015	9.0%	NB/EB	55.0%	1,882	1,540	2,115	1,952	691	362	2,806	2,314	E	D
NW 40 Street	Cullum Road	6LD	D	2,680	2,636	2,003	38,015	9.0%	NB/EB	55.0%	1,882	1,540	2,174	1,902	721	362	2,895	2,264	F	D
Cullum Road	Wiles Road	6LD	D	2,680	1,915	2,515	46,091	9.0%	SB/WB	55.0%	1,867	2,282	1,517	2,443	561	372	2,078	2,816	C	E
Banks Road (N/S)																				
Sample Road	Cullum Road	4LD	D	1,200	615	1,049	38,015	9.0%	SB/WB	55.0%	1,540	1,882	310	414	340	686	649	1,100	C	D
Cullum Road	Wiles Road	4LD	D	1,200	621	749	46,091	9.0%	SB/WB	55.0%	1,867	2,282	318	408	339	390	657	798	C	C
Lyons Road (N/S)																				
Sample Road	Collum Road	6LD	D	2,940	2,650	3,168	57,520	9.0%	NB/EB	55.0%	2,847	2,330	2,415	3,232	570	384	2,985	3,616	F	F
Collum Road	Wiles Road	6LD	D	2,940	2,704	3,158	58,214	9.0%	NB/EB	55.0%	2,882	2,358	2,440	3,221	594	376	3,033	3,597	F	F

NOTES:

[1] 2035 ROADWAY NUMBER OF LANES OBTAINED FROM 2035 BROWARD COUNTY'S LONG RANG TRANSPORTATION PLAN.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-15
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE III YEAR 2015 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] (E+C) 2015 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2015 TOTAL BACKGROUND VOLUME		2015 PROJECT TRIP ASSIGNMENT						2015 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
							[4] PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																		
SR 7	NW 54th Avenue	6LD	D	2,680	1,966	2,836	15.6%	18.2%	I	O	32	37	1,998	2,873	C	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,050	3,140	29.8%	26.7%	O	I	60	55	2,110	3,195	D	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	2,557	3,192	31.8%	29.5%	O	I	64	61	2,621	3,253	D	F	No	No
Wiles Road (E/W)																		
SR 7	Banks Road	4LD	D	1,770	1,463	1,435	0.0%	0.0%	O	I	0	0	1,463	1,435	D	D	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,633	1,580	5.2%	4.7%	O	I	10	10	1,643	1,590	D	D	No	No
Cullum Road (E/W)																		
SR7	NW 54th Avenue	4LD	D	1,200	447	391	22.8%	6.2%	I	O	47	12	494	403	C	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	240	176	10.4%	9.4%	O	I	21	19	261	195	C	C	No	No
Banks Road	Lyons Road	2LU	D	500	361	373	5.2%	4.7%	O	I	10	10	371	383	C	C	No	No
NW 54thAvenue (N/S)																		
SR 7	Sample Road	4LD	D	1,200	535	506	7.7%	5.8%	I	O	16	12	551	518	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	643	724	35.0%	41.8%	I	O	72	84	715	808	C	C	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	445	513	16.6%	32.2%	I	O	34	65	479	578	C	C	No	No
SR 7 (N/S)																		
Sample Road	NW 40 Street	6LD	D	2,680	1,997	1,758	13.0%	1.8%	I	O	27	4	2,024	1,762	C	C	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,059	1,717	25.6%	1.8%	O	O	51	4	2,110	1,721	D	C	No	No
Cullum Road	Wiles Road	6LD	D	2,680	1,503	2,180	27.9%	21.8%	O	I	56	45	1,559	2,225	C	D	No	No
Banks Road (N/S)																		
Sample Road	Cullum Road	4LD	D	1,200	379	623	4.8%	4.0%	I	O	10	8	389	631	C	C	No	No
Cullum Road	Wiles Road	4LD	D	1,200	385	468	5.2%	4.7%	O	I	10	10	395	478	C	C	No	No
Lyons Road (N/S)																		
Sample Road	Collum Road	6LD	D	2,940	1,802	2,535	0.0%	0.0%	O	I	0	0	1,802	2,535	B	C	No	No
Collum Road	Wiles Road	6LD	D	2,940	1,826	2,527	5.2%	4.7%	O	I	10	10	1,836	2,537	B	C	No	No

NOTES:

[1] 2015 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.

[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-16
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE IV YEAR 2018 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] (E+C) 2018 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2018 TOTAL BACKGROUND VOLUME		2018 PROJECT TRIP ASSIGNMENT						2018 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
							[4] PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																		
SR 7	NW 54th Avenue	6LD	D	2,680	2,179	3,065	15.6%	18.2%	I	O	35	39	2,214	3,104	D	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,243	3,390	29.8%	26.7%	O	I	64	59	2,307	3,449	D	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	2,842	3,437	31.8%	29.5%	O	I	69	65	2,911	3,502	F	F	No	No
Wiles Road (E/W)																		
SR 7	Banks Road	4LD	D	1,770	1,556	1,565	0.0%	0.0%	O	I	0	0	1,556	1,565	D	D	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,685	1,668	5.2%	4.7%	O	I	11	10	1,696	1,678	D	D	No	No
Cullum Road (E/W)																		
SR7	NW 54th Avenue	4LD	D	1,200	626	497	22.8%	6.2%	I	O	51	13	677	510	C	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	496	365	10.4%	9.4%	O	I	22	21	518	386	C	C	No	No
Banks Road	Lyons Road	4LD	D	1,200	491	514	5.2%	4.7%	O	I	11	10	502	524	C	C	No	No
NW 54thAvenue (N/S)																		
SR 7	Sample Road	4LD	D	1,200	548	518	7.7%	5.8%	I	O	17	13	565	531	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	728	796	35.0%	41.8%	I	O	78	90	806	886	C	C	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	539	638	16.6%	32.2%	I	O	37	70	576	708	C	C	No	No
SR 7 (N/S)																		
Sample Road	NW 40 Street	6LD	D	2,680	2,260	1,907	13.0%	1.8%	I	O	29	4	2,289	1,911	D	C	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,328	1,865	25.6%	1.8%	O	O	55	4	2,383	1,869	D	C	No	No
Cullum Road	Wiles Road	6LD	D	2,680	1,684	2,332	27.9%	21.8%	O	I	60	48	1,744	2,380	C	D	No	No
Banks Road (N/S)																		
Sample Road	Cullum Road	4LD	D	1,200	492	833	4.8%	4.0%	I	O	11	9	503	842	C	C	No	No
Cullum Road	Wiles Road	4LD	D	1,200	499	605	5.2%	4.7%	O	I	11	10	510	615	C	C	No	No
Lyons Road (N/S)																		
Sample Road	Collum Road	6LD	D	2,940	2,039	2,729	0.0%	0.0%	O	I	0	0	2,039	2,729	B	C	No	No
Collum Road	Wiles Road	6LD	D	2,940	2,060	2,719	5.2%	4.7%	O	I	11	10	2,071	2,729	B	C	No	No

NOTES:

[1] 2018 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.

[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.

[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-17
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
PHASE V YEAR 2020 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVE B

ROADWAY FROM	TO	[1] (E+C) 2020 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2020 TOTAL BACKGROUND VOLUME		2020 PROJECT TRIP ASSIGNMENT						2020 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
							[4] PERCENT ASSIGNMENT		DIRECTION (IN/OUT)		PROJECT TRIPS		[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																		
SR 7	NW 54th Avenue	6LD	D	2,680	2,409	3,310	15.6%	18.2%	I	O	32	36	2,441	3,346	D	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,481	3,672	29.8%	26.7%	O	I	59	54	2,540	3,726	D	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	3,174	3,721	31.8%	29.5%	O	I	63	60	3,237	3,781	F	F	No	No
Wiles Road (E/W)																		
SR 7	Banks Road	4LD	D	1,770	1,635	1,682	0.0%	0.0%	O	I	0	0	1,635	1,682	D	D	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,717	1,763	5.2%	4.7%	O	I	10	10	1,727	1,773	D	E	No	No
Cullum Road (E/W)																		
SR7	NW 54th Avenue	4LD	D	1,200	851	615	22.8%	6.2%	I	O	46	12	897	627	C	C	No	No
NW 54th Avenue	Banks Road	4LD	D	1,200	538	401	10.4%	9.4%	O	I	20	19	558	420	C	C	No	No
Banks Road	Lyons Road	4LD	D	1,200	510	577	5.2%	4.7%	O	I	10	10	520	587	C	C	No	No
NW 54thAvenue (N/S)																		
SR 7	Sample Road	4LD	D	1,200	572	539	7.7%	5.8%	I	O	16	11	588	550	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	887	949	35.0%	41.8%	I	O	71	82	958	1,031	D	D	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	665	830	16.6%	32.2%	I	O	34	63	699	893	C	C	No	No
SR 7 (N/S)																		
Sample Road	NW 40 Street	6LD	D	2,680	2,535	2,046	13.0%	1.8%	I	O	26	4	2,561	2,050	D	C	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,636	2,003	25.6%	1.8%	O	O	50	4	2,686	2,007	E	C	No	No
Cullum Road	Wiles Road	6LD	D	2,680	1,915	2,515	27.9%	21.8%	O	I	55	44	1,970	2,559	C	D	No	No
Banks Road (N/S)																		
Sample Road	Cullum Road	4LD	D	1,200	615	1,049	4.8%	4.0%	I	O	10	8	625	1,057	C	D	No	No
Cullum Road	Wiles Road	4LD	D	1,200	621	749	5.2%	4.7%	O	I	10	10	631	759	C	C	No	No
Lyons Road (N/S)																		
Sample Road	Collum Road	6LD	D	2,940	2,650	3,168	0.0%	0.0%	O	I	0	0	2,650	3,168	C	F	No	No
Collum Road	Wiles Road	6LD	D	2,940	2,704	3,158	5.2%	4.7%	O	I	10	10	2,714	3,168	C	F	No	No

NOTES:

[1] 2020 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.
[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.
[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.
[4] PM PEAK PROJECT TRIPS - SEE TRIP GENERATION ANALYSIS.
[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.
[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-18
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2035 TOTAL VOLUME AND LEVEL OF SERVICE - ALTERNATIVES A AND C AND SUB-ALTERNATIVE A-1

ROADWAY FROM	TO	[1] LRTP 2035 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2035 TOTAL BACKGROUND VOLUME		[4] 2035 PROJECT TRIPS		2035 TOTAL VOLUME LEVEL OF SERVICE AND SIGNIFICANCE					
									[5] VOLUME		LOS		[6] SIGNIFICANCE AND FAILING (=>5%)	
					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)														
SR 7	NW 54th Avenue	6LD	D	2,680	2,675	3,708	32	36	2,707	3,744	E	F	No	No
NW 54th Avenue	Banks Road	6LD	D	2,680	2,740	4,116	59	54	2,799	4,170	E	F	No	No
Banks Road	Lyons Road	6LD	D	2,680	3,494	4,168	63	60	3,557	4,228	F	F	No	No
Wiles Road (E/W)														
SR 7	Banks Road	4LD	D	1,770	1,874	1,910	0	0	1,874	1,910	F	F	No	No
Banks Road	Lyons Road	4LD	D	1,770	1,956	1,990	10	10	1,966	2,000	F	F	No	No
Cullum Road (E/W)														
SR7	NW 54th Avenue	4LD	D	1,200	853	644	46	12	899	656	C	C	**No**	No
NW 54th Avenue	Banks Road	4LD	D	1,200	538	400	20	19	558	419	C	C	No	No
Banks Road	Lyons Road	4LD	D	1,200	545	617	10	10	555	627	C	C	No	No
NW 54thAvenue (N/S)														
SR 7	Sample Road	4LD	D	1,200	648	612	16	11	664	623	C	C	No	No
Sample Road	NW 40th Street	4LD	D	1,200	915	973	71	82	986	1,055	D	D	No	No
NW 40th Street	Cullum Road	4LD	D	1,200	687	835	34	63	721	898	C	C	No	No
SR 7 (N/S)														
Sample Road	NW 40 Street	6LD	D	2,680	2,806	2,314	26	4	2,832	2,318	F	D	No	No
NW 40 Street	Cullum Road	6LD	D	2,680	2,895	2,264	50	4	2,945	2,268	F	D	No	No
Cullum Road	Wiles Road	6LD	D	2,680	2,078	2,816	55	44	2,133	2,860	D	F	No	No
Banks Road (N/S)														
Sample Road	Cullum Road	4LD	D	1,200	649	1,100	10	8	659	1,108	C	D	No	No
Cullum Road	Wiles Road	4LD	D	1,200	657	798	10	10	667	808	C	C	No	No
Lyons Road (N/S)														
Sample Road	Collum Road	6LD	D	2,940	2,985	3,616	0	0	2,985	3,616	F	F	No	No
Collum Road	Wiles Road	6LD	D	2,940	3,033	3,597	10	10	3,043	3,607	F	F	No	No

NOTES:

[1] 2035 ROADWAY NUMBER OF LANES OBTAINED FROM 2035 BROWARD COUNTY'S LONG RANG TRANSPORTATION PLAN.
[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.
[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.
[4] 2035 PROJECT TRIPS ARE EAQUAL TO 2020 PROJECT TRIPS.
[5] TOTAL VOLUME = TOTAL BACKGROUND PLUS PROJECT TRIPS.
[6] SIGNIFICANT IMPACT IS CONSIDERED WHEN PROJECT TRIPS ARE GREATER THAN 5% OF MAXIMUM SERVICE VOLUME.

TABLE H-19
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2015 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE C-1

ROADWAY FROM	TO	[1] 2015 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2015 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2015 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
										[4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,696	2,496	230	296	1,926	2,791	C	E
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,767	2,836	210	236	1,978	3,073	C	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,146	2,882	333	236	2,480	3,118	D	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,413	1,346	50	89	1,463	1,435	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,452	1,383	168	163	1,620	1,545	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	199	221	191	155	390	376	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	79	73	136	79	215	152	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	245	275	103	87	348	362	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	513	479	3	13	516	492	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	544	517	105	151	649	668	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	537	435	145	139	682	573	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,706	1,596	258	158	1,964	1,754	C	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,729	1,555	268	158	1,997	1,713	C	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,187	1,957	249	168	1,435	2,126	C	D
Banks Road (N/S)													
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	244	331	123	282	367	613	C	C
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	250	325	122	132	373	456	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,607	2,395	195	140	1,802	2,535	B	C
Collum Road	Wiles Road	6LD	D	2,940	1.0%	1,607	2,395	219	132	1,826	2,527	B	C

NOTES:

[1] 2015 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

TABLE H-20
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2018 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE C-1

ROADWAY FROM	TO	[1] 2018 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2018 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2018 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
										[4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,744	2,567	398	457	2,142	3,023	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,814	2,916	360	410	2,175	3,327	D	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,204	2,962	565	406	2,770	3,368	E	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,456	1,387	100	178	1,556	1,565	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,495	1,424	237	291	1,733	1,714	D	D
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	200	226	372	257	572	483	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	79	73	273	157	352	230	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	251	282	167	165	418	447	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	527	492	3	13	530	505	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	549	522	191	223	740	745	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	541	436	237	268	778	703	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,755	1,644	474	259	2,229	1,903	D	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,776	1,602	494	259	2,270	1,861	D	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,217	2,011	404	269	1,620	2,281	C	D
Banks Road (N/S)													
Sample Road	Cullum Road	4LD	D	1,200	1.0%	250	340	231	484	481	824	C	C
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	256	334	230	261	487	594	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,656	2,467	383	262	2,039	2,729	B	C
Collum Road	Wiles Road	6LD	D	2,940	1.0%	1,654	2,467	407	254	2,061	2,721	B	C

NOTES:

[1] 2018 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-21
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2020 BACKGROUND VOLUME AND LEVEL OF SERVICE - SUB-ALTERNATIVE C-1

ROADWAY FROM	TO	[1] (E+C) 2020 ROADWAY NUMBER OF LANES	[2] LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	GROWTH RATE	2020 BACKGROUND VOLUME		COMMITTED DEVELOPMENTS TRIPS		2020 TOTAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
										[4] VOLUME		LOS	
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)													
SR 7	NW 54th Avenue	6LD	D	2,680	1.0%	1,777	2,616	564	618	2,341	3,233	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	1.0%	1,846	2,970	509	586	2,356	3,557	D	F
Banks Road	Lyons Road	6LD	D	2,680	1.0%	2,243	3,017	797	576	3,041	3,593	F	F
Wiles Road (E/W)													
SR 7	Banks Road	4LD	D	1,770	1.0%	1,485	1,415	150	267	1,635	1,682	D	D
Banks Road	Lyons Road	4LD	D	1,770	1.0%	1,524	1,452	175	338	1,700	1,789	D	E
Cullum Road (E/W)													
SR7	NW 54th Avenue	4LD	D	1,200	1.0%	200	230	552	359	752	589	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	1.0%	79	73	409	236	488	309	C	C
Banks Road	Lyons Road	4LU	D	1,200	1.0%	255	287	230	244	485	531	C	C
NW 54thAvenue (N/S)													
SR 7	Sample Road	4LD	D	1,200	1.0%	536	501	3	13	539	514	C	C
Sample Road	NW 40th Street	4LD	D	1,200	1.0%	553	525	277	294	830	819	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	1.0%	544	437	329	396	873	832	C	C
SR 7 (N/S)													
Sample Road	NW 40 Street	6LD	D	2,680	1.0%	1,788	1,677	691	362	2,479	2,039	D	C
NW 40 Street	Cullum Road	6LD	D	2,680	1.0%	1,808	1,634	721	362	2,529	1,996	D	C
Cullum Road	Wiles Road	6LD	D	2,680	1.0%	1,237	2,048	561	372	1,797	2,421	C	D
Banks Road (N/S)													
Sample Road	Cullum Road	4LD	D	1,200	1.0%	254	346	340	686	594	1,032	C	D
Cullum Road	Wiles Road	4LD	D	1,200	1.0%	260	340	339	390	600	729	C	C
Lyons Road (N/S)													
Sample Road	Collum Road	6LD	D	2,940	1.0%	1,689	2,784	570	384	2,259	3,168	B	F
Collum Road	Wiles Road	6LD	D	2,940	1.0%	2,101	2,775	594	376	2,695	3,151	C	F

NOTES:

[1] 2020 ROADWAY NUMBER OF LANES OBTAINED THROUGH FIELD SURVEY BY KEITH AND SCHNARS, P.A., AND FROM FDOT FIVE-YEAR WORK PROGRAM OR COUNTY'S TRANSPORTATION IMPROVEMENT PROGRAM.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

TABLE H-22
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
YEAR 2035 BACKGROUND VOLUME AND LEVEL OF SERVICE - ALTERNATIVE C-1

ROADWAY FROM	TO	[1] LRTP 2035 ROADWAY NUMBER OF LANES	[2] ADOPTED LOS	[3] PEAK HOUR MAXIMUM SERVICE VOLUME	2020 BACKGROUND VOLUME		2035 SERPM BACKGOUND VOLUME						FINAL BACKGROUND VOLUME		COMMITTED DEVELOPMENT TRIPS		2035 FINAL BACKGROUND VOLUME AND LEVEL OF SERVICE			
							2035 SERPM AADT	K-30	PEAK DIREC-TION	D-30	DIRECTIONAL BACKGROUND VOLUME						[4] VOLUME		LOS	
					NB/EB	SB/WB					NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
Sample Road (E/W)																				
SR 7	NW 54th Avenue	6LD	D	2,680	2,341	3,233	49,453	9.0%	SB/WB	55.0%	2,003	2,448	2,044	3,015	564	618	2,608	3,632	D	F
NW 54th Avenue	Banks Road	6LD	D	2,680	2,356	3,557	49,453	9.0%	SB/WB	55.0%	2,003	2,448	2,107	3,415	509	586	2,617	4,002	D	F
Banks Road	Lyons Road	6LD	D	2,680	3,041	3,593	52,537	9.0%	SB/WB	55.0%	2,128	2,601	2,565	3,466	797	576	3,363	4,042	F	F
Wiles Road (E/W)																				
SR 7	Banks Road	4LD	D	1,770	1,635	1,682	40,318	9.0%	NB/EB	55.0%	1,996	1,633	1,724	1,643	150	267	1,874	1,910	F	F
Banks Road	Lyons Road	4LD	D	1,770	1,700	1,789	40,950	9.0%	NB/EB	55.0%	2,027	1,658	1,763	1,680	175	338	1,939	2,017	F	F
Cullum Road (E/W)																				
SR7	NW 54th Avenue	4LD	D	1,200	752	589	N/A	---	SB/WB	---	N/A	N/A	204	259	552	359	756	618	C	C
NW 54th Avenue	Banks Road	4LD	D	1,200	488	309	N/A	---	SB/WB	---	N/A	N/A	79	73	409	236	488	309	C	C
Banks Road	Lyons Road	4LD	D	1,200	485	531	N/A	---	SB/WB	---	N/A	N/A	290	327	230	244	520	571	C	C
NW 54thAvenue (N/S)																				
SR 7	Sample Road	4LD	D	1,200	539	514	N/A	---	NB/EB	---	N/A	N/A	613	575	3	13	616	588	C	C
Sample Road	NW 40th Street	4LD	D	1,200	830	819	N/A	---	NB/EB	---	N/A	N/A	583	551	277	294	860	845	C	C
NW 40th Street	Cullum Road	4LD	D	1,200	873	832	N/A	---	SB/WB	---	N/A	N/A	567	444	329	396	896	839	C	C
SR 7 (N/S)																				
Sample Road	NW 40 Street	6LD	D	2,680	2,479	2,039	38,015	9.0%	NB/EB	55.0%	1,882	1,540	2,060	1,945	691	362	2,751	2,307	E	D
NW 40 Street	Cullum Road	6LD	D	2,680	2,529	1,996	38,015	9.0%	NB/EB	55.0%	1,882	1,540	2,068	1,895	721	362	2,789	2,257	E	D
Cullum Road	Wiles Road	6LD	D	2,680	1,797	2,421	46,091	9.0%	SB/WB	55.0%	1,867	2,282	1,402	2,350	561	372	1,962	2,723	C	E
Banks Road (N/S)																				
Sample Road	Cullum Road	4LD	D	1,200	594	1,032	38,015	9.0%	SB/WB	55.0%	1,540	1,882	289	397	340	686	629	1,083	C	D
Cullum Road	Wiles Road	4LD	D	1,200	600	729	46,091	9.0%	SB/WB	55.0%	1,867	2,282	296	389	339	390	636	778	C	C
Lyons Road (N/S)																				
Sample Road	Collum Road	6LD	D	2,940	2,259	3,168	57,520	9.0%	NB/EB	55.0%	2,847	2,330	1,961	3,232	570	384	2,531	3,616	C	F
Collum Road	Wiles Road	6LD	D	2,940	2,695	3,151	58,214	9.0%	NB/EB	55.0%	2,882	2,358	2,433	3,216	594	376	3,027	3,592	F	F

NOTES:

[1] 2035 ROADWAY NUMBER OF LANES OBTAINED FROM 2035 BROWARD COUNTY'S LONG RANG TRANSPORTATION PLAN.

[2] ROADWAY ADOPTED LEVEL OF SERVICE (LOS) OBTAINED FROM BROWARD COUNTY.

[3] MAXIMUM SERVICE VOLUMES ARE OBTAINED FROM FDOT'S 2009 QUALITY/LEVEL OF SERVICE HANDBOOK OR FROM BROWARD COUNTY'S ROADWAY CAPACITY AND LEVEL OF SERVICE ANALYSIS REPORT.

[4] TOTAL BACKGROUND = BACKGROUND PLUS COMMITTED TRIPS.

Appendix I

Intersection Volumes

TABLE I-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: BASE PHASE II (2012) AND ALTERNATIVE A, PHASE III (2012-2015)
20-Apr-12

	2011			SCCC Phase II Trips (2011)				Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2015 BACKGOUND							2015 TOTAL		
											2015 Tract 65 SCCC Background (Alt. A, Phase III)							
INTERSECTION	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756		2015 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase III 2011-2015)	Percent Inbound Distri-bution	IN 1023	Percent Outbound Distri-bution	OUT 994	2015 BACK-GROUND	2015 Fee-To-Trust IN 65	2015 Fee-To-Trust OUT 63	TOTAL 2015 TRAFFIC
1 Sample Rd	EB	U	9	0.0%	0	0.0%	0	9	9	0	0.0%	0	0.0%	0	9	0	0	9
and		L	201	1.6%	12	0.0%	0	189	196	51	1.6%	16	0.0%	0	263	1	0	264
SR-7		T	1,243	13.9%	108	0.0%	0	1,135	1,182	132	13.9%	142	0.0%	0	1,456	9	0	1,465
		R	92	0.0%	0	0.0%	0	92	96	38	0.0%	0	0.0%	0	134	0	0	134
Signalized	WB	U	24	0.0%	0	0.0%	0	24	25	0	0.0%	0	0.0%	0	25	0	0	25
		L	180	0.0%	0	2.3%	17	163	170	87	0.0%	0	2.3%	23	280	0	1	281
		T	1,805	0.0%	0	15.9%	120	1,685	1,754	181	0.0%	0	15.9%	158	2,093	0	10	2,103
4/14/2011		R	324	0.0%	0	0.0%	0	324	337	15	0.0%	0	0.0%	0	352	0	0	352
PHF=0.96	NB	L	146	0.0%	0	0.0%	0	146	152	21	0.0%	0	0.0%	0	173	0	0	173
		T	1,069	11.4%	89	0.0%	0	980	1,020	19	0.0%	0	0.0%	0	1,039	0	0	1,039
		R	149	1.7%	13	0.0%	0	136	141	64	1.7%	17	0.0%	0	222	1	0	223
	SB	L	220	0.0%	0	0.0%	0	220	229	6	0.0%	0	0.0%	0	235	0	0	235
		T	1,108	0.0%	0	1.8%	14	1,094	1,138	35	0.0%	0	1.8%	18	1,191	0	1	1,192
		R	253	0.0%	0	0.0%	0	253	263	43	0.0%	0	0.0%	0	306	0	0	306
2 Sample Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	1,577	0.0%	0	0.0%	0	1,577	1,641	190	15.6%	160	0.0%	0	1,991	10	0	2,001
SW Service Rd		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	2,319	0.0%	0	12.2%	92	2,227	2,317	261	0.0%	0	12.2%	121	2,699	0	8	2,707
2011-2035		R	37	2.9%	23	0.0%	0	14	14	0	2.9%	30	0.0%	0	44	2	0	46
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
4/14/2011		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.71		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	86	0.0%	0	6.0%	45	41	43	0	0.0%	0	6.0%	60	103	0	4	107
3 Sample Rd	EB	U	58	0.0%	0	0.0%	0	58	60	0	0.0%	0	0.0%	0	60	0	0	60
and		L	152	15.6%	121	0.0%	0	31	33	70	15.6%	160	0.0%	0	263	10	0	273
NW 54th Ave		T	1,603	0.0%	0	0.0%	0	1,603	1,668	120	0.0%	0	0.0%	0	1,788	0	0	1,788
		R	39	0.0%	0	0.0%	0	39	41	0	0.0%	0	0.0%	0	41	0	0	41
Signalized	WB	L	338	0.0%	0	0.0%	0	338	352	15	0.0%	0	0.0%	0	367	0	0	367
		T	2,071	2.9%	23	0.0%	0	2,048	2,131	172	2.9%	30	0.0%	0	2,333	2	0	2,335
		R	291	27.8%	216	0.0%	0	75	78	32	23.8%	243	0.0%	0	353	15	0	368
4/14/2011	NB	L	149	0.0%	0	0.0%	0	149	155	0	0.0%	0	0.0%	0	155	0	0	155
PHF=0.95		T	129	7.7%	60	0.0%	0	69	72	3	7.7%	79	0.0%	0	154	5	0	159
		R	325	0.0%	0	0.0%	0	325	338	11	0.0%	0	0.0%	0	349	0	0	349
	SB	L	308	0.0%	0	33.8%	256	52	54	49	0.0%	0	29.8%	296	399	0	19	418
		T	83	0.0%	0	5.8%	44	39	40	13	0.0%	0	5.8%	58	111	0	4	115
		R	78	0.0%	0	12.2%	92	0	0	89	0.0%	0	12.2%	121	210	0	8	218

TABLE I-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: BASE PHASE II (2012) AND ALTERNATIVE A, PHASE III (2012-2015)
20-Apr-12

			2011	SCCC Phase II Trips (2011)					2015 BACKGOUND							2015 TOTAL		
											2015 Tract 65 SCCC Background (Alt. A, Phase III)					2015 Fee-To-Trust		
INTERSECTION	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2015 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase III 2011-2015)	Percent Inbound Distri-bution	IN 1023	Percent Outbound Distri-bution	OUT 994	2015 BACK-GROUND	IN 65	OUT 63	TOTAL 2015 TRAFFIC
4 Sample Rd	EB	L	9	0.0%	0	0.0%	0	9	9	33	0.0%	0	0.0%	0	42	0	0	42
and		T	1,819	0.0%	0	31.8%	240	1,579	1,643	147	0.0%	0	28.8%	286	2,076	0	18	2,094
Banks Rd		R	120	0.0%	0	2.0%	15	105	110	0	0.0%	0	1.0%	10	120	0	1	121
Existing	WB	U	6	0.0%	0	0.0%	0	6	6	0	0.0%	0	0.0%	0	6	0	0	6
Unsignalized		L	196	0.0%	0	0.0%	0	196	204	0	0.0%	0	0.0%	0	204	0	0	204
		T	2,758	30.7%	239	0.0%	0	2,519	2,622	145	25.7%	263	0.0%	0	3,030	17	0	3,047
Signalized		R	12	0.8%	6	0.0%	0	6	6	66	3.8%	39	0.0%	0	111	2	0	113
2020/2035	NB	U	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		L	0	0.0%	0	0.0%	0	0	0	0	1.0%	10	0.0%	0	10	1	0	11
		T	0	0.0%	0	0.0%	0	0	0	21	1.0%	10	0.0%	0	31	1	0	32
4/14/2011		R	207	0.0%	0	0.0%	0	207	215	0	0.0%	0	0.0%	0	215	0	0	215
PHF=0.93	SB	L	0	0.0%	0	0.0%	0	0	0	98	0.0%	0	3.0%	30	128	0	2	130
		T	0	0.0%	0	0.0%	0	0	0	35	0.0%	0	1.0%	10	45	0	1	46
		R	6	0.0%	0	0.0%	0	6	6	75	0.0%	0	0.0%	0	81	0	0	81
5 Sample Rd	EB	L	248	0.0%	0	0.0%	0	248	258	40	0.0%	0	0.0%	0	298	0	0	298
and		T	1,241	0.0%	0	23.9%	181	1,060	1,103	176	0.0%	0	23.9%	238	1,517	0	15	1,532
Lyons		R	416	0.0%	0	7.9%	60	356	371	76	0.0%	0	7.9%	79	526	0	5	531
	WB	U	11	0.0%	0	0.0%	0	11	11	0	0.0%	0	0.0%	0	11	0	0	11
Signalized		L	162	0.0%	0	0.0%	0	162	169	2	0.0%	0	0.0%	0	171	0	0	171
		T	1,943	25.6%	199	0.0%	0	1,744	1,815	127	25.6%	262	0.0%	0	2,204	17	0	2,221
4/14/2011		R	391	0.0%	0	0.0%	0	391	407	43	0.0%	0	0.0%	0	450	0	0	450
PHF=0.92	NB	L	480	5.9%	46	0.0%	0	434	452	58	3.9%	40	0.0%	0	550	3	0	553
		T	1,150	0.0%	0	0.0%	0	1,150	1,197	41	0.0%	0	0.0%	0	1,238	0	0	1,238
		R	140	0.0%	0	0.0%	0	140	146	1	0.0%	0	0.0%	0	147	0	0	147
	SB	U	10	0.0%	0	0.0%	0	10	10	0	0.0%	0	0.0%	0	10	0	0	10
		L	307	0.0%	0	0.0%	0	307	319	42	0.0%	0	0.0%	0	361	0	0	361
		T	955	0.0%	0	0.0%	0	955	994	71	0.0%	0	0.0%	0	1,065	0	0	1,065
		R	420	0.0%	0	0.0%	0	420	437	12	0.0%	0	0.0%	0	449	0	0	449
6 SR-7	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
NW 40th St		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	232	0.0%	0	30.6%	231	0	0	0	0.0%	0	25.6%	254	254	0	16	270
4/14/2011	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	1,493	0.0%	0	0.0%	0	1,493	1,554	193	0.0%	0	0.0%	0	1,747	0	0	1,747
PHF=0.81		R	100	13.0%	101	0.0%	0	0	0	0	13.0%	133	0.0%	0	133	8	0	141
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	1.8%	18	18	0	1	19
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0

TABLE I-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: BASE PHASE II (2012) AND ALTERNATIVE A, PHASE III (2012-2015)
20-Apr-12

INTERSECTION	Movement		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distribution	IN 777	Percent Outbound Distribution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2015 BACKGOUND: 2015 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Developments (Phase III 2011-2015)	2015 Tract 65 SCCC Background (Alt. A, Phase III) Percent Inbound Distribution	IN 1023	Percent Outbound Distribution	OUT 994	2015 BACKGROUND	2015 TOTAL: 2015 Fee-To-Trust IN 65	OUT 63	TOTAL 2015 TRAFFIC
7 SR-7	EB	L	211	0.0%	0	0.0%	0	211	220	0	0.0%	0	0.0%	0	220	0	0	220
and		T	30	1.0%	8	0.0%	0	22	23	6	1.0%	10	0.0%	0	39	1	0	40
Cullum Rd		R	29	0.0%	0	0.0%	0	29	30	0	0.0%	0	0.0%	0	30	0	0	30
	WB	L	28	0.0%	0	1.8%	14	14	15	34	0.0%	0	1.8%	18	67	0	1	68
Signalized		T	45	0.0%	0	2.1%	16	29	30	8	0.0%	0	2.1%	21	59	0	1	60
		R	197	0.0%	0	7.7%	58	139	145	149	0.0%	0	2.3%	23	317	0	1	318
4/14/2011	NB	U	47	0.0%	0	0.0%	0	47	49	0	0.0%	0	0.0%	0	49	0	0	49
PHF=0.94		L	147	0.0%	0	0.0%	0	147	153	0	0.0%	0	0.0%	0	153	0	0	153
		T	1,446	0.0%	0	0.0%	0	1,446	1,505	78	0.0%	0	25.6%	254	1,837	0	16	1,853
		R	17	0.0%	0	0.0%	0	17	18	138	0.0%	0	0.0%	0	156	0	0	156
	SB	U	39	0.0%	0	0.0%	0	39	41	0	0.0%	0	0.0%	0	41	0	0	41
		L	237	31.2%	242	0.0%	0	0	0	100	21.8%	223	0.0%	0	323	14	0	337
		T	1,477	0.0%	0	0.0%	0	1,477	1,537	65	0.0%	0	0.0%	0	1,602	0	0	1,602
		R	292	0.0%	0	0.0%	0	292	304	0	0.0%	0	0.0%	0	304	0	0	304
8 SR-7	EB	U	40	0.0%	0	0.0%	0	40	42	0	0.0%	0	0.0%	0	42	0	0	42
and		L	498	0.0%	0	0.0%	0	498	518	6	0.0%	0	0.0%	0	524	0	0	524
Wiles Rd		T	707	0.0%	0	0.0%	0	707	736	26	0.0%	0	0.0%	0	762	0	0	762
		R	247	3.8%	30	0.0%	0	217	225	28	3.8%	39	0.0%	0	292	2	0	294
Signalized	WB	L	318	9.4%	73	0.0%	0	245	255	2	0.0%	0	0.0%	0	257	0	0	257
		T	941	0.0%	0	0.0%	0	941	979	23	0.0%	0	0.0%	0	1,002	0	0	1,002
4/14/2011		R	155	0.0%	0	0.0%	0	155	161	36	0.0%	0	0.0%	0	197	0	0	197
PHF=0.97	NB	U	50	0.0%	0	0.0%	0	50	52	0	0.0%	0	0.0%	0	52	0	0	52
		L	288	0.0%	0	2.5%	19	269	279	46	0.0%	0	2.5%	25	350	0	2	352
		T	1,393	0.0%	0	25.4%	192	1,201	1,250	131	0.0%	0	25.4%	252	1,633	0	16	1,649
		R	253	0.0%	0	10.4%	79	174	181	2	0.0%	0	0.0%	0	183	0	0	183
	SB	U	51	0.0%	0	0.0%	0	51	53	0	0.0%	0	0.0%	0	53	0	0	53
		L	161	0.0%	0	0.0%	0	161	168	19	0.0%	0	0.0%	0	187	0	0	187
		T	1,449	18.0%	140	0.0%	0	1,309	1,362	100	18.0%	184	0.0%	0	1,646	12	0	1,658
		R	559	0.0%	0	0.0%	0	559	582	4	0.0%	0	0.0%	0	586	0	0	586
9 Lyons Rd	EB	L	24	0.0%	0	0.0%	0	24	25	49	0.0%	0	5.2%	52	126	0	3	129
and		T	0	0.0%	0	0.0%	0	0	0	5	0.0%	0	0.0%	0	5	0	0	5
Cullum Rd		R	75	0.0%	0	0.0%	0	75	78	22	0.0%	0	0.0%	0	100	0	0	100
Existing	WB	L	15	0.0%	0	0.0%	0	15	16	0	0.0%	0	0.0%	0	16	0	0	16
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	5	0.0%	0	0.0%	0	5	0	0	5
		R	32	0.0%	0	0.0%	0	32	33	0	0.0%	0	0.0%	0	33	0	0	33
Signalized	NB	L	62	0.0%	0	0.0%	0	62	65	10	0.0%	0	0.0%	0	75	0	0	75
2020/2035		T	1,804	0.0%	0	0.0%	0	1,804	1,877	242	0.0%	0	0.0%	0	2,119	0	0	2,119
		R	27	0.0%	0	0.0%	0	27	28	0	0.0%	0	0.0%	0	28	0	0	28
5/12/2011	SB	U	7	0.0%	0	0.0%	0	7	7	0	0.0%	0	0.0%	0	7	0	0	7
		L	57	0.0%	0	0.0%	0	57	59	0	0.0%	0	0.0%	0	59	0	0	59
PHF=0.90		T	1,735	0.0%	0	0.0%	0	1,735	1,805	148	0.0%	0	0.0%	0	1,953	0	0	1,953
		R	11	0.0%	0	0.0%	0	11	11	19	4.7%	48	0.0%	0	78	3	0	81

TABLE I-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: BASE PHASE II (2012) AND ALTERNATIVE A, PHASE III (2012-2015)
20-Apr-12

			2011	SCCC Phase II Trips (2011)					2015 BACKGOUND							2015 TOTAL		
											2015 Tract 65 SCCC Background (Alt. A, Phase III)					2015 Fee-To-Trust		
INTERSECTION	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2015 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase III 2011-2015)	Percent Inbound Distri-bution	IN 1023	Percent Outbound Distri-bution	OUT 994	2015 BACK-GROUND	IN 65	OUT 63	TOTAL 2015 TRAFFIC
10 Lyons Rd	EB	L	415	0.0%	0	6.0%	45	370	385	23	0.0%	0	3.0%	30	438	0	2	440
and		T	536	0.0%	0	4.4%	33	503	523	27	0.0%	0	2.2%	22	572	0	1	573
Wiles Rd		R	360	0.0%	0	0.0%	0	360	375	7	0.0%	0	0.0%	0	382	0	0	382
	WB	L	351	0.0%	0	0.0%	0	351	365	22	2.1%	21	0.0%	0	408	1	0	409
Signalized		T	859	4.1%	32	0.0%	0	827	861	37	2.1%	21	0.0%	0	919	1	0	920
		R	306	0.0%	0	0.0%	0	306	318	0	0.0%	0	0.0%	0	318	0	0	318
4/14/2011	NB	L	324	0.0%	0	0.0%	0	324	337	0	0.0%	0	0.0%	0	337	0	0	337
PHF=0.92		T	1,309	0.0%	0	0.0%	0	1,309	1,362	212	0.0%	0	6.0%	60	1,634	0	4	1,638
		R	250	0.0%	0	0.0%	0	250	260	50	0.0%	0	2.2%	22	332	0	1	333
	SB	L	140	0.0%	0	0.0%	0	140	146	0	0.0%	0	0.0%	0	146	0	0	146
		T	1,108	0.0%	0	0.0%	0	1,108	1,153	140	2.6%	27	0.0%	0	1,320	2	0	1,322
		R	254	5.3%	41	0.0%	0	213	222	49	2.6%	27	0.0%	0	298	2	0	300
11 NW 54th Ave	EB	L	18	0.0%	0	2.4%	18	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
South Casino		R	47	0.0%	0	6.2%	47	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Access	WB	L	42	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Existing		T	11	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		R	24	0.0%	0	8.8%	67	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Signalized	NB	L	123	14.7%	114	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
2020/2035		T	381	29.4%	228	0.0%	0	153	160	105	0.0%	0	0.0%	0	265	0	0	265
		R	55	7.0%	54	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
4/21/2011	SB	L	18	2.4%	19	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.95		T	299	0.0%	0	36.8%	278	21	22	151	0.0%	0	47.8%	475	648	0	30	678
		R	58	7.4%	57	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
12 NW 54th Ave	EB	L	26	0.0%	0	3.4%	26	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	3	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
NW 40th St		R	108	0.0%	0	14.8%	112	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Existing	WB	L	26	0.0%	0	3.1%	23	3	3	37	0.0%	0	0.0%	0	40	0	0	40
Unsignalized		T	5	0.6%	5	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	29	0.0%	0	2.8%	21	8	9	106	4.8%	49	0.0%	0	164	3	0	167
Signalized	NB	L	228	29.4%	228	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
2020/2035		T	150	0.0%	0	2.4%	18	132	138	36	47.1%	482	0.0%	0	656	31	0	687
		R	9	0.0%	0	0.0%	0	9	9	29	0.0%	0	0.0%	0	38	0	0	38
4/14/2011	SB	L	75	5.1%	40	3.0%	23	12	13	91	0.0%	0	4.0%	40	144	0	3	147
PHF=0.86		T	243	9.8%	76	18.9%	143	24	25	34	0.0%	0	47.8%	475	534	0	30	564
		R	14	3.0%	23	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
13 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	16.6%	165	165	0	10	175
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
North Casino		R	165	0.0%	0	21.9%	166	0	0	0	0.0%	0	51.8%	515	515	0	33	548
Access	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Existing		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized	NB	L	0	0.0%	0	0.0%	0	0	0	0	51.9%	531	0.0%	0	531	34	0	565
		T	237	0.0%	0	11.6%	88	149	155	145	0.0%	0	0.0%	0	300	0	0	300
Signalized		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
2020/2035	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	138	17.9%	139	0.0%	0	0	0	139	0.0%	0	0.0%	0	139	0	0	139
		R	111	14.3%	111	0.0%	0	0	0	0	32.2%	329	0.0%	0	329	21	0	350

TABLE I-1
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: BASE PHASE II (2012) AND ALTERNATIVE A, PHASE III (2012-2015)
20-Apr-12

INTERSECTION			2011	SCCC Phase II Trips (2011)				Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2015 BACKGOUND								2015 TOTAL		
									2015 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase III 2011-2015)	2015 Tract 65 SCCC Background (Alt. A, Phase III)				2015 BACK-GROUND	2015 Fee-To-Trust		TOTAL 2015 TRAFFIC
	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756				Percent Inbound Distri-bution	IN 1023	Percent Outbound Distri-bution	OUT 994		IN 65	OUT 63	
14 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	96	0.0%	0	0.0%	0	96	0	0	96
Cullum Rd		R	295	37.2%	289	0.0%	0	6	6	55	22.8%	233	0.0%	0	294	15	0	309
	WB	L	0	0.0%	0	0.0%	0	0	0	20	9.4%	96	0.0%	0	116	6	0	122
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	9	0.0%	0	0.0%	0	9	0	0	9
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	24	0.0%	0	0.0%	0	24	0	0	24
	NB	L	212	0.0%	0	11.6%	88	124	129	53	0.0%	0	6.2%	62	244	0	4	248
Roundabout		T	0	0.0%	0	0.0%	0	0	0	92	0.0%	0	0.0%	0	92	0	0	92
2020/2035		R	0	0.0%	0	0.0%	0	0	0	27	0.0%	0	10.4%	103	130	0	7	137
	SB	L	0	0.0%	0	0.0%	0	0	0	22	0.0%	0	0.0%	0	22	0	0	22
		T	0	0.0%	0	0.0%	0	0	0	65	0.0%	0	0.0%	0	65	0	0	65
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
15 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	24	0.0%	0	5.2%	52	76	0	3	79
and		T	0	0.0%	0	0.0%	0	0	0	16	0.0%	0	5.2%	52	68	0	3	71
Cullum Rd		R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73
	WB	L	0	0.0%	0	0.0%	0	0	0	30	0.0%	0	0.0%	0	30	0	0	30
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	7	4.7%	48	0.0%	0	55	3	0	58
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	24	0.0%	0	0.0%	0	24	0	0	24
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Roundabout		T	0	0.0%	0	0.0%	0	0	0	70	0.0%	0	0.0%	0	70	0	0	70
2020/2035		R	0	0.0%	0	0.0%	0	0	0	64	0.0%	0	0.0%	0	64	0	0	64
	SB	L	0	0.0%	0	0.0%	0	0	0	29	0.0%	0	0.0%	0	29	0	0	29
		T	0	0.0%	0	0.0%	0	0	0	75	0.0%	0	0.0%	0	75	0	0	75
		R	0	0.0%	0	0.0%	0	0	0	36	4.7%	48	0.0%	0	84	3	0	87
16 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	1,103	0.0%	0	10.4%	79	1,024	1,066	4	0.0%	0	0.0%	0	1,070	0	0	1,070
Wiles Rd		R	3	0.0%	0	0.0%	0	3	3	42	0.0%	0	0.0%	0	45	0	0	45
Existing	WB	L	3	0.0%	0	0.0%	0	3	3	89	4.7%	48	0.0%	0	140	3	0	143
Unsignalized		T	1,465	9.4%	73	0.0%	0	1,392	1,449	6	0.0%	0	0.0%	0	1,455	0	0	1,455
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Signalized	NB	L	6	0.0%	0	0.0%	0	6	6	55	0.0%	0	0.0%	0	61	0	0	61
2020/2035		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	7	0.0%	0	0.0%	0	7	7	61	0.0%	0	5.2%	52	120	0	3	123
5/12/2011	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.88		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0

TABLE I-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: ALTERNATIVE A, PHASE IV (2016-2018)
20-Apr-12

	2011			SCCC Phase II Trips (2011)				Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2018 BACKGOUND							2018 TOTAL		
											2018 Tract 65 SCCC Background (Alt. A, Phase IV)							
INTERSECTION	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756		2018 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase IV 2011-2018)	Percent Inbound Distri-bution	IN 1199	Percent Outbound Distri-bution	OUT 1165	2018 BACK-GROUND	2018 Fee-To-Trust IN 198	2018 Fee-To-Trust OUT 192	TOTAL 2018 TRAFFIC
1 Sample Rd	EB	U	9	0.0%	0	0.0%	0	9	10	0	0.0%	0	0.0%	0	10	0	0	10
and		L	201	1.6%	12	0.0%	0	189	202	79	1.6%	19	0.0%	0	300	3	0	303
SR-7		T	1,243	13.9%	108	0.0%	0	1,135	1,217	220	13.9%	167	0.0%	0	1,604	28	0	1,632
		R	92	0.0%	0	0.0%	0	92	99	42	0.0%	0	0.0%	0	141	0	0	141
Signalized	WB	U	24	0.0%	0	0.0%	0	24	26	0	0.0%	0	0.0%	0	26	0	0	26
		L	180	0.0%	0	2.3%	17	163	175	125	0.0%	0	2.3%	27	327	0	4	331
		T	1,805	0.0%	0	15.9%	120	1,685	1,807	280	0.0%	0	15.9%	185	2,272	0	31	2,303
4/14/2011		R	324	0.0%	0	0.0%	0	324	347	31	0.0%	0	0.0%	0	378	0	0	378
PHF=0.96	NB	L	146	0.0%	0	0.0%	0	146	157	23	0.0%	0	0.0%	0	180	0	0	180
		T	1,069	11.4%	89	0.0%	0	980	1,050	19	0.0%	0	0.0%	0	1,069	0	0	1,069
		R	149	1.7%	13	0.0%	0	136	146	112	1.7%	20	0.0%	0	278	3	0	281
	SB	L	220	0.0%	0	0.0%	0	220	236	14	0.0%	0	0.0%	0	250	0	0	250
		T	1,108	0.0%	0	1.8%	14	1,094	1,173	35	0.0%	0	1.8%	21	1,229	0	3	1,232
		R	253	0.0%	0	0.0%	0	253	271	68	0.0%	0	0.0%	0	339	0	0	339
2 Sample Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	1,577	0.0%	0	0.0%	0	1,577	1,691	332	15.6%	187	0.0%	0	2,210	31	0	2,241
SW Service Rd		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	2,319	0.0%	0	12.2%	92	2,227	2,388	413	0.0%	0	12.2%	142	2,943	0	23	2,966
2011-2035		R	37	2.9%	23	0.0%	0	14	15	0	2.9%	35	0.0%	0	50	6	0	56
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
4/14/2011		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.71		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	86	0.0%	0	6.0%	45	41	44	0	0.0%	0	6.0%	70	114	0	12	126
3 Sample Rd	EB	U	58	0.0%	0	0.0%	0	58	62	0	0.0%	0	0.0%	0	62	0	0	62
and		L	152	15.6%	121	0.0%	0	31	34	125	15.6%	187	0.0%	0	346	31	0	377
NW 54th Ave		T	1,603	0.0%	0	0.0%	0	1,603	1,719	206	0.0%	0	0.0%	0	1,925	0	0	1,925
		R	39	0.0%	0	0.0%	0	39	42	0	0.0%	0	0.0%	0	42	0	0	42
Signalized	WB	L	338	0.0%	0	0.0%	0	338	362	29	0.0%	0	0.0%	0	391	0	0	391
		T	2,071	2.9%	23	0.0%	0	2,048	2,195	289	2.9%	35	0.0%	0	2,519	6	0	2,525
		R	291	27.8%	216	0.0%	0	75	80	63	23.8%	285	0.0%	0	428	47	0	475
4/14/2011	NB	L	149	0.0%	0	0.0%	0	149	160	0	0.0%	0	0.0%	0	160	0	0	160
PHF=0.95		T	129	7.7%	60	0.0%	0	69	74	3	7.7%	92	0.0%	0	169	15	0	184
		R	325	0.0%	0	0.0%	0	325	348	23	0.0%	0	0.0%	0	371	0	0	371
	SB	L	308	0.0%	0	33.8%	256	52	55	84	0.0%	0	29.8%	347	486	0	57	543
		T	83	0.0%	0	5.8%	44	39	42	13	0.0%	0	5.8%	68	123	0	11	134
		R	78	0.0%	0	12.2%	92	0	0	124	0.0%	0	12.2%	142	266	0	23	289

TABLE I-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: ALTERNATIVE A, PHASE IV (2016-2018)
20-Apr-12

INTERSECTION	Move-ment		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2018 BACKGOUND 2018 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase IV 2011-2018)	2018 Tract 65 SCCC Background (Alt. A, Phase IV) Percent Inbound Distri-bution	IN 1199	Percent Outbound Distri-bution	OUT 1165	2018 BACK-GROUND	2018 TOTAL 2018 Fee-To-Trust IN 198	OUT 192	TOTAL 2018 TRAFFIC
4 Sample Rd	EB	L	9	0.0%	0	0.0%	0	9	10	65	0.0%	0	0.0%	0	75	0	0	75
and		T	1,819	0.0%	0	31.8%	240	1,579	1,693	247	0.0%	0	28.8%	336	2,276	0	55	2,331
Banks Rd		R	120	0.0%	0	2.0%	15	105	113	0	0.0%	0	1.0%	12	125	0	2	127
Existing	WB	U	6	0.0%	0	0.0%	0	6	6	0	0.0%	0	0.0%	0	6	0	0	6
Unsignalized		L	196	0.0%	0	0.0%	0	196	210	0	0.0%	0	0.0%	0	210	0	0	210
		T	2,758	30.7%	239	0.0%	0	2,519	2,701	259	25.7%	308	0.0%	0	3,268	51	0	3,319
Signalized		R	12	0.8%	6	0.0%	0	6	6	122	3.8%	46	0.0%	0	174	8	0	182
2020/2035	NB	U	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		L	0	0.0%	0	0.0%	0	0	0	0	1.0%	12	0.0%	0	12	2	0	14
		T	0	0.0%	0	0.0%	0	0	0	40	1.0%	12	0.0%	0	52	2	0	54
4/14/2011		R	207	0.0%	0	0.0%	0	207	222	0	0.0%	0	0.0%	0	222	0	0	222
PHF=0.93	SB	L	0	0.0%	0	0.0%	0	0	0	156	0.0%	0	3.0%	35	191	0	6	197
		T	0	0.0%	0	0.0%	0	0	0	56	0.0%	0	1.0%	12	68	0	2	70
		R	6	0.0%	0	0.0%	0	6	6	123	0.0%	0	0.0%	0	129	0	0	129
5 Sample Rd	EB	L	248	0.0%	0	0.0%	0	248	266	77	0.0%	0	0.0%	0	343	0	0	343
and		T	1,241	0.0%	0	23.9%	181	1,060	1,136	299	0.0%	0	23.9%	278	1,713	0	46	1,759
Lyons		R	416	0.0%	0	7.9%	60	356	382	122	0.0%	0	7.9%	92	596	0	15	611
	WB	U	11	0.0%	0	0.0%	0	11	12	0	0.0%	0	0.0%	0	12	0	0	12
Signalized		L	162	0.0%	0	0.0%	0	162	174	4	0.0%	0	0.0%	0	178	0	0	178
		T	1,943	25.6%	199	0.0%	0	1,744	1,870	227	25.6%	307	0.0%	0	2,404	51	0	2,455
4/14/2011		R	391	0.0%	0	0.0%	0	391	419	88	0.0%	0	0.0%	0	507	0	0	507
PHF=0.92	NB	L	480	5.9%	46	0.0%	0	434	466	109	3.9%	47	0.0%	0	622	8	0	630
		T	1,150	0.0%	0	0.0%	0	1,150	1,233	79	0.0%	0	0.0%	0	1,312	0	0	1,312
		R	140	0.0%	0	0.0%	0	140	150	2	0.0%	0	0.0%	0	152	0	0	152
	SB	U	10	0.0%	0	0.0%	0	10	11	0	0.0%	0	0.0%	0	11	0	0	11
		L	307	0.0%	0	0.0%	0	307	329	84	0.0%	0	0.0%	0	413	0	0	413
		T	955	0.0%	0	0.0%	0	955	1,024	128	0.0%	0	0.0%	0	1,152	0	0	1,152
		R	420	0.0%	0	0.0%	0	420	450	19	0.0%	0	0.0%	0	469	0	0	469
6 SR-7	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
NW 40th St		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	232	0.0%	0	30.6%	231	0	0	0	0.0%	0	25.6%	298	298	0	49	347
4/14/2011	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	1,493	0.0%	0	0.0%	0	1,493	1,601	343	0.0%	0	0.0%	0	1,944	0	0	1,944
PHF=0.81		R	100	13.0%	101	0.0%	0	0	0	0	13.0%	156	0.0%	0	156	26	0	182
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	1.8%	21	21	0	3	24
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0

TABLE I-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: ALTERNATIVE A, PHASE IV (2016-2018)
20-Apr-12

INTERSECTION			2011	SCCC Phase II Trips (2011)				Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2018 BACKGOUND							2018 TOTAL		
									2018 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase IV 2011-2018)	2018 Tract 65 SCCC Background (Alt. A, Phase IV)				2018 BACK-GROUND	2018 Fee-To-Trust		TOTAL 2018 TRAFFIC
	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756				Percent Inbound Distri-bution	IN 1199	Percent Outbound Distri-bution	OUT 1165		IN 198	OUT 192	
7 SR-7	EB	L	211	0.0%	0	0.0%	0	211	226	0	0.0%	0	0.0%	0	226	0	0	226
and		T	30	1.0%	8	0.0%	0	22	24	11	1.0%	12	0.0%	0	47	2	0	49
Cullum Rd		R	29	0.0%	0	0.0%	0	29	31	0	0.0%	0	0.0%	0	31	0	0	31
	WB	L	28	0.0%	0	1.8%	14	14	15	67	0.0%	0	1.8%	21	103	0	3	106
Signalized		T	45	0.0%	0	2.1%	16	29	31	14	0.0%	0	2.1%	24	69	0	4	73
		R	197	0.0%	0	7.7%	58	139	149	246	0.0%	0	2.3%	27	422	0	4	426
4/14/2011	NB	U	47	0.0%	0	0.0%	0	47	50	0	0.0%	0	0.0%	0	50	0	0	50
PHF=0.94		L	147	0.0%	0	0.0%	0	147	158	0	0.0%	0	0.0%	0	158	0	0	158
		T	1,446	0.0%	0	0.0%	0	1,446	1,550	114	0.0%	0	25.6%	298	1,962	0	49	2,011
		R	17	0.0%	0	0.0%	0	17	18	276	0.0%	0	0.0%	0	294	0	0	294
	SB	U	39	0.0%	0	0.0%	0	39	42	0	0.0%	0	0.0%	0	42	0	0	42
		L	237	31.2%	242	0.0%	0	0	0	189	21.8%	261	0.0%	0	450	43	0	493
		T	1,477	0.0%	0	0.0%	0	1,477	1,584	76	0.0%	0	0.0%	0	1,660	0	0	1,660
		R	292	0.0%	0	0.0%	0	292	313	0	0.0%	0	0.0%	0	313	0	0	313
8 SR-7	EB	U	40	0.0%	0	0.0%	0	40	43	0	0.0%	0	0.0%	0	43	0	0	43
and		L	498	0.0%	0	0.0%	0	498	534	12	0.0%	0	0.0%	0	546	0	0	546
Wiles Rd		T	707	0.0%	0	0.0%	0	707	758	52	0.0%	0	0.0%	0	810	0	0	810
		R	247	3.8%	30	0.0%	0	217	232	44	3.8%	46	0.0%	0	322	8	0	330
Signalized	WB	L	318	9.4%	73	0.0%	0	245	263	4	0.0%	0	0.0%	0	267	0	0	267
		T	941	0.0%	0	0.0%	0	941	1,009	48	0.0%	0	0.0%	0	1,057	0	0	1,057
4/14/2011		R	155	0.0%	0	0.0%	0	155	166	71	0.0%	0	0.0%	0	237	0	0	237
PHF=0.97	NB	U	50	0.0%	0	0.0%	0	50	54	0	0.0%	0	0.0%	0	54	0	0	54
		L	288	0.0%	0	2.5%	19	269	288	71	0.0%	0	2.5%	29	388	0	5	393
		T	1,393	0.0%	0	25.4%	192	1,201	1,288	214	0.0%	0	25.4%	296	1,798	0	49	1,847
		R	253	0.0%	0	10.4%	79	174	187	3	0.0%	0	0.0%	0	190	0	0	190
	SB	U	51	0.0%	0	0.0%	0	51	55	0	0.0%	0	0.0%	0	55	0	0	55
		L	161	0.0%	0	0.0%	0	161	173	37	0.0%	0	0.0%	0	210	0	0	210
		T	1,449	18.0%	140	0.0%	0	1,309	1,403	183	18.0%	216	0.0%	0	1,802	36	0	1,838
		R	559	0.0%	0	0.0%	0	559	599	7	0.0%	0	0.0%	0	606	0	0	606
9 Lyons Rd	EB	L	24	0.0%	0	0.0%	0	24	26	72	0.0%	0	5.2%	61	159	0	10	169
and		T	0	0.0%	0	0.0%	0	0	0	11	0.0%	0	0.0%	0	11	0	0	11
Cullum Rd		R	75	0.0%	0	0.0%	0	75	80	31	0.0%	0	0.0%	0	111	0	0	111
Existing	WB	L	15	0.0%	0	0.0%	0	15	16	0	0.0%	0	0.0%	0	16	0	0	16
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	10	0.0%	0	0.0%	0	10	0	0	10
		R	32	0.0%	0	0.0%	0	32	34	0	0.0%	0	0.0%	0	34	0	0	34
Signalized	NB	L	62	0.0%	0	0.0%	0	62	66	18	0.0%	0	0.0%	0	84	0	0	84
2020/2035		T	1,804	0.0%	0	0.0%	0	1,804	1,934	479	0.0%	0	0.0%	0	2,413	0	0	2,413
		R	27	0.0%	0	0.0%	0	27	29	0	0.0%	0	0.0%	0	29	0	0	29
5/12/2011	SB	U	7	0.0%	0	0.0%	0	7	8	0	0.0%	0	0.0%	0	8	0	0	8
		L	57	0.0%	0	0.0%	0	57	61	0	0.0%	0	0.0%	0	61	0	0	61
PHF=0.90		T	1,735	0.0%	0	0.0%	0	1,735	1,860	291	0.0%	0	0.0%	0	2,151	0	0	2,151
		R	11	0.0%	0	0.0%	0	11	12	34	4.7%	56	0.0%	0	102	9	0	111

TABLE I-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: ALTERNATIVE A, PHASE IV (2016-2018)
20-Apr-12

INTERSECTION	Move-ment		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2018 BACKGOUND 2018 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase IV 2011-2018)	2018 Tract 65 SCCC Background (Alt. A, Phase IV) Percent Inbound Distri-bution	IN 1199	Percent Outbound Distri-bution	OUT 1165	2018 BACK-GROUND	2018 TOTAL 2018 Fee-To-Trust IN 198	OUT 192	TOTAL 2018 TRAFFIC
10 Lyons Rd	EB	L	415	0.0%	0	6.0%	45	370	397	46	0.0%	0	3.0%	35	478	0	6	484
and		T	536	0.0%	0	4.4%	33	503	539	42	0.0%	0	2.2%	26	607	0	4	611
Wiles Rd		R	360	0.0%	0	0.0%	0	360	386	14	0.0%	0	0.0%	0	400	0	0	400
	WB	L	351	0.0%	0	0.0%	0	351	376	40	2.1%	25	0.0%	0	441	4	0	445
Signalized		T	859	4.1%	32	0.0%	0	827	887	75	2.1%	25	0.0%	0	987	4	0	991
		R	306	0.0%	0	0.0%	0	306	328	0	0.0%	0	0.0%	0	328	0	0	328
4/14/2011	NB	L	324	0.0%	0	0.0%	0	324	347	0	0.0%	0	0.0%	0	347	0	0	347
PHF=0.92		T	1,309	0.0%	0	0.0%	0	1,309	1,403	393	0.0%	0	6.0%	70	1,866	0	12	1,878
		R	250	0.0%	0	0.0%	0	250	268	99	0.0%	0	2.2%	26	393	0	4	397
	SB	L	140	0.0%	0	0.0%	0	140	150	0	0.0%	0	0.0%	0	150	0	0	150
		T	1,108	0.0%	0	0.0%	0	1,108	1,188	272	2.6%	31	0.0%	0	1,491	5	0	1,496
		R	254	5.3%	41	0.0%	0	213	228	94	2.6%	31	0.0%	0	353	5	0	358
11 NW 54th Ave	EB	L	18	0.0%	0	2.4%	18	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
South Casino		R	47	0.0%	0	6.2%	47	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Access	WB	L	42	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Existing		T	11	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		R	24	0.0%	0	8.8%	67	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Signalized	NB	L	123	14.7%	114	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
2020/2035		T	381	29.4%	228	0.0%	0	153	165	191	0.0%	0	0.0%	0	356	0	0	356
		R	55	7.0%	54	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
4/21/2011	SB	L	18	2.4%	19	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.95		T	299	0.0%	0	36.8%	278	21	23	223	0.0%	0	47.8%	557	803	0	92	895
		R	58	7.4%	57	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
12 NW 54th Ave	EB	L	26	0.0%	0	3.4%	26	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	3	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
NW 40th St		R	108	0.0%	0	14.8%	112	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Existing	WB	L	26	0.0%	0	3.1%	23	3	3	74	0.0%	0	0.0%	0	77	0	0	77
Unsignalized		T	5	0.6%	5	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	29	0.0%	0	2.8%	21	8	9	159	4.8%	58	0.0%	0	226	10	0	236
Signalized	NB	L	228	29.4%	228	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
2020/2035		T	150	0.0%	0	2.4%	18	132	142	72	47.1%	565	0.0%	0	779	93	0	872
		R	9	0.0%	0	0.0%	0	9	10	58	0.0%	0	0.0%	0	68	0	0	68
4/14/2011	SB	L	75	5.1%	40	3.0%	23	12	13	171	0.0%	0	4.0%	47	231	0	8	239
PHF=0.86		T	243	9.8%	76	18.9%	143	24	26	68	0.0%	0	47.8%	557	651	0	92	743
		R	14	3.0%	23	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0

TABLE I-2
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
INTERSECTION VOLUMES: ALTERNATIVE A, PHASE IV (2016-2018)
20-Apr-12

			2011	SCCC Phase II Trips (2011)					2018 BACKGOUND							2018 TOTAL		
											2018 Tract 65 SCCC Background (Alt. A, Phase IV)					2018 Fee-To-Trust		
INTERSECTION	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2018 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (Phase IV 2011-2018)	Percent Inbound Distri-bution	IN 1199	Percent Outbound Distri-bution	OUT 1165	2018 BACK-GROUND	IN 198	OUT 192	TOTAL 2018 TRAFFIC
13 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	16.6%	193	193	0	32	225
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
North Casino		R	165	0.0%	0	21.9%	166	0	0	0	0.0%	0	51.8%	603	603	0	99	702
Access	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Existing		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized	NB	L	0	0.0%	0	0.0%	0	0	0	0	51.9%	622	0.0%	0	622	103	0	725
		T	237	0.0%	0	11.6%	88	149	159	237	0.0%	0	0.0%	0	396	0	0	396
Signalized		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
2020/2035	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	138	17.9%	139	0.0%	0	0	0	268	0.0%	0	0.0%	0	268	0	0	268
		R	111	14.3%	111	0.0%	0	0	0	0	32.2%	386	0.0%	0	386	64	0	450
14 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	192	0.0%	0	0.0%	0	192	0	0	192
Cullum Rd		R	295	37.2%	289	0.0%	0	6	7	99	22.8%	273	0.0%	0	379	45	0	424
	WB	L	0	0.0%	0	0.0%	0	0	0	39	9.4%	113	0.0%	0	152	19	0	171
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	17	0.0%	0	0.0%	0	17	0	0	17
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	49	0.0%	0	0.0%	0	49	0	0	49
	NB	L	212	0.0%	0	11.6%	88	124	133	53	0.0%	0	6.2%	72	258	0	12	270
Roundabout		T	0	0.0%	0	0.0%	0	0	0	184	0.0%	0	0.0%	0	184	0	0	184
2020/2035		R	0	0.0%	0	0.0%	0	0	0	55	0.0%	0	10.4%	121	176	0	20	196
	SB	L	0	0.0%	0	0.0%	0	0	0	43	0.0%	0	0.0%	0	43	0	0	43
		T	0	0.0%	0	0.0%	0	0	0	129	0.0%	0	0.0%	0	129	0	0	129
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
15 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	49	0.0%	0	5.2%	61	110	0	10	120
and		T	0	0.0%	0	0.0%	0	0	0	33	0.0%	0	5.2%	61	94	0	10	104
Cullum Rd		R	0	0.0%	0	0.0%	0	0	0	146	0.0%	0	0.0%	0	146	0	0	146
	WB	L	0	0.0%	0	0.0%	0	0	0	51	0.0%	0	0.0%	0	51	0	0	51
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	15	4.7%	56	0.0%	0	71	9	0	80
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	49	0.0%	0	0.0%	0	49	0	0	49
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Roundabout		T	0	0.0%	0	0.0%	0	0	0	127	0.0%	0	0.0%	0	127	0	0	127
2020/2035		R	0	0.0%	0	0.0%	0	0	0	89	0.0%	0	0.0%	0	89	0	0	89
	SB	L	0	0.0%	0	0.0%	0	0	0	57	0.0%	0	0.0%	0	57	0	0	57
		T	0	0.0%	0	0.0%	0	0	0	147	0.0%	0	0.0%	0	147	0	0	147
		R	0	0.0%	0	0.0%	0	0	0	72	4.7%	56	0.0%	0	128	9	0	137
16 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	1,103	0.0%	0	10.4%	79	1,024	1,098	9	0.0%	0	0.0%	0	1,107	0	0	1,107
Wiles Rd		R	3	0.0%	0	0.0%	0	3	3	84	0.0%	0	0.0%	0	87	0	0	87
Existing	WB	L	3	0.0%	0	0.0%	0	3	3	174	4.7%	56	0.0%	0	233	9	0	242
Unsignalized		T	1,465	9.4%	73	0.0%	0	1,392	1,493	14	0.0%	0	0.0%	0	1,507	0	0	1,507
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Signalized	NB	L	6	0.0%	0	0.0%	0	6	6	110	0.0%	0	0.0%	0	116	0	0	116
2020/2035		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	7	0.0%	0	0.0%	0	7	8	109	0.0%	0	5.2%	61	178	0	10	188
5/12/2011	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.88		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0

TABLE I-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVES: A AND C AND SUB-ALTERNATIVE A-1
19-Apr-12

			2011	SCCC Phase II Trips (2011)					2020 BACKGOUND							2020 TOTAL			2035 BACKGOUND				
INTERSECTION	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (2011-2020)	2020 Tract 65 SCCC Background (Alt. A, A-1 & C) Percent Inbound Distri-bution	IN 1203	Percent Outbound Distri-bution	OUT 1170	2020 BACK-GROUND	2020 Fee-To-Trust IN 264	OUT 257	TOTAL 2020 TRAFFIC	2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	TOTAL 2035 TRAFFIC
1 Sample Rd	EB	U	9	0.0%	0	0.0%	0	9	10	0	0.0%	0	0.0%	0	10	0	0	10	11	0	0	11	11
and		L	201	1.6%	12	0.0%	0	189	206	108	1.6%	19	0.0%	0	333	4	0	337	239	108	19	366	370
SR-7		T	1,243	13.9%	108	0.0%	0	1,135	1,242	306	13.9%	167	0.0%	0	1,715	37	0	1,752	1,442	306	167	1,915	1,952
		R	92	0.0%	0	0.0%	0	92	101	45	0.0%	0	0.0%	0	146	0	0	146	117	45	0	162	162
Signalized	WB	U	24	0.0%	0	0.0%	0	24	26	0	0.0%	0	0.0%	0	26	0	0	26	30	0	0	30	30
		L	180	0.0%	0	2.3%	17	163	178	162	0.0%	0	2.3%	27	367	0	6	373	207	162	27	396	402
		T	1,805	0.0%	0	15.9%	120	1,685	1,843	376	0.0%	0	15.9%	186	2,405	0	41	2,446	2,140	376	186	2,702	2,743
4/14/2011		R	324	0.0%	0	0.0%	0	324	354	46	0.0%	0	0.0%	0	400	0	0	400	411	46	0	457	457
PHF=0.96	NB	L	146	0.0%	0	0.0%	0	146	160	25	0.0%	0	0.0%	0	185	0	0	185	185	25	0	210	210
		T	1,069	11.4%	89	0.0%	0	980	1,072	19	0.0%	0	0.0%	0	1,091	0	0	1,091	1,244	19	0	1,263	1,263
		R	149	1.7%	13	0.0%	0	136	149	158	1.7%	20	0.0%	0	327	4	0	331	172	158	20	350	354
	SB	L	220	0.0%	0	0.0%	0	220	241	20	0.0%	0	0.0%	0	261	0	0	261	279	20	0	299	299
		T	1,108	0.0%	0	1.8%	14	1,094	1,196	35	0.0%	0	1.8%	21	1,252	0	5	1,257	1,389	35	21	1,445	1,450
		R	253	0.0%	0	0.0%	0	253	277	91	0.0%	0	0.0%	0	368	0	0	368	321	91	0	412	412
2 Sample Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	1,577	0.0%	0	0.0%	0	1,577	1,725	471	15.6%	188	0.0%	0	2,384	41	0	2,425	2,002	471	188	2,661	2,702
SW Service Rd		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized		T	2,319	0.0%	0	12.2%	92	2,227	2,436	562	0.0%	0	12.2%	143	3,141	0	31	3,172	2,828	562	143	3,533	3,564
2011-2035		R	37	2.9%	23	0.0%	0	14	15	0	2.9%	35	0.0%	0	50	8	0	58	17	0	35	52	60
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
4/14/2011		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
PHF=0.71		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		R	86	0.0%	0	6.0%	45	41	45	0	0.0%	0	6.0%	70	115	0	15	130	52	0	70	122	137
3 Sample Rd	EB	U	58	0.0%	0	0.0%	0	58	63	0	0.0%	0	0.0%	0	63	0	0	63	74	0	0	74	74
and		L	152	15.6%	121	0.0%	0	31	34	179	15.6%	188	0.0%	0	401	41	0	442	40	179	188	407	448
NW 54th Ave		T	1,603	0.0%	0	0.0%	0	1,603	1,753	291	0.0%	0	0.0%	0	2,044	0	0	2,044	2,035	291	0	2,326	2,326
		R	39	0.0%	0	0.0%	0	39	43	0	0.0%	0	0.0%	0	43	0	0	43	50	0	0	50	50
Signalized	WB	L	338	0.0%	0	0.0%	0	338	370	44	0.0%	0	0.0%	0	414	0	0	414	429	44	0	473	473
		T	2,071	2.9%	23	0.0%	0	2,048	2,239	402	2.9%	35	0.0%	0	2,676	8	0	2,684	2,600	402	35	3,037	3,045
		R	291	27.8%	216	0.0%	0	75	82	95	23.8%	286	0.0%	0	463	63	0	526	95	95	286	476	539
4/14/2011	NB	L	149	0.0%	0	0.0%	0	149	163	0	0.0%	0	0.0%	0	163	0	0	163	189	0	0	189	189
PHF=0.95		T	129	7.7%	60	0.0%	0	69	76	3	7.7%	93	0.0%	0	172	20	0	192	88	3	93	184	204
		R	325	0.0%	0	0.0%	0	325	355	34	0.0%	0	0.0%	0	389	0	0	389	413	34	0	447	447
	SB	L	308	0.0%	0	33.8%	256	52	57	120	0.0%	0	29.8%	349	526	0	77	603	66	120	349	535	612
		T	83	0.0%	0	5.8%	44	39	42	13	0.0%	0	5.8%	68	123	0	15	138	49	13	68	130	145
		R	78	0.0%	0	12.2%	92	0	0	160	0.0%	0	12.2%	143	303	0	31	334	0	160	143	303	334

TABLE I-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVES: A AND C AND SUB-ALTERNATIVE A-1
19-Apr-12

INTERSECTION	2011 Movement	2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distribution	IN 777	Percent Outbound Distribution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Developments (2011-2020)	2020 Tract 65 SCCC Background (Alt. A, A-1 & C) Percent Inbound Distribution	IN 1203	Percent Outbound Distribution	OUT 1170	2020 BACK-GROUND	2020 TOTAL 2020 Fee-To-Trust IN 264	OUT 257	TOTAL 2020 TRAFFIC	2035 BACKGOUND 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	TOTAL 2035 TRAFFIC
4 Sample Rd	EB L	9	0.0%	0	0.0%	0	9	10	98	0.0%	0	0.0%	0	108	0	0	108	11	98	0	109	109
and	T	1,819	0.0%	0	31.8%	240	1,579	1,727	346	0.0%	0	28.8%	337	2,410	0	74	2,484	2,005	346	337	2,688	2,762
Banks Rd	R	120	0.0%	0	2.0%	15	105	115	0	0.0%	0	1.0%	12	127	0	3	130	134	0	12	146	149
Existing	WB U	6	0.0%	0	0.0%	0	6	7	0	0.0%	0	0.0%	0	7	0	0	7	8	0	0	8	8
Unsignalized	L	196	0.0%	0	0.0%	0	196	214	0	0.0%	0	0.0%	0	214	0	0	214	249	0	0	249	249
	T	2,758	30.7%	239	0.0%	0	2,519	2,755	372	25.7%	309	0.0%	0	3,436	68	0	3,504	3,199	372	309	3,880	3,948
Signalized	R	12	0.8%	6	0.0%	0	6	6	177	3.8%	46	0.0%	0	229	10	0	239	7	177	46	230	240
2020/2035	NB U	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	L	0	0.0%	0	0.0%	0	0	0	0	1.0%	12	0.0%	0	12	3	0	15	0	0	12	12	15
	T	0	0.0%	0	0.0%	0	0	0	58	1.0%	12	0.0%	0	70	3	0	73	0	58	12	70	73
4/14/2011	R	207	0.0%	0	0.0%	0	207	226	0	0.0%	0	0.0%	0	226	0	0	226	263	0	0	263	263
PHF=0.93	SB L	0	0.0%	0	0.0%	0	0	0	214	0.0%	0	3.0%	35	249	0	8	257	0	214	35	249	257
	T	0	0.0%	0	0.0%	0	0	0	78	0.0%	0	1.0%	12	90	0	3	93	0	78	12	90	93
	R	6	0.0%	0	0.0%	0	6	7	171	0.0%	0	0.0%	0	178	0	0	178	8	171	0	179	179
5 Sample Rd	EB L	248	0.0%	0	0.0%	0	248	271	112	0.0%	0	0.0%	0	383	0	0	383	315	112	0	427	427
and	T	1,241	0.0%	0	23.9%	181	1,060	1,159	423	0.0%	0	23.9%	280	1,862	0	61	1,923	1,346	423	280	2,049	2,110
Lyons	R	416	0.0%	0	7.9%	60	356	390	166	0.0%	0	7.9%	92	648	0	20	668	453	166	92	711	731
	WB U	11	0.0%	0	0.0%	0	11	12	0	0.0%	0	0.0%	0	12	0	0	12	14	0	0	14	14
Signalized	L	162	0.0%	0	0.0%	0	162	177	6	0.0%	0	0.0%	0	183	0	0	183	206	6	0	212	212
	T	1,943	25.6%	199	0.0%	0	1,744	1,907	326	25.6%	308	0.0%	0	2,541	68	0	2,609	2,214	326	308	2,848	2,916
4/14/2011	R	391	0.0%	0	0.0%	0	391	428	131	0.0%	0	0.0%	0	559	0	0	559	496	131	0	627	627
PHF=0.92	NB L	480	5.9%	46	0.0%	0	434	475	157	3.9%	47	0.0%	0	679	10	0	689	551	157	47	755	765
	T	1,150	0.0%	0	0.0%	0	1,150	1,258	117	0.0%	0	0.0%	0	1,375	0	0	1,375	1,460	117	0	1,577	1,577
	R	140	0.0%	0	0.0%	0	140	153	3	0.0%	0	0.0%	0	156	0	0	156	178	3	0	181	181
	SB U	10	0.0%	0	0.0%	0	10	11	0	0.0%	0	0.0%	0	11	0	0	11	13	0	0	13	13
	L	307	0.0%	0	0.0%	0	307	336	126	0.0%	0	0.0%	0	462	0	0	462	390	126	0	516	516
	T	955	0.0%	0	0.0%	0	955	1,044	186	0.0%	0	0.0%	0	1,230	0	0	1,230	1,213	186	0	1,399	1,399
	R	420	0.0%	0	0.0%	0	420	459	26	0.0%	0	0.0%	0	485	0	0	485	533	26	0	559	559
6 SR-7	EB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
NW 40th St	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	WB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	R	232	0.0%	0	30.6%	231	0	0	0	0.0%	0	25.6%	300	300	0	66	366	0	0	300	300	366
4/14/2011	NB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	T	1,493	0.0%	0	0.0%	0	1,493	1,633	495	0.0%	0	0.0%	0	2,128	0	0	2,128	1,896	495	0	2,391	2,391
PHF=0.81	R	100	13.0%	101	0.0%	0	0	0	0	13.0%	156	0.0%	0	156	34	0	190	0	0	156	156	190
	SB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	1.8%	21	21	0	5	26	0	0	21	21	26
	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0

TABLE I-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVES: A AND C AND SUB-ALTERNATIVE A-1
19-Apr-12

INTERSECTION	Move-ment		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (2011-2020)	2020 Tract 65 SCCC Background (Alt. A, A-1 & C) Percent Inbound Distri-bution	IN 1203	Percent Outbound Distri-bution	OUT 1170	2020 BACK-GROUND	2020 TOTAL 2020 Fee-To-Trust IN 264	OUT 257	TOTAL 2020 TRAFFIC	2035 BACKGOUND 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	TOTAL 2035 TRAFFIC
7 SR-7	EB	L	211	0.0%	0	0.0%	0	211	231	0	0.0%	0	0.0%	0	231	0	0	231	268	0	0	268	268
and		T	30	1.0%	8	0.0%	0	22	24	16	1.0%	12	0.0%	0	52	3	0	55	28	16	12	56	59
Cullum Rd		R	29	0.0%	0	0.0%	0	29	32	0	0.0%	0	0.0%	0	32	0	0	32	37	0	0	37	37
	WB	L	28	0.0%	0	1.8%	14	14	15	101	0.0%	0	1.8%	21	137	0	5	142	18	101	21	140	145
Signalized		T	45	0.0%	0	2.1%	16	29	31	19	0.0%	0	2.1%	25	75	0	5	80	36	19	25	80	85
		R	197	0.0%	0	7.7%	58	139	152	344	0.0%	0	2.3%	27	523	0	6	529	177	344	27	548	554
4/14/2011	NB	U	47	0.0%	0	0.0%	0	47	51	0	0.0%	0	0.0%	0	51	0	0	51	60	0	0	60	60
PHF=0.94		L	147	0.0%	0	0.0%	0	147	161	0	0.0%	0	0.0%	0	161	0	0	161	187	0	0	187	187
		T	1,446	0.0%	0	0.0%	0	1,446	1,581	151	0.0%	0	25.6%	300	2,032	0	66	2,098	1,836	151	300	2,287	2,353
		R	17	0.0%	0	0.0%	0	17	19	414	0.0%	0	0.0%	0	433	0	0	433	22	414	0	436	436
	SB	U	39	0.0%	0	0.0%	0	39	43	0	0.0%	0	0.0%	0	43	0	0	43	50	0	0	50	50
		L	237	31.2%	242	0.0%	0	0	0	279	21.8%	262	0.0%	0	541	58	0	599	0	279	262	541	599
		T	1,477	0.0%	0	0.0%	0	1,477	1,615	86	0.0%	0	0.0%	0	1,701	0	0	1,701	1,875	86	0	1,961	1,961
		R	292	0.0%	0	0.0%	0	292	319	0	0.0%	0	0.0%	0	319	0	0	319	371	0	0	371	371
8 SR-7	EB	U	40	0.0%	0	0.0%	0	40	44	0	0.0%	0	0.0%	0	44	0	0	44	51	0	0	51	51
and		L	498	0.0%	0	0.0%	0	498	545	18	0.0%	0	0.0%	0	563	0	0	563	632	18	0	650	650
Wiles Rd		T	707	0.0%	0	0.0%	0	707	773	78	0.0%	0	0.0%	0	851	0	0	851	898	78	0	976	976
		R	247	3.8%	30	0.0%	0	217	237	60	3.8%	46	0.0%	0	343	10	0	353	275	60	46	381	391
Signalized	WB	L	318	9.4%	73	0.0%	0	245	268	6	0.0%	0	0.0%	0	274	0	0	274	311	6	0	317	317
		T	941	0.0%	0	0.0%	0	941	1,029	71	0.0%	0	0.0%	0	1,100	0	0	1,100	1,195	71	0	1,266	1,266
4/14/2011		R	155	0.0%	0	0.0%	0	155	170	107	0.0%	0	0.0%	0	277	0	0	277	197	107	0	304	304
PHF=0.97	NB	U	50	0.0%	0	0.0%	0	50	55	0	0.0%	0	0.0%	0	55	0	0	55	63	0	0	63	63
		L	288	0.0%	0	2.5%	19	269	294	94	0.0%	0	2.5%	29	417	0	6	423	341	94	29	464	470
		T	1,393	0.0%	0	25.4%	192	1,201	1,314	298	0.0%	0	25.4%	297	1,909	0	65	1,974	1,525	298	297	2,120	2,185
		R	253	0.0%	0	10.4%	79	174	190	5	0.0%	0	0.0%	0	195	0	0	195	221	5	0	226	226
	SB	U	51	0.0%	0	0.0%	0	51	56	0	0.0%	0	0.0%	0	56	0	0	56	65	0	0	65	65
		L	161	0.0%	0	0.0%	0	161	176	56	0.0%	0	0.0%	0	232	0	0	232	204	56	0	260	260
		T	1,449	18.0%	140	0.0%	0	1,309	1,431	266	18.0%	217	0.0%	0	1,914	48	0	1,962	1,662	266	217	2,145	2,193
		R	559	0.0%	0	0.0%	0	559	611	11	0.0%	0	0.0%	0	622	0	0	622	710	11	0	721	721
9 Lyons Rd	EB	L	24	0.0%	0	0.0%	0	24	26	94	0.0%	0	5.2%	61	181	0	13	194	30	94	61	185	198
and		T	0	0.0%	0	0.0%	0	0	0	16	0.0%	0	0.0%	0	16	0	0	16	0	16	0	16	16
Cullum Rd		R	75	0.0%	0	0.0%	0	75	82	40	0.0%	0	0.0%	0	122	0	0	122	95	40	0	135	135
Existing	WB	L	15	0.0%	0	0.0%	0	15	16	0	0.0%	0	0.0%	0	16	0	0	16	19	0	0	19	19
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	15	0.0%	0	0.0%	0	15	0	0	15	0	15	0	15	15
		R	32	0.0%	0	0.0%	0	32	35	0	0.0%	0	0.0%	0	35	0	0	35	41	0	0	41	41
Signalized	NB	L	62	0.0%	0	0.0%	0	62	68	25	0.0%	0	0.0%	0	93	0	0	93	79	25	0	104	104
2020/2035		T	1,804	0.0%	0	0.0%	0	1,804	1,973	716	0.0%	0	0.0%	0	2,689	0	0	2,689	2,291	716	0	3,007	3,007
		R	27	0.0%	0	0.0%	0	27	30	0	0.0%	0	0.0%	0	30	0	0	30	34	0	0	34	34
5/12/2011	SB	U	7	0.0%	0	0.0%	0	7	8	0	0.0%	0	0.0%	0	8	0	0	8	9	0	0	9	9
		L	57	0.0%	0	0.0%	0	57	62	0	0.0%	0	0.0%	0	62	0	0	62	72	0	0	72	72
PHF=0.90		T	1,735	0.0%	0	0.0%	0	1,735	1,898	434	0.0%	0	0.0%	0	2,332	0	0	2,332	2,203	434	0	2,637	2,637
		R	11	0.0%	0	0.0%	0	11	12	48	4.7%	57	0.0%	0	117	12	0	129	14	48	57	119	131

TABLE I-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVES: A AND C AND SUB-ALTERNATIVE A-1
19-Apr-12

INTERSECTION		2011		SCCC Phase II Trips (2011)				Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND							2020 TOTAL			2035 BACKGOUND				TOTAL 2035 TRAFFIC
	Move-ment		All Peak Season Volume	Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756		2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (2011-2020)	2020 Tract 65 SCCC Background (Alt. A, A-1 & C) Percent Inbound Distri-bution	IN 1203	Percent Outbound Distri-bution	OUT 1170	2020 BACK-GROUND	2020 Fee-To-Trust IN 264	OUT 257	TOTAL 2020 TRAFFIC	2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	
10 Lyons Rd	EB	L	415	0.0%	0	6.0%	45	370	405	69	0.0%	0	3.0%	35	509	0	8	517	470	69	35	574	582
and		T	536	0.0%	0	4.4%	33	503	550	56	0.0%	0	2.2%	26	632	0	6	638	638	56	26	720	726
Wiles Rd		R	360	0.0%	0	0.0%	0	360	394	21	0.0%	0	0.0%	0	415	0	0	415	457	21	0	478	478
	WB	L	351	0.0%	0	0.0%	0	351	384	59	2.1%	25	0.0%	0	468	6	0	474	446	59	25	530	536
Signalized		T	859	4.1%	32	0.0%	0	827	905	112	2.1%	25	0.0%	0	1,042	6	0	1,048	1,050	112	25	1,187	1,193
		R	306	0.0%	0	0.0%	0	306	335	0	0.0%	0	0.0%	0	335	0	0	335	389	0	0	389	389
4/14/2011	NB	L	324	0.0%	0	0.0%	0	324	354	0	0.0%	0	0.0%	0	354	0	0	354	411	0	0	411	411
PHF=0.92		T	1,309	0.0%	0	0.0%	0	1,309	1,432	573	0.0%	0	6.0%	70	2,075	0	15	2,090	1,662	573	70	2,305	2,320
		R	250	0.0%	0	0.0%	0	250	273	149	0.0%	0	2.2%	26	448	0	6	454	317	149	26	492	498
	SB	L	140	0.0%	0	0.0%	0	140	153	0	0.0%	0	0.0%	0	153	0	0	153	178	0	0	178	178
		T	1,108	0.0%	0	0.0%	0	1,108	1,212	404	2.6%	31	0.0%	0	1,647	7	0	1,654	1,407	404	31	1,842	1,849
		R	254	5.3%	41	0.0%	0	213	233	140	2.6%	31	0.0%	0	404	7	0	411	270	140	31	441	448
11 NW 54th Ave	EB	L	18	0.0%	0	2.4%	18	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
South Casino		R	47	0.0%	0	6.2%	47	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Access	WB	L	42	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Existing		T	11	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized		R	24	0.0%	0	8.8%	67	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Signalized	NB	L	123	14.7%	114	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
2020/2035		T	381	29.4%	228	0.0%	0	153	168	277	0.0%	0	0.0%	0	445	0	0	445	195	277	0	472	472
		R	55	7.0%	54	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
4/21/2011	SB	L	18	2.4%	19	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
PHF=0.95		T	299	0.0%	0	36.8%	278	21	23	294	0.0%	0	47.8%	559	876	0	123	999	27	294	559	880	1,003
		R	58	7.4%	57	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
12 NW 54th Ave	EB	L	26	0.0%	0	3.4%	26	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	3	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
NW 40th St		R	108	0.0%	0	14.8%	112	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Existing	WB	L	26	0.0%	0	3.1%	23	3	3	111	0.0%	0	0.0%	0	114	0	0	114	4	111	0	115	115
Unsignalized		T	5	0.6%	5	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		R	29	0.0%	0	2.8%	21	8	9	212	4.8%	58	0.0%	0	279	13	0	292	10	212	58	280	293
Signalized	NB	L	228	29.4%	228	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
2020/2035		T	150	0.0%	0	2.4%	18	132	145	108	47.1%	567	0.0%	0	820	124	0	944	168	108	567	843	967
		R	9	0.0%	0	0.0%	0	9	10	87	0.0%	0	0.0%	0	97	0	0	97	11	87	0	98	98
4/14/2011	SB	L	75	5.1%	40	3.0%	23	12	13	251	0.0%	0	4.0%	47	311	0	10	321	15	251	47	313	323
PHF=0.86		T	243	9.8%	76	18.9%	143	24	26	102	0.0%	0	47.8%	559	687	0	123	810	30	102	559	691	814
		R	14	3.0%	23	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0

TABLE I-3
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVES: A AND C AND SUB-ALTERNATIVE A-1
19-Apr-12

INTERSECTION	Move-ment	2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (2011-2020)	2020 Tract 65 SCCC Background (Alt. A, A-1 & C) Percent Inbound Distri-bution	IN 1203	Percent Outbound Distri-bution	OUT 1170	2020 BACK-GROUND	2020 TOTAL 2020 Fee-To-Trust IN 264	OUT 257	TOTAL 2020 TRAFFIC	2035 BACKGOUND 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	TOTAL 2035 TRAFFIC
13 NW 54th Ave	EB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	16.6%	194	194	0	43	237	0	0	194	194	237
and	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
North Casino	R	165	0.0%	0	21.9%	166	0	0	0	0.0%	0	51.8%	606	606	0	133	739	0	0	606	606	739
Access	WB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Existing	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized	NB L	0	0.0%	0	0.0%	0	0	0	0	51.9%	624	0.0%	0	624	137	0	761	0	0	624	624	761
	T	237	0.0%	0	11.6%	88	149	163	329	0.0%	0	0.0%	0	492	0	0	492	189	329	0	518	518
Signalized	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
2020/2035	SB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	T	138	17.9%	139	0.0%	0	0	0	396	0.0%	0	0.0%	0	396	0	0	396	0	396	0	396	396
	R	111	14.3%	111	0.0%	0	0	0	0	32.2%	387	0.0%	0	387	85	0	472	0	0	387	387	472
14 NW 54th Ave	EB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and	T	0	0.0%	0	0.0%	0	0	0	288	0.0%	0	0.0%	0	288	0	0	288	0	288	0	288	288
Cullum Rd	R	295	37.2%	289	0.0%	0	6	7	143	22.8%	274	0.0%	0	424	60	0	484	8	143	274	425	485
	WB L	0	0.0%	0	0.0%	0	0	0	59	9.4%	113	0.0%	0	172	25	0	197	0	59	113	172	197
Full Intersection	T	0	0.0%	0	0.0%	0	0	0	26	0.0%	0	0.0%	0	26	0	0	26	0	26	0	26	26
Developed 2015	R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73	0	73	0	73	73
	NB L	212	0.0%	0	11.6%	88	124	135	53	0.0%	0	6.2%	73	261	0	16	277	157	53	73	283	299
Roundabout	T	0	0.0%	0	0.0%	0	0	0	276	0.0%	0	0.0%	0	276	0	0	276	0	276	0	276	276
2020/2035	R	0	0.0%	0	0.0%	0	0	0	82	0.0%	0	10.4%	122	204	0	27	231	0	82	122	204	231
	SB L	0	0.0%	0	0.0%	0	0	0	65	0.0%	0	0.0%	0	65	0	0	65	0	65	0	65	65
	T	0	0.0%	0	0.0%	0	0	0	194	0.0%	0	0.0%	0	194	0	0	194	0	194	0	194	194
	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
15 Banks Rd	EB L	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	5.2%	61	134	0	13	147	0	73	61	134	147
and	T	0	0.0%	0	0.0%	0	0	0	49	0.0%	0	5.2%	61	110	0	13	123	0	49	61	110	123
Cullum Rd	R	0	0.0%	0	0.0%	0	0	0	219	0.0%	0	0.0%	0	219	0	0	219	0	219	0	219	219
	WB L	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73	0	73	0	73	73
Full Intersection	T	0	0.0%	0	0.0%	0	0	0	22	4.7%	57	0.0%	0	79	12	0	91	0	22	57	79	91
Developed 2015	R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73	0	73	0	73	73
	NB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Roundabout	T	0	0.0%	0	0.0%	0	0	0	184	0.0%	0	0.0%	0	184	0	0	184	0	184	0	184	184
2020/2035	R	0	0.0%	0	0.0%	0	0	0	113	0.0%	0	0.0%	0	113	0	0	113	0	113	0	113	113
	SB L	0	0.0%	0	0.0%	0	0	0	86	0.0%	0	0.0%	0	86	0	0	86	0	86	0	86	86
	T	0	0.0%	0	0.0%	0	0	0	219	0.0%	0	0.0%	0	219	0	0	219	0	219	0	219	219
	R	0	0.0%	0	0.0%	0	0	0	108	4.7%	57	0.0%	0	165	12	0	177	0	108	57	165	177
16 Banks Rd	EB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and	T	1,103	0.0%	0	10.4%	79	1,024	1,120	13	0.0%	0	0.0%	0	1,133	0	0	1,133	1,300	13	0	1,313	1,313
Wiles Rd	R	3	0.0%	0	0.0%	0	3	3	126	0.0%	0	0.0%	0	129	0	0	129	4	126	0	130	130
Existing	WB L	3	0.0%	0	0.0%	0	3	3	260	4.7%	57	0.0%	0	320	12	0	332	4	260	57	321	333
Unsignalized	T	1,465	9.4%	73	0.0%	0	1,392	1,523	20	0.0%	0	0.0%	0	1,543	0	0	1,543	1,768	20	0	1,788	1,788
	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Signalized	NB L	6	0.0%	0	0.0%	0	6	7	165	0.0%	0	0.0%	0	172	0	0	172	8	165	0	173	173
2020/2035	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	R	7	0.0%	0	0.0%	0	7	8	157	0.0%	0	5.2%	61	226	0	13	239	9	157	61	227	240
5/12/2011	SB L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
PHF=0.88	T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0

TABLE I-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVE: B
20-Apr-12

INTERSECTION			2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND: 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (2011-2020)	2020 Tract 65 SCCC Background (Alt. B) Percent Inbound Distri-bution	IN 1210	Percent Outbound Distri-bution	OUT 1176	2020 BACK-GROUND	2020 TOTAL: 2020 Fee-To-Trust IN 203	OUT 197	TOTAL 2020 TRAFFIC	2035 BACKGOUND: 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	TOTAL 2035 TRAFFIC
1 Sample Rd	EB	U	9	0.0%	0	0.0%	0	9	10	0	0.0%	0	0.0%	0	10	0	0	10	11	0	0	11	11
and		L	201	1.6%	12	0.0%	0	189	206	108	1.6%	19	0.0%	0	333	3	0	336	239	108	19	366	369
SR-7		T	1,243	13.9%	108	0.0%	0	1,135	1,242	306	13.9%	168	0.0%	0	1,716	28	0	1,744	1,442	306	168	1,916	1,944
		R	92	0.0%	0	0.0%	0	92	101	45	0.0%	0	0.0%	0	146	0	0	146	117	45	0	162	162
Signalized	WB	U	24	0.0%	0	0.0%	0	24	26	0	0.0%	0	0.0%	0	26	0	0	26	30	0	0	30	30
		L	180	0.0%	0	2.3%	17	163	178	162	0.0%	0	2.3%	27	367	0	5	372	207	162	27	396	401
		T	1,805	0.0%	0	15.9%	120	1,685	1,843	376	0.0%	0	15.9%	187	2,406	0	31	2,437	2,140	376	187	2,703	2,734
4/14/2011		R	324	0.0%	0	0.0%	0	324	354	46	0.0%	0	0.0%	0	400	0	0	400	411	46	0	457	457
PHF=0.96	NB	L	146	0.0%	0	0.0%	0	146	160	25	0.0%	0	0.0%	0	185	0	0	185	185	25	0	210	210
		T	1,069	11.4%	89	0.0%	0	980	1,072	19	0.0%	0	0.0%	0	1,091	0	0	1,091	1,244	19	0	1,263	1,263
		R	149	1.7%	13	0.0%	0	136	149	158	1.7%	21	0.0%	0	328	3	0	331	172	158	21	351	354
	SB	L	220	0.0%	0	0.0%	0	220	241	20	0.0%	0	0.0%	0	261	0	0	261	279	20	0	299	299
		T	1,108	0.0%	0	1.8%	14	1,094	1,196	35	0.0%	0	1.8%	21	1,252	0	4	1,256	1,389	35	21	1,445	1,449
		R	253	0.0%	0	0.0%	0	253	277	91	0.0%	0	0.0%	0	368	0	0	368	321	91	0	412	412
2 Sample Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	1,577	0.0%	0	0.0%	0	1,577	1,725	471	15.6%	189	0.0%	0	2,385	32	0	2,417	2,002	471	189	2,662	2,694
SW Service Rd		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized		T	2,319	0.0%	0	12.2%	92	2,227	2,436	562	0.0%	0	12.2%	143	3,141	0	24	3,165	2,828	562	143	3,533	3,557
2011-2035		R	37	2.9%	23	0.0%	0	14	15	0	15.0%	182	0.0%	0	197	30	0	227	17	0	182	199	229
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
4/14/2011		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
PHF=0.71		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		R	86	0.0%	0	6.0%	45	41	45	0	0.0%	0	6.0%	71	116	0	12	128	52	0	71	123	135
3 Sample Rd	EB	U	58	0.0%	0	0.0%	0	58	63	0	0.0%	0	0.0%	0	63	0	0	63	74	0	0	74	74
and		L	152	15.6%	121	0.0%	0	31	34	179	15.6%	189	0.0%	0	402	32	0	434	40	179	189	408	440
NW 54th Ave		T	1,603	0.0%	0	0.0%	0	1,603	1,753	291	0.0%	0	0.0%	0	2,044	0	0	2,044	2,035	291	0	2,326	2,326
		R	39	0.0%	0	0.0%	0	39	43	0	0.0%	0	0.0%	0	43	0	0	43	50	0	0	50	50
Signalized	WB	L	338	0.0%	0	0.0%	0	338	370	44	0.0%	0	0.0%	0	414	0	0	414	429	44	0	473	473
		T	2,071	2.9%	23	0.0%	0	2,048	2,239	402	0.0%	0	0.0%	0	2,641	0	0	2,641	2,600	402	0	3,002	3,002
		R	291	27.8%	216	0.0%	0	75	82	95	15.7%	190	0.0%	0	367	32	0	399	95	95	190	380	412
4/14/2011	NB	L	149	0.0%	0	0.0%	0	149	163	0	0.0%	0	0.0%	0	163	0	0	163	189	0	0	189	189
PHF=0.95		T	129	7.7%	60	0.0%	0	69	76	3	7.7%	93	0.0%	0	172	16	0	188	88	3	93	184	200
		R	325	0.0%	0	0.0%	0	325	355	34	0.0%	0	0.0%	0	389	0	0	389	413	34	0	447	447
	SB	L	308	0.0%	0	33.8%	256	52	57	120	0.0%	0	29.8%	350	527	0	59	586	66	120	350	536	595
		T	83	0.0%	0	5.8%	44	39	42	13	0.0%	0	5.8%	68	123	0	11	134	49	13	68	130	141
		R	78	0.0%	0	12.2%	92	0	0	160	0.0%	0	12.2%	143	303	0	24	327	0	160	143	303	327

TABLE I-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVE: B
20-Apr-12

INTERSECTION	Movement		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distribution	IN 777	Percent Outbound Distribution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Developments (2011-2020)	2020 Tract 65 SCCC Background (Alt. B) Percent Inbound Distribution	IN 1210	Percent Outbound Distribution	OUT 1176	2020 BACKGROUND	2020 TOTAL 2020 Fee-To-Trust IN 203	OUT 197	TOTAL 2020 TRAFFIC	2035 BACKGOUND 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACKGROUND	TOTAL 2035 TRAFFIC
4 Sample Rd	EB	L	9	0.0%	0	0.0%	0	9	10	98	0.0%	0	0.0%	0	108	0	0	108	11	98	0	109	109
and		T	1,819	0.0%	0	31.8%	240	1,579	1,727	346	0.0%	0	28.8%	339	2,412	0	57	2,469	2,005	346	339	2,690	2,747
Banks Rd		R	120	0.0%	0	2.0%	15	105	115	0	0.0%	0	1.0%	12	127	0	2	129	134	0	12	146	148
Existing	WB	U	6	0.0%	0	0.0%	0	6	7	0	0.0%	0	0.0%	0	7	0	0	7	8	0	0	8	8
Unsignalized		L	196	0.0%	0	0.0%	0	196	214	0	0.0%	0	0.0%	0	214	0	0	214	249	0	0	249	249
		T	2,758	30.7%	239	0.0%	0	2,519	2,755	372	26.7%	323	0.0%	0	3,450	54	0	3,504	3,199	372	323	3,894	3,948
Signalized		R	12	0.8%	6	0.0%	0	6	6	177	2.8%	34	0.0%	0	217	6	0	223	7	177	34	218	224
2020/2035	NB	U	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	58	2.0%	24	0.0%	0	82	4	0	86	0	58	24	82	86
4/14/2011		R	207	0.0%	0	0.0%	0	207	226	0	0.0%	0	0.0%	0	226	0	0	226	263	0	0	263	263
PHF=0.93	SB	L	0	0.0%	0	0.0%	0	0	0	214	0.0%	0	3.0%	35	249	0	6	255	0	214	35	249	255
		T	0	0.0%	0	0.0%	0	0	0	78	0.0%	0	1.0%	12	90	0	2	92	0	78	12	90	92
		R	6	0.0%	0	0.0%	0	6	7	171	0.0%	0	0.0%	0	178	0	0	178	8	171	0	179	179
5 Sample Rd	EB	L	248	0.0%	0	0.0%	0	248	271	112	0.0%	0	0.0%	0	383	0	0	383	315	112	0	427	427
and		T	1,241	0.0%	0	23.9%	181	1,060	1,159	423	0.0%	0	23.9%	281	1,863	0	47	1,910	1,346	423	281	2,050	2,097
Lyons		R	416	0.0%	0	7.9%	60	356	390	166	0.0%	0	7.9%	93	649	0	16	665	453	166	93	712	728
	WB	U	11	0.0%	0	0.0%	0	11	12	0	0.0%	0	0.0%	0	12	0	0	12	14	0	0	14	14
Signalized		L	162	0.0%	0	0.0%	0	162	177	6	0.0%	0	0.0%	0	183	0	0	183	206	6	0	212	212
		T	1,943	25.6%	199	0.0%	0	1,744	1,907	326	25.6%	310	0.0%	0	2,543	52	0	2,595	2,214	326	310	2,850	2,902
4/14/2011		R	391	0.0%	0	0.0%	0	391	428	131	0.0%	0	0.0%	0	559	0	0	559	496	131	0	627	627
PHF=0.92	NB	L	480	5.9%	46	0.0%	0	434	475	157	3.9%	47	0.0%	0	679	8	0	687	551	157	47	755	763
		T	1,150	0.0%	0	0.0%	0	1,150	1,258	117	0.0%	0	0.0%	0	1,375	0	0	1,375	1,460	117	0	1,577	1,577
		R	140	0.0%	0	0.0%	0	140	153	3	0.0%	0	0.0%	0	156	0	0	156	178	3	0	181	181
	SB	U	10	0.0%	0	0.0%	0	10	11	0	0.0%	0	0.0%	0	11	0	0	11	13	0	0	13	13
		L	307	0.0%	0	0.0%	0	307	336	126	0.0%	0	0.0%	0	462	0	0	462	390	126	0	516	516
		T	955	0.0%	0	0.0%	0	955	1,044	186	0.0%	0	0.0%	0	1,230	0	0	1,230	1,213	186	0	1,399	1,399
		R	420	0.0%	0	0.0%	0	420	459	26	0.0%	0	0.0%	0	485	0	0	485	533	26	0	559	559
6 SR-7	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
NW 40th St		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		R	232	0.0%	0	30.6%	231	0	0	0	0.0%	0	25.6%	301	301	0	50	351	0	0	301	301	351
4/14/2011	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	1,493	0.0%	0	0.0%	0	1,493	1,633	495	0.0%	0	0.0%	0	2,128	0	0	2,128	1,896	495	0	2,391	2,391
PHF=0.81		R	100	13.0%	101	0.0%	0	0	0	0	13.0%	157	0.0%	0	157	26	0	183	0	0	157	157	183
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	1.8%	21	21	0	4	25	0	0	21	21	25
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0

TABLE I-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVE: B
20-Apr-12

INTERSECTION	Movement		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distribution	IN 777	Percent Outbound Distribution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND: 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Developments (2011-2020)	2020 Tract 65 SCCC Background (Alt. B) Percent Inbound Distribution	IN 1210	Percent Outbound Distribution	OUT 1176	2020 BACKGROUND	2020 TOTAL: 2020 Fee-To-Trust IN 203	OUT 197	TOTAL 2020 TRAFFIC	2035 BACKGOUND: 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACKGROUND	TOTAL 2035 TRAFFIC
7 SR-7	EB	L	211	0.0%	0	0.0%	0	211	231	0	0.0%	0	0.0%	0	231	0	0	231	268	0	0	268	268
and		T	30	1.0%	8	0.0%	0	22	24	16	1.0%	12	0.0%	0	52	2	0	54	28	16	12	56	58
Cullum Rd		R	29	0.0%	0	0.0%	0	29	32	0	0.0%	0	0.0%	0	32	0	0	32	37	0	0	37	37
	WB	L	28	0.0%	0	1.8%	14	14	15	101	0.0%	0	1.8%	21	137	0	4	141	18	101	21	140	144
Signalized		T	45	0.0%	0	2.1%	16	29	31	19	0.0%	0	2.1%	25	75	0	4	79	36	19	25	80	84
		R	197	0.0%	0	7.7%	58	139	152	344	0.0%	0	2.3%	27	523	0	5	528	177	344	27	548	553
4/14/2011	NB	U	47	0.0%	0	0.0%	0	47	51	0	0.0%	0	0.0%	0	51	0	0	51	60	0	0	60	60
PHF=0.94		L	147	0.0%	0	0.0%	0	147	161	0	0.0%	0	0.0%	0	161	0	0	161	187	0	0	187	187
		T	1,446	0.0%	0	0.0%	0	1,446	1,581	151	0.0%	0	25.6%	301	2,033	0	50	2,083	1,836	151	301	2,288	2,338
		R	17	0.0%	0	0.0%	0	17	19	414	0.0%	0	0.0%	0	433	0	0	433	22	414	0	436	436
	SB	U	39	0.0%	0	0.0%	0	39	43	0	0.0%	0	0.0%	0	43	0	0	43	50	0	0	50	50
		L	237	31.2%	242	0.0%	0	0	0	279	21.8%	264	0.0%	0	543	44	0	587	0	279	264	543	587
		T	1,477	0.0%	0	0.0%	0	1,477	1,615	86	0.0%	0	0.0%	0	1,701	0	0	1,701	1,875	86	0	1,961	1,961
		R	292	0.0%	0	0.0%	0	292	319	0	0.0%	0	0.0%	0	319	0	0	319	371	0	0	371	371
8 SR-7	EB	U	40	0.0%	0	0.0%	0	40	44	0	0.0%	0	0.0%	0	44	0	0	44	51	0	0	51	51
and		L	498	0.0%	0	0.0%	0	498	545	18	0.0%	0	0.0%	0	563	0	0	563	632	18	0	650	650
Wiles Rd		T	707	0.0%	0	0.0%	0	707	773	78	0.0%	0	0.0%	0	851	0	0	851	898	78	0	976	976
		R	247	3.8%	30	0.0%	0	217	237	60	3.8%	46	0.0%	0	343	8	0	351	275	60	46	381	389
Signalized	WB	L	318	9.4%	73	0.0%	0	245	268	6	0.0%	0	0.0%	0	274	0	0	274	311	6	0	317	317
		T	941	0.0%	0	0.0%	0	941	1,029	71	0.0%	0	0.0%	0	1,100	0	0	1,100	1,195	71	0	1,266	1,266
4/14/2011		R	155	0.0%	0	0.0%	0	155	170	107	0.0%	0	0.0%	0	277	0	0	277	197	107	0	304	304
PHF=0.97	NB	U	50	0.0%	0	0.0%	0	50	55	0	0.0%	0	0.0%	0	55	0	0	55	63	0	0	63	63
		L	288	0.0%	0	2.5%	19	269	294	94	0.0%	0	2.5%	29	417	0	5	422	341	94	29	464	469
		T	1,393	0.0%	0	25.4%	192	1,201	1,314	298	0.0%	0	25.4%	299	1,911	0	50	1,961	1,525	298	299	2,122	2,172
		R	253	0.0%	0	10.4%	79	174	190	5	0.0%	0	0.0%	0	195	0	0	195	221	5	0	226	226
	SB	U	51	0.0%	0	0.0%	0	51	56	0	0.0%	0	0.0%	0	56	0	0	56	65	0	0	65	65
		L	161	0.0%	0	0.0%	0	161	176	56	0.0%	0	0.0%	0	232	0	0	232	204	56	0	260	260
		T	1,449	18.0%	140	0.0%	0	1,309	1,431	266	18.0%	218	0.0%	0	1,915	37	0	1,952	1,662	266	218	2,146	2,183
		R	559	0.0%	0	0.0%	0	559	611	11	0.0%	0	0.0%	0	622	0	0	622	710	11	0	721	721
9 Lyons Rd	EB	L	24	0.0%	0	0.0%	0	24	26	94	0.0%	0	5.2%	61	181	0	10	191	30	94	61	185	195
and		T	0	0.0%	0	0.0%	0	0	0	16	0.0%	0	0.0%	0	16	0	0	16	0	16	0	16	16
Cullum Rd		R	75	0.0%	0	0.0%	0	75	82	40	0.0%	0	0.0%	0	122	0	0	122	95	40	0	135	135
Existing	WB	L	15	0.0%	0	0.0%	0	15	16	0	0.0%	0	0.0%	0	16	0	0	16	19	0	0	19	19
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	15	0.0%	0	0.0%	0	15	0	0	15	0	15	0	15	15
		R	32	0.0%	0	0.0%	0	32	35	0	0.0%	0	0.0%	0	35	0	0	35	41	0	0	41	41
Signalized	NB	L	62	0.0%	0	0.0%	0	62	68	25	0.0%	0	0.0%	0	93	0	0	93	79	25	0	104	104
2020/2035		T	1,804	0.0%	0	0.0%	0	1,804	1,973	716	0.0%	0	0.0%	0	2,689	0	0	2,689	2,291	716	0	3,007	3,007
		R	27	0.0%	0	0.0%	0	27	30	0	0.0%	0	0.0%	0	30	0	0	30	34	0	0	34	34
5/12/2011	SB	U	7	0.0%	0	0.0%	0	7	8	0	0.0%	0	0.0%	0	8	0	0	8	9	0	0	9	9
		L	57	0.0%	0	0.0%	0	57	62	0	0.0%	0	0.0%	0	62	0	0	62	72	0	0	72	72
PHF=0.90		T	1,735	0.0%	0	0.0%	0	1,735	1,898	434	0.0%	0	0.0%	0	2,332	0	0	2,332	2,203	434	0	2,637	2,637
		R	11	0.0%	0	0.0%	0	11	12	48	4.7%	57	0.0%	0	117	10	0	127	14	48	57	119	129

TABLE I-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVE: B
20-Apr-12

INTERSECTION	Move-ment		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distri-bution	IN 777	Percent Outbound Distri-bution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop-ments (2011-2020)	2020 Tract 65 SCCC Background (Alt. B) Percent Inbound Distri-bution	IN 1210	Percent Outbound Distri-bution	OUT 1176	2020 BACK-GROUND	2020 TOTAL 2020 Fee-To-Trust IN 203	OUT 197	TOTAL 2020 TRAFFIC	2035 BACKGOUND 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACK-GROUND	TOTAL 2035 TRAFFIC
10 Lyons Rd	EB	L	415	0.0%	0	6.0%	45	370	405	69	0.0%	0	3.0%	35	509	0	6	515	470	69	35	574	580
and		T	536	0.0%	0	4.4%	33	503	550	56	0.0%	0	2.2%	26	632	0	4	636	638	56	26	720	724
Wiles Rd		R	360	0.0%	0	0.0%	0	360	394	21	0.0%	0	0.0%	0	415	0	0	415	457	21	0	478	478
	WB	L	351	0.0%	0	0.0%	0	351	384	59	2.1%	25	0.0%	0	468	4	0	472	446	59	25	530	534
Signalized		T	859	4.1%	32	0.0%	0	827	905	112	2.1%	25	0.0%	0	1,042	4	0	1,046	1,050	112	25	1,187	1,191
		R	306	0.0%	0	0.0%	0	306	335	0	0.0%	0	0.0%	0	335	0	0	335	389	0	0	389	389
4/14/2011	NB	L	324	0.0%	0	0.0%	0	324	354	0	0.0%	0	0.0%	0	354	0	0	354	411	0	0	411	411
PHF=0.92		T	1,309	0.0%	0	0.0%	0	1,309	1,432	573	0.0%	0	6.0%	71	2,076	0	12	2,088	1,662	573	71	2,306	2,318
		R	250	0.0%	0	0.0%	0	250	273	149	0.0%	0	2.2%	26	448	0	4	452	317	149	26	492	496
	SB	L	140	0.0%	0	0.0%	0	140	153	0	0.0%	0	0.0%	0	153	0	0	153	178	0	0	178	178
		T	1,108	0.0%	0	0.0%	0	1,108	1,212	404	2.6%	31	0.0%	0	1,647	5	0	1,652	1,407	404	31	1,842	1,847
		R	254	5.3%	41	0.0%	0	213	233	140	2.6%	31	0.0%	0	404	5	0	409	270	140	31	441	446
11 NW 54th Ave	EB	L	18	0.0%	0	2.4%	18	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
South Casino		R	47	0.0%	0	6.2%	47	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Access	WB	L	42	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Existing		T	11	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized		R	24	0.0%	0	8.8%	67	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Signalized	NB	L	123	14.7%	114	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
2020/2035		T	381	29.4%	228	0.0%	0	153	168	277	35.0%	424	0.0%	0	869	71	0	940	195	277	424	896	967
		R	55	7.0%	54	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
4/21/2011	SB	L	18	2.4%	19	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
PHF=0.95		T	299	0.0%	0	36.8%	278	21	23	294	0.0%	0	41.8%	492	809	0	82	891	27	294	492	813	895
		R	58	7.4%	57	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
12 NW 54th Ave	EB	L	26	0.0%	0	3.4%	26	0	0	0	0.0%	0	13.6%	160	160	0	27	187	0	0	160	160	187
and		T	3	0.0%	0	0.0%	0	0	0	0	0.0%	0	2.0%	24	24	0	4	28	0	0	24	24	28
NW 40th St		R	108	0.0%	0	14.8%	112	0	0	0	0.0%	0	23.9%	281	281	0	47	328	0	0	281	281	328
Existing	WB	L	26	0.0%	0	3.1%	23	3	3	111	0.0%	0	0.0%	0	114	0	0	114	4	111	0	115	115
Unsignalized		T	5	0.6%	5	0.0%	0	0	0	0	4.8%	58	0.0%	0	58	10	0	68	0	0	58	58	68
		R	29	0.0%	0	2.8%	21	8	9	212	0.0%	0	0.0%	0	221	0	0	221	10	212	0	222	222
Signalized	NB	L	228	29.4%	228	0.0%	0	0	0	0	35.0%	424	0.0%	0	424	71	0	495	0	0	424	424	495
2020/2035		T	150	0.0%	0	2.4%	18	132	145	108	0.0%	0	0.0%	0	253	0	0	253	168	108	0	276	276
		R	9	0.0%	0	0.0%	0	9	10	87	0.0%	0	0.0%	0	97	0	0	97	11	87	0	98	98
4/14/2011	SB	L	75	5.1%	40	3.0%	23	12	13	251	0.0%	0	5.0%	59	323	0	10	333	15	251	59	325	335
PHF=0.86		T	243	9.8%	76	18.9%	143	24	26	102	0.0%	0	16.9%	199	327	0	33	360	30	102	199	331	364
		R	14	3.0%	23	0.0%	0	0	0	0	18.0%	218	0.0%	0	218	37	0	255	0	0	218	218	255

TABLE I-4
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 & 2035 INTERSECTION VOLUMES: ALTERNATIVE: B
20-Apr-12

INTERSECTION	Movement		2011 All Peak Season Volume	SCCC Phase II Trips (2011) Percent Inbound Distribution	IN 777	Percent Outbound Distribution	OUT 756	Non-SCCC Phase II Trips (Peak Season minus SCCC Trips)	2020 BACKGOUND: 2020 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Developments (2011-2020)	2020 Tract 65 SCCC Background (Alt. B) Percent Inbound Distribution	IN 1210	Percent Outbound Distribution	OUT 1176	2020 BACKGROUND	2020 TOTAL: 2020 Fee-To-Trust IN 203	OUT 197	TOTAL 2020 TRAFFIC	2035 BACKGOUND: 2035 Non-SCCC Traffic x Growth Rate (1% per yr)	Committed Develop. 2012-2020	SCCC Trust Trips	2035 BACKGROUND	TOTAL 2035 TRAFFIC
13 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
North Casino		R	165	0.0%	0	21.9%	166	0	0	0	0.0%	0	21.9%	258	258	0	43	301	0	0	258	258	301
Access	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Existing		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Unsignalized	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	237	0.0%	0	11.6%	88	149	163	329	0.0%	0	0.0%	0	492	0	0	492	189	329	0	518	518
Signalized		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
2020/2035	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		T	138	17.9%	139	0.0%	0	0	0	396	18.0%	218	0.0%	0	614	37	0	651	0	396	218	614	651
		R	111	14.3%	111	0.0%	0	0	0	0	14.2%	172	0.0%	0	172	29	0	201	0	0	172	172	201
14 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	288	0.0%	0	0.0%	0	288	0	0	288	0	288	0	288	288
Cullum Rd		R	295	37.2%	289	0.0%	0	6	7	143	22.8%	276	0.0%	0	426	46	0	472	8	143	276	427	473
	WB	L	0	0.0%	0	0.0%	0	0	0	59	9.4%	114	0.0%	0	173	19	0	192	0	59	114	173	192
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	26	0.0%	0	0.0%	0	26	0	0	26	0	26	0	26	26
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73	0	73	0	73	73
	NB	L	212	0.0%	0	11.6%	88	124	135	53	0.0%	0	6.2%	73	261	0	12	273	157	53	73	283	295
Roundabout		T	0	0.0%	0	0.0%	0	0	0	276	0.0%	0	0.0%	0	276	0	0	276	0	276	0	276	276
2020/2035		R	0	0.0%	0	0.0%	0	0	0	82	0.0%	0	10.4%	122	204	0	20	224	0	82	122	204	224
	SB	L	0	0.0%	0	0.0%	0	0	0	65	0.0%	0	0.0%	0	65	0	0	65	0	65	0	65	65
		T	0	0.0%	0	0.0%	0	0	0	194	0.0%	0	0.0%	0	194	0	0	194	0	194	0	194	194
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
15 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	5.2%	61	134	0	10	144	0	73	61	134	144
and		T	0	0.0%	0	0.0%	0	0	0	49	0.0%	0	5.2%	61	110	0	10	120	0	49	61	110	120
Cullum Rd		R	0	0.0%	0	0.0%	0	0	0	219	0.0%	0	0.0%	0	219	0	0	219	0	219	0	219	219
	WB	L	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73	0	73	0	73	73
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	22	4.7%	57	0.0%	0	79	10	0	89	0	22	57	79	89
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	0	73	0	73	0	73	73
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Roundabout		T	0	0.0%	0	0.0%	0	0	0	184	0.0%	0	0.0%	0	184	0	0	184	0	184	0	184	184
2020/2035		R	0	0.0%	0	0.0%	0	0	0	113	0.0%	0	0.0%	0	113	0	0	113	0	113	0	113	113
	SB	L	0	0.0%	0	0.0%	0	0	0	86	0.0%	0	0.0%	0	86	0	0	86	0	86	0	86	86
		T	0	0.0%	0	0.0%	0	0	0	219	0.0%	0	0.0%	0	219	0	0	219	0	219	0	219	219
		R	0	0.0%	0	0.0%	0	0	0	108	4.7%	57	0.0%	0	165	10	0	175	0	108	57	165	175
16 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
and		T	1,103	0.0%	0	10.4%	79	1,024	1,120	13	0.0%	0	0.0%	0	1,133	0	0	1,133	1,300	13	0	1,313	1,313
Wiles Rd		R	3	0.0%	0	0.0%	0	3	3	126	0.0%	0	0.0%	0	129	0	0	129	4	126	0	130	130
Existing	WB	L	3	0.0%	0	0.0%	0	3	3	260	4.7%	57	0.0%	0	320	10	0	330	4	260	57	321	331
Unsignalized		T	1,465	9.4%	73	0.0%	0	1,392	1,523	20	0.0%	0	0.0%	0	1,543	0	0	1,543	1,768	20	0	1,788	1,788
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
Signalized	NB	L	6	0.0%	0	0.0%	0	6	7	165	0.0%	0	0.0%	0	172	0	0	172	8	165	0	173	173
2020/2035		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		R	7	0.0%	0	0.0%	0	7	8	157	0.0%	0	5.2%	61	226	0	10	236	9	157	61	227	237
5/12/2011	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
PHF=0.88		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0	0	0	0	0	0

TABLE I-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 AND 2035 INTERSECTION VOLUMES: SUB-ALTERNATIVE C-1
18-Apr-12

		2011		SCCC TRIPS				Non-SCCC TRIPS PHASE 2	2020							2035		
INTERSECTION	MOVEMENT		PEAK SEASON VOLUME	PERCENT IN DISTRIB	Vol. 777	PERCENT OUT DISTRIB	Out 756		Non-SCCC TRAFFIC 2020	Committed Developments (2011-2020)	Alt C-1 Inbound Trip Dist.	C-1 IN Trips 777	Alt C-1 Outbound Trip Dist.	C-1 OUT Trips 756	2020 ALT C-1 Total Int. Vol.	Non-SCCC TRAFFIC	Committed Developments (2011-2020)	ALT C-1 TOTAL INT VOL.
1 Sample Rd	EB	U	9	0.0%	0	0.0%	0	9	10	0	0.0%	0	0.0%	0	10	11	0	11
and		L	201	1.6%	12	0.0%	0	189	206	108	1.6%	12	0.0%	0	326	239	108	359
SR-7		T	1,243	13.9%	108	0.0%	0	1,135	1,242	306	13.9%	108	0.0%	0	1,656	1,442	306	1,856
		R	92	0.0%	0	0.0%	0	92	101	45	0.0%	0	0.0%	0	146	117	45	162
Signalized	WB	U	24	0.0%	0	0.0%	0	24	26	0	0.0%	0	0.0%	0	26	30	0	30
		L	180	0.0%	0	2.3%	17	163	178	162	0.0%	0	2.3%	17	357	207	162	386
4/14/2011		T	1,805	0.0%	0	15.9%	120	1,685	1,843	376	0.0%	0	15.9%	120	2,339	2,140	376	2,636
		R	324	0.0%	0	0.0%	0	324	354	46	0.0%	0	0.0%	0	400	411	46	457
PHF=0.96	NB	L	146	0.0%	0	0.0%	0	146	160	25	0.0%	0	0.0%	0	185	185	25	210
		T	1,069	11.4%	89	0.0%	0	980	1,072	19	0.0%	0	0.0%	0	1,091	1,244	19	1,263
		R	149	1.7%	13	0.0%	0	136	149	158	1.7%	13	0.0%	0	320	172	158	343
	SB	L	220	0.0%	0	0.0%	0	220	241	20	0.0%	0	0.0%	0	261	279	20	299
		T	1,108	0.0%	0	1.8%	14	1,094	1,196	35	0.0%	0	1.8%	14	1,245	1,389	35	1,438
		R	253	0.0%	0	0.0%	0	253	277	91	0.0%	0	0.0%	0	368	321	91	412
2 Sample Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	1,577	0.0%	0	0.0%	0	1,577	1,725	471	15.6%	121	0.0%	0	2,317	2,002	471	2,594
SW Service Rd		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	2,319	0.0%	0	12.2%	92	2,227	2,436	562	0.0%	0	12.2%	92	3,090	2,828	562	3,482
		R	37	2.9%	23	0.0%	0	14	15	0	2.9%	23	0.0%	0	38	17	0	40
4/14/2011	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.71		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	86	0.0%	0	6.0%	45	41	45	0	0.0%	0	6.0%	45	90	52	0	97
3 Sample Rd	EB	U	58	0.0%	0	0.0%	0	58	63	0	0.0%	0	0.0%	0	63	74	0	74
and		L	152	15.6%	121	0.0%	0	31	34	179	15.6%	121	0.0%	0	334	40	179	340
NW 54th Ave		T	1,603	0.0%	0	0.0%	0	1,603	1,753	291	0.0%	0	0.0%	0	2,044	2,035	291	2,326
		R	39	0.0%	0	0.0%	0	39	43	0	0.0%	0	0.0%	0	43	50	0	50
Signalized	WB	L	338	0.0%	0	0.0%	0	338	370	44	0.0%	0	0.0%	0	414	429	44	473
		T	2,071	2.9%	23	0.0%	0	2,048	2,239	402	2.9%	23	0.0%	0	2,664	2,600	402	3,025
4/14/2011		R	291	27.8%	216	0.0%	0	75	82	95	23.8%	185	0.0%	0	362	95	95	375
	NB	L	149	0.0%	0	0.0%	0	149	163	0	0.0%	0	0.0%	0	163	189	0	189
PHF=0.95		T	129	7.7%	60	0.0%	0	69	76	3	7.7%	60	0.0%	0	139	88	3	151
		R	325	0.0%	0	0.0%	0	325	355	34	0.0%	0	0.0%	0	389	413	34	447
	SB	L	308	0.0%	0	33.8%	256	52	57	120	0.0%	0	29.0%	219	396	66	120	405
		T	83	0.0%	0	5.8%	44	39	42	13	0.0%	0	5.8%	44	99	49	13	106
		R	78	0.0%	0	12.2%	92	0	0	160	0.0%	0	12.2%	92	252	0	160	252
4 Sample Rd	EB	L	9	0.0%	0	0.0%	0	9	10	98	0.0%	0	0.0%	0	108	11	98	109
and		T	1,819	0.0%	0	31.8%	240	1,579	1,727	346	0.0%	0	28.0%	212	2,285	2,005	346	2,563
Banks Rd		R	120	0.0%	0	2.0%	15	105	115	0	0.0%	0	1.0%	8	123	134	0	142
	WB	U	6	0.0%	0	0.0%	0	6	7	0	0.0%	0	0.0%	0	7	8	0	8
Unsignalized		L	196	0.0%	0	0.0%	0	196	214	0	0.0%	0	0.0%	0	214	249	0	249
		T	2,758	30.7%	239	0.0%	0	2,519	2,755	372	25.7%	200	0.0%	0	3,327	3,199	372	3,771
4/14/2011		R	12	0.8%	6	0.0%	0	6	6	177	3.8%	30	0.0%	0	213	7	177	214
	NB	U	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.93		L	0	0.0%	0	0.0%	0	0	0	0	1.0%	8	0.0%	0	8	0	0	8
		T	0	0.0%	0	0.0%	0	0	0	58	1.0%	8	0.0%	0	66	0	58	66
		R	207	0.0%	0	0.0%	0	207	226	0	0.0%	0	0.0%	0	226	263	0	263
	SB	L	0	0.0%	0	0.0%	0	0	0	214	0.0%	0	3.8%	29	243	0	214	243
		T	0	0.0%	0	0.0%	0	0	0	78	0.0%	0	1.0%	8	86	0	78	86
		R	6	0.0%	0	0.0%	0	6	7	171	0.0%	0	0.0%	0	178	8	171	179
5 Sample Rd	EB	L	248	0.0%	0	0.0%	0	248	271	112	0.0%	0	0.0%	0	383	315	112	427
and		T	1,241	0.0%	0	23.9%	181	1,060	1,159	423	0.0%	0	23.9%	181	1,763	1,346	423	1,950
Lyons		R	416	0.0%	0	7.9%	60	356	390	166	0.0%	0	7.9%	60	616	453	166	679
	WB	U	11	0.0%	0	0.0%	0	11	12	0	0.0%	0	0.0%	0	12	14	0	14
Signalized		L	162	0.0%	0	0.0%	0	162	177	6	0.0%	0	0.0%	0	183	206	6	212
		T	1,943	25.6%	199	0.0%	0	1,744	1,907	326	25.6%	199	0.0%	0	2,432	2,214	326	2,739
4/14/2011		R	391	0.0%	0	0.0%	0	391	428	131	0.0%	0	0.0%	0	559	496	131	627
	NB	L	480	5.9%	46	0.0%	0	434	475	157	3.9%	30	0.0%	0	662	551	157	738
PHF=0.92		T	1,150	0.0%	0	0.0%	0	1,150	1,258	117	0.0%	0	0.0%	0	1,375	1,460	117	1,577
		R	140	0.0%	0	0.0%	0	140	153	3	0.0%	0	0.0%	0	156	178	3	181
	SB	U	10	0.0%	0	0.0%	0	10	11	0	0.0%	0	0.0%	0	11	13	0	13
		L	307	0.0%	0	0.0%	0	307	336	126	0.0%	0	0.0%	0	462	390	126	516
		T	955	0.0%	0	0.0%	0	955	1,044	186	0.0%	0	0.0%	0	1,230	1,213	186	1,399
		R	420	0.0%	0	0.0%	0	420	459	26	0.0%	0	0.0%	0	485	533	26	559

TABLE I-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 AND 2035 INTERSECTION VOLUMES: SUB-ALTERNATIVE C-1
18-Apr-12

			2011	SCCC TRIPS				Non-SCCC TRIPS PHASE 2	2020							2035		
INTERSECTION	MOVEMENT		PEAK SEASON VOLUME	PERCENT IN DISTRIB	Vol. 777	PERCENT OUT DISTRIB	Out 756		Non-SCCC TRAFFIC 2020	Committed Developments (2011-2020)	Alt C-1 Inbound Trip Dist.	C-1 IN Trips 777	Alt C-1 Outbound Trip Dist.	C-1 OUT Trips 756	2020 ALT C-1 Total Int. Vol.	Non-SCCC TRAFFIC	Committed Developments (2011-2020)	ALT C-1 TOTAL INT VOL.
6 SR-7	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
NW 40th St		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	232	0.0%	0	30.6%	231	0	0	0	0.0%	0	25.6%	194	194	0	0	194
4/14/2011	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	1,493	0.0%	0	0.0%	0	1,493	1,633	495	0.0%	0	0.0%	0	2,128	1,896	495	2,391
PHF=0.81		R	100	13.0%	101	0.0%	0	0	0	0	13.0%	101	0.0%	0	101	0	0	101
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	1.8%	14	14	0	0	14
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
7 SR-7	EB	L	211	0.0%	0	0.0%	0	211	231	0	0.0%	0	0.0%	0	231	268	0	268
and		T	30	1.0%	8	0.0%	0	22	24	16	1.0%	8	0.0%	0	48	28	16	52
Cullum Rd		R	29	0.0%	0	0.0%	0	29	32	0	0.0%	0	0.0%	0	32	37	0	37
	WB	L	28	0.0%	0	1.8%	14	14	15	101	0.0%	0	1.8%	14	130	18	101	133
Signalized		T	45	0.0%	0	2.1%	16	29	31	19	0.0%	0	2.1%	16	66	36	19	71
		R	197	0.0%	0	7.7%	58	139	152	344	0.0%	0	2.3%	17	513	177	344	538
4/14/2011	NB	U	47	0.0%	0	0.0%	0	47	51	0	0.0%	0	0.0%	0	51	60	0	60
		L	147	0.0%	0	0.0%	0	147	161	0	0.0%	0	0.0%	0	161	187	0	187
PHF=0.94		T	1,446	0.0%	0	0.0%	0	1,446	1,581	151	0.0%	0	25.6%	194	1,926	1,836	151	2,181
		R	17	0.0%	0	0.0%	0	17	19	414	0.0%	0	0.0%	0	433	22	414	436
	SB	U	39	0.0%	0	0.0%	0	39	43	0	0.0%	0	0.0%	0	43	50	0	50
		L	237	31.2%	242	0.0%	0	0	0	279	21.8%	169	0.0%	0	448	0	279	448
		T	1,477	0.0%	0	0.0%	0	1,477	1,615	86	0.0%	0	0.0%	0	1,701	1,875	86	1,961
		R	292	0.0%	0	0.0%	0	292	319	0	0.0%	0	0.0%	0	319	371	0	371
8 SR-7	EB	U	40	0.0%	0	0.0%	0	40	44	0	0.0%	0	0.0%	0	44	51	0	51
and		L	498	0.0%	0	0.0%	0	498	545	18	0.0%	0	0.0%	0	563	632	18	650
Wiles Rd		T	707	0.0%	0	0.0%	0	707	773	78	0.0%	0	0.0%	0	851	898	78	976
		R	247	3.8%	30	0.0%	0	217	237	60	3.8%	30	0.0%	0	327	275	60	365
Signalized	WB	L	318	9.4%	73	0.0%	0	245	268	6	0.0%	0	0.0%	0	274	311	6	317
		T	941	0.0%	0	0.0%	0	941	1,029	71	0.0%	0	0.0%	0	1,100	1,195	71	1,266
4/14/2011		R	155	0.0%	0	0.0%	0	155	170	107	0.0%	0	0.0%	0	277	197	107	304
	NB	U	50	0.0%	0	0.0%	0	50	55	0	0.0%	0	0.0%	0	55	63	0	63
PHF=0.97		L	288	0.0%	0	2.5%	19	269	294	94	0.0%	0	2.5%	19	407	341	94	454
		T	1,393	0.0%	0	25.4%	192	1,201	1,314	298	0.0%	0	25.4%	192	1,804	1,525	298	2,015
		R	253	0.0%	0	10.4%	79	174	190	5	0.0%	0	0.0%	0	195	221	5	226
	SB	U	51	0.0%	0	0.0%	0	51	56	0	0.0%	0	0.0%	0	56	65	0	65
		L	161	0.0%	0	0.0%	0	161	176	56	0.0%	0	0.0%	0	232	204	56	260
		T	1,449	18.0%	140	0.0%	0	1,309	1,431	266	18.0%	140	0.0%	0	1,837	1,662	266	2,068
		R	559	0.0%	0	0.0%	0	559	611	11	0.0%	0	0.0%	0	622	710	11	721
9 Lyons Rd	EB	L	24	0.0%	0	0.0%	0	24	26	94	0.0%	0	5.2%	39	159	30	94	163
and		T	0	0.0%	0	0.0%	0	0	0	16	0.0%	0	0.0%	0	16	0	16	16
Cullum Rd		R	75	0.0%	0	0.0%	0	75	82	40	0.0%	0	0.0%	0	122	95	40	135
	WB	L	15	0.0%	0	0.0%	0	15	16	0	0.0%	0	0.0%	0	16	19	0	19
Unsignalized		T	0	0.0%	0	0.0%	0	0	0	15	0.0%	0	0.0%	0	15	0	15	15
		R	32	0.0%	0	0.0%	0	32	35	0	0.0%	0	0.0%	0	35	41	0	41
5/12/2011	NB	L	62	0.0%	0	0.0%	0	62	68	25	0.0%	0	0.0%	0	93	79	25	104
		T	1,804	0.0%	0	0.0%	0	1,804	1,973	716	0.0%	0	0.0%	0	2,689	2,291	716	3,007
PHF=0.90		R	27	0.0%	0	0.0%	0	27	30	0	0.0%	0	0.0%	0	30	34	0	34
	SB	U	7	0.0%	0	0.0%	0	7	8	0	0.0%	0	0.0%	0	8	9	0	9
		L	57	0.0%	0	0.0%	0	57	62	0	0.0%	0	0.0%	0	62	72	0	72
		T	1,735	0.0%	0	0.0%	0	1,735	1,898	434	0.0%	0	0.0%	0	2,332	2,203	434	2,637
		R	11	0.0%	0	0.0%	0	11	12	48	4.7%	37	0.0%	0	97	14	48	99
10 Lyons Rd	EB	L	415	0.0%	0	6.0%	45	370	405	69	0.0%	0	3.0%	23	497	470	69	562
and		T	536	0.0%	0	4.4%	33	503	550	56	0.0%	0	2.2%	17	623	638	56	711
Wiles Rd		R	360	0.0%	0	0.0%	0	360	394	21	0.0%	0	0.0%	0	415	457	21	478
	WB	L	351	0.0%	0	0.0%	0	351	384	59	2.1%	16	0.0%	0	459	446	59	521
Signalized		T	859	4.1%	32	0.0%	0	827	905	112	2.1%	16	0.0%	0	1,033	1,050	112	1,178
		R	306	0.0%	0	0.0%	0	306	335	0	0.0%	0	0.0%	0	335	389	0	389
4/14/2011	NB	L	324	0.0%	0	0.0%	0	324	354	0	0.0%	0	0.0%	0	354	411	0	411
		T	1,309	0.0%	0	0.0%	0	1,309	1,432	573	0.0%	0	6.0%	45	2,050	1,662	573	2,280
PHF=0.92		R	250	0.0%	0	0.0%	0	250	273	149	0.0%	0	2.2%	17	439	317	149	483
	SB	L	140	0.0%	0	0.0%	0	140	153	0	0.0%	0	0.0%	0	153	178	0	178
		T	1,108	0.0%	0	0.0%	0	1,108	1,212	404	2.6%	20	0.0%	0	1,636	1,407	404	1,831
		R	254	5.3%	41	0.0%	0	213	233	140	2.6%	20	0.0%	0	393	270	140	430

TABLE I-5
SEMINOLE FEE-TO-TRUST DEVELOPMENT PROJECT / TRANSPORTATION PLANNING STUDY
2020 AND 2035 INTERSECTION VOLUMES: SUB-ALTERNATIVE C-1
18-Apr-12

		2011		SCCC TRIPS				Non-SCCC TRIPS PHASE 2	2020							2035		
INTERSECTION	MOVEMENT		PEAK SEASON VOLUME	PERCENT IN DISTRIB	Vol. 777	PERCENT OUT DISTRIB	Out 756		Non-SCCC TRAFFIC 2020	Committed Developments (2011-2020)	Alt C-1 Inbound Trip Dist.	C-1 IN Trips 777	Alt C-1 Outbound Trip Dist.	C-1 OUT Trips 756	2020 ALT C-1 Total Int. Vol.	Non-SCCC TRAFFIC	Committed Developments (2011-2020)	ALT C-1 TOTAL INT VOL.
11 NW 54th Ave	EB	L	18	0.0%	0	2.4%	18	0	0	0	0.0%	0	2.4%	18	18	0	0	18
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
South Casino Access		R	47	0.0%	0	6.2%	47	0	0	0	0.0%	0	15.0%	113	113	0	0	113
	WB	L	42	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Unsignalized		T	11	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	24	0.0%	0	8.8%	67	0	0	0	0.0%	0	0.0%	0	0	0	0	0
4/21/2011	NB	L	123	14.7%	114	0.0%	0	0	0	0	14.7%	114	0.0%	0	114	0	0	114
		T	381	29.4%	228	0.0%	0	153	168	277	32.4%	252	0.0%	0	697	195	277	724
PHF=0.95		R	55	7.0%	54	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	SB	L	18	2.4%	19	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	299	0.0%	0	36.8%	278	21	23	294	0.0%	0	32.0%	242	559	27	294	563
		R	58	7.4%	57	0.0%	0	0	0	0	9.8%	76	0.0%	0	76	0	0	76
12 NW 54th Ave	EB	L	26	0.0%	0	3.4%	26	0	0	0	0.0%	0	11.2%	85	85	0	0	85
and		T	3	0.0%	0	0.0%	0	3	3	0	0.0%	0	2.8%	21	24	4	0	25
NW 40th St		R	108	0.0%	0	14.8%	112	0	0	0	0.0%	0	15.1%	114	114	0	0	114
	WB	L	26	0.0%	0	3.1%	23	3	3	111	0.0%	0	0.0%	0	114	4	111	115
Unsignalized		T	5	0.6%	5	0.0%	0	0	0	0	4.8%	37	0.0%	0	37	0	0	37
		R	29	0.0%	0	2.8%	21	8	9	212	0.0%	0	0.0%	0	221	10	212	222
4/14/2011	NB	L	228	29.4%	228	0.0%	0	0	0	0	32.4%	252	0.0%	0	252	0	0	252
		T	150	0.0%	0	2.4%	18	132	145	108	0.0%	0	2.4%	18	271	168	108	294
PHF=0.86		R	9	0.0%	0	0.0%	0	9	10	87	0.0%	0	0.0%	0	97	11	87	98
	SB	L	75	5.1%	40	3.0%	23	12	13	251	0.0%	0	5.0%	38	302	15	251	304
		T	243	9.8%	76	18.9%	143	24	26	102	9.8%	76	16.9%	128	332	30	102	336
		R	14	3.0%	23	0.0%	0	0	0	0	3.0%	23	0.0%	0	23	0	0	23
13 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
North Casino Access		R	165	0.0%	0	21.9%	166	0	0	0	0.0%	0	21.9%	166	166	0	0	166
	WB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
Signalized		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	237	0.0%	0	11.6%	88	149	163	329	0.0%	0	0.0%	0	492	189	329	518
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	138	17.9%	139	0.0%	0	0	0	396	0.0%	0	0.0%	0	396	0	396	396
		R	111	14.3%	111	0.0%	0	0	0	0	19.4%	151	0.0%	0	151	0	0	151
14 NW 54th Ave	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	0	0.0%	0	0.0%	0	0	0	288	0.0%	0	0.0%	0	288	0	288	288
Cullum Rd		R	295	37.2%	289	0.0%	0	6	7	143	22.8%	177	0.0%	0	327	8	143	328
	WB	L	0	0.0%	0	0.0%	0	0	0	59	9.4%	73	0.0%	0	132	0	59	132
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	26	0.0%	0	0.0%	0	26	0	26	26
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	73	73
	NB	L	212	0.0%	0	11.6%	88	124	135	53	0.0%	0	6.2%	47	235	157	53	257
		T	0	0.0%	0	0.0%	0	0	0	276	0.0%	0	0.0%	0	276	0	276	276
		R	0	0.0%	0	0.0%	0	0	0	82	0.0%	0	10.4%	79	161	0	82	161
	SB	L	0	0.0%	0	0.0%	0	0	0	65	0.0%	0	0.0%	0	65	0	65	65
		T	0	0.0%	0	0.0%	0	0	0	194	0.0%	0	0.0%	0	194	0	194	194
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
15 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	5.2%	39	112	0	73	112
and		T	0	0.0%	0	0.0%	0	0	0	49	0.0%	0	5.2%	39	88	0	49	88
Cullum Rd		R	0	0.0%	0	0.0%	0	0	0	219	0.0%	0	0.0%	0	219	0	219	219
	WB	L	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	73	73
Full Intersection		T	0	0.0%	0	0.0%	0	0	0	22	4.7%	37	0.0%	0	59	0	22	59
Developed 2015		R	0	0.0%	0	0.0%	0	0	0	73	0.0%	0	0.0%	0	73	0	73	73
	NB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	184	0.0%	0	0.0%	0	184	0	184	184
		R	0	0.0%	0	0.0%	0	0	0	113	0.0%	0	0.0%	0	113	0	113	113
	SB	L	0	0.0%	0	0.0%	0	0	0	86	0.0%	0	0.0%	0	86	0	86	86
		T	0	0.0%	0	0.0%	0	0	0	219	0.0%	0	0.0%	0	219	0	219	219
		R	0	0.0%	0	0.0%	0	0	0	108	4.7%	37	0.0%	0	145	0	108	145
16 Banks Rd	EB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
and		T	1,103	0.0%	0	10.4%	79	1,024	1,120	13	0.0%	0	0.0%	0	1,133	1,300	13	1,313
Wiles Rd		R	3	0.0%	0	0.0%	0	3	3	126	0.0%	0	0.0%	0	129	4	126	130
	WB	L	3	0.0%	0	0.0%	0	3	3	260	4.7%	37	0.0%	0	300	4	260	301
Unsignalized		T	1,465	9.4%	73	0.0%	0	1,392	1,523	20	0.0%	0	0.0%	0	1,543	1,768	20	1,788
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
5/12/2011	NB	L	6	0.0%	0	0.0%	0	6	7	165	0.0%	0	0.0%	0	172	8	165	173
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
PHF=0.88		R	7	0.0%	0	0.0%	0	7	8	157	0.0%	0	5.2%	39	204	9	157	205
	SB	L	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		T	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0
		R	0	0.0%	0	0.0%	0	0	0	0	0.0%	0	0.0%	0	0	0	0	0

Appendix J

Transit Information

Appendix J-1

Broward County Transit

TIMETABLE

ROUTE 18

Monday - Friday

Effective 5/1/11

Golden Glades Park & Ride
to Sandalfoot Cove Boulevard
and Highway 441

via Highway 441

BROWARD COUNTY Transit

A service of the
Broward County Commission

facebook

YouTube

Download & Print at broward.org/bct

Wheelchair Accessible

Bike Racks

Customer Service

Monday - Friday ..... 7 am - 8 pm
Saturday, Sunday and Holidays .....8:30 am - 5 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 8:30 am - 4:30 pm

Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Senior/Youth/Disabled/Medicare,* Premium Express. Children (under 40 inches ride FREE).

Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

10 Ride Pass

10 Rides any time, any day.
Expires after the tenth ride is taken.

7 Day Pass

Unlimited rides for seven consecutive days.
Starts on the first day card is used.
Expires after the seventh day.

31 Day Adult Pass

Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31 Day Reduced Pass

Youth*, Seniors*, Disabled*, Medicare*, College Student*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31-Day Premium Pass

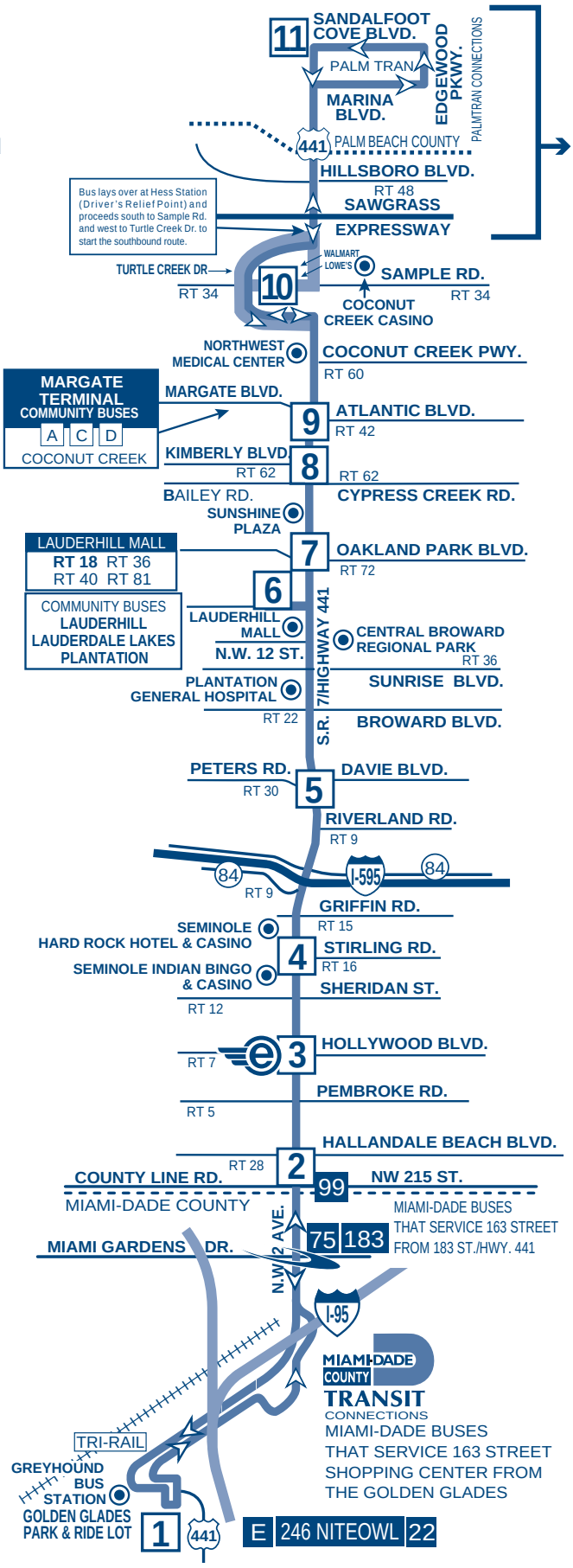
Unlimited rides for 31 consecutive days on Express or Regular.

Bus Passes are not redeemable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

***NOTICE:** Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

ROUTE 18

Golden Glades Park & Ride to Sandalfoot Cove Boulevard and Highway 441



Route 441 Breeze WEEKDAY Limited Service Stops:

- SAMPLE RD.
- COPANS RD.
- COCONUT CREEK PKWY.
- ATLANTIC BLVD.
- KIMBERLY BLVD.
- COMMERCIAL BLVD.
- OAKLAND PARK BLVD.
- LAUDERHILL MALL STOP ON U.S. 441 AT N.W.12 ST.
- BROWARD BLVD.
- DAVIE BLVD.
- RIVERLAND RD.
- GRIFFIN RD.
- STIRLING RD.
- SHERIDAN ST.
- HOLLYWOOD/PINES BLVD.
- PEMBROKE RD.
- HALLANDALE BEACH BLVD. Eastbound MIRAMAR PKWY. Westbound
- 215 ST./ COUNTY LINE ROAD
- 199 ST./IVES DAIRY RD.
- 183 ST./MIAMI GARDENS DR.
- GOLDEN GLADES PARK & RIDE/TRI-RAIL

Pick up a 411 Breeze Timetable for more information

POINTS OF INTEREST

- Lauderhill Mall
- Sunshine Plaza
- Northwest Medical Center
- Plantation General Hospital
- Central Broward
- Regional Park
- Coconut Creek Casino
- Seminole Hard Rock Hotel & Casino
- Seminole Indian Bingo & Casino
- Greyhound Bus Terminal

LEGEND

CONNECTING ROUTES — RT #

O MAIN ROUTE

TIMEPOINTS

The Breeze stop location

95 Express

N W E S

GOLDEN GLADES PARK AND RIDE/ TRI - RAIL STATION/GREYHOUND STATION

BCT CONNECTIONS 18 UNIVERSITY BREEZE 441 BREEZE

MDT CONNECTIONS E 22 49 77 95 246 277

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager,1 N. University Drive, Suite 3100A, Plantation, FL 33324.

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP

Times with the letter "G" before them indicate bus returns to garage.

There are additional bus stops in between those listed.

NORTHBOUND

To Sandalfoot Cove Boulevard and Highway 441

GOLDEN GLADES INTERCHANGE 1	NW 215 ST.& HWY. 441 2	HOLLYWOOD BLVD. & HWY. 441. 3	STIRLING RD. & HWY. 441 4	DAVIE BLVD. & HWY. 441 5	LAUDERHILL MALL 6	OAKLAND PARK BLVD. & HWY. 441 7	BAILEY RD. & HWY. 441 8	ATLANTIC BLVD. & HWY. 441 9	SAMPLE RD. & TURTLE CREEK DR. 10	SANDALFOOT/ BOCA RATON 11
					4:50a	4:59a	5:09a	5:16a	5:26a	
		4:47a	4:55a	5:04a	5:20a	5:29a	5:40a	5:48a	5:59a	6:14a
		5:11a	5:19a	5:28a	5:45a	5:55a	6:06a	6:14a	6:25a	
5:15a	5:27a	5:38a	5:47a	5:57a	6:15a	6:25a	6:36a	6:45a	6:57a	7:13a
5:30a	5:43a	5:54a	6:03a	6:13a	6:35a	6:46a	6:58a	7:07a	7:19a	
5:45a	5:58a	6:09a	6:18a	6:28a	6:50a	7:01a	7:13a	7:22a	7:34a	7:51a
6:00a	6:13a	6:24a	6:33a	6:44a	7:05a	7:16a	7:28a	7:37a	7:50a	
6:15a	6:28a	6:40a	6:50a	7:01a	7:20a	7:31a	7:44a	7:54a	8:07a	8:24a
6:30a	6:44a	6:56a	7:06a	7:17a	7:35a	7:47a	8:00a	8:10a	8:23a	
6:45a	6:59a	7:11a	7:21a	7:32a	7:50a	8:02a	8:15a	8:25a	8:38a	8:54a
7:00a	7:14a	7:26a	7:37a	7:49a	8:06a	8:18a	8:31a	8:40a	8:52a	
7:15a	7:29a	7:42a	7:53a	8:05a	8:20a	8:32a	8:44a	8:53a	9:05a	9:21a
7:30a	7:45a	7:58a	8:09a	8:21a	8:35a	8:46a	8:58a	9:07a	9:19a	
7:45a	8:00a	8:13a	8:24a	8:36a	8:50a	9:01a	9:13a	9:22a	9:34a	9:50a
8:00a	8:15a	8:28a	8:38a	8:49a	9:05a	9:16a	9:28a	9:37a	9:49a	
8:15a	8:30a	8:42a	8:52a	9:03a	9:20a	9:31a	9:43a	9:52a	10:04a	10:20a
8:30a	8:44a	8:56a	9:06a	9:17a	9:35a	9:46a	9:58a	10:07a	10:19a	
8:45a	8:59a	9:11a	9:21a	9:32a	9:50a	10:01a	10:13a	10:22a	10:34a	10:50a
9:00a	9:14a	9:26a	9:36a	9:47a	10:05a	10:16a	10:28a	10:37a	10:49a	
9:15a	9:29a	9:41a	9:51a	10:02a	10:20a	10:31a	10:43a	10:52a	11:04a	11:20a
9:30a	9:44a	9:56a	10:06a	10:17a	10:35a	10:46a	10:58a	11:07a	11:19a	
9:45a	9:59a	10:11a	10:21a	10:32a	10:50a	11:01a	11:13a	11:22a	11:34a	11:50a
10:00a	10:14a	10:26a	10:36a	10:47a	11:05a	11:16a	11:28a	11:37a	11:49a	
10:15a	10:29a	10:41a	10:51a	11:02a	11:20a	11:31a	11:43a	11:52a	12:04p	12:20p
10:30a	10:44a	10:56a	11:06a	11:17a	11:35a	11:46a	11:58a	12:07p	12:19p	
10:45a	10:59a	11:11a	11:21a	11:32a	11:50a	12:01p	12:13p	12:22p	12:34p	12:50p
11:00a	11:14a	11:26a	11:36a	11:47a	12:05p	12:16p	12:28p	12:37p	12:49p	
11:15a	11:29a	11:41a	11:51a	12:02p	12:20p	12:31p	12:43p	12:52p	1:04p	1:20p
11:30a	11:44a	11:56a	12:06p	12:17p	12:35p	12:46p	12:58p	1:07p	1:19p	
11:45a	11:59a	12:11p	12:21p	12:32p	12:50p	1:01p	1:13p	1:22p	1:34p	1:50p
12:00p	12:14p	12:26p	12:36p	12:47p	1:05p	1:16p	1:28p	1:37p	1:49p	
12:15p	12:29p	12:41p	12:51p	1:02p	1:20p	1:31p	1:43p	1:52p	2:04p	2:20p
12:30p	12:44p	12:56p	1:06p	1:17p	1:35p	1:46p	1:58p	2:07p	2:19p	
12:45p	12:59p	1:11p	1:21p	1:32p	1:50p	2:01p	2:13p	2:22p	2:34p	2:50p
1:00p	1:14p	1:26p	1:36p	1:47p	2:05p	2:16p	2:28p	2:37p	2:49p	
1:15p	1:29p	1:41p	1:51p	2:02p	2:20p	2:31p	2:43p	2:52p	3:04p	3:20p
1:30p	1:44p	1:56p	2:06p	2:17p	2:35p	2:46p	2:58p	3:07p	3:19p	
1:45p	1:59p	2:11p	2:21p	2:32p	2:50p	3:01p	3:13p	3:22p	3:34p	3:51p
2:00p	2:14p	2:26p	2:36p	2:47p	3:05p	3:16p	3:28p	3:38p	3:51p	
2:15p	2:29p	2:41p	2:51p	3:02p	3:20p	3:31p	3:44p	3:54p	4:07p	4:24p
2:30p	2:44p	2:56p	3:06p	3:17p	3:37p	3:49p	4:02p	4:12p	4:25p	4:43p
2:45p	2:59p	3:11p	3:21p	3:32p	3:55p	4:07p	4:20p	4:30p	4:43p	
3:00p	3:14p	3:26p	3:37p	3:49p	4:10p	4:22p	4:35p	4:46p	5:00p	5:18p
3:15p	3:29p	3:42p	3:53p	4:05p	4:25p	4:37p	4:51p	5:02p	5:16p	
3:30p	3:45p	3:58p	4:09p	4:21p	4:40p	4:53p	5:07p	5:18p	5:32p	5:49p
3:45p	4:00p	4:13p	4:24p	4:37p	4:55p	5:08p	5:22p	5:33p	5:46p	
4:00p	4:15p	4:28p	4:40p	4:53p	5:10p	5:23p	5:37p	5:47p	6:00p	6:17p
4:15p	4:30p	4:44p	4:56p	5:09p	5:25p	5:37p	5:50p	6:00p	6:13p	
4:30p	4:46p	5:00p	5:12p	5:25p	5:40p	5:52p	6:05p	6:15p	6:28p	6:44p
4:45p	5:01p	5:15p	5:27p	5:39p	5:55p	6:07p	6:20p	6:30p	6:42p G	
5:00p	5:16p	5:30p	5:41p	5:53p	6:10p	6:22p	6:35p	6:44p	6:56p	7:12p
5:15p	5:31p	5:44p	5:55p	6:07p	6:25p	6:37p	6:49p	6:58p	7:10p G	
5:30p	5:45p	5:58p	6:09p	6:21p	6:40p	6:51p	7:03p	7:12p	7:24p G	
5:45p	6:00p	6:13p	6:24p	6:36p	6:52p	7:03p	7:15p	7:24p	7:36p	7:52p
6:00p	6:15p	6:28p	6:38p	6:49p	7:05p	7:16p	7:28p	7:37p	7:49p G	
6:15p	6:30p	6:42p	6:52p	7:03p	7:20p	7:31p	7:43p	7:52p	8:04p	8:20p
6:30p	6:44p	6:56p	7:06p	7:17p	7:35p	7:46p	7:58p	8:07p	8:19p G	
6:45p	6:59p	7:11p	7:21p	7:32p	7:50p	8:01p	8:13p	8:22p	8:34p	8:49p
7:15p	7:29p	7:41p	7:51p	8:02p	8:20p	8:31p	8:42p	8:50p	9:01p G	
7:45p	7:59p	8:11p	8:21p	8:32p	8:50p	9:00p	9:11p	9:19p	9:30p	
8:15p	8:29p	8:40p	8:49p	8:59p	9:20p	9:30p	9:41p	9:49p	10:00p	
8:45p	8:58p	9:09p	9:18p	9:28p	9:45p	9:55p	10:06p	10:14p	10:25p G	
9:15p	9:28p	9:39p	9:48p	9:58p	10:15p	10:25p	10:35p	10:42p	10:52p	
9:45p	9:58p	10:09p	10:18p	10:28p	10:45p	10:54p	11:04p	11:11p	11:21p G	
10:15p	10:28p	10:38p	10:46p	10:55p	11:15p	11:24p	11:34p	11:41p	11:51p G	
11:00p	11:12p	11:22p	11:30p	11:39p	11:55p	12:04a	12:14a	12:21a	12:31a G	

TRANSIT WATCH

WHEN IT COMES TO OUR SAFETY, WE CAN ALWAYS USE AN EXTRA PAIR OF EYES AND EARS. BE ALERT. CALL 954-357-LOOK (5665). TELL US.

SOUTHBOUND

To Golden Glades Park & Ride

SANDALFOOT/ BOCA RATON 11	SAMPLE RD. & TURTLE CREEK RD. 10	ATLANTIC BLVD & HWY. 441 9	BAILEY RD. & HWY. 441. 8	OAKLAND PARK BLVD. & HWY. 441 7	LAUDERHILL MALL 6	DAVIE BLVD. & HWY. 441 5	STIRLING RD. & HWY. 441 4	HOLLYWOOD BLVD. & HWY. 441 3	NW 215 ST. & HWY. 441 2	GOLDEN GLADES PARK & RIDE 1
					4:50a	5:00a	5:11a	5:20a	5:30a	5:41a
	4:40a	4:49a	4:56a	5:06a	5:20a	5:30a	5:42a	5:52a	6:03a	6:14a
	5:10a	5:19a	5:26a	5:37a	5:50a	6:01a	6:13a	6:23a	6:35a	6:47a
					6:05a	6:16a	6:28a	6:39a	6:51a	7:03a
	5:35a	5:45a	5:53a	6:04a	6:20a	6:31a	6:44a	6:55a	7:07a	7:19a
					6:35a	6:47a	7:00a	7:11a	7:23a	7:35a
	6:00a	6:10a	6:18a	6:29a	6:50a	7:02a	7:15a	7:26a	7:38a	7:51a
6:00a	6:15a	6:25a	6:33a	6:45a	7:05a	7:17a	7:30a	7:42a	7:55a	8:08a
	6:30a	6:41a	6:50a	7:02a	7:20a	7:32a	7:46a	7:58a	8:11a	8:24a
6:30a	6:45a	6:56a	7:05a	7:17a	7:35a	7:48a	8:02a	8:14a	8:27a	8:39a
	7:00a	7:11a	7:20a	7:32a	7:50a	8:03a	8:17a	8:29a	8:41a	8:53a
7:00a	7:15a	7:26a	7:36a	7:49a	8:05a	8:18a	8:32a	8:43a	8:55a	9:07a
	7:30a	7:42a	7:52a	8:05a	8:20a	8:33a	8:46a	8:57a	9:09a	9:21a
7:30a	7:45a	7:57a	8:07a	8:20a	8:35a	8:47a	9:00a	9:11a	9:23a	9:35a
	8:00a	8:12a	8:22a	8:35a	8:50a	9:02a	9:15a	9:26a	9:38a	9:50a
8:00a	8:15a	8:27a	8:36a	8:48a	9:05a	9:17a	9:30a	9:41a	9:53a	10:05a
	8:30a	8:41a	8:50a	9:02a	9:20a	9:32a	9:45a	9:56a	10:08a	10:20a
8:30a	8:45a	8:56a	9:05a	9:17a	9:35a	9:47a	10:00a	10:11a	10:23a	10:35a
	9:00a	9:11a	9:20a	9:32a	9:50a	10:02a	10:15a	10:26a	10:38a	10:50a
9:00a	9:15a	9:26a	9:35a	9:47a	10:05a	10:17a	10:30a	10:41a	10:53a	11:05a
	9:30a	9:41a	9:50a	10:02a	10:20a	10:32a	10:45a	10:56a	11:08a	11:20a
9:30a	9:45a	9:56a	10:05a	10:17a	10:35a	10:47a	11:00a	11:11a	11:23a	11:35a
	10:00a	10:11a	10:20a	10:32a	10:50a	11:02a	11:15a	11:26a	11:38a	11:50a
10:00a	10:15a	10:26a	10:35a	10:47a	11:05a	11:17a	11:30a	11:41a	11:53a	12:05p
	10:30a	10:41a	10:50a	11:02a	11:20a	11:32a	11:45a	11:56a	12:08p	12:20p
10:30a	10:45a	10:56a	11:05a	11:17a	11:35a	11:47a	12:00p	12:11p	12:23p	12:35p
	11:00a	11:11a	11:20a	11:32a	11:50a	12:02p	12:15p	12:26p	12:38p	12:50p
11:00a	11:15a	11:26a	11:35a	11:47a	12:05p	12:17p	12:30p	12:41p	12:53p	1:05p
	11:30a	11:41a	11:50a	12:02p	12:20p	12:32p	12:45p	12:56p	1:08p	1:20p
11:30a	11:45a	11:56a	12:05p	12:17p	12:35p	12:47p	1:00p	1:11p	1:23p	1:35p
	12:00p	12:11p	12:20p	12:32p	12:50p	1:02p	1:15p	1:26p	1:38p	1:50p
12:00p	12:15p	12:26p	12:35p	12:47p	1:05p	1:17p	1:30p	1:41p	1:53p	2:05p
	12:30p	12:41p	12:50p	1:02p	1:20p	1:32p	1:45p	1:56p	2:08p	2:20p
12:30p	12:45p	12:56p	1:05p	1:17p	1:35p	1:47p	2:00p	2:11p	2:23p	2:35p
	1:00p	1:11p	1:20p	1:32p	1:50p	2:02p	2:15p	2:26p	2:38p	2:50p
1:00p	1:15p	1:26p	1:35p	1:47p	2:05p	2:17p	2:30p	2:41p	2:53p	3:05p
	1:30p	1:41p	1:50p	2:02p	2:20p	2:32p	2:45p	2:56p	3:08p	3:20p
1:30p	1:45p	1:56p	2:05p	2:17p	2:35p	2:47p	3:00p	3:11p	3:23p	3:35p
	2:00p	2:11p	2:20p	2:32p	2:50p	3:02p	3:15p	3:26p	3:39p	3:52p
2:00p	2:15p	2:26p	2:35p	2:47p	3:05p	3:17p	3:30p	3:42p	3:55p	4:08p
	2:30p	2:41p	2:50p	3:02p	3:20p	3:32p	3:46p	3:58p	4:11p	4:24p
2:30p	2:45p	2:56p	3:05p	3:17p	3:35p	3:48p	4:02p	4:14p	4:27p	4:41p
	3:00p	3:11p	3:20p	3:32p	3:50p	4:03p	4:17p	4:29p	4:43p	4:57p
3:00p	3:15p	3:26p	3:36p	3:49p	4:05p	4:18p	4:32p	4:45p	4:59p	5:13p
	3:30p	3:42p	3:52p	4:05p	4:20p	4:33p	4:48p	5:01p	5:15p	5:29p
3:30p	3:45p	3:57p	4:07p	4:20p	4:37p	4:51p	5:06p	5:19p	5:33p	5:46p
	4:00p	4:12p	4:22p	4:35p	4:55p	5:09p	5:24p	5:37p	5:50p	6:03p
4:00p	4:15p	4:27p	4:38p	4:52p	5:10p	5:24p	5:38p	5:50p	6:03p	6:16p
	4:30p	4:43p	4:54p	5:08p	5:25p	5:38p	5:52p	6:04p	6:17p	6:30p
4:30p	4:45p	4:58p	5:09p	5:23p	5:40p	5:53p	6:07p	6:19p	6:32p	6:44p G
	5:00p	5:13p	5:24p	5:37p	5:52p	6:05p	6:19p	6:31p	6:43p	6:55p G
5:00p	5:15p	5:28p	5:38p	5:51p	6:05p	6:18p	6:32p	6:43p	6:55p	7:07p
	5:30p	5:42p	5:52p	6:05p	6:20p	6:33p	6:46p	6:57p	7:09p	7:21p G
5:30p	5:45p	5:57p	6:07p	6:20p	6:35p	6:47p	7:00p	7:11p	7:23p	7:35p
	6:00p	6:12p	6:22p	6:35p	6:50p	7:02p	7:15p	7:26p	7:38p	7:50p G
6:00p	6:15p	6:27p	6:36p	6:48p	7:05p	7:17p	7:30p	7:41p	7:53p	8:05p
	6:30p	6:41p	6:50p	7:02p	7:20p	7:32p	7:45p	7:56p	8:08p	8:20p G
6:30p	6:45p	6:56p	7:05p	7:17p	7:35p	7:47p	8:00p	8:11p	8:23p	8:35p
7:00p	7:15p	7:26p	7:35p	7:47p	8:05p	8:17p	8:30p	8:40p	8:51p	9:02p
7:30p	7:45p	7:56p	8:05p	8:17p	8:35p	8:46p	8:58p	9:08p	9:19p	9:30p
8:00p	8:15p	8:26p	8:34p	8:45p	9:00p	9:11p	9:23p	9:33p	9:44p	9:55p
8:30p	8:45p	8:55p	9:03p	9:14p	9:30p	9:41p	9:53p	10:03p	10:14p	10:25p G
9:00p	9:15p	9:25p	9:33p	9:44p	10:00p	10:11p	10:23p	10:33p	10:43p	10:53p
	9:45p	9:55p	10:03p	10:14p	10:30p	10:40p	10:51p	11:00p	11:10p	11:20p G
	10:15p	10:25p	10:33p	10:43p	11:00p	11:10p	11:21p	11:30p	11:40p	11:50p G
	11:00p	11:09p	11:16p	11:26p	11:40p	11:50p	12:01a	12:10a	12:20a	12:30a G

Customer Service

Monday - Friday.....7 am - 8 pm
Saturday, Sunday and Holidays.....8:30 am - 5 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 8:30 am - 4:30 pm

Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day	Memorial Day
Independence Day	Thanksgiving Day	Christmas Day

Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.* Children (under 40 inches ride FREE)

Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

10 Ride Pass: 10 Rides any time, any day. Expires after the tenth ride is taken.

7 Day Pass: Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

31 Day Adult Pass: Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31 Day Reduced Pass: Youth*, Seniors*, Disabled*, Medicare*, College Student*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

****Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

****Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not redeemable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

** Premium Bus Pass can be purchased online at broward.org/bct and at select Broward County library locations.

TIMETABLE

ROUTE 18

Saturday - Sunday

Effective 5/1/11

Golden Glades Park & Ride to Sandalfoot Cove Boulevard and Highway 441

via Highway 441

BROWARD COUNTY Transit

A service of the Broward County Commission

facebook

YouTube

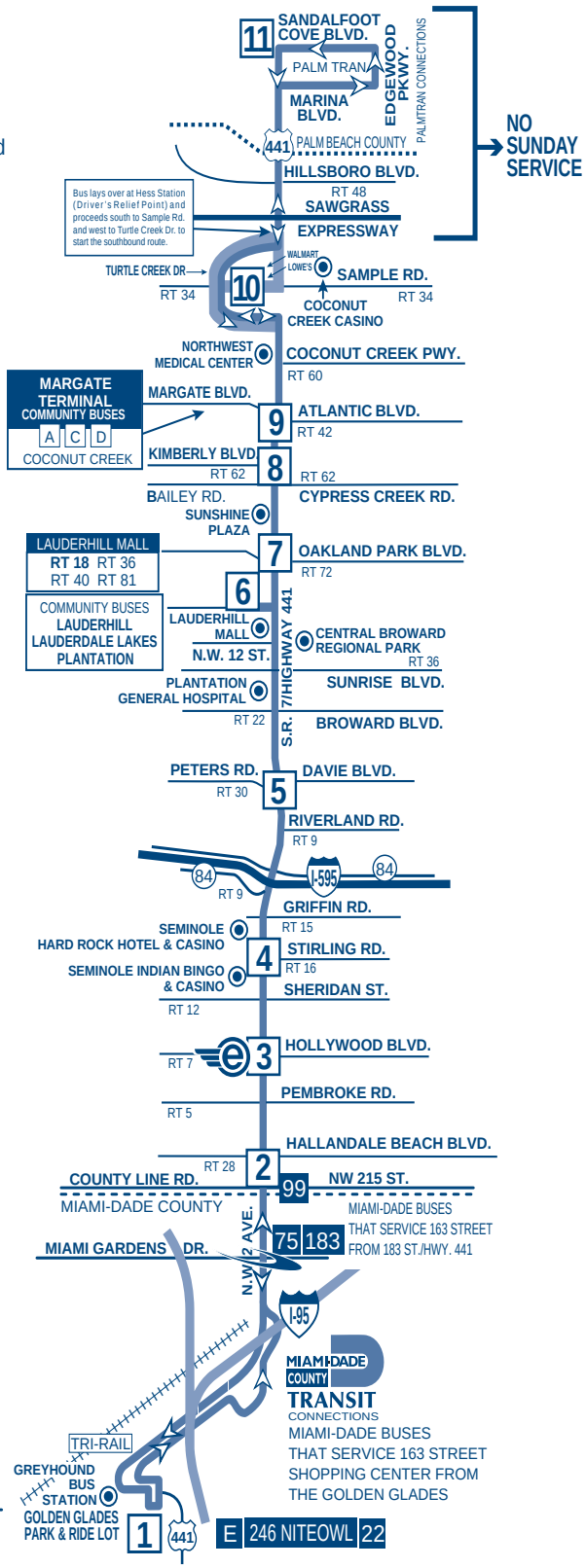
Download & Print at broward.org/bct

Wheelchair Accessible

Bike Racks

ROUTE 18

Golden Glades Park & Ride to Sandalfoot Cove Boulevard and Highway 441



POINTS OF INTEREST

- Lauderhill Mall
- Sunshine Plaza
- Northwest Medical Center
- Plantation General Hospital
- Central Broward
- Regional Park
- Coconut Creek Casino
- Seminole Hard Rock Hotel & Casino
- Seminole Indian Bingo & Casino
- Greyhound Bus Terminal

LEGEND

CONNECTING ROUTES — RT #

O — MAIN ROUTE

TIMEPOINTS

The Breeze stop location

95 Express

N W E S

GOLDEN GLADES PARK AND RIDE/ TRI - RAIL STATION/GREYHOUND STATION

BCT CONNECTIONS 18 UNIVERSITY BREEZE 441 BREEZE

MDT CONNECTIONS E 22 49 77 95 246 277

TRANSFER POLICY 7/10/11

TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of $1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays $.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a $ .50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

There are additional bus stops in between those listed.

SATURDAY NORTHBOUND To Sandalfoot Cove Boulevard

GOLDEN GLADES PARK & RIDE	NW 215 ST & HWY. 441	HOLLYWOOD BLVD. & HWY. 441	STIRLING RD. & HWY. 441	DAVIE BLVD. & HWY. 441	LAUDERHILL MALL	OAKLAND PARK BLVD. & HWY. 441	BAILEY RD & HWY. 441	ATLANTIC BLVD & HWY. 441	SAMPLE RD. & TURTLE CREEK DR.	SANDALFOOT COVE BLVD. & HWY. 441
1	2	3	4	5	6	7	8	9	10	11
					5:35a	5:44a	5:54a	6:01a	6:11a	
		5:26a	5:34a	5:43a	6:05a	6:14a	6:24a	6:31a	6:42a	6:57a
5:35a	5:47a	5:57a	6:05a	6:14a	6:35a	6:45a	6:56a	7:04a	7:15a	7:30a
6:00a	6:12a	6:22a	6:30a	6:40a	7:05a	7:15a	7:26a	7:34a	7:45a	8:00a
6:20a	6:32a	6:43a	6:52a	7:02a	7:25a	7:35a	7:46a	7:54a	8:05a	
6:40a	6:53a	7:04a	7:13a	7:23a	7:45a	7:55a	8:06a	8:14a	8:25a	8:40a
7:00a	7:13a	7:24a	7:33a	7:43a	8:05a	8:15a	8:26a	8:34a	8:45a	
7:20a	7:33a	7:44a	7:53a	8:03a	8:25a	8:35a	8:46a	8:54a	9:05a	9:20a
7:40a	7:53a	8:04a	8:13a	8:23a	8:45a	8:55a	9:06a	9:14a	9:25a	
8:00a	8:13a	8:24a	8:33a	8:43a	9:05a	9:15a	9:26a	9:35a	9:47a	10:03a
8:20a	8:33a	8:44a	8:53a	9:03a	9:25a	9:36a	9:48a	9:57a	10:09a	
8:40a	8:53a	9:04a	9:13a	9:23a	9:45a	9:56a	10:08a	10:17a	10:29a	10:45a
9:00a	9:13a	9:24a	9:33a	9:44a	10:05a	10:16a	10:28a	10:37a	10:49a	
9:20a	9:33a	9:45a	9:55a	10:06a	10:25a	10:36a	10:48a	10:57a	11:09a	11:25a
9:40a	9:54a	10:06a	10:16a	10:27a	10:45a	10:56a	11:08a	11:17a	11:29a	
10:00a	10:14a	10:26a	10:36a	10:47a	11:05a	11:16a	11:28a	11:37a	11:49a	12:05p
10:20a	10:34a	10:46a	10:56a	11:07a	11:25a	11:36a	11:48a	11:57a	12:09p	
10:40a	10:54a	11:06a	11:16a	11:27a	11:45a	11:56a	12:08p	12:17p	12:29p	12:45p
11:00a	11:14a	11:26a	11:36a	11:47a	12:05p	12:16p	12:28p	12:37p	12:49p	
11:20a	11:34a	11:46a	11:56a	12:07p	12:25p	12:36p	12:48p	12:57p	1:09p	1:25p
11:40a	11:54a	12:06p	12:16p	12:27p	12:45p	12:56p	1:08p	1:17p	1:29p	
12:00p	12:14p	12:26p	12:36p	12:47p	1:05p	1:16p	1:28p	1:37p	1:49p	2:05p
12:20p	12:34p	12:46p	12:56p	1:07p	1:25p	1:36p	1:48p	1:57p	2:09p	
12:40p	12:54p	1:06p	1:16p	1:27p	1:45p	1:56p	2:08p	2:17p	2:29p	2:45p
1:00p	1:14p	1:26p	1:36p	1:47p	2:05p	2:16p	2:28p	2:37p	2:49p	
1:20p	1:34p	1:46p	1:56p	2:07p	2:25p	2:36p	2:48p	2:57p	3:09p	3:25p
1:40p	1:54p	2:06p	2:16p	2:27p	2:45p	2:56p	3:08p	3:17p	3:29p	
2:00p	2:14p	2:26p	2:36p	2:47p	3:05p	3:16p	3:28p	3:37p	3:49p	4:05p
2:20p	2:34p	2:46p	2:56p	3:07p	3:25p	3:36p	3:48p	3:57p	4:09p	
2:40p	2:54p	3:06p	3:16p	3:27p	3:45p	3:56p	4:08p	4:17p	4:29p	4:45p
3:00p	3:14p	3:26p	3:36p	3:47p	4:05p	4:16p	4:28p	4:37p	4:49p	
3:20p	3:34p	3:46p	3:56p	4:07p	4:25p	4:36p	4:48p	4:57p	5:09p	5:25p
3:40p	3:54p	4:06p	4:16p	4:27p	4:45p	4:56p	5:08p	5:17p	5:29p	
4:00p	4:14p	4:26p	4:36p	4:47p	5:05p	5:16p	5:28p	5:37p	5:49p	6:05p
4:20p	4:34p	4:46p	4:56p	5:07p	5:25p	5:36p	5:48p	5:57p	6:09p G	
4:40p	4:54p	5:06p	5:16p	5:27p	5:45p	5:56p	6:08p	6:17p	6:29p	6:44p
5:00p	5:14p	5:26p	5:36p	5:47p	6:05p	6:16p	6:28p	6:36p	6:47p G	
5:20p	5:34p	5:46p	5:56p	6:07p	6:25p	6:35p	6:46p	6:54p	7:05p	7:20p
5:40p	5:54p	6:06p	6:16p	6:27p	6:45p	6:55p	7:06p	7:14p	7:25p G	
6:00p	6:14p	6:26p	6:35p	6:45p	7:05p	7:15p	7:26p	7:34p	7:45p G	
6:30p	6:43p	6:54p	7:03p	7:13p	7:35p	7:45p	7:56p	8:04p	8:15p	
7:00p	7:13p	7:24p	7:33p	7:43p	8:10p	8:20p	8:31p	8:39p	8:49p	
7:40p	7:53p	8:04p	8:13p	8:23p	8:45p	8:54p	9:04p	9:11p	9:21p	
8:20p	8:33p	8:43p	8:51p	9:00p	9:20p	9:29p	9:39p	9:46p	9:56p	
9:00p	9:12p	9:22p	9:30p	9:39p	10:00p	10:09p	10:19p	10:26p	10:35p	
9:40p	9:52p	10:02p	10:10p	10:19p	10:40p	10:48p	10:57p	11:03p	11:12p G	
10:15p	10:27p	10:36p	10:43p	10:51p	11:10p	11:18p	11:27p	11:33p	11:42p G	
10:45p	10:56p	11:05p	11:12p	11:20p	11:40p	11:48p	11:57p	12:03a	12:12a G	

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP

Times with the letter "G" before them indicate bus returns to garage.

SATURDAY SOUTHBOUND

To Golden Glades Park & Ride

SANDALFOOT COVE BLVD. & HWY. 441	SAMPLE RD. & TURTLE CREEK DR.	ATLANTIC BLVD & HWY. 441	BAILEY RD & HWY. 441	OAKLAND PARK BLVD. & HWY. 441	LAUDERHILL MALL	DAVIE BLVD. & HWY. 441	STIRLING RD. & HWY. 441	HOLLYWOOD BLVD. & HWY. 441	NW 215 ST & HWY. 441	GOLDEN GLADES PARK & RIDE
11	10	9	8	7	6	5	4	3	2	1
					5:00a	5:10a	5:21a	5:30a	5:40a	5:50a
					5:30a	5:40a	5:51a	6:00a	6:10a	6:20a
	5:00a	5:09a	5:16a	5:26a	5:50a	6:00a	6:11a	6:20a	6:30a	6:41a
	5:30a	5:39a	5:46a	5:56a	6:10a	6:20a	6:32a	6:42a	6:53a	7:04a
					6:30a	6:41a	6:53a	7:03a	7:14a	7:25a
	6:00a	6:09a	6:16a	6:26a	6:50a	7:01a	7:13a	7:23a	7:34a	7:45a
	6:20a	6:29a	6:37a	6:48a	7:10a	7:21a	7:33a	7:43a	7:54a	8:05a
	6:40a	6:50a	6:58a	7:09a	7:30a	7:41a	7:53a	8:03a	8:14a	8:25a
	7:00a	7:10a	7:18a	7:29a	7:50a	8:01a	8:13a	8:23a	8:34a	8:45a
7:05a	7:20a	7:30a	7:38a	7:49a	8:10a	8:21a	8:33a	8:43a	8:54a	9:05a
	7:40a	7:50a	7:58a	8:09a	8:30a	8:41a	8:53a	9:03a	9:14a	9:25a
7:45a	8:00a	8:10a	8:18a	8:29a	8:50a	9:01a	9:13a	9:23a	9:34a	9:46a
	8:15a	8:25a	8:33a	8:44a	9:07a	9:18a	9:30a	9:41a	9:53a	10:05a
8:20a	8:35a	8:45a	8:53a	9:04a	9:25a	9:37a	9:50a	10:01a	10:13a	10:25a
	8:55a	9:05a	9:13a	9:24a	9:45a	9:57a	10:10a	10:21a	10:33a	10:45a
9:00a	9:15a	9:25a	9:33a	9:45a	10:05a	10:17a	10:30a	10:41a	10:53a	11:05a
	9:35a	9:46a	9:55a	10:07a	10:25a	10:37a	10:50a	11:01a	11:13a	11:25a
9:40a	9:55a	10:06a	10:15a	10:27a	10:45a	10:57a	11:10a	11:21a	11:33a	11:45a
	10:20a	10:31a	10:40a	10:52a	11:10a	11:22a	11:35a	11:46a	11:58a	12:10p
10:25a	10:40a	10:51a	11:00a	11:12a	11:30a	11:42a	11:55a	12:06p	12:18p	12:30p
	11:00a	11:11a	11:20a	11:32a	11:50a	12:02p	12:15p	12:26p	12:38p	12:50p
11:05a	11:20a	11:31a	11:40a	11:52a	12:10p	12:22p	12:35p	12:46p	12:58p	1:10p
	11:40a	11:51a	12:00p	12:12p	12:30p	12:42p	12:55p	1:06p	1:18p	1:30p
11:45a	12:00p	12:11p	12:20p	12:32p	12:50p	1:02p	1:15p	1:26p	1:38p	1:50p
	12:20p	12:31p	12:40p	12:52p	1:10p	1:22p	1:35p	1:46p	1:58p	2:10p
12:25p	12:40p	12:51p	1:00p	1:12p	1:30p	1:42p	1:55p	2:06p	2:18p	2:30p
	1:00p	1:11p	1:20p	1:32p	1:50p	2:02p	2:15p	2:26p	2:38p	2:50p
1:05p	1:20p	1:31p	1:40p	1:52p	2:10p	2:22p	2:35p	2:46p	2:58p	3:10p
	1:40p	1:51p	2:00p	2:12p	2:30p	2:42p	2:55p	3:06p	3:18p	3:30p
1:45p	2:00p	2:11p	2:20p	2:32p	2:50p	3:02p	3:15p	3:26p	3:38p	3:50p
	2:20p	2:31p	2:40p	2:52p	3:10p	3:22p	3:35p	3:46p	3:58p	4:10p
2:25p	2:40p	2:51p	3:00p	3:12p	3:30p	3:42p	3:55p	4:06p	4:18p	4:30p
	3:00p	3:11p	3:20p	3:32p	3:50p	4:02p	4:15p	4:26p	4:38p	4:50p
3:05p	3:20p	3:31p	3:40p	3:52p	4:10p	4:22p	4:35p	4:46p	4:58p	5:10p
	3:40p	3:51p	4:00p	4:12p	4:30p	4:42p	4:55p	5:06p	5:18p	5:30p
3:45p	4:00p	4:11p	4:20p	4:32p	4:50p	5:02p	5:15p	5:26p	5:38p	5:50p
	4:20p	4:31p	4:40p	4:52p	5:10p	5:22p	5:35p	5:46p	5:58p	6:10p G
4:25p	4:40p	4:51p	5:00p	5:12p	5:30p	5:42p	5:55p	6:06p	6:18p	6:30p
	5:00p	5:11p	5:20p	5:32p	5:50p	6:02p	6:15p	6:26p	6:37p	6:48p
5:05p	5:20p	5:31p	5:40p	5:52p	6:10p	6:22p	6:35p	6:45p	6:56p	7:07p G
	5:40p	5:51p	6:00p	6:12p	6:30p	6:41p	6:53p	7:03p	7:14p	7:25p
5:45p	6:00p	6:11p	6:20p	6:32p	6:55p	7:06p	7:18p	7:28p	7:39p	7:50p G
6:15p	6:30p	6:40p	6:48p	6:59p	7:20p	7:31p	7:43p	7:53p	8:04p	8:15p
6:55p	7:10p	7:20p	7:28p	7:39p	8:00p	8:11p	8:23p	8:33p	8:43p	8:53p
7:35p	7:50p	8:00p	8:08p	8:19p	8:40p	8:50p	9:01p	9:10p	9:20p	9:30p
	8:25p	8:35p	8:42p	8:52p	9:10p	9:20p	9:31p	9:40p	9:50p	10:00p
	9:00p	9:09p	9:16p	9:26p	9:45p	9:55p	10:06p	10:15p	10:25p	10:35p
	9:35p	9:44p	9:51p	10:01p	10:20p	10:30p	10:40p	10:48p	10:57p	11:06p G
	10:15p	10:24p	10:31p	10:40p	11:00p	11:09p	11:19p	11:27p	11:36p	11:45p G
	10:55p	11:03p	11:09p	11:18p	11:40p	11:49p	11:59p	12:07a	12:16a	12:25a G

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP

Times with the letter "G" before them indicate bus returns to garage.

SUNDAY NORTHBOUND

To Sample Road & Turtlecreek Drive

GOLDEN GLADES PARK & RIDE 1	NW 215 ST & HWY. 441 2	HOLLYWOOD BLVD. & HWY. 441 3	STIRLING RD. & HWY. 441 4	DAVIE BLVD. & HWY. 441 5	LAUDERHILL MALL 6	OAKLAND PARK BLVD. & HWY. 441 7	BAILEY RD & HWY. 441 8	ATLANTIC BLVD & US 441 9	SAMPLE RD. & TURTLE CREEK DR. 10
					7:00a	7:09a	7:19a	7:26a	7:36a
6:30a	6:42a	6:52a	7:00a	7:09a	7:25a	7:34a	7:44a	7:51a	8:01a
6:55a	7:07a	7:17a	7:25a	7:34a	7:50a	7:59a	8:09a	8:16a	8:26a
7:20a	7:32a	7:42a	7:50a	7:59a	8:15a	8:24a	8:34a	8:41a	8:51a
7:45a	7:57a	8:07a	8:15a	8:24a	8:40a	8:49a	8:59a	9:06a	9:16a
8:10a	8:22a	8:32a	8:40a	8:49a	9:05a	9:14a	9:24a	9:31a	9:42a
8:35a	8:47a	8:57a	9:05a	9:14a	9:35a	9:45a	9:56a	10:04a	10:15a
9:00a	9:12a	9:22a	9:30a	9:40a	10:05a	10:15a	10:26a	10:34a	10:45a
9:30a	9:43a	9:54a	10:03a	10:13a	10:35a	10:45a	10:56a	11:04a	11:15a
10:00a	10:13a	10:24a	10:33a	10:43a	11:05a	11:15a	11:26a	11:34a	11:45a
10:30a	10:43a	10:54a	11:03a	11:13a	11:35a	11:45a	11:56a	12:04p	12:15p
11:00a	11:13a	11:24a	11:33a	11:43a	12:05p	12:15p	12:26p	12:34p	12:45p
11:30a	11:43a	11:54a	12:03p	12:13p	12:35p	12:45p	12:56p	1:04p	1:15p
12:00p	12:13p	12:24p	12:33p	12:43p	1:05p	1:15p	1:26p	1:34p	1:45p
12:30p	12:43p	12:54p	1:03p	1:13p	1:35p	1:45p	1:56p	2:04p	2:15p
1:00p	1:13p	1:24p	1:33p	1:43p	2:05p	2:15p	2:26p	2:34p	2:45p
1:30p	1:43p	1:54p	2:03p	2:13p	2:35p	2:45p	2:56p	3:04p	3:15p
2:00p	2:13p	2:24p	2:33p	2:43p	3:05p	3:15p	3:26p	3:34p	3:45p
2:30p	2:43p	2:54p	3:03p	3:13p	3:35p	3:45p	3:56p	4:04p	4:15p
3:00p	3:13p	3:24p	3:33p	3:43p	4:05p	4:15p	4:26p	4:34p	4:45p
3:30p	3:43p	3:54p	4:03p	4:13p	4:35p	4:45p	4:56p	5:04p	5:15p
4:00p	4:13p	4:24p	4:33p	4:43p	5:05p	5:15p	5:26p	5:34p	5:45p
4:30p	4:43p	4:54p	5:03p	5:13p	5:35p	5:45p	5:56p	6:04p	6:15p
5:00p	5:13p	5:24p	5:33p	5:43p	6:05p	6:15p	6:26p	6:34p	6:44p
5:30p	5:43p	5:54p	6:03p	6:13p	6:35p	6:44p	6:54p	7:01p	7:11p
6:00p	6:13p	6:24p	6:33p	6:42p	7:00p	7:09p	7:19p	7:26p	7:36p G
6:25p	6:37p	6:46p	6:54p	7:03p	7:20p	7:29p	7:39p	7:46p	7:56p
6:50p	7:02p	7:11p	7:19p	7:28p	7:45p	7:54p	8:04p	8:11p	8:21p
7:15p	7:27p	7:36p	7:44p	7:53p	8:10p	8:19p	8:29p	8:35p	8:44p
7:45p	7:57p	8:06p	8:14p	8:23p	8:40p	8:48p	8:57p	9:03p	9:12p G
8:15p	8:27p	8:35p	8:42p	8:50p	9:10p	9:18p	9:27p	9:33p	9:42p G
8:45p	8:56p	9:04p	9:11p	9:19p	9:40p	9:48p	9:57p	10:03p	10:12p G
9:15p	9:26p	9:34p	9:41p	9:49p	10:10p	10:18p	10:27p	10:33p	10:42p G

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP

Times with the letter "G" before them indicate bus returns to garage.

No Sunday Service to Sandalfoot Cove Boulevard & Highway 441

TRANSIT WATCH

WHEN IT COMES TO OUR SAFETY, WE CAN ALWAYS USE AN EXTRA PAIR OF EYES AND EARS. BE ALERT. CALL 954-357-LOOK (5665). TELL US.

SUNDAY SOUTHBOUND To Golden Glades Park & Ride

SAMPLE RD. & TURTLE CREEK DR. 10	ATLANTIC BLVD & US 441 9	BAILEY RD & HWY. 441 8	OAKLAND PARK BLVD. & HWY. 441 7	LAUDERHILL MALL 6	DAVIE BLVD. & HWY. 441 5	STIRLING RD. & HWY. 441 4	HOLLYWOOD BLVD. & HWY. 441 3	NW 215 ST & HWY. 441 2	GOLDEN GLADES PARK & RIDE 1
				6:45a	6:55a	7:06a	7:15a	7:25a	7:35a
6:30a	6:39a	6:46a	6:56a	7:10a	7:20a	7:31a	7:40a	7:50a	8:00a
6:55a	7:04a	7:11a	7:21a	7:35a	7:45a	7:56a	8:05a	8:15a	8:25a
7:20a	7:29a	7:36a	7:46a	8:00a	8:10a	8:21a	8:30a	8:40a	8:50a
7:45a	7:54a	8:01a	8:11a	8:25a	8:35a	8:46a	8:55a	9:05a	9:15a
8:10a	8:19a	8:26a	8:36a	8:50a	9:00a	9:11a	9:20a	9:30a	9:41a
8:35a	8:44a	8:51a	9:01a	9:20a	9:30a	9:42a	9:52a	10:03a	10:14a
9:00a	9:09a	9:16a	9:26a	9:50a	10:01a	10:13a	10:23a	10:34a	10:45a
9:30a	9:40a	9:48a	9:59a	10:20a	10:31a	10:43a	10:53a	11:04a	11:15a
10:00a	10:10a	10:18a	10:29a	10:50a	11:01a	11:13a	11:23a	11:34a	11:45a
10:30a	10:40a	10:48a	10:59a	11:20a	11:31a	11:43a	11:53a	12:04p	12:15p
11:00a	11:10a	11:18a	11:29a	11:50a	12:01p	12:13p	12:23p	12:34p	12:45p
11:30a	11:40a	11:48a	11:59a	12:20p	12:31p	12:43p	12:53p	1:04p	1:15p
12:00p	12:10p	12:18p	12:29p	12:50p	1:01p	1:13p	1:23p	1:34p	1:45p
12:30p	12:40p	12:48p	12:59p	1:20p	1:31p	1:43p	1:53p	2:04p	2:15p
1:00p	1:10p	1:18p	1:29p	1:50p	2:01p	2:13p	2:23p	2:34p	2:45p
1:30p	1:40p	1:48p	1:59p	2:20p	2:31p	2:43p	2:53p	3:04p	3:15p
2:00p	2:10p	2:18p	2:29p	2:50p	3:01p	3:13p	3:23p	3:34p	3:45p
2:30p	2:40p	2:48p	2:59p	3:20p	3:31p	3:43p	3:53p	4:04p	4:15p
3:00p	3:10p	3:18p	3:29p	3:50p	4:01p	4:13p	4:23p	4:34p	4:45p
3:30p	3:40p	3:48p	3:59p	4:20p	4:31p	4:43p	4:53p	5:04p	5:15p
4:00p	4:10p	4:18p	4:29p	4:50p	5:01p	5:13p	5:23p	5:34p	5:45p
4:30p	4:40p	4:48p	4:59p	5:20p	5:31p	5:43p	5:53p	6:04p	6:15p
5:00p	5:10p	5:18p	5:29p	5:50p	6:01p	6:13p	6:23p	6:34p	6:44p
5:30p	5:40p	5:48p	5:59p	6:20p	6:31p	6:42p	6:51p	7:01p	7:11p
6:00p	6:10p	6:18p	6:29p	6:45p	6:55p	7:06p	7:15p	7:25p	7:35p
6:30p	6:39p	6:46p	6:56p	7:15p	7:25p	7:36p	7:45p	7:55p	8:05p
7:00p	7:09p	7:16p	7:26p	7:45p	7:55p	8:06p	8:15p	8:25p	8:35p
7:30p	7:39p	7:46p	7:56p	8:15p	8:25p	8:35p	8:43p	8:52p	9:01p
8:00p	8:09p	8:16p	8:26p	8:40p	8:49p	8:59p	9:07p	9:16p	9:25p G
8:30p	8:38p	8:44p	8:53p	9:10p	9:19p	9:29p	9:37p	9:46p	9:55p G
9:00p	9:08p	9:14p	9:23p	9:40p	9:49p	9:59p	10:07p	10:16p	10:25p G

For more details on our fares please visit our web site at broward.org/bct/faresandpasses.htm or call customer service: 954.357.8400.

Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol ☐.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.

Information: 954.357.8400

Hearing-speech impaired/TTY: 954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.

This symbol is used on bus stop signs to indicate accessible bus stops.

BROWARD COUNTY FLORIDA

BROWARD COUNTY
BOARD OF COUNTY COMMISSIONERS
An equal opportunity employer and provider of services.

TIMETABLE

ROUTE

31

Weekday, Saturday & Sunday

Effective 10/31/10

Broward Central Terminal

BCC North Campus

Hillsboro Blvd. & Lyons Rd.

BROWARD COUNTY Transit

A service of the
Broward County Commission

Wheelchair Accessible Bike Racks

www.broward.org/bct

Customer Service

Monday - Friday.....7 am - 8 pm
Saturday, Sunday and Holidays.....8:30 am - 5 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 9:00 am - 4:00 pm

Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day
Independence Day
Labor Day
Thanksgiving Day
Memorial Day
Christmas Day

Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Premium Express, Senior/Youth/Disabled/Medicare.* Children (under 40 inches ride FREE)

Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

10 Ride Pass: 10 Rides any time, any day. Expires after the tenth ride is taken.

7 Day Pass: Unlimited rides for seven consecutive days. Starts on the first day card is used. Expires after the seventh day.

31 Day Adult Pass: Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31 Day Reduced Pass: Youth*, Seniors*, Disabled*, Medicare*, College Student*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

****Premium Express 10 Ride Pass:** 10 rides any time, any day. Expires after tenth ride is taken.

****Premium Express 31 Day Pass:** Unlimited rides for 31 consecutive days. Starts on the first day card is used.

Bus Passes are not redeemable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

*NOTICE: Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

** Premium Bus Pass can be purchased online at broward.org/bct and at select Broward County library locations.

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP
Times with the letter "G" before them indicate bus returns to garage.

NORTHBOUND

To Hillsboro Blvd.

BROWARDCENTRAL TERMINAL 1	N.W. 19 ST. & N.W. 15 AVE. 2	N.W. 31 AVE. & OAKLAND PARK BLVD. 3	CYPRESS CREEK RD. & N.W. 31 AVE. 4	BCC NORTH CAMPUS 5	LYONS RD. & COPANS RD. 6	HILLSBORO BLVD. & LYONS RD. 7
5:30a	5:42a	5:50a	5:58a		6:10a	6:24a
6:00a	6:12a	6:20a	6:28a		6:40a	6:54a
6:20a	6:33a	6:42a	6:50a	7:05a	7:13a	7:29a
6:40a	6:53a	7:02a	7:12a	7:27a	7:35a	7:51a
7:00a	7:15a	7:26a	7:36a	7:51a	7:59a	8:15a
7:20a	7:35a	7:46a	7:56a	8:11a	8:19a	8:35a
7:40a	7:55a	8:06a	8:16a	8:31a	8:39a	8:55a
8:00a	8:15a	8:26a	8:36a	8:51a	8:59a	9:13a
8:20a	8:35a	8:46a	8:56a	9:11a	9:17a	9:31a
8:40a	8:53a	9:02a	9:10a	9:25a	9:31a	G9:45a
9:00a	9:13a	9:22a	9:30a	9:45a	9:51a	10:05a
9:20a	9:33a	9:42a	9:50a	10:05a	10:11a	10:25a
9:40a	9:53a	10:02a	10:10a	10:25a	10:31a	G10:45a
10:00a	10:13a	10:22a	10:30a	10:45a	10:51a	11:05a
10:30a	10:43a	10:52a	11:00a	11:15a	11:21a	11:35a
11:00a	11:13a	11:22a	11:30a	11:45a	11:51a	12:05p
11:30a	11:43a	11:52a	12:00p	12:15p	12:21p	12:35p
12:00p	12:13p	12:22p	12:30p	12:45p	12:51p	1:05p
12:30p	12:43p	12:52p	1:00p	1:15p	1:21p	1:35p
1:00p	1:13p	1:22p	1:30p	1:45p	1:51p	2:05p
1:30p	1:43p	1:52p	2:00p	2:15p	2:21p	2:35p
2:00p	2:13p	2:22p	2:30p	2:45p	2:51p	3:05p
2:20p	2:33p	2:42p	2:50p	3:05p	3:11p	3:25p
2:40p	2:53p	3:02p	3:10p	3:25p	3:31p	3:45p
3:00p	3:13p	3:22p	3:30p	3:45p	3:51p	4:06p
3:20p	3:33p	3:42p	3:50p	4:05p	4:13p	4:29p
3:40p	3:53p	4:02p	4:12p	4:27p	4:35p	4:51p
4:00p	4:15p	4:26p	4:36p	4:51p	4:59p	5:15p
4:20p	4:35p	4:46p	4:56p	5:11p	5:19p	5:35p
4:40p	4:55p	5:06p	5:16p	5:31p	5:39p	5:55p
5:00p	5:15p	5:26p	5:36p	5:51p	5:59p	6:13p
5:20p	5:35p	5:46p	5:56p	6:11p	6:19p	6:33p
5:40p	5:55p	6:06p	6:15p	6:30p	6:36p	G6:50p
6:00p	6:13p	6:22p	6:30p	6:45p	6:51p	G7:05p
6:20p	6:33p	6:42p	6:50p	7:05p	7:11p	7:25p
6:40p	6:53p	7:02p	7:10p	7:25p	7:31p	G7:45p
7:00p	7:12p	7:20p	7:28p	7:40p	7:46p	8:00p
7:30p	7:42p	7:50p	7:58p	8:10p	8:16p	G8:30p
8:00p	8:12p	8:20p	8:28p	8:40p	8:46p	9:00p
8:45p	8:57p	9:05p	9:13p	9:25p	9:31p	9:45p
9:30p	9:42p	9:50p	9:58p		G10:10p	
10:15p	10:27p	10:35p	10:43p		G10:55p	

SOUTHBOUND

To Broward Central Terminal

HILLSBORO BLVD. & LYONS RD. 7	LYONS RD. & COPANS RD. 6	BCC NORTH CAMPUS 5	CYPRESS CREEK RD. & N.W. 31 AVE. 4	N.W. 31 AVE. & OAKLAND PARK BLVD. 3	N.W. 19 ST. & N.W. 15 AVE. 2	BROWARD CENTRAL TERMINAL 1
	5:05a		5:17a	5:25a	5:33a	5:45a
	5:25a		5:37a	5:45a	5:53a	6:05a
	5:45a		5:57a	6:05a	6:13a	6:25a
	6:05a		6:17a	6:25a	6:33a	6:45a
6:15a	6:27a		6:39a	6:47a	6:55a	7:07a
	6:45a		6:57a	7:05a	7:13a	7:25a
6:40a	6:52a	7:00a	7:14a	7:24a	7:35a	7:50a
7:00a	7:14a	7:25a	7:39a	7:49a	8:00a	8:15a
7:20a	7:34a	7:45a	7:59a	8:09a	8:20a	8:35a
7:40a	7:54a	8:05a	8:19a	8:29a	8:40a	8:55a
8:00a	8:14a	8:25a	8:39a	8:49a	9:00a	9:13a
8:20a	8:34a	8:45a	8:59a	9:07a	9:16a	9:29a
8:40a	8:54a	9:05a	9:17a	9:25a	9:34a	9:47a
9:00a	9:12a	9:20a	9:32a	9:40a	9:49a	G10:05a
9:20a	9:32a	9:40a	9:52a	10:00a	10:09a	10:22a
9:45a	9:57a	10:05a	10:17a	10:25a	10:34a	10:47a
10:15a	10:27a	10:35a	10:47a	10:55a	11:04a	11:17a
10:45a	10:57a	11:05a	11:17a	11:25a	11:34a	11:47a
11:15a	11:27a	11:35a	11:47a	11:55a	12:04p	12:17p
11:45a	11:57a	12:05p	12:17p	12:25p	12:34p	12:47p
12:15p	12:27p	12:35p	12:47p	12:55p	1:04p	1:17p
12:45p	12:57p	1:05p	1:17p	1:25p	1:34p	1:47p
1:15p	1:27p	1:35p	1:47p	1:55p	2:04p	2:17p
1:45p	1:57p	2:05p	2:17p	2:25p	2:34p	2:47p
		2:25p	2:37p	2:45p	2:54p	3:07p
2:20p	2:32p	2:40p	2:52p	3:00p	3:09p	3:22p
2:40p	2:52p	3:00p	3:12p	3:20p	3:29p	3:42p
3:00p	3:12p	3:20p	3:32p	3:40p	3:49p	4:02p
3:20p	3:32p	3:40p	3:52p	4:00p	4:11p	4:26p
3:40p	3:52p	4:00p	4:14p	4:24p	4:35p	4:50p
4:00p	4:14p	4:25p	4:39p	4:49p	5:00p	5:15p
4:20p	4:34p	4:45p	4:59p	5:09p	5:20p	5:35p
4:40p	4:54p	5:05p	5:19p	5:29p	5:40p	5:55p
5:00p	5:14p	5:25p	5:39p	5:49p	6:00p	6:13p
5:20p	5:34p	5:45p	5:59p	6:07p	6:16p	6:29p
5:40p	5:54p	6:05p	6:16p	6:24p	6:33p	6:46p
6:00p	6:12p	6:20p	6:30p	6:38p	6:47p	G7:00p
6:20p	6:32p	6:40p	6:50p	6:58p	7:06p	7:18p
6:50p	7:02p	7:10p	7:20p	7:28p	7:36p	7:48p
7:35p	7:47p	7:55p	8:05p	8:13p	8:21p	8:33p
8:20p	8:32p	8:40p	8:50p	8:58p	9:06p	9:18p
9:05p	9:17p	9:25p	9:35p	9:43p	9:51p	10:03p
9:50p	10:02p	10:10p	10:20p	10:28p	10:36p	G10:48p

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP
Times with the letter "G" before them indicate bus returns to garage.

NORTHBOUND

To Hillsboro Blvd.

BROWARDCENTRAL TERMINAL 1	N.W. 19 ST. & N.W. 15 AVE. 2	N.W. 31 AVE. & OAKLAND PARK BLVD. 3	CYPRESS CREEK RD. & N.W. 31 AVE. 4	BCC NORTH CAMPUS 5	LYONS RD. & COPANS RD. 6	HILLSBORO BLVD. & LYONS RD. 7
5:45a	5:57a	6:05a	6:13a		6:25a	6:39a
6:30a	6:42a	6:50a	6:58a		7:10a	7:24a
7:15a	7:27a	7:35a	7:43a	7:55a	8:01a	8:15a
8:00a	8:12a	8:20a	8:28a	8:40a	8:46a	9:00a
8:45a	8:57a	9:05a	9:13a	9:25a	9:31a	9:45a
9:30a	9:42a	9:50a	9:58a	10:10a	10:16a	10:30a
10:15a	10:27a	10:35a	10:43a	10:55a	11:01a	11:15a
11:00a	11:12a	11:20a	11:28a	11:40a	11:46a	12:00p
11:45a	11:57a	12:05p	12:13p	12:25p	12:31p	12:45p
12:30p	12:42p	12:50p	12:58p	1:10p	1:16p	1:30p
1:15p	1:27p	1:35p	1:43p	1:55p	2:01p	2:15p
2:00p	2:12p	2:20p	2:28p	2:40p	2:46p	3:00p
2:45p	2:57p	3:05p	3:13p	3:25p	3:31p	3:45p
3:30p	3:42p	3:50p	3:58p	4:10p	4:16p	4:30p
4:15p	4:27p	4:35p	4:43p	4:55p	5:01p	5:15p
5:00p	5:12p	5:20p	5:28p	5:40p	5:46p	6:00p
5:45p	5:57p	6:05p	6:13p		6:26p	6:40p
6:30p	6:42p	6:50p	6:58p		7:11p	7:25p
7:15p	7:27p	7:35p	7:43p		7:55p	8:09p
8:00p	8:12p	8:20p	8:28p		8:40p	8:54p
8:45p	8:57p	9:05p	9:13p		9:25p	9:39p
9:30p	9:42p	9:50p	9:58p		G10:10p	
10:15p	10:27p	10:35p	10:43p		G10:55p	

SOUTHBOUND

To Broward Central Terminal

HILLSBORO BLVD. & LYONS RD. 7	LYONS RD. & COPANS RD. 6	BCC NORTH CAMPUS 5	CYPRESS CREEK RD. & N.W. 31 AVE. 4	N.W. 31 AVE. & OAKLAND PARK BLVD. 3	N.W. 19 ST. & N.W. 15 AVE. 2	BROWARD CENTRAL TERMINAL 1
	5:35a		5:47a	5:55a	6:03a	6:15a
	6:20a		6:32a	6:40a	6:48a	7:00a
6:55a	7:07a		7:19a	7:27a	7:35a	7:47a
7:40a	7:52a	8:00a	8:10a	8:18a	8:26a	8:38a
8:25a	8:37a	8:45a	8:55a	9:03a	9:11a	9:23a
9:10a	9:22a	9:30a	9:40a	9:48a	9:56a	10:08a
9:55a	10:07a	10:15a	10:25a	10:33a	10:41a	10:53a
10:40a	10:52a	11:00a	11:10a	11:18a	11:26a	11:38a
11:25a	11:37a	11:45a	11:55a	12:03p	12:11p	12:23p
12:10p	12:22p	12:30p	12:40p	12:48p	12:56p	1:08p
12:55p	1:07p	1:15p	1:25p	1:33p	1:41p	1:53p
1:40p	1:52p	2:00p	2:10p	2:18p	2:26p	2:38p
2:25p	2:37p	2:45p	2:55p	3:03p	3:11p	3:23p
3:10p	3:22p	3:30p	3:40p	3:48p	3:56p	4:08p
3:55p	4:07p	4:15p	4:25p	4:33p	4:41p	4:53p
4:40p	4:52p	5:00p	5:10p	5:18p	5:26p	5:38p
5:25p	5:37p	5:45p	5:55p	6:03p	6:11p	6:23p
6:10p	6:22p		6:34p	6:42p	6:50p	7:02p
6:55p	7:07p		7:19p	7:27p	7:35p	7:47p
7:40p	7:52p		8:04p	8:12p	8:20p	8:32p
8:25p	8:37p		8:49p	8:57p	9:05p	9:17p
9:10p	9:22p		9:34p	9:42p	9:50p	10:02p
9:55p	10:06p		10:17p	10:25p	10:33p	G10:45p

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP
Times with the letter "G" before them indicate bus returns to garage.

NORTHBOUND
To Hillsboro Blvd.

BROWARDCENTRAL TERMINAL 1	N.W. 19 ST. & N.W. 15 AVE. 2	N.W. 31 AVE. & OAKLAND PARK BLVD. 3	CYPRESS CREEK RD. & N.W. 31 AVE. 4	BCC NORTH CAMPUS 5	LYONS RD. & COPANS RD. 6	HILLSBORO BLVD. & LYONS RD. 7
9:10a	9:22a	9:30a	9:38a		9:50a	10:04a
9:55a	10:07a	10:15a	10:23a		10:35a	10:49a
10:40a	10:52a	11:00a	11:08a		11:20a	11:34a
11:25a	11:37a	11:45a	11:53a	12:05p	12:11p	12:25p
12:10p	12:22p	12:30p	12:38p	12:50p	12:56p	1:10p
12:55p	1:07p	1:15p	1:23p	1:35p	1:41p	1:55p
1:40p	1:52p	2:00p	2:08p	2:20p	2:26p	2:40p
2:25p	2:37p	2:45p	2:53p	3:05p	3:11p	3:25p
3:10p	3:22p	3:30p	3:38p	3:50p	3:56p	4:10p
3:55p	4:07p	4:15p	4:23p	4:35p	4:41p	4:55p
4:40p	4:52p	5:00p	5:08p	5:20p	5:26p	5:40p
5:25p	5:37p	5:45p	5:53p	6:05p	6:11p	6:25p
6:10p	6:22p	6:30p	6:38p		6:50p	7:04p
6:55p	7:07p	7:15p	7:23p		7:35p	7:49p
7:40p	7:52p	8:00p	8:08p		G 8:20p	
8:15p	8:27p	8:35p	8:43p		G 8:55p	

SOUTHBOUND
To Broward Central Terminal

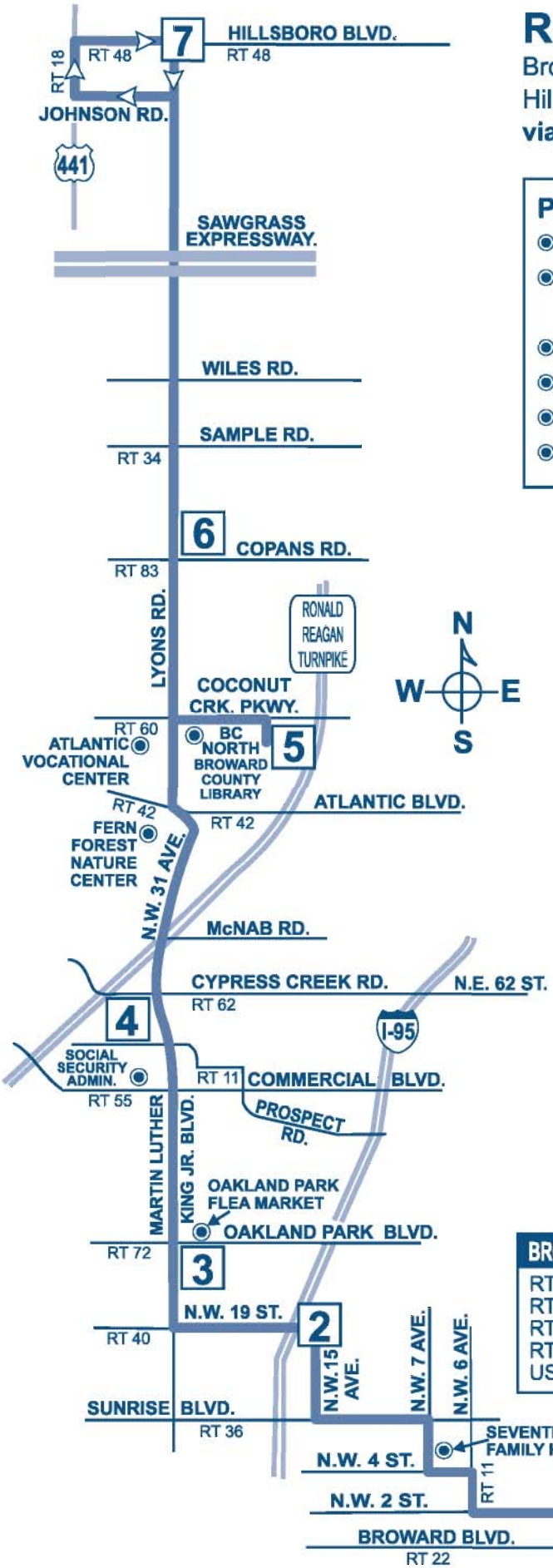
HILLSBORO BLVD. & LYONS RD. 7	LYONS RD. & COPANS RD. 6	BCC NORTH CAMPUS 5	CYPRESS CREEK RD. & N.W. 31 AVE. 4	N.W. 31 AVE. & OAKLAND PARK BLVD. 3	N.W. 19 ST. & N.W. 15 AVE. 2	BROWARD CENTRAL TERMINAL 1
	9:00a		9:12a	9:20a	9:28a	9:40a
	9:45a		9:57a	10:05a	10:13a	10:25a
10:15a	10:27a		10:39a	10:47a	10:55a	11:07a
11:00a	11:12a		11:24a	11:32a	11:40a	11:52a
11:45a	11:57a	12:05p	12:15p	12:23p	12:31p	12:43p
12:30p	12:42p	12:50p	1:00p	1:08p	1:16p	1:28p
1:15p	1:27p	1:35p	1:45p	1:53p	2:01p	2:13p
2:00p	2:12p	2:20p	2:30p	2:38p	2:46p	2:58p
2:45p	2:57p	3:05p	3:15p	3:23p	3:31p	3:43p
3:30p	3:42p	3:50p	4:00p	4:08p	4:16p	4:28p
4:15p	4:27p	4:35p	4:45p	4:53p	5:01p	5:13p
5:00p	5:12p	5:20p	5:30p	5:38p	5:46p	5:58p
5:45p	5:57p	6:05p	6:15p	6:23p	6:31p	6:43p
6:30p	6:42p		6:54p	7:02p	7:10p	7:22p
7:10p	7:22p		7:34p	7:42p	7:50p	8:02p
7:55p	8:05p		8:17p	8:25p	8:33p	G 8:45p

ROUTE 31

Broward Central Terminal to
Hillsboro Boulevard and Lyons Road
via NW 31 Avenue/Lyons Road

POINTS OF INTEREST

- Oakland Park Flea Market
- Seventh Avenue Family Health Center
- Atlantic Vocational Center
- Broward College North
- Social Security Admin.
- Fern Forest Nature Center



LEGEND

MAIN ROUTE

0 TIME POINTS

RT 00 CONNECTING ROUTES

Route 31 Platform Location

BAY A-5

BROWARD CENTRAL TERMINAL

RT 1	RT 11	RT 30	RT 60
RT 6	RT 14	**RT 31**	RT 81
RT 9	RT 20	RT 40	
RT 10	RT 22	RT 50	
US 1 BREEZE			

TRANSFER POLICY 7/10/11

TRANSFERS BETWEEN REGULAR BUS ROUTE SERVICE AND PREMIUM EXPRESS BUS SERVICE

A BCT 31-Day Premium Express Bus Pass is acceptable on all BCT regular bus service. Passengers transferring from regular route bus service to express bus service with an All Day, 7-Day or 31-Day bus pass, must pay a premium upgrade fee of $1.00. Passengers with a regular 10-Ride bus pass or paying by cash on regular service will not be able to transfer between bus services and must pay the full premium fare when boarding the Express bus.

TRANSFERS FROM BCT TO OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When boarding a BCT bus, passenger pays the appropriate BCT fare and may request a transfer from the bus operator if transferring to Miami-Dade Transit (MDT), Palm Tran or Tri-Rail.

TRANSFERS TO BCT FROM OTHER SOUTH FLORIDA TRANSIT SYSTEMS

When transferring from MDT, Palm Tran and Tri-Rail to BCT regular fixed-route bus service, passenger pays $.50 with a transfer issued by MDT or Palm Tran and proof of fare payment such as Easy Card and receipt issued by Tri-Rail. Tri-Rail passengers boarding BCT at any locations other than at a Tri-Rail station will be required to pay the full fare.

TRANSFERS BETWEEN OTHER SOUTH FLORIDA TRANSIT SYSTEMS AND PREMIUM EXPRESS BUS SERVICE

Transfers to MDT or Tri-Rail from Express, a transfer is issued and passenger must pay appropriate MDT or Tri-Rail fare.

Transfer from MDT or Tri-Rail to Express, a $ .50 transfer fee is required with the appropriate transfer from MDT or Tri-Rail.

The Express does not connect with Palm Tran.

The Easy Card issued by MDT and Tri-Rail is not accepted as payment on any BCT bus.

For more details on our fares please visit our web site at broward.org/bct or call customer service: 954.357.8400.

Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol ☐.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.

Information: 954.357.8400

Hearing-speech impaired/TTY: 954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.

This symbol is used on bus stop signs to indicate accessible bus stops.

BROWARD COUNTY FLORIDA

BROWARD COUNTY
BOARD OF COUNTY COMMISSIONERS
An equal opportunity employer and provider of services.

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

For more details on our fares please visit our web site at broward.org/bct or call customer service: 954.357.8400.

Reading A Timetable - It's Easy

1. The map shows the exact bus route.
2. Major route intersections are called time points. Time points are shown with the symbol ☐.
3. The timetable lists major time points for bus route. Listed under time points are scheduled departure times.
4. Reading from left to right, indicates the time for each bus trip.
5. The bus picks up and drops off riders at all BCT bus stop signs along the route where there is a Broward County bus stop sign.
6. Arrive at the bus stop five minutes early. Buses operate as close to published timetables as traffic conditions allow.

Not paying your fare is a crime per Florida Statute 812.015. Violation constitutes a misdemeanor, punishable by jail time and/or a fine.

Information: 954.357.8400

Hearing-speech impaired/TTY: 954.357.8302

This publication can be made available in large print, tape cassette, or Braille, by request.

This symbol is used on bus stop signs to indicate accessible bus stops.

BROWARD COUNTY FLORIDA

BROWARD COUNTY
BOARD OF COUNTY COMMISSIONERS
An equal opportunity employer and provider of services.

This public document was promulgated at a cost of $646., or $.038 per copy, to inform the public about the Transportation Department's schedule and route information. Reprinted 5/12

TIMETABLE

ROUTE 34

Monday - Sunday

Effective 1/9/11

Sample Road and Coral Ridge Drive to Sample Road and Federal Highway/U.S. 1

via Sample Road

BROWARD COUNTY Transit

A service of the Broward County Commission

facebook

YouTube

Download & Print at broward.org/bct

Wheelchair Accessible

Bike Racks

Route 34

BROWARD COUNTY TRANSIT
www.broward.org/bct

Sample Road and Coral Ridge Drive
to Sample Road and
Federal Highway/U.S. 1

via Sample Road

There are additional bus stops in between those listed.

MONDAY - FRIDAY

EASTBOUND

To Federal Highway

SAMPLE RD. & CORAL RIDGE DR. 1	SAMPLE RD. & UNIVERSITY DR. 2	SAMPLE RD.& TURTLE CREEK RD. 3	SAMPLE RD. & POWERLINE RD. 4	SAMPLE RD. & TRI-RAIL 5	SAMPLE RD. & FEDERAL HWY. 6
5:00a	5:08a	5:17a	5:26a	5:31a	5:40a
5:30a	5:38a	5:47a	5:56a	6:01a	6:10a
6:00a	6:08a	6:17a	6:26a	6:31a	6:40a
6:20a	6:28a	6:37a	6:46a	6:51a	7:00a
6:40a	6:48a	6:57a	7:07a	7:13a	7:23a
7:00a	7:09a	7:19a	7:29a	7:36a	7:47a
7:20a	7:29a	7:40a	7:51a	7:58a	8:09a
7:40a	7:50a	8:01a	8:12a	8:19a	8:30a
8:00a	8:10a	8:21a	8:32a	8:39a	8:50a
8:20a	8:30a	8:41a	8:52a	8:59a	9:10a
8:40a	8:50a	9:01a	9:12a	9:19a	9:30a G
9:00a	9:09a	9:19a	9:29a	9:35a	9:45a
9:30a	9:39a	9:49a	9:59a	10:05a	10:15a
10:00a	10:09a	10:19a	10:29a	10:35a	10:45a
10:30a	10:39a	10:49a	10:59a	11:05a	11:15a
11:00a	11:09a	11:19a	11:29a	11:35a	11:45a
11:30a	11:39a	11:49a	11:59a	12:05p	12:15p
12:00p	12:09p	12:19p	12:29p	12:35p	12:45p
12:30p	12:39p	12:49p	12:59p	1:05p	1:15p
1:00p	1:09p	1:19p	1:29p	1:35p	1:45p
1:30p	1:39p	1:49p	1:59p	2:05p	2:15p
2:00p	2:09p	2:19p	2:29p	2:35p	2:45p
2:30p	2:39p	2:49p	2:59p	3:05p	3:15p
3:00p	3:09p	3:19p	3:29p	3:35p	3:45p
3:20p	3:29p	3:39p	3:49p	3:55p	4:05p
3:40p	3:49p	3:59p	4:09p	4:15p	4:25p
4:00p	4:09p	4:19p	4:29p	4:35p	4:45p
4:20p	4:29p	4:39p	4:49p	4:55p	5:05p
4:40p	4:49p	4:59p	5:09p	5:15p	5:25p
5:00p	5:09p	5:19p	5:29p	5:35p	5:45p
5:20p	5:29p	5:39p	5:49p	5:55p	6:05p G
5:40p	5:49p	5:59p	6:09p	6:15p	6:25p
6:00p	6:09p	6:19p	6:29p	6:35p	6:45p
6:30p	6:39p	6:49p	6:59p	7:05p	7:15p
7:00p	7:09p	7:19p	7:29p	7:35p	7:45p
7:30p	7:39p	7:49p	7:59p	8:05p	8:15p G
8:00p	8:08p	8:17p	8:26p	8:31p	8:40p
9:00p	9:08p	9:17p	9:26p	9:31p	9:40p
10:00p	10:08p	10:17p	10:26p	10:31p	10:40p G

WESTBOUND

To Coral Ridge Drive

SAMPLE RD. & FEDERAL HWY. 6	SAMPLE RD. & TRI-RAIL 5	SAMPLE RD. & POWERLINE RD. 4	SAMPLE RD.& TURTLE CREEK RD.. 3	SAMPLE RD. & UNIVERSITY DR. 2	SAMPLE RD. & CORAL RIDGE DR. 1
5:15a	5:27a	5:33a	5:42a	5:51a	6:05a
5:45a	5:57a	6:03a	6:12a	6:21a	6:35a
6:15a	6:27a	6:33a	6:42a	6:51a	7:05a
6:35a	6:47a	6:53a	7:02a	7:12a	7:27a
6:55a	7:08a	7:15a	7:25a	7:35a	7:50a
7:15a	7:28a	7:35a	7:45a	7:55a	8:10a
7:35a	7:48a	7:55a	8:05a	8:15a	8:30a
7:55a	8:08a	8:15a	8:25a	8:35a	8:50a
8:15a	8:28a	8:35a	8:45a	8:55a	9:10a G
8:35a	8:48a	8:55a	9:05a	9:15a	9:30a
8:55a	9:08a	9:15a	9:25a	9:35a	9:50a
9:25a	9:38a	9:45a	9:55a	10:05a	10:20a
9:55a	10:08a	10:15a	10:25a	10:35a	10:50a
10:25a	10:38a	10:45a	10:55a	11:05a	11:20a
10:55a	11:08a	11:15a	11:25a	11:35a	11:50a
11:25a	11:38a	11:45a	11:55a	12:05p	12:20p
11:55a	12:08p	12:15p	12:25p	12:35p	12:50p
12:25p	12:38p	12:45p	12:55p	1:05p	1:20p
12:55p	1:08p	1:15p	1:25p	1:35p	1:50p
1:25p	1:38p	1:45p	1:55p	2:05p	2:20p
1:55p	2:08p	2:15p	2:25p	2:35p	2:50p
2:25p	2:38p	2:45p	2:55p	3:05p	3:20p
2:55p	3:08p	3:15p	3:25p	3:35p	3:50p
3:15p	3:28p	3:35p	3:45p	3:55p	4:10p
3:35p	3:48p	3:55p	4:05p	4:15p	4:30p
3:55p	4:08p	4:15p	4:25p	4:36p	4:52p
4:15p	4:28p	4:36p	4:47p	4:58p	5:14p
4:35p	4:49p	4:57p	5:08p	5:19p	5:35p
4:55p	5:09p	5:17p	5:28p	5:39p	5:55p
5:15p	5:29p	5:37p	5:48p	5:59p	6:15p
5:35p	5:49p	5:57p	6:08p	6:19p	6:35p G
5:55p	6:08p	6:15p	6:25p	6:35p	6:50p
6:25p	6:38p	6:45p	6:55p	7:05p	7:20p
6:55p	7:08p	7:15p	7:25p	7:35p	7:50p
7:25p	7:38p	7:45p	7:55p	8:05p	8:20p G
7:55p	8:07p	8:13p	8:22p	8:31p	8:45p
8:55p	9:07p	9:13p	9:22p	9:31p	9:45p
9:55p	10:07p	10:13p	10:22p	10:31p	10:45pG

NUMBERS IN BOXES REFER TO TIME POINTS ON MAP • **Times with the letter "G" after them indicate bus returns to garage.**

SATURDAY

EASTBOUND

To Federal Highway

SAMPLE RD. & CORAL RIDGE DR. 1	SAMPLE RD. & UNIVERSITY DR. 2	SAMPLE RD. & TURTLE CREEK RD. 3	SAMPLE RD. & POWERLINE RD. 4	SAMPLE RD. TRI-RAIL 5	SAMPLE RD. & FEDERAL HWY. 6
5:40a	5:48a	5:57a	6:06a	6:11a	6:20a
6:20a	6:28a	6:37a	6:46a	6:51a	7:00a
7:00a	7:08a	7:17a	7:26a	7:31a	7:40a
7:40a	7:48a	7:57a	8:06a	8:11a	8:20a
8:20a	8:28a	8:37a	8:46a	8:51a	9:00a
9:00a	9:09a	9:19a	9:29a	9:35a	9:45a
9:40a	9:49a	9:59a	10:09a	10:15a	10:25a
10:20a	10:29a	10:39a	10:49a	10:55a	11:05a
11:00a	11:09a	11:19a	11:29a	11:35a	11:45a
11:40a	11:49a	11:59a	12:09p	12:15p	12:25p
12:20p	12:29p	12:39p	12:49p	12:55p	1:05p
1:00p	1:09p	1:19p	1:29p	1:35p	1:45p
1:40p	1:49p	1:59p	2:09p	2:15p	2:25p
2:20p	2:29p	2:39p	2:49p	2:55p	3:05p
3:00p	3:09p	3:19p	3:29p	3:35p	3:45p
3:40p	3:49p	3:59p	4:09p	4:15p	4:25p
4:20p	4:29p	4:39p	4:49p	4:55p	5:05p
5:00p	5:09p	5:19p	5:29p	5:35p	5:45p
5:40p	5:49p	5:59p	6:08p	6:13p	6:22p
6:20p	6:28p	6:37p	6:46p	6:51p	7:00p
7:00p	7:08p	7:17p	7:26p	7:31p	7:40p
8:00p	8:08p	8:17p	8:26p	8:31p	8:40p
9:00p	9:08p	9:17p	9:26p	9:31p	9:40p G

WESTBOUND

To Coral Ridge Drive

SAMPLE RD. & FEDERAL HWY. 6	SAMPLE RD. & TRI-RAIL 5	SAMPLE RD. & POWERLINE RD. 4	SAMPLE RD. & TURTLE CREEK RD. 3	SAMPLE RD. & UNIVERSITY DR. 2	SAMPLE RD. & CORAL RIDGE DR. 1
5:55a	6:07a	6:13a	6:22a	6:31a	6:45a
6:35a	6:47a	6:53a	7:02a	7:11a	7:25a
7:15a	7:27a	7:33a	7:42a	7:51a	8:05a
7:55a	8:07a	8:13a	8:22a	8:31a	8:45a
8:35a	8:47a	8:53a	9:02a	9:12a	9:27a
9:15a	9:28a	9:35a	9:45a	9:55a	10:10a
9:55a	10:08a	10:15a	10:25a	10:35a	10:50a
10:35a	10:48a	10:55a	11:05a	11:15a	11:30a
11:15a	11:28a	11:35a	11:45a	11:55a	12:10p
11:55a	12:08p	12:15p	12:25p	12:35p	12:50p
12:35p	12:48p	12:55p	1:05p	1:15p	1:30p
1:15p	1:28p	1:35p	1:45p	1:55p	2:10p
1:55p	2:08p	2:15p	2:25p	2:35p	2:50p
2:35p	2:48p	2:55p	3:05p	3:15p	3:30p
3:15p	3:28p	3:35p	3:45p	3:55p	4:10p
3:55p	4:08p	4:15p	4:25p	4:35p	4:50p
4:35p	4:48p	4:55p	5:05p	5:15p	5:30p
5:15p	5:28p	5:35p	5:45p	5:55p	6:09p
5:55p	6:07p	6:13p	6:22p	6:31p	6:45p
6:35p	6:47p	6:53p	7:02p	7:11p	7:25p G
7:10p	7:22p	7:28p	7:37p	7:46p	8:00p
7:55p	8:07p	8:13p	8:22p	8:31p	8:45p
8:55p	9:07p	9:13p	9:22p	9:31p	9:45p G

SUNDAY

EASTBOUND

To Federal Highway

SAMPLE RD. & CORAL RIDGE DR. 1	SAMPLE RD. & UNIVERSITY DR. 2	SAMPLE RD. & TURTLE CREEK RD. 3	SAMPLE RD. & POWERLINE RD. 4	SAMPLE RD. TRI-RAIL 5	SAMPLE RD. & FEDERAL HWY. 6
8:00a	8:08a	8:17a	8:26a	8:31a	8:40a
9:00a	9:08a	9:17a	9:26a	9:31a	9:40a
10:00a	10:08a	10:17a	10:26a	10:31a	10:40a
11:00a	11:08a	11:17a	11:26a	11:31a	11:40a
12:00p	12:08p	12:17p	12:26p	12:31p	12:40p
1:00p	1:08p	1:17p	1:26p	1:31p	1:40p
2:00p	2:08p	2:17p	2:26p	2:31p	2:40p
3:00p	3:08p	3:17p	3:26p	3:31p	3:40p
4:00p	4:08p	4:17p	4:26p	4:31p	4:40p
5:00p	5:08p	5:17p	5:26p	5:31p	5:40p
6:00p	6:08p	6:17p	6:26p	6:31p	6:40p
7:00p	7:08p	7:17p	7:26p	7:31p	7:40p G

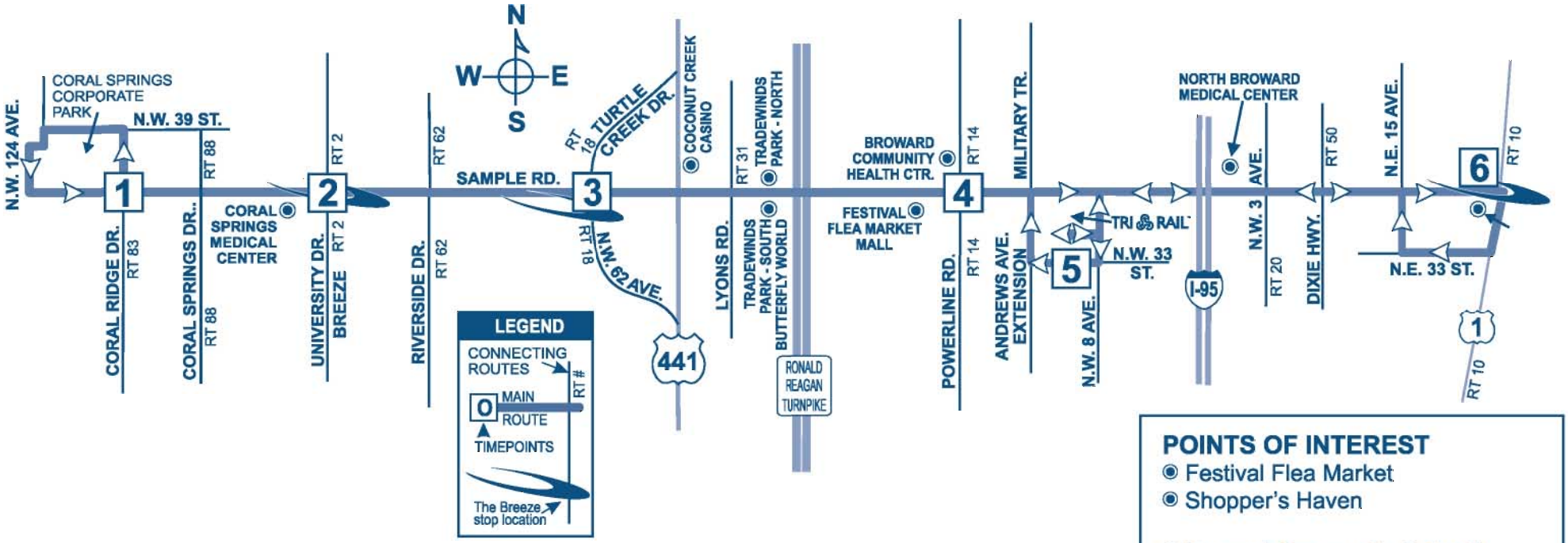
WESTBOUND

To Coral Ridge Drive

SAMPLE RD. & FEDERAL HWY. 6	SAMPLE RD. & TRI-RAIL 5	SAMPLE RD. & POWERLINE RD. 4	SAMPLE RD. & TURTLE CREEK RD. 3	SAMPLE RD. & UNIVERSITY DR. 2	SAMPLE RD. & CORAL RIDGE DR. 1
7:55a	8:07a	8:13a	8:22a	8:31a	8:45a
8:55a	9:07a	9:13a	9:22a	9:31a	9:45a
9:55a	10:07a	10:13a	10:22a	10:31a	10:45a
10:55a	11:07a	11:13a	11:22a	11:31a	11:45a
11:55a	12:07p	12:13p	12:22p	12:31p	12:45p
12:55p	1:07p	1:13p	1:22p	1:31p	1:45p
1:55p	2:07p	2:13p	2:22p	2:31p	2:45p
2:55p	3:07p	3:13p	3:22p	3:31p	3:45p
3:55p	4:07p	4:13p	4:22p	4:31p	4:45p
4:55p	5:07p	5:13p	5:22p	5:31p	5:45p
5:55p	6:07p	6:13p	6:22p	6:31p	6:45p
6:55p	7:07p	7:13p	7:22p	7:31p	7:45p G

ROUTE 34

Sample Road and Coral Ridge Drive to
Sample Road and Federal Highway
via Sample Road



POINTS OF INTEREST

- Festival Flea Market
- Shopper's Haven
- Broward Community & Family Health Center
- Coral Springs Medical Center
- North Broward Medical Center
- Tradewinds Park - North and South
- Butterfly World
- Coconut Creek Casino

TIMETABLE

ROUTE 441 Breeze

Monday - Friday
Limited Service

Golden Glades/Tri-Rail Park and Ride to Sample Road and Highway 441

via Highway 441

Effective 10/7/07

BROWARD COUNTY Transit
A service of the Broward County Commission

facebook

YouTube

Download & Print at broward.org/bct

Wheelchair Accessible

Bike Racks

Customer Service

Monday - Friday ..... 7 am - 8 pm
Saturday, Sunday and Holidays .....8:30 am - 5 pm

Transit Operations Agents help with:

- Trip planning
- Routes, times and transfer information
- Identifying Bus Pass sales locations
- Special event information

Lost and Found: 954-357-6414, Monday - Friday, 8:30 am - 4:30 pm

Holiday Bus Service

Sunday bus service is provided on the following observed holidays:

New Year's Day	Labor Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

Fares

Exact fare, dollar bill or coins required. Operators do not carry change.

Fares are: Regular, Senior/Youth/Disabled/Medicare,* Premium Express. Children (under 40 inches ride FREE).

Fare Deals

All Day Bus Pass offers unlimited rides on all routes. On sale aboard all BCT buses.

NOTE: Other cost saving passes cannot be purchased on BCT buses, but are available at the Central Bus Terminal and at authorized distributors.

10 Ride Pass

10 Rides any time, any day.
Expires after the tenth ride is taken.

7 Day Pass

Unlimited rides for seven consecutive days.
Starts on the first day card is used.
Expires after the seventh day.

31 Day Adult Pass

Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31 Day Reduced Pass

Youth*, Seniors*, Disabled*, Medicare*, College Student*. Unlimited rides for 31 consecutive days. Starts on the first day card is used.

31-Day Premium Pass

Unlimited rides for 31 consecutive days on Express or Regular.

Bus Passes are not redeemable, refundable or transferrable. Damaged cards are invalid. Lost, stolen or damaged cards will not be replaced.

***NOTICE:** Proof of age is required for Youth fare (18 years or younger) and for Senior fare (65 years or older). For College Student Bus Pass, a college photo ID card is required. For Disabled and Medicare fare, proof of disability (Medicare card) and photo I.D. is required. Eligible Senior fare patrons are encouraged to acquire their BCT Reduced Fare Photo ID cards.

ROUTE 441 BREEZE

Monday - Friday
Limited Service
Stops at Highway 441 and these intersections ONLY.

- SAMPLE RD.
- COPANS RD.
- COCONUT CREEK PKWY.
- ATLANTIC BLVD.
- KIMBERLY BLVD.
- COMMERCIAL BLVD.
- OAKLAND PARK BLVD.
- LAUDERHILL MALL STOP ON U.S. 441 AT N.W.12 ST.
- BROWARD BLVD.
- DAVIE BLVD.
- RIVERLAND RD.
- GRIFFIN RD.
- STIRLING RD.
- SHERIDAN ST.
- HOLLYWOOD/PINES BLVD.
- PEMBROKE RD.
- HALLANDALE BEACH BLVD. Eastbound MIRAMAR PKWY. Westbound
- 215 ST./ COUNTY LINE ROAD
- 199 ST./IVES DAIRY RD.
- 183 ST./MIAMI GARDENS DR.
- GOLDEN GLADES PARK & RIDE/TRI-RAIL

NORTHBOUND

To Lauderhill Mall/Sample Road

GOLDEN GLADES TRI-RAIL/ PARK & RIDE	183 ST./MIAMI GARDENS DR.	199 ST./IVES DAIRY RD.	COUNTY LINE RD.	HALLANDALE BCH. BLVD.	PEMBROKE RD.	HOLLYWOOD BLVD.	SHERIDAN ST.	STIRLING RD.	GRIFFIN RD.	RIVERLAND RD.	DAVIE BLVD.	BROWARD BLVD.	N.W. 12 ST. & HWY. 441 (LAUDERHILL MALL)	OAKLAND PARK BLVD.	COMMERCIAL BLVD.	KIMBERLY BLVD.	ATLANTIC BLVD.	COCONUT CREEK PKWY.	COPANS RD.	SAMPLE RD.
MORNING SERVICE																				
5:37a	5:43a	5:46a	5:48a	5:52a	5:55a	5:58a	6:03a	6:06a	6:09a	6:14a	6:15a	6:17a	6:21a	6:27a	6:34a	6:39a	6:45a	6:47a	6:50a	6:55a
6:07a	6:13a	6:16a	6:18a	6:22a	6:25a	6:28a	6:34a	6:37a	6:41a	6:46a	6:48a	6:50a	6:55a	7:01a	7:08a	7:13a	7:19a	7:21a	7:24a	7:29a
6:37a	6:44a	6:47a	6:50a	6:54a	6:58a	7:01a	7:07a	7:10a	7:14a	7:19a	7:21a	7:23a	7:28a	7:34a	7:42a	7:47a	7:53a	7:55a	7:58a	8:04a
7:07a	7:14a	7:17a	7:20a	7:24a	7:28a	7:31a	7:37a	7:40a	7:44a	7:50a	7:52a	7:54a	7:59a	8:05a	8:13a	8:18a	8:24a	8:26a	8:29a	8:34a
7:37a	7:45a	7:48a	7:51a	7:55a	8:00a	8:03a	8:09a	8:12a	8:16a	8:22a	8:24a	8:26a	8:31a	8:37a	8:44a	8:49a	8:55a	8:57a	9:00a	9:05a
8:12a	8:20a	8:23a	8:26a	8:30a	8:34a	8:37a	8:43a	8:46a	8:50a	8:55a	8:57a	8:59a	9:04a	9:10a	9:17a	9:22a	9:28a	9:30a	9:33a	G9:38a
8:42a	8:49a	8:52a	8:55a	8:59a	9:03a	9:06a	9:12a	9:15a	9:19a	9:24a	9:26a	9:28a	9:33a	9:39a	9:46a	9:51a	9:57a	9:59a	10:02a	G10:07a
9:12a	9:19a	9:22a	9:25a	9:29a	9:33a	9:36a	9:42a	9:45a	9:49a	9:54a	9:56a	9:58a	10:03a	10:09a	10:16a	10:21a	10:27a	10:29a	10:32a	G10:37a
9:42a	9:49a	9:52a	9:55a	9:59a	10:03a	10:06a	10:12a	10:15a	10:19a	10:24a	10:26a	10:28a	10:33a	10:39a	10:46a	10:51a	10:57a	10:59a	11:02a	G11:07a
AFTERNOON SERVICE																				
2:52p	2:59p	3:02p	3:05p	3:09p	3:13p	3:16p	3:22p	3:25p	3:29p	3:35p	3:37p	3:39p	3:44p	3:50p	3:58p	4:03p	4:09p	4:11p	4:14p	4:20p
3:22p	3:29p	3:32p	3:35p	3:39p	3:44p	3:47p	3:53p	3:56p	4:00p	4:06p	4:08p	4:10p	4:15p	4:21p	4:29p	4:35p	4:41p	4:43p	4:46p	4:52p
3:52p	4:00p	4:03p	4:06p	4:10p	4:15p	4:18p	4:24p	4:27p	4:31p	4:38p	4:40p	4:42p	4:48p	4:54p	5:02p	5:08p	5:14p	5:16p	5:19p	5:25p
4:22p	4:30p	4:33p	4:37p	4:41p	4:46p	4:50p	4:56p	4:59p	5:03p	5:10p	5:12p	5:14p	5:20p	5:26p	5:34p	5:39p	5:45p	5:47p	5:50p	5:56p
4:52p	5:00p	5:03p	5:07p	5:11p	5:16p	5:20p	5:26p	5:29p	5:33p	5:39p	5:41p	5:43p	5:48p	5:54p	6:02p	6:07p	6:13p	6:15p	6:18p	G6:24p
5:22p	5:30p	5:33p	5:36p	5:40p	5:45p	5:48p	5:54p	5:57p	6:01p	6:07p	6:09p	6:11p	6:16p	6:22p	6:30p	6:35p	6:41p	6:43p	6:46p	G6:52p
5:52p	6:00p	6:03p	6:06p	6:10p	6:15p	6:18p	6:24p	6:27p	6:31p	6:37p	6:39p	6:41p	6:46p	6:52p	7:00p	7:05p	7:11p	7:13p	7:16p	G7:22p
6:22p	6:30p	6:33p	6:36p	6:40p	6:45p	6:48p	6:54p	6:57p	7:01p	7:07p	7:09p	7:11p	7:16p	7:22p	7:30p	7:35p	7:41p	7:43p	7:46p	G7:52p

Times with the letter "G" before them indicate bus returns to garage.

broward.org/bct

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED
Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

SOUTHBOUND

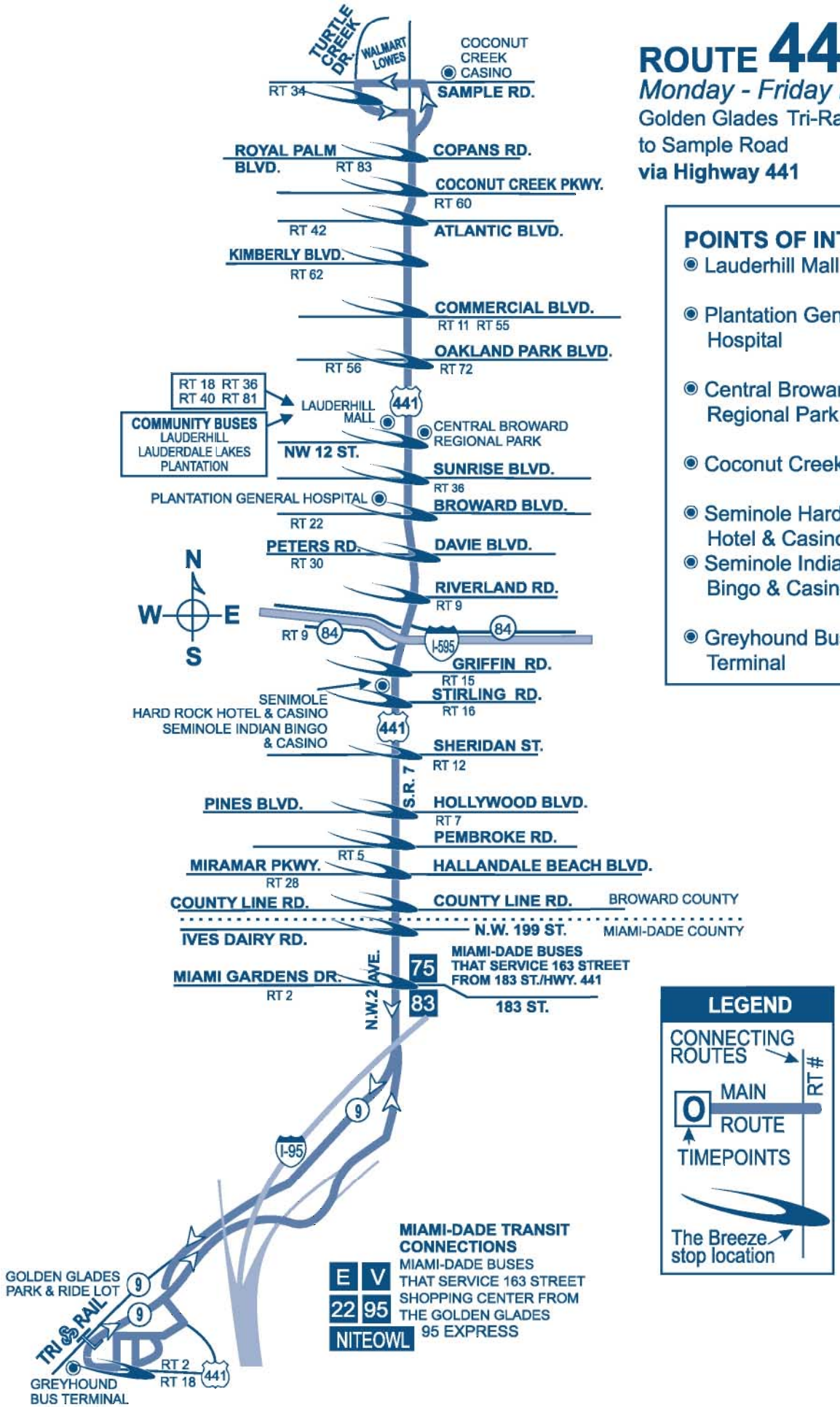
To Lauderhill Mall/Golden Glades Park & Ride

SAMPLE RD.	COPANS RD.	COCONUT CREEK PKWY.	ATLANTIC BLVD.	KIMBERLY BLVD.	COMMERCIAL BLVD.	OAKLAND PARK BLVD.	N.W. 12 ST. & HWY. 441 (LAUDERHILL MALL)	BROWARD BLVD.	DAVIE BLVD.	RIVERLAND RD.	GRIFFIN RD.	STIRLING RD.	SHERIDAN ST.	HOLLYWOOD BLVD.	PEMBROKE RD.	HALLANDALE BCH. BLVD.	COUNTY LINE RD.	199 ST./IVES DAIRY RD.	183 ST./MIAMI GARDENS DR.	GOLDEN GLADES TRI-RAIL/ PARK & RIDE
MORNING SERVICE																				
5:07a	5:11a	5:13a	5:15a	5:20a	5:25a	5:31a	5:37a	5:41a	5:43a	5:44a	5:49a	5:52a	5:55a	6:00a	6:03a	6:06a	6:10a	6:12a	6:15a	6:20a
5:37a	5:41a	5:43a	5:45a	5:50a	5:55a	6:01a	6:07a	6:11a	6:13a	6:14a	6:19a	6:22a	6:25a	6:30a	6:33a	6:37a	6:41a	6:44a	6:47a	6:53a
6:07a	6:11a	6:13a	6:15a	6:20a	6:25a	6:31a	6:37a	6:42a	6:44a	6:46a	6:51a	6:55a	6:58a	7:04a	7:07a	7:11a	7:15a	7:18a	7:21a	7:27a
6:37a	6:41a	6:44a	6:46a	6:52a	6:57a	7:04a	7:10a	7:15a	7:17a	7:19a	7:24a	7:28a	7:31a	7:37a	7:40a	7:45a	7:49a	7:52a	7:55a	8:02a
7:07a	7:11a	7:14a	7:16a	7:22a	7:27a	7:35a	7:41a	7:46a	7:48a	7:50a	7:56a	8:00a	8:03a	8:09a	8:12a	8:17a	8:21a	8:24a	8:27a	8:33a
7:37a	7:42a	7:45a	7:47a	7:53a	7:58a	8:06a	8:12a	8:17a	8:19a	8:21a	8:27a	8:31a	8:34a	8:40a	8:43a	8:47a	8:51a	8:54a	8:57a	9:03a
8:12a	8:17a	8:20a	8:22a	8:28a	8:33a	8:40a	8:46a	8:51a	8:53a	8:55a	9:00a	9:04a	9:07a	9:13a	9:16a	9:20a	9:24a	9:27a	9:30a	9:36a
8:42a	8:46a	8:49a	8:51a	8:57a	9:02a	9:09a	9:15a	9:20a	9:22a	9:24a	9:29a	9:33a	9:36a	9:42a	9:45a	9:49a	9:53a	9:56a	9:59a	G10:05a
9:12a	9:16a	9:19a	9:21a	9:27a	9:32a	9:39a	9:45a	9:50a	9:52a	9:54a	9:59a	10:03a	10:06a	10:12a	10:15a	10:19a	10:23a	10:26a	10:29a	G10:35a
AFTERNOON SERVICE																				
2:42p	2:46p	2:49p	2:51p	2:57p	3:02p	3:09p	3:15p	3:20p	3:22p	3:24p	3:29p	3:33p	3:36p	3:42p	3:45p	3:50p	3:54p	3:57p	4:00p	4:07p
3:12p	3:16p	3:19p	3:21p	3:27p	3:32p	3:40p	3:46p	3:51p	3:53p	3:55p	4:01p	4:05p	4:08p	4:14p	4:17p	4:22p	4:26p	4:29p	4:32p	4:39p
3:37p	3:42p	3:45p	3:47p	3:53p	3:58p	4:06p	4:12p	4:17p	4:19p	4:21p	4:27p	4:31p	4:34p	4:40p	4:44p	4:49p	4:53p	4:57p	5:00p	5:07p
4:07p	4:12p	4:15p	4:17p	4:23p	4:28p	4:36p	4:42p	4:48p	4:50p	4:52p	4:59p	5:03p	5:06p	5:12p	5:16p	5:21p	5:25p	5:29p	5:32p	5:39p
4:37p	4:42p	4:45p	4:47p	4:53p	4:59p	5:07p	5:13p	5:19p	5:21p	5:23p	5:30p	5:34p	5:37p	5:43p	5:46p	5:51p	5:55p	5:58p	6:01p	6:08p
5:07p	5:12p	5:15p	5:17p	5:23p	5:29p	5:37p	5:43p	5:48p	5:50p	5:52p	5:58p	6:02p	6:05p	6:11p	6:14p	6:19p	6:23p	6:26p	6:29p	G6:36p
5:37p	5:42p	5:45p	5:47p	5:53p	5:58p	6:06p	6:12p	6:17p	6:19p	6:21p	6:27p	6:31p	6:34p	6:40p	6:43p	6:48p	6:52p	6:55p	6:58p	G7:05p
6:07p	6:12p	6:15p	6:17p	6:23p	6:28p	6:36p	6:42p	6:47p	6:49p	6:51p	6:57p	7:01p	7:04p	7:10p	7:13p	7:18p	7:22p	7:25p	7:28p	G7:35p

ROUTE 441 *Breeze*

Monday - Friday Limited Service

Golden Glades Tri-Rail Park & Ride
to Sample Road
via Highway 441



POINTS OF INTEREST

- Lauderhill Mall
- Plantation General Hospital
- Central Broward Regional Park
- Coconut Creek Casino
- Seminole Hard Rock Hotel & Casino
- Seminole Indian Bingo & Casino
- Greyhound Bus Terminal

LEGEND

CONNECTING ROUTES → RT #

O — MAIN ROUTE

TIMEPOINTS

The Breeze stop location

Appendix J-2

City of Coconut Creek Community Bus

Coconut Creek Community Bus

The City of Coconut Creek and Broward County Transit (BCT) are providing this community service to increase the number of destinations that can be reached through public transit. This service is designed to operate in conjunction with BCT routes 18, 31, 34, 48, 83, 441 Breeze and the City of Margate Inner-City Transit.

The Community Bus is air conditioned and wheelchair accessible in accordance with the Americans with Disabilities Act (ADA).

There is no fare for the Coconut Creek Bus service. However, riders making connections with BCT or the City of Margate Community Bus Service routes are expected to pay the exact fare.

Hours of Operation

Monday through Saturday

7:00 am – 6:00 pm

The Community Bus travels every 60 minutes, with assigned stops. Please refer to the timetable and map on the reverse side for times and destinations.

Service operates as close to schedule as possible, although traffic conditions may cause the Community Bus to arrive slightly early or late. Please allow yourself enough time when traveling. Mechanical difficulties may interrupt service. There will be no service when Coconut Creek is under "Hurricane Warning".

Holidays

There is no service on the following holidays observed by the City of Coconut Creek:

New Year's Eve
New Year's Day
Martin Luther King, Jr. Birthday
President's Day
Memorial Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
and the day after
Christmas Eve
Christmas Day

Bike Racks

Bike racks are available on Coconut Creek Community Buses. Racks are designed to carry two bikes only. It is important to have the operator's attention before loading and unloading your bike. As the bus approaches, have your bike ready to load. Remove any loose items that may fall off.

Loading

- Always load your bike from the curbside of the street.
- Lower-Squeeze the handle and pull down to release the folded bike rack.
- Lift your bike into the rack, fitting the wheels into the slots of the vacant position closest to the bus.
- Latch-Pull and release the support arm over the front tire, making sure the support arm is resting on the tire, not on the fender or frame.

Unloading

- Before exiting, notify the operator you are removing your bike.
- Pull the support arm off the tire. Move the support arm down and out of the way. Lift your bike out of the rack. If your bike is the only one on the rack, return the rack to the upright position.

Move quickly to the curb.

Information

For more information about the City of Coconut Creek Community Bus service route and connections call:

954.973.6789
Monday through Friday:
8 am – 5 pm

Hearing-speech impaired/TTY*
954.973.6700
***Teletype machine required**

Visit the City of Coconut Creek web site at: **www.creekgov.net**

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

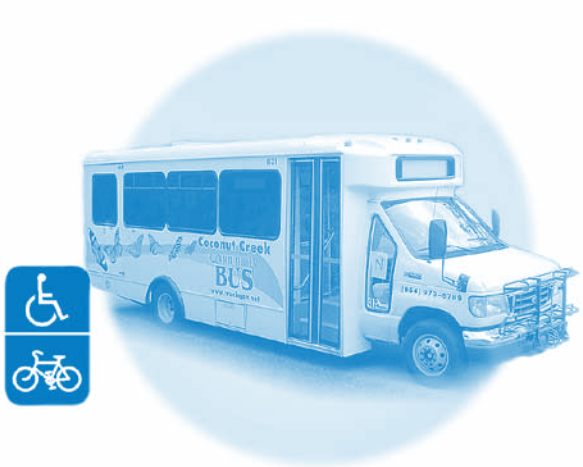
Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

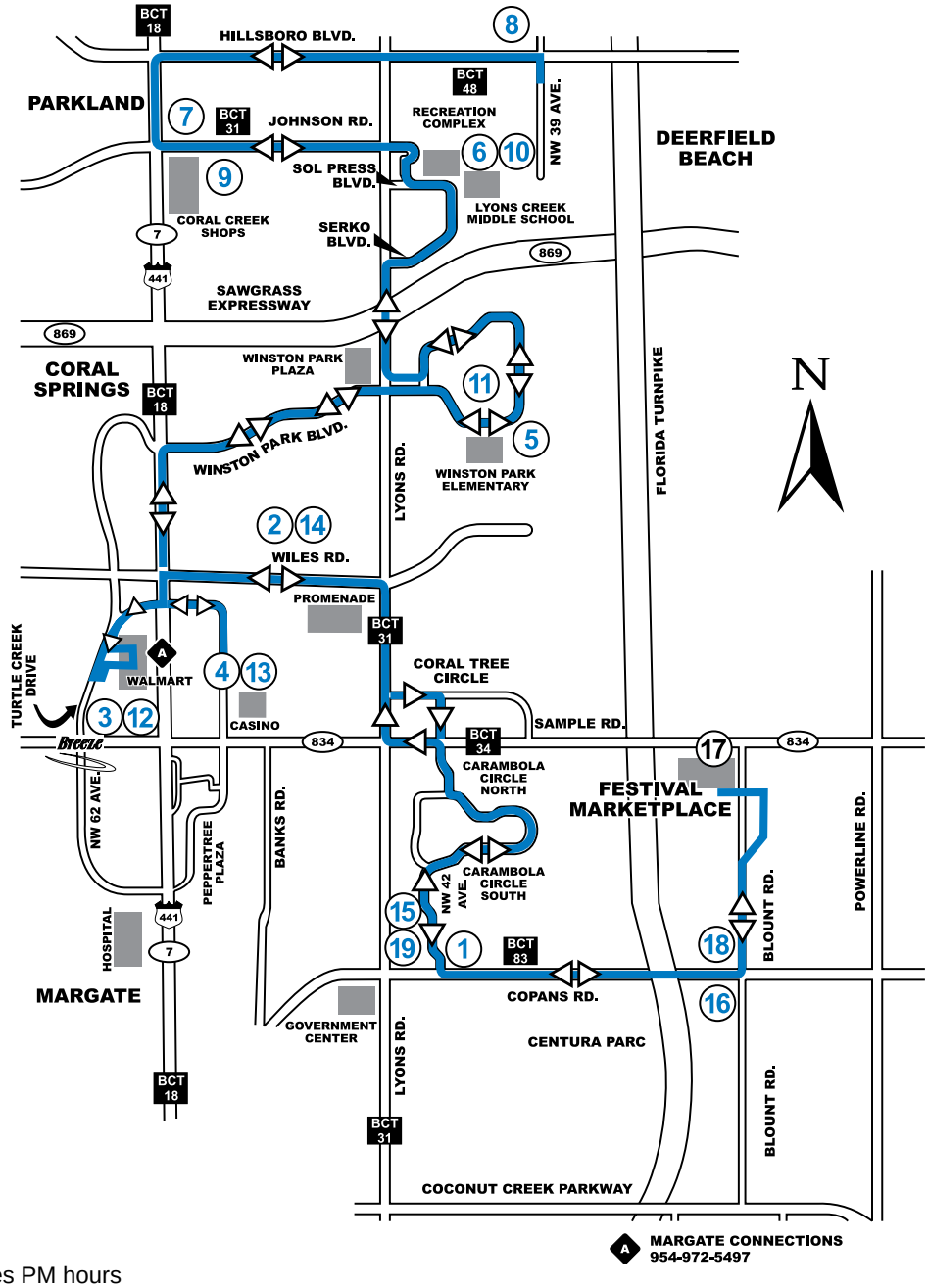
COCONUT CREEK

"N" Route

Map and Timetable

Effective April 2012





BOLD type indicates PM hours

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Copans Rd & NW 42 Ave	Wiles Rd & Evergreen Lakes	Turtle Creek Dr & Turtle Run Plaza Wal-Mart	Seminole Casino Coconut Creek	Winston Park Blvd & NW 42 Ave	Coconut Creek Recreational Complex	Johnson Rd & US 441	Hillsboro Blvd & NW 39 Ave	Johnson Rd & US 441	Coconut Creek Recreational Complex	Winston Park Blvd & NW 42 Ave	Turtle Creek Dr & Turtle Run Plaza Wal-Mart	Seminole Casino Coconut Creek	Wiles Rd & Evergreen Lakes	Copans Rd & NW 42 Ave	Copans Rd & Centura Park	Festival Marketplace	Copans Rd & Centura Park	Copans Rd & NW 42 Ave
7:00a	7:13a	7:20a	7:26a	7:34a	7:42a	7:46a	7:54a	8:01a	8:05a	8:14a	8:21a	8:27a	8:35a	8:48a	8:50a	8:55a	8:58a	9:00a
8:00a	8:13a	8:20a	8:26a	8:34a	8:42a	8:46a	8:54a	9:01a	9:05a	9:14a	9:21a	9:27a	9:35a	9:48a	9:50a	9:55a	9:58a	10:00a
9:00a	9:13a	9:20a	9:26a	9:34a	9:42a	9:46a	9:54a	10:01a	10:05a	10:14a	10:21a	10:27a	10:35a	10:48a	10:50a	10:55a	10:58a	11:00a
10:00a	10:13a	10:20a	10:26a	10:34a	10:42a	10:46a	10:54a	11:01a	11:05a	11:14a	11:21a	11:27a	11:35a	11:48a	11:50a	11:55a	11:58a	12:00p
11:00a	11:13a	11:20a	11:26a	11:34a	11:42a	11:46a	11:54a	12:01p	12:05p	12:14p	12:21p	12:27p	12:35p	12:48p	12:50p	12:55p	12:58p	1:00p
12:00p	**12:13p**	**12:20p**	**12:26p**	**12:34p**	**12:42p**	**12:46p**	**12:54p**	**1:01p**	**1:05p**	**1:14p**	**1:21p**	**1:27p**	**1:35p**	**1:48p**	**1:50p**	**1:55p**	**1:58p**	**2:00p**
1:00p	**1:13p**	**1:20p**	**1:26p**	**1:34p**	**1:42p**	**1:46p**	**1:54p**	**2:01p**	**2:05p**	**2:14p**	**2:21p**	**2:27p**	**2:35p**	**2:48p**	**2:50p**	**2:55p**	**2:58p**	**3:00p**
2:00p	**2:13p**	**2:20p**	**2:26p**	**2:34p**	**2:42p**	**2:46p**	**2:54p**	**3:01p**	**3:05p**	**3:14p**	**3:21p**	**3:27p**	**3:35p**	**3:48p**	**3:50p**	**3:55p**	**3:58p**	**4:00p**
3:00p	**3:13p**	**3:20p**	**3:26p**	**3:34p**	**3:42p**	**3:46p**	**3:54p**	**4:01p**	**4:05p**	**4:14p**	**4:21p**	**4:27p**	**4:35p**	**4:48p**	**4:50p**	**4:55p**	**4:58p**	**5:00p**
4:00p	**4:13p**	**4:20p**	**4:26p**	**4:34p**	**4:42p**	**4:46p**	**4:54p**	**5:01p**	**5:05p**	**5:14p**	**5:21p**	**5:27p**	**5:35p**	**5:48p**	**5:50p**	**5:55p**	**5:58p**	**6:00p**

Coconut Creek Community Bus

The City of Coconut Creek and Broward County Transit (BCT) are providing this community service to increase the number of destinations that can be reached through public transit. This service is designed to operate in conjunction with BCT routes 18, 31, 34, 42, 60 and 83, 441 Breeze the Tri-Rail shuttle bus at the Coconut Creek Government Center, and Margate Inner-City Transit.

The Community Bus is air conditioned and wheelchair accessible in accordance with the Americans with Disabilities Act (ADA).

There is no fare for the Coconut Creek Bus service. However, riders making connections with BCT or the City of Margate Community Bus Service routes are expected to pay the exact fare.

Hours of Operation

Monday through Saturday
6:30 am – 6:00 pm

The Community Bus travels every 60 minutes, with assigned stops. Please refer to the timetable and map on the reverse side for times and destinations. Service operates as close to schedule as possible, although traffic conditions may cause the Community Bus to arrive slightly early or late. Please allow yourself enough time when traveling. Mechanical difficulties may interrupt service. There will be no service when Coconut Creek is under "Hurricane Warning".

Holidays

There is no service on the following holidays observed by the City of Coconut Creek:

New Year's Eve
New Year's Day
Martin Luther King, Jr Birthday.
President's Day
Memorial Day
Independence Day
Labor Day
Veteran's Day
Thanksgiving Day
and the day after
Christmas Eve
Christmas Day

Bike Racks

Bike racks are available on Coconut Creek Community Buses. Racks are designed to carry two bikes only. It is important to have the operator's attention before loading and unloading your bike. As the bus approaches, have your bike ready to load. Remove any loose items that may fall off.

Loading

- Always load your bike from the curb-side of the street.
- Lower-Squeeze the handle and pull down to release the folded bike rack.
- Lift your bike into the rack, fitting the wheels into the slots of the vacant position closest to the bus.
- Latch-Pull and release the support arm over the front tire, making sure the support arm is resting on the tire, not on the fender or frame.

Unloading

- Before exiting, notify the operator you are removing your bike.
- Pull the support arm off the tire. Move the support arm down and out of the way. Lift your bike out of the rack. If your bike is the only one on the rack, return the rack to the upright position.

Move quickly to the curb.

Information

For more information about the City of Coconut Creek Community Bus service route and connections call:

954.973.6789
Monday through Friday:
8 am – 5 pm

Hearing-speech impaired/TTY*
954.973.6700
*Teletype machine required

Visit the City of Coconut Creek web site at: **www.creekgov.net**

For more information about BCT routes, fares or connections, call:

BCT Rider Info
954.357.8400
Hearing-speech impaired/TTY*
954.357.8302
*Teletype machine required

COCONUT CREEK

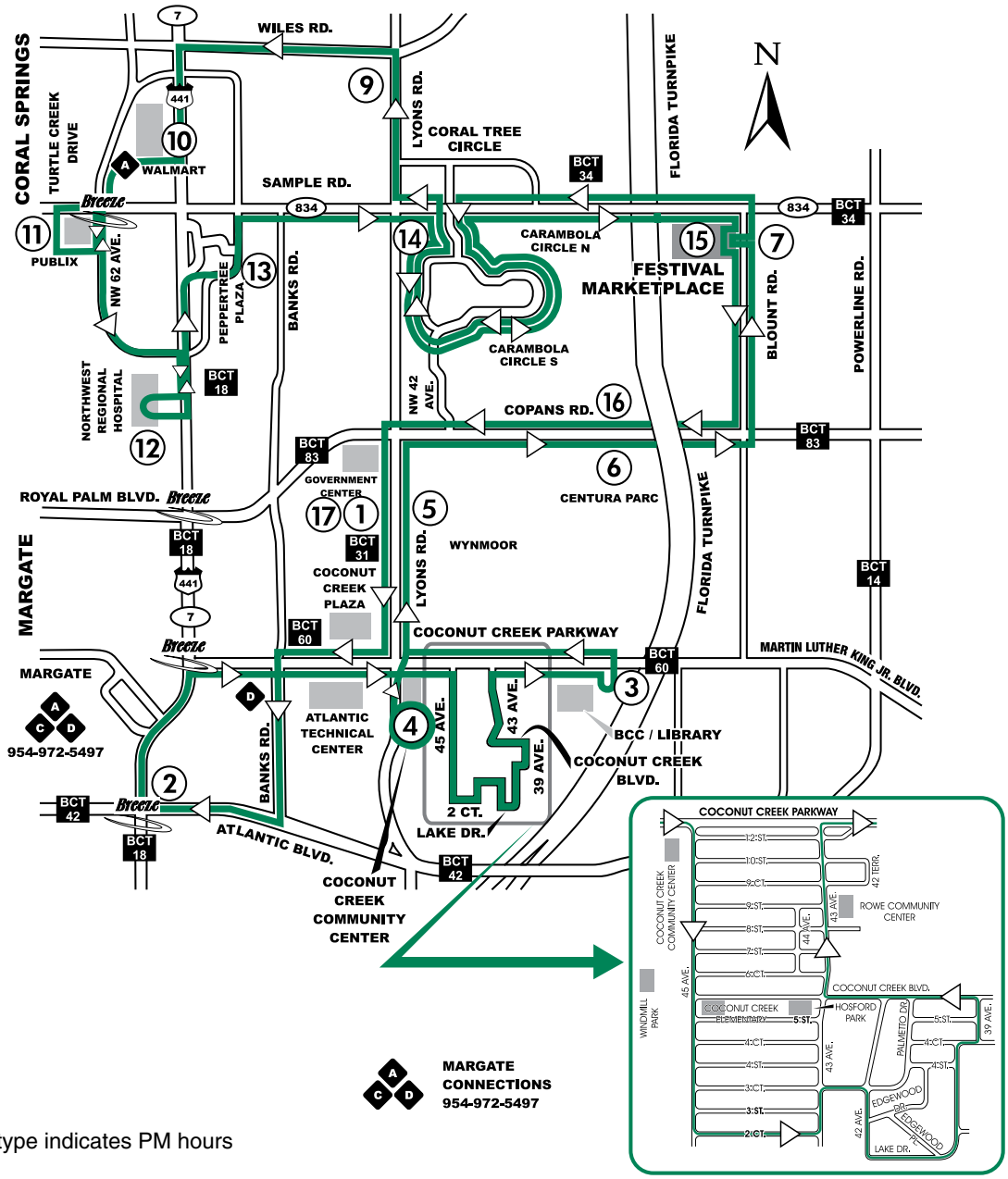
"S" Route

Map and Timetable

Effective April 2012

PROTECTIONS OF TITLE VI OF THE CIVIL RIGHTS ACT OF 1964 AS AMENDED

Any person(s) or group(s) who believes that they have been subjected to discrimination because of race, color, or national origin, under any transit program or activity provided by Broward County Transit (BCT), may call 954-357-8481 to file a Title VI discrimination complaint or write to Broward County Transit Division, Compliance Manager, 1 N. University Drive, Suite 3100A, Plantation, FL 33324.

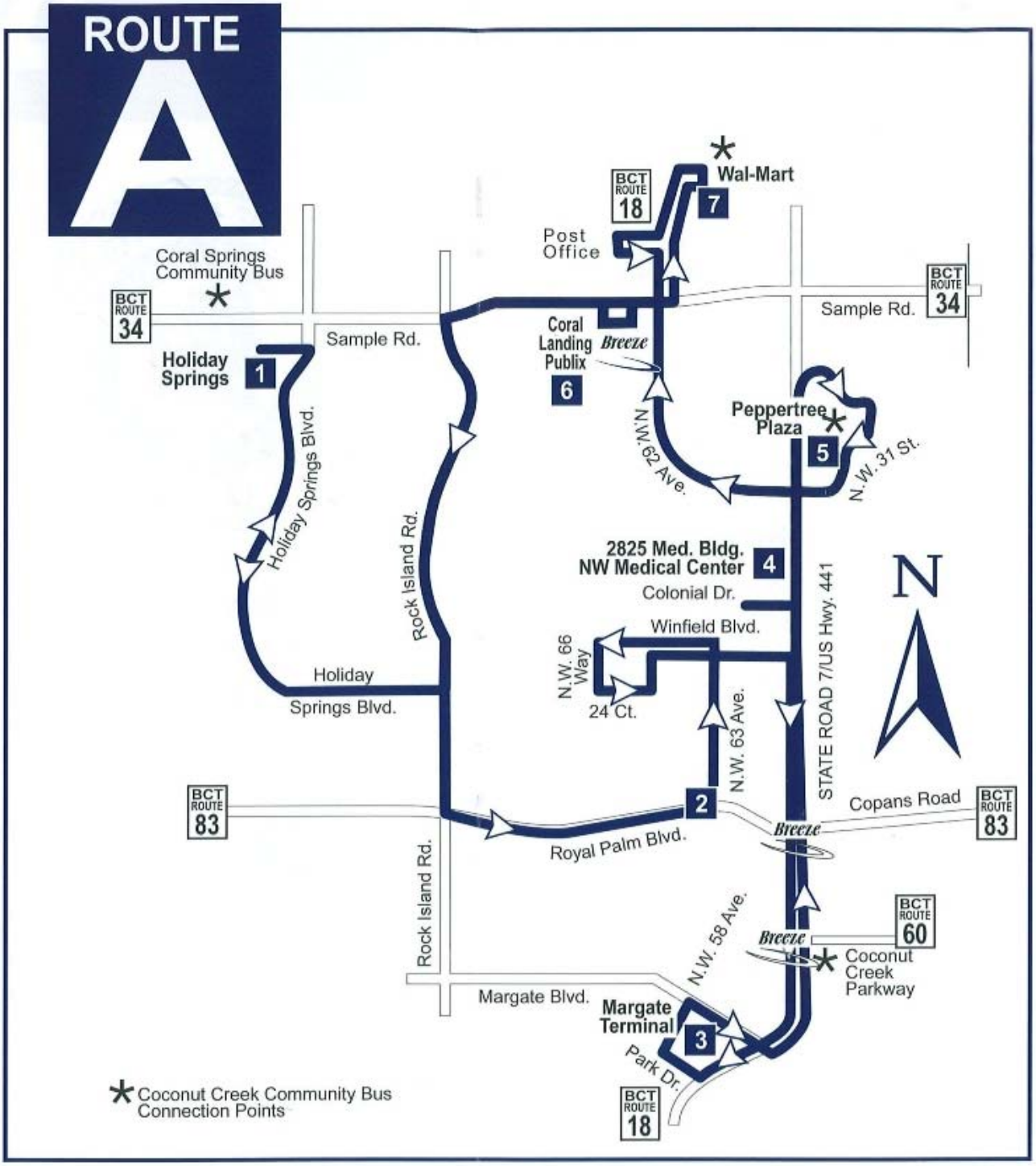


BOLD type indicates PM hours

1 NW 22 St & Lyons Rd	2 Atlantic Blvd & US 441	3 BC North Campus	4 Coconut Creek Community Center	5 Lyons Rd & Wynmoor	6 Copans Rd & Centura Park	7 Festival Marketplace	8 McDonalds Sample Rd & NW 42 Ave	9 Wiles & Lyons Roads	10 Turtle Creek Dr & Turtle Run Plaza Wal-Mart	11 Publix Coral Landing	12 NW Medical Center	13 Peppertree Plaza Sample Rd & US 441	14 McDonalds Sample Rd & NW 42 Ave	15 Festival Marketplace	16 Copans Rd & Centura Park	17 NW 22 St & Lyons Rd
6:30a	6:43a	6:57a	7:04a	7:08a	7:11a	7:14a	7:26a	7:39a	7:47a	7:51a	7:57a	8:04a	8:09a	8:21a	8:27a	8:30a
7:30a	7:43a	7:57a	8:04a	8:08a	8:11a	8:14a	8:26a	8:39a	8:47a	8:51a	8:57a	9:04a	9:09a	9:21a	9:27a	9:30a
8:30a	8:43a	8:57a	9:04a	9:08a	9:11a	9:14a	9:26a	9:39a	9:47a	9:51a	9:57a	10:04a	10:09a	10:21a	10:27a	10:30a
9:30a	9:43a	9:57a	10:04a	10:08a	10:11a	10:14a	10:26a	10:39a	10:47a	10:51a	10:57a	11:04a	11:09a	11:21a	11:27a	11:30a
10:30a	10:43a	10:57a	11:04a	11:08a	11:11a	11:14a	11:26a	11:39a	11:47a	11:51a	11:57a	12:04p	12:09p	12:21p	12:27p	12:30p
11:30a	11:43a	11:57a	**12:04p**	**12:08p**	**12:11p**	**12:14p**	**12:26p**	**12:39p**	**12:47p**	**12:51p**	**12:57p**	**1:04p**	**1:09p**	**1:21p**	**1:27p**	**1:30p**
12:30p	**12:43p**	**12:57p**	**1:04p**	**1:08p**	**1:11p**	**1:14p**	**1:26p**	**1:39p**	**1:47p**	**1:51p**	**1:57p**	**2:04p**	**2:09p**	**2:21p**	**2:27p**	**2:30p**
1:30p	**1:43p**	**1:57p**	**2:04p**	**2:08p**	**2:11p**	**2:14p**	**2:26p**	**2:39p**	**2:47p**	**2:51p**	**2:57p**	**3:04p**	**3:09p**	**3:21p**	**3:27p**	**3:30p**
2:30p	**2:43p**	**2:57p**	**3:04p**	**3:08p**	**3:11p**	**3:14p**	**3:26p**	**3:39p**	**3:47p**	**3:51p**	**3:57p**	**4:04p**	**4:09p**	**4:21p**	**4:27p**	**4:30p**
3:30p	**3:43p**	**3:57p**	**4:04p**	**4:08p**	**4:11p**	**4:14p**	**4:26p**	**4:39p**	**4:47p**	**4:51p**	**4:57p**	**5:04p**	**5:09p**	**5:21p**	**5:27p**	**5:30p**
4:30p	**4:41p**	**4:53p**	**4:59p**	**5:02p**												
5:30p	**5:41p**	**5:53p**	**5:59p**	**6:02p**												

Appendix J-3

City of Margate Inner-City Transit


ROUTE
A
Wal-Mart
7
BCT ROUTE 18
Post Office
Coral Springs Community Bus
BCT ROUTE 34
Sample Rd.
BCT ROUTE 34
Coral Landing Publix
Breeze
6
Holiday Springs
1
Peppertree Plaza
5
N.W. 62 Ave.
N.W. 31 St.
Holiday Springs Blvd.
Rock Island Rd.
2825 Med. Bldg.
NW Medical Center
4
Colonial Dr.
Winfield Blvd.
N.W. 66 Way
24 Ct.
N
Holiday Springs Blvd.
N.W. 63 Ave.
STATE ROAD 7/US Hwy. 441
BCT ROUTE 83
2
Copans Road
BCT ROUTE 83
Breeze
Royal Palm Blvd.
Rock Island Rd.
N.W. 58 Ave.
BCT ROUTE 60
Breeze
Coconut Creek Parkway
Margate Blvd.
Margate Terminal
3
Park Dr.
BCT ROUTE 18
Coconut Creek Community Bus Connection Points

HOLIDAY SPRINGS • MARGATE TERMNAL
N.W. MEDICAL CENTER • PEPPERTREE PLAZA
CORAL LANDING • WAL-MART

MONDAY THROUGH FRIDAY

ROUTE A

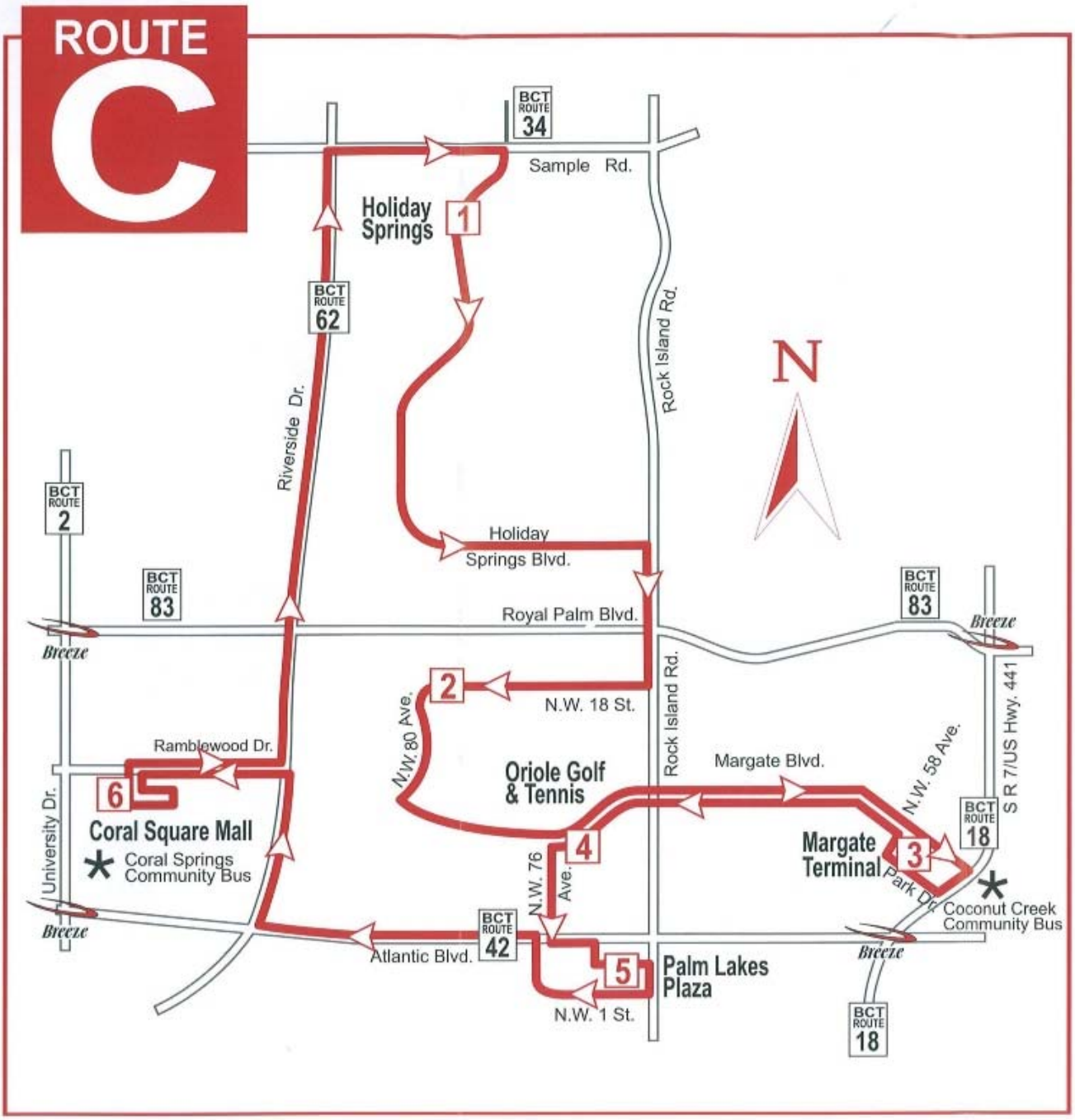
EASTBOUND To Hwy. 441 — **WESTBOUND**

To Margate Term, NW Medical, Coral Landing, Wal-Mart — To Holiday Springs

Holiday Springs Blvd. Sample Road	Royal Palm Blvd & NW 63 Ave	Margate Terminal	NW Medical Center	Peppertree Plaza Sample Rd & US 441	Publix Coral Landing	Wal-Mart Turtle Creek Dr & Turtle Run Plaza	Holiday Springs Blvd. Sample Road
1	2	3	4	5	6	7	1
7:30	7:40	7:50	7:57	8:03	8:13	8:20	8:30
8:30	8:40	8:50	8:57	9:03	9:13	9:20	9:30
9:30	9:40	9:50	9:57	10:03	10:13	10:20	10:30
10:30	10:40	10:50	10:57	11:03	11:13	11:20	11:30
11:30	11:40	11:50	11:57	12:03	12:13	12:20	12:30
12:30	12:40	12:50	12:57	1:03	1:13	1:20	1:30
1:30	1:40	1:50	1:57	2:03	2:13	2:20	2:30
2:30	2:40	2:50	2:57	3:03	3:13	3:20	3:30
3:30	3:40	3:50	3:57	4:03	4:13	4:20	4:30

NUMBERS INDICATES TIME POINTS ON THE MAP.
G DESIGNATES BUS RETURNS TO GARAGE AND IS NOT IN SERVICE.

Regular fare for each ONE WAY trip is .75¢. The exact fare is required on all buses at all times. Please have fare ready when boarding.
Operators do not carry cash.


ROUTE
C
BCT ROUTE 34
Sample Rd.
Holiday Springs
1
BCT ROUTE 62
Riverside Dr.
Rock Island Rd.
N
BCT ROUTE 2
Holiday Springs Blvd.
BCT ROUTE 83
Royal Palm Blvd.
BCT ROUTE 83
Breeze
Breeze
2
N.W. 18 St.
N.W. 80 Ave.
Rock Island Rd.
Ramblewood Dr.
Margate Blvd.
N.W. 58 Ave.
S R 7/US Hwy. 441
6
Oriole Golf & Tennis
University Dr.
Coral Square Mall
Coral Springs Community Bus
4
N.W. 76 Ave.
Margate Terminal
3
Park Dr.
BCT ROUTE 18
Coconut Creek Community Bus
Breeze
BCT ROUTE 42
Atlantic Blvd.
5
Palm Lakes Plaza
N.W. 1 St.
Breeze
BCT ROUTE 18

HOLIDAY SPRINGS • MARGATE TERMINAL
PALM LAKES PLAZA • CORAL SQUARE MALL

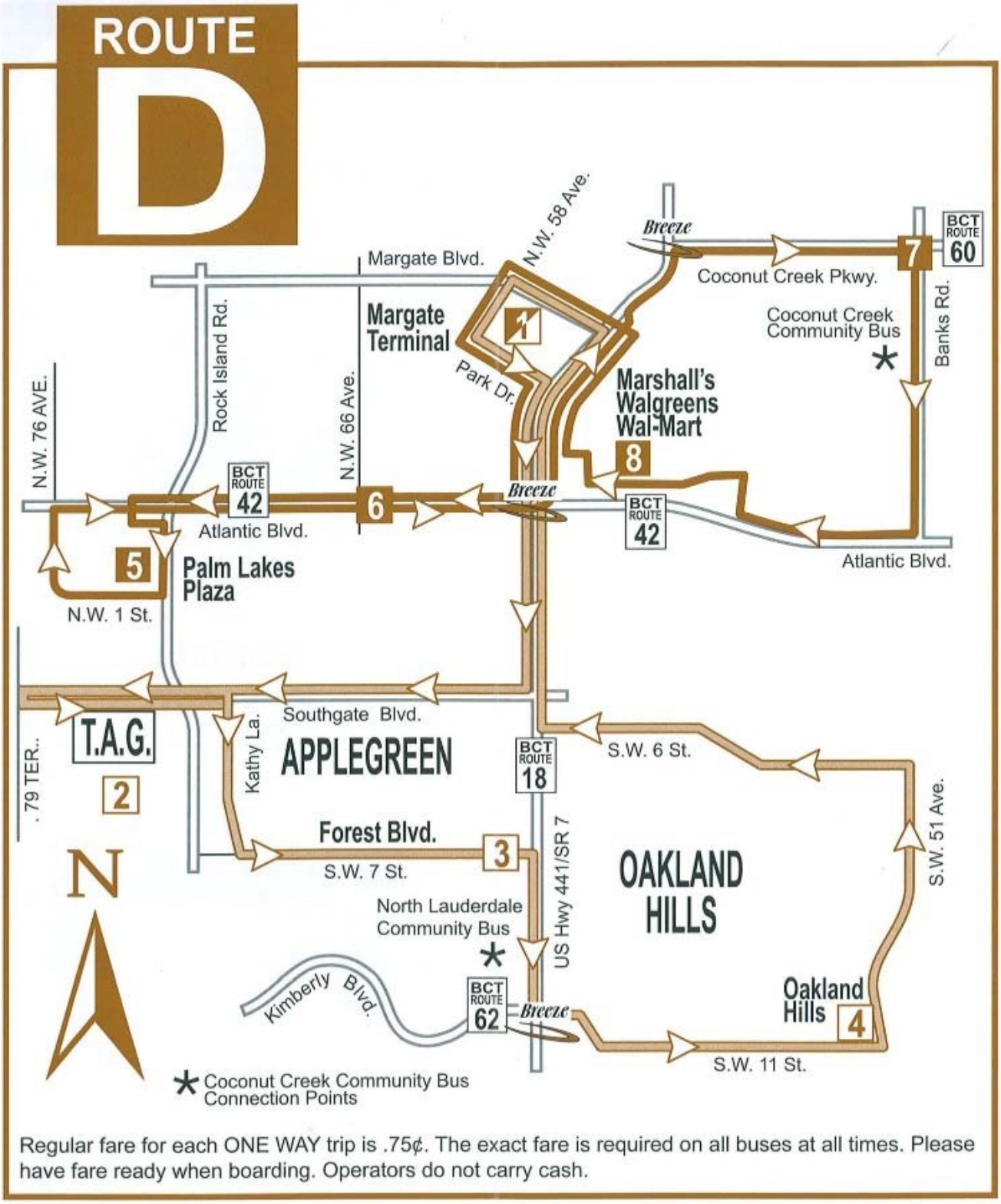
MONDAY THROUGH FRIDAY

ROUTE C

SOUTHBOUND			WESTBOUND			NORTHBOUND	
To Margate Terminal			To Coral Square Mall			To Holiday Springs	
Holiday Springs Blvd. Sample Road	NW 18 St & NW 80 Ave	Margate Terminal	Margate Blvd & Golf Circle Dr	Palm Lakes Plaza	Coral Square Mall	Coral Square Mall	Holiday Springs Blvd. Sample Road
1	2	3	4	5	6	6	1
7:30	7:35	7:50	7:55	8:00	8:10	8:15	8:25
8:30	8:35	8:50	8:55	9:00	9:10	9:15	9:25
9:30	9:35	9:50	9:55	10:00	10:10	10:15	10:25
10:30	10:35	10:50	10:55	11:00	11:10	11:15	11:25
11:30	11:35	11:50	11:55	**12:00**	**12:10**	**12:15**	**12:25**
12:30	**12:35**	**12:50**	**12:55**	**1:00**	**1:10**	**1:15**	**1:25**
1:30	**1:35**	**1:50**	**1:55**	**2:00**	**2:10**	**2:15**	**2:25**
2:30	**2:35**	**2:50**	**2:55**	**3:00**	**3:10**	**3:15**	**3:25**
3:30	**3:35**	**3:50**	**3:55**	**4:00**	**4:10**	**4:15**	**4:30**

NUMBERS INDICATE TIME POINTS ON THE MAP

Regular fare for each ONE WAY trip is .75¢. The exact fare is required on all buses at all times. Please have fare ready when boarding. Operators do not carry cash.



Regular fare for each ONE WAY trip is .75¢. The exact fare is required on all buses at all times. Please have fare ready when boarding. Operators do not carry cash.

MARGATE TERMINAL • SOUTHGATE BLVD. • FOREST BLVD. AT APPLEGREEN • OAKLAND HILLS • PALM LAKES PLAZA LAKEWOOD PLAZA

MONDAY THROUGH FRIDAY

ROUTE D

SOUTH BOUND				WESTBOUND		EASTBOUND				
To T.A.G., Apple Green, Oakland Hills				To Palm Lakes Plaza		To Coconut Creek Pkwy, Banks Rd				
Margate Terminal	TAG on Southgate Blvd & NW 75 Ter	Forest Blvd & US 441 Applegreen	Oakland Hills	Margate Terminal	Palm Lake Plaza	Palm Lake Plaza	Atlantic Blvd & NW 66 Ave	Coconut Creek Pkwy & Banks Rd	Lakewood Plaza Wal-Mart	Margate Terminal
1	2	3	4	1	5	5	6	7	8	1
7:20	7:28	7:32	7:37	7:47	7:57	8:02	8:07	8:12	8:17	8:20
8:20	8:28	8:32	8:37	8:47	8:57	9:02	9:07	9:12	9:17	9:20
9:20	9:28	9:32	9:37	9:47	9:57	10:02	10:07	10:12	10:17	10:20
10:20	10:28	10:32	10:37	10:47	10:57	11:02	11:07	11:12	11:17	11:20
11:20	11:28	11:32	11:37	11:47	11:57	**12:02**	**12:07**	**12:12**	**12:17**	**12:20**
12:20	**12:28**	**12:32**	**12:37**	**12:47**	**12:57**	**1:02**	**1:07**	**1:12**	**1:17**	**1:20**
1:20	**1:28**	**1:32**	**1:37**	**1:47**	**1:57**	**2:02**	**2:07**	**2:12**	**2:17**	**2:20**
2:20	**2:28**	**2:32**	**2:37**	**2:47**	**2:57**	**3:02**	**3:07**	**3:12**	**3:17**	**3:20**
3:20	**3:28**	**3:32**	**3:37**	**3:47**	**3:57**	**4:02**	**4:07**	**4:12**	**4:17**	**4:20**

NUMBERS INDICATES TIME POINTS ON THE MAP.

Appendix K

SYNCHRO and HCS Outputs

Index Appendix K

K-1 **2011 Existing PM Peak Hour Intersection Analysis**
K-2 **2015 Phase III Background PM Peak Hour Intersection Analysis Alternatives A and C and Sub-Alternative A-1**
K-3 **2018 Phase IV Background PM Peak Hour Intersection Analysis Alternatives A and C and Sub-Alternative A-1**
K-4 **2020 Background PM Peak Hour Intersection Analysis Alternatives A and C and Sub-Alternative A-1**
K-5 **2035 Background PM Peak Hour Intersection Analysis Alternatives A and C and Sub-Alternative A-1**
K-6 **2020 Background PM Peak Hour Intersection Analysis Alternative B**
K-7 **2035 Background PM Peak Hour Intersection Analysis Alternative B**
K-8 **2020 Background PM Peak Hour Intersection Analysis Sub-Alternative C-1**
K-9 **2035 Background PM Peak Hour Intersection Analysis Sub-Alternative C-1**
K-10 **Impacted Intersection Analysis, Total PM Peak Hour, Phase III, 2012 – 2015, Alternatives A and C and Sub-Alternative A-1**
K-11 **Impacted Intersection Analysis, Total PM Peak Hour, Phase IV, 2016 – 2018, Alternatives A and C and Sub-Alternative A-1**
K-12 **Impacted Intersection Analysis, Total PM Peak Hour, 2020 Built-out, Alternatives A and C and Sub-Alternative A-1**
K-13 **Impacted Intersection Analysis, Total PM Peak Hour, Cumulative 2035, Alternatives A and C and Sub-Alternative A-1**
K-14 **Signalization of Intersection No. 6, SR 7 and NW 40th Street, 2018, 2020, and 2035 Total PM Peak Hour, Alternatives A and C and Sub-Alternative A-1**

Appendix K-1

2011 Existing PM Peak Hour Intersection Analysis

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	210	1244	204	1805	220	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	219	1296	212	1880	229	152
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	219	1296	212	1880	229	152
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	14.5	109.9	14.1	109.5	15.0	15.0
Effective Green, g (s)	14.5	109.9	14.1	109.5	15.0	15.0
Actuated g/C Ratio	0.09	0.69	0.09	0.68	0.09	0.09
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	301	3479	292	3466	311	311
v/s Ratio Prot	c0.07	0.26	0.06	c0.37	c0.07	0.05
v/s Ratio Perm						
v/c Ratio	0.73	0.37	0.73	0.54	0.74	0.49
Uniform Delay, d1	70.8	10.5	71.1	12.7	70.6	68.9
Progression Factor	1.00	1.00	0.93	0.74	1.00	1.00
Incremental Delay, d2	7.2	0.3	6.4	0.5	7.6	0.4
Delay (s)	78.1	10.8	72.4	9.9	78.2	69.3
Level of Service	E	B	E	A	E	E
Approach Delay (s)		20.6		16.2		
Approach LOS		C		B		

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		789			1546	37
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1111			2177	52
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						86
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						121
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								121
C(m) (vph)								478
v/c								0.25
95% queue length								0.99
Control Delay								15.1
LOS								C
Approach Delay							15.1	
Approach LOS							C	

HCM Signalized Intersection Capacity Analysis
3: Sample Rd & NW 54th Ave

Existing 2012 PM Peak

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	58	152	1603	39	338	2071	291	149	129	325	307	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.70	1.00	1.00	0.57	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1256	3539	1583	1027	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	160	1687	41	356	2180	306	157	136	342	323	87
RTOR Reduction (vph)	0	0	0	13	0	0	125	0	0	229	0	0
Lane Group Flow (vph)	0	221	1687	28	356	2180	181	157	136	113	323	87
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		15.0	79.6	79.6	22.3	86.9	86.9	31.4	16.1	16.1	36.8	18.8
Effective Green, g (s)		15.0	79.6	79.6	22.3	86.9	86.9	31.4	16.1	16.1	36.8	18.8
Actuated g/C Ratio		0.09	0.50	0.50	0.14	0.54	0.54	0.20	0.10	0.10	0.23	0.12
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		311	2520	788	463	2751	860	290	356	159	313	416
v/s Ratio Prot		0.07	0.33		c0.11	c0.43		0.05	0.04		c0.12	0.02
v/s Ratio Perm				0.02			0.11	0.05		0.07	c0.12	
v/c Ratio		0.71	0.67	0.04	0.77	0.79	0.21	0.54	0.38	0.71	1.03	0.21
Uniform Delay, d1		70.4	30.3	20.6	66.4	29.3	18.9	56.9	67.3	69.7	59.8	63.9
Progression Factor		1.13	0.90	0.75	1.17	0.57	0.20	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		6.1	1.4	0.1	2.2	0.8	0.2	1.1	0.2	11.2	59.4	0.1
Delay (s)		85.7	28.5	15.5	79.6	17.3	4.0	58.0	67.5	80.8	119.2	64.0
Level of Service		F	C	B	E	B	A	E	E	F	F	E
Approach Delay (s)			34.7			23.7			72.3			100.0
Approach LOS			C			C			E			F

Intersection Summary

HCM Average Control Delay	38.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	78
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	82
RTOR Reduction (vph)	72
Lane Group Flow (vph)	10
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	18.8
Effective Green, g (s)	18.8
Actuated g/C Ratio	0.12
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	186
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.05
Uniform Delay, d1	62.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	62.7
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst:	MEAY
Agency/Co.:	Keith and Schnars, P.A.
Date Performed:	04/12/2012
Analysis Time Period:	PM Peak Hour
Intersection:	#4 Sample Rd & Banks Rd
Jurisdiction:	Broward County
Units: U. S. Customary	
Analysis Year:	Existing 2012 PM Peak Hour
Project ID: Seminole	Fee-to-Trust Development Project
East/West Street:	Sample Rd
North/South Street:	Banks Rd
Intersection Orientation: EW	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	9	1213	120	202	1839	12
Peak-Hour Factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Hourly Flow Rate, HFR	9	1304	129	217	1977	12
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?			No			
Lanes	1	2	1	1	2	0
Configuration	L	T	R	L	T	TR
Upstream Signal?		Yes			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			207			6
Peak Hour Factor, PHF			0.93			0.93
Hourly Flow Rate, HFR			222			6
Percent Heavy Vehicles			2			2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			1
Configuration			R			R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L			R			R
v (vph)	9	217			222			6
C(m) (vph)	286	723			483			296
v/c	0.03	0.30			0.46			0.02
95% queue length	0.10	1.26			2.38			0.06
Control Delay	18.0	12.1			18.6			17.4
LOS	C	B			C			C
Approach Delay				18.6			17.4	
Approach LOS				C			C	

HCM Signalized Intersection Capacity Analysis
5: Sample Rd & Lyons Rd

Existing 2012 PM Peak

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	248	1241	416	11	162	1943	391	480	1150	140	10	307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	270	1349	452	12	176	2112	425	522	1250	152	11	334
RTOR Reduction (vph)	0	0	168	0	0	0	119	0	0	89	0	0
Lane Group Flow (vph)	270	1349	284	0	188	2112	306	522	1250	63	0	345
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	11.5	66.3	66.3		11.2	66.0	66.0	25.5	39.8	39.8		18.2
Effective Green, g (s)	11.5	66.3	66.3		11.2	66.0	66.0	25.5	39.8	39.8		18.2
Actuated g/C Ratio	0.07	0.41	0.41		0.07	0.41	0.41	0.16	0.25	0.25		0.11
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	239	2099	656		232	2089	653	529	1265	394		378
v/s Ratio Prot	c0.08	0.27			0.06	c0.42		c0.16	c0.25			0.10
v/s Ratio Perm			0.18				0.19			0.04		
v/c Ratio	1.13	0.64	0.43		0.81	1.01	0.47	0.99	0.99	0.16		0.91
Uniform Delay, d1	74.2	37.4	33.4		73.4	47.0	34.2	67.1	59.9	47.0		70.1
Progression Factor	0.83	1.19	1.93		1.00	1.00	1.00	1.00	1.00	1.00		0.86
Incremental Delay, d2	90.8	1.2	1.6		18.0	22.4	2.4	35.3	22.2	0.1		20.2
Delay (s)	152.7	45.6	66.2		91.4	69.4	36.6	102.4	82.1	47.2		80.4
Level of Service	F	D	E		F	E	D	F	F	D		F
Approach Delay (s)		64.1				65.8			84.8			
Approach LOS		E				E			F			

Intersection Summary

HCM Average Control Delay	79.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	97.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	955	420
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1038	457
RTOR Reduction (vph)	0	2
Lane Group Flow (vph)	1038	455
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	32.5	44.0
Effective Green, g (s)	32.5	44.0
Actuated g/C Ratio	0.20	0.28
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	1033	435
v/s Ratio Prot	0.20	0.08
v/s Ratio Perm		0.21
v/c Ratio	1.00	1.05
Uniform Delay, d1	63.8	58.0
Progression Factor	1.27	1.59
Incremental Delay, d2	25.2	49.4
Delay (s)	106.3	141.8
Level of Service	F	F
Approach Delay (s)	110.3	
Approach LOS	F	

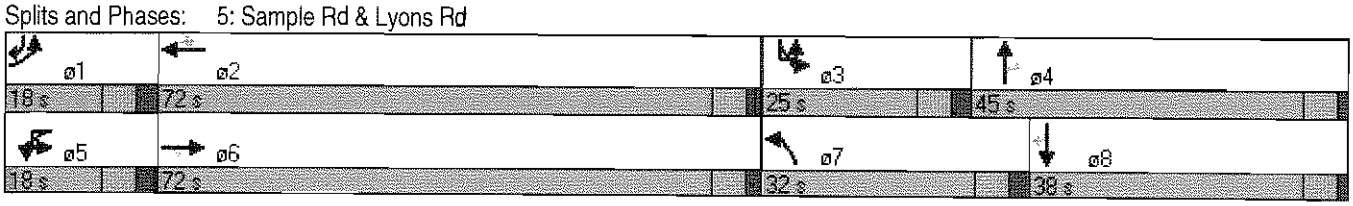
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	248	1241	416	162	1943	391	480	1150	140	307	955	420
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	18.0	72.0	72.0	18.0	72.0	72.0	32.0	45.0	45.0	25.0	38.0	18.0
Total Split (%)	11.3%	45.0%	45.0%	11.3%	45.0%	45.0%	20.0%	28.1%	28.1%	15.6%	23.8%	11.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	11.5	66.3	66.3	11.2	66.0	66.0	25.5	39.8	39.8	18.2	32.5	49.5
Actuated g/C Ratio	0.07	0.41	0.41	0.07	0.41	0.41	0.16	0.25	0.25	0.11	0.20	0.31
v/c Ratio	1.13	0.64	0.55	0.81	1.01	0.55	0.99	0.99	0.31	0.92	1.00	0.93
Control Delay	145.1	45.9	25.4	98.6	68.6	20.7	102.0	81.6	15.0	83.5	103.8	103.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	145.1	45.9	25.4	98.6	68.6	20.7	102.0	81.6	15.0	83.5	103.8	103.9
LOS	F	D	C	F	E	C	F	F	B	F	F	F
Approach Delay		54.4			63.2			81.9			100.0	
Approach LOS		D			E			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 109 (68%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.13
Intersection Signal Delay: 73.2 Intersection LOS: E
Intersection Capacity Utilization 97.2% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Queues
5: Sample Rd & Lyons Rd

Existing 2012 PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	270	1349	452	188	2112	425	522	1250	152	345	1038	457
v/c Ratio	1.13	0.64	0.55	0.81	1.01	0.55	0.99	0.99	0.31	0.92	1.00	0.93
Control Delay	145.1	45.9	25.4	98.6	68.6	20.7	102.0	81.6	15.0	83.5	103.8	103.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	145.1	45.9	25.4	98.6	68.6	20.7	102.0	81.6	15.0	83.5	103.8	103.9
Queue Length 50th (ft)	~169	478	237	101	~826	175	285	482	28	190	~422	500
Queue Length 95th (ft)	m#251	m501	m357	#163	#936	285	#408	#591	92	m#268	m#516	m#674
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	239	2100	825	239	2089	772	529	1266	483	384	1033	492
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.13	0.64	0.55	0.79	1.01	0.55	0.99	0.99	0.31	0.90	1.00	0.93

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		747	101			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		922	124			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			231			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			285			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					285			
C(m) (vph)					552			
v/c					0.52			
95% queue length					2.94			
Control Delay					18.3			
LOS					C			
Approach Delay				18.3				
Approach LOS				C				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

Existing 2012 PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	211	30	29	28	45	197	47	147	1446	17	39	237
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	1.00	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.93		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1694	1709		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.72	1.00		0.72	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	1291	1709		1277	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	224	32	31	30	48	210	50	156	1538	18	41	252
RTOR Reduction (vph)	0	0	0	0	0	117	0	0	0	7	0	0
Lane Group Flow (vph)	224	63	0	30	48	93	0	206	1538	11	0	293
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm			Perm		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases		4			8		5	5	2		1	1
Permitted Phases	4			8		8				2		
Actuated Green, G (s)	31.0	31.0		31.0	31.0	31.0		12.8	92.9	92.9		18.1
Effective Green, g (s)	31.0	31.0		31.0	31.0	31.0		12.8	92.9	92.9		18.1
Actuated g/C Ratio	0.19	0.19		0.19	0.19	0.19		0.08	0.58	0.58		0.11
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	250	331		247	679	304		263	2924	910		372
v/s Ratio Prot		0.04			0.01			0.06	c0.31			c0.09
v/s Ratio Perm	c0.17			0.02		0.06				0.01		
v/c Ratio	0.90	0.19		0.12	0.07	0.31		0.78	0.53	0.01		0.79
Uniform Delay, d1	62.9	54.0		53.3	52.7	55.3		72.2	20.3	14.2		69.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.03	0.87	0.80		0.91
Incremental Delay, d2	30.2	0.1		0.1	0.0	0.2		13.1	0.7	0.0		6.6
Delay (s)	93.2	54.1		53.3	52.7	55.5		87.2	18.2	11.3		69.5
Level of Service	F	D		D	D	E		F	B	B		E
Approach Delay (s)		84.6			54.8				26.2			
Approach LOS		F			D				C			

Intersection Summary

HCM Average Control Delay	28.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1477	292
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	1571	311
RTOR Reduction (vph)	0	86
Lane Group Flow (vph)	1571	225
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	98.2	98.2
Effective Green, g (s)	98.2	98.2
Actuated g/C Ratio	0.61	0.61
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	3091	962
v/s Ratio Prot	c0.31	
v/s Ratio Perm		0.14
v/c Ratio	0.51	0.23
Uniform Delay, d1	17.3	13.9
Progression Factor	0.73	0.69
Incremental Delay, d2	0.4	0.4
Delay (s)	13.0	10.0
Level of Service	B	B
Approach Delay (s)	20.2	
Approach LOS	C	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	40	498	707	247	318	941	155	50	288	1393	253	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	41	513	729	255	328	970	160	52	297	1436	261	53
RTOR Reduction (vph)	0	0	0	0	0	0	39	0	0	0	14	0
Lane Group Flow (vph)	0	554	729	255	328	970	121	0	349	1436	247	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		27.2	48.7	48.7	19.5	41.0	41.0		11.0	56.8	76.3	
Effective Green, g (s)		27.2	48.7	48.7	19.5	41.0	41.0		11.0	56.8	76.3	
Actuated g/C Ratio		0.17	0.30	0.30	0.12	0.26	0.26		0.07	0.36	0.48	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		564	1077	482	405	907	406		228	1805	814	
v/s Ratio Prot		c0.17	0.21		0.10	c0.27			c0.11	0.28	0.04	
v/s Ratio Perm				0.16			0.08				0.12	
v/c Ratio		0.98	0.68	0.53	0.81	1.07	0.30		1.53	0.80	0.30	
Uniform Delay, d1		66.2	48.8	46.1	68.4	59.5	47.9		74.5	46.4	25.6	
Progression Factor		1.00	1.00	1.00	1.16	0.65	0.44		1.23	0.74	0.61	
Incremental Delay, d2		33.1	1.3	0.5	5.7	42.6	0.1		256.9	3.2	0.1	
Delay (s)		99.3	50.1	46.6	84.8	81.5	21.0		348.8	37.4	15.7	
Level of Service		F	D	D	F	F	C		F	D	B	
Approach Delay (s)			67.2			75.6				87.8		
Approach LOS			E			E				F		

Intersection Summary			
HCM Average Control Delay	72.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	105.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	161	1449	559
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	166	1494	576
RTOR Reduction (vph)	0	0	159
Lane Group Flow (vph)	219	1494	417
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	11.0	56.8	56.8
Effective Green, g (s)	11.0	56.8	56.8
Actuated g/C Ratio	0.07	0.36	0.36
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	228	1805	562
v/s Ratio Prot	0.07	c0.29	
v/s Ratio Perm			0.26
v/c Ratio	0.96	0.83	0.74
Uniform Delay, d1	74.3	47.1	45.2
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	48.1	4.5	8.6
Delay (s)	122.4	51.7	53.7
Level of Service	F	D	D
Approach Delay (s)		58.9	
Approach LOS		E	

Intersection Summary

Timings
8: Wiles Rd & State Rd 7

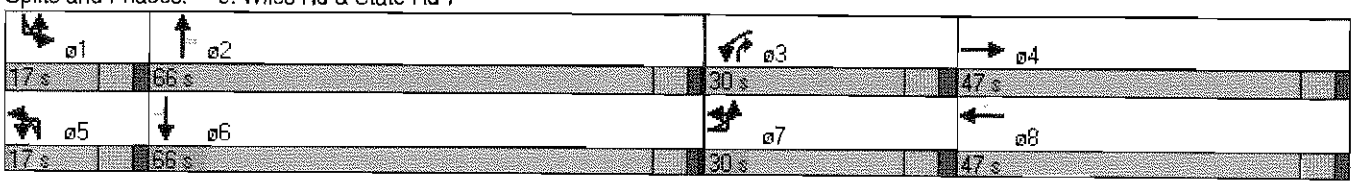
Existing 2012 PM Peak

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	498	707	247	318	941	155	288	1393	253	161	1449	559
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	47.0	47.0	30.0	47.0	47.0	17.0	66.0	30.0	17.0	66.0	66.0
Total Split (%)	18.8%	29.4%	29.4%	18.8%	29.4%	29.4%	10.6%	41.3%	18.8%	10.6%	41.3%	41.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	27.2	48.7	48.7	19.5	41.0	41.0	11.0	56.8	82.3	11.0	56.8	56.8
Actuated g/C Ratio	0.17	0.30	0.30	0.12	0.26	0.26	0.07	0.36	0.51	0.07	0.36	0.36
v/c Ratio	0.98	0.68	0.53	0.81	1.07	0.36	1.53	0.80	0.32	0.96	0.83	0.80
Control Delay	98.2	53.9	52.9	87.5	80.5	15.3	309.7	37.3	12.6	122.7	51.5	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	98.2	53.9	52.9	87.5	80.5	15.3	309.7	37.3	12.6	122.7	51.5	34.6
LOS	F	D	D	F	F	B	F	D	B	F	D	C
Approach Delay		69.7			74.9			80.6			54.1	
Approach LOS		E			E			F			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 137 (86%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.53
Intersection Signal Delay: 68.9 — Intersection LOS: E
Intersection Capacity Utilization 105.6% — ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	554	729	255	328	970	160	349	1436	261	219	1494	576
v/c Ratio	0.98	0.68	0.53	0.81	1.07	0.36	1.53	0.80	0.32	0.96	0.83	0.80
Control Delay	98.2	53.9	52.9	87.5	80.5	15.3	309.7	37.3	12.6	122.7	51.5	34.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	98.2	53.9	52.9	87.5	80.5	15.3	309.7	37.3	12.6	122.7	51.5	34.6
Queue Length 50th (ft)	~328	361	227	155	~590	72	~264	460	88	120	511	326
Queue Length 95th (ft)	#463	458	342	m159	m#637	m83	#378	525	m68	#208	566	490
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	564	1077	482	498	907	445	228	1907	871	228	1907	748
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.98	0.68	0.53	0.66	1.07	0.36	1.53	0.75	0.30	0.96	0.78	0.77

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: PM Peak
Intersection: #9 Cullum Rd & Lyons Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Cullum Rd
North/South Street: Lyons Rd
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	62	1203	27	64	1157	11
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	68	1336	30	71	1285	12
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?			No			No
Lanes	1	2	1	1	2	1
Configuration	L	T	R	L	T	R
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	15	0	32	24	0	75
Peak Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	16	0	35	26	0	83
Percent Heavy Vehicles	2	2	2	2	2	2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No /			No /
Lanes	1	1	0	1	1	0
Configuration	L		TR	L		TR

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L	L		TR	L		TR
v (vph)	68	71	16		35	26		83
C(m) (vph)	877	499	93		456	134		636
v/c	0.08	0.14	0.17		0.08	0.19		0.13
95% queue length	0.25	0.49	0.59		0.25	0.69		0.45
Control Delay	9.4	13.4	51.6		13.6	38.2		11.5
LOS	A	B	F		B	E		B
Approach Delay				25.5			17.9	
Approach LOS				D			C	

HCM Signalized Intersection Capacity Analysis
10: Wiles Rd & Lyons Rd

Existing 2012 PM Peak

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	536	360	351	859	306	324	1309	250	140	1108	254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	451	583	391	382	934	333	352	1423	272	152	1204	276
RTOR Reduction (vph)	0	0	128	0	0	124	0	0	154	0	0	0
Lane Group Flow (vph)	451	583	263	382	934	209	352	1423	118	152	1204	276
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	20.0	44.6	44.6	19.6	44.2	44.2	14.8	60.8	60.8	11.0	57.0	57.0
Effective Green, g (s)	20.0	44.6	44.6	19.6	44.2	44.2	14.8	60.8	60.8	11.0	57.0	57.0
Actuated g/C Ratio	0.12	0.28	0.28	0.12	0.28	0.28	0.09	0.38	0.38	0.07	0.36	0.36
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	415	986	441	407	978	437	307	1932	602	228	1812	564
v/s Ratio Prot	c0.14	0.16		0.12	c0.26		c0.11	c0.28		0.05	0.24	
v/s Ratio Perm			0.17			0.13			0.07			0.17
v/c Ratio	1.09	0.59	0.60	0.94	0.96	0.48	1.15	0.74	0.20	0.67	0.66	0.49
Uniform Delay, d1	70.0	49.8	49.9	69.6	56.9	48.3	72.6	42.7	33.2	72.7	43.4	40.2
Progression Factor	1.17	1.04	1.11	1.00	1.00	1.00	0.75	1.56	5.39	1.00	1.00	1.00
Incremental Delay, d2	66.7	0.6	1.3	28.9	18.6	0.3	85.5	1.4	0.4	5.6	1.9	3.0
Delay (s)	148.8	52.3	56.5	98.5	75.5	48.6	139.8	68.2	179.5	78.3	45.4	43.2
Level of Service	F	D	E	F	E	D	F	E	F	E	D	D
Approach Delay (s)		84.0			75.4			95.3			48.1	
Approach LOS		F			E			F			D	

Intersection Summary

HCM Average Control Delay	76.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	86.2%	ICU Level of Service	E
Analysis Period (min)	15		

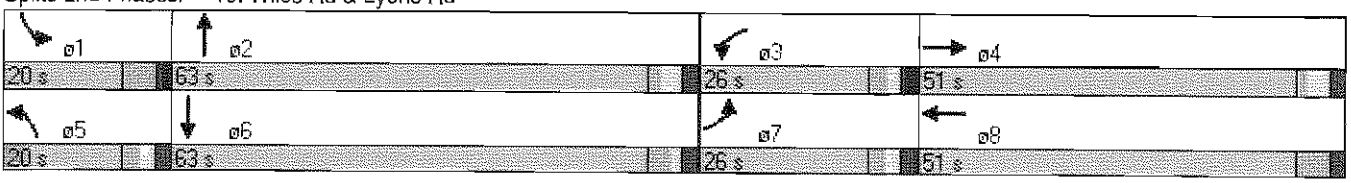
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	536	360	351	859	306	324	1309	250	140	1108	254
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	26.0	51.0	51.0	26.0	51.0	51.0	20.0	63.0	63.0	20.0	63.0	63.0
Total Split (%)	16.3%	31.9%	31.9%	16.3%	31.9%	31.9%	12.5%	39.4%	39.4%	12.5%	39.4%	39.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	20.0	44.6	44.6	19.6	44.2	44.2	14.8	60.7	60.7	11.0	57.0	57.0
Actuated g/C Ratio	0.12	0.28	0.28	0.12	0.28	0.28	0.09	0.38	0.38	0.07	0.36	0.36
v/c Ratio	1.09	0.59	0.69	0.94	0.96	0.59	1.15	0.74	0.36	0.66	0.66	0.49
Control Delay	139.2	54.2	36.2	100.0	76.3	27.9	134.7	69.4	30.5	86.5	45.6	43.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	139.2	54.2	36.2	100.0	76.3	27.9	134.7	69.4	30.5	86.5	45.6	43.8
LOS	F	D	D	F	E	C	F	E	C	F	D	D
Approach Delay		76.2			72.0			75.5			49.1	
Approach LOS		E			E			E			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 132 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 68.4 — Intersection LOS: E
Intersection Capacity Utilization 86.2% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	451	583	391	382	934	333	352	1423	272	152	1204	276
v/c Ratio	1.09	0.59	0.69	0.94	0.96	0.59	1.15	0.74	0.36	0.66	0.66	0.49
Control Delay	139.2	54.2	36.2	100.0	76.3	27.9	134.7	69.4	30.5	86.5	45.6	43.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	139.2	54.2	36.2	100.0	76.3	27.9	134.7	69.4	30.5	86.5	45.6	43.8
Queue Length 50th (ft)	~277	213	137	207	505	145	~233	560	137	81	389	225
Queue Length 95th (ft)	m#381	m307	m271	#306	#635	256	m#263	m576	m159	120	443	320
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	415	995	573	415	995	569	306	1931	755	290	1812	564
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.59	0.68	0.92	0.94	0.59	1.15	0.74	0.36	0.52	0.66	0.49

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: 2012 PM Peak Hour
Intersection: #11 S. Access & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: S. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	123	382	55	18	299	58
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	129	402	57	18	314	61
Percent Heavy Vehicles	5	--	--	5	--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes	1	2	0	1	2	1
Configuration	L	T	TR	L	T	R
Upstream Signal?		Yes			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	42	11	24	18	0	47
Peak Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR	44	11	25	18	0	49
Percent Heavy Vehicles	5	5	5	5	5	5
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			No /			No /
Lanes	0	1	0	0	1	0
Configuration		LTR			LTR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L	L		LTR			LTR	
v (vph)	129	18		80			67	
C(m) (vph)	1159	1138		383			636	
v/c	0.11	0.02		0.21			0.11	
95% queue length	0.37	0.05		0.78			0.35	
Control Delay	8.5	8.2		16.9			11.3	
LOS	A	A		C			B	
Approach Delay				16.9			11.3	
Approach LOS				C			B	

HCS+: Unsignalized Intersections Release 5.5

Phone: Fax:
E-Mail:

ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: PM Peak Hour
Intersection: #12 NW 40 Street & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: NW 54th Ave

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	26	3	108	26	5	29	229	150	9	75	243	14
% Thrus Left Lane									0			0

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT	R	L	TR	LT	TR	LT	TR
PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Flow Rate	33	125	30	38	266	184	87	298
% Heavy Veh	2	2	2	2	2	2	2	2
No. Lanes	2		2		2		2	
Opposing-Lanes	2		2		2		2	
Conflicting-lanes	2		2		2		2	
Geometry group	5		5		5		5	

Duration, T 0.25 hrs.

Worksheet 3 - Saturation Headway Adjustment Worksheet

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rates:								
Total in Lane	33	125	30	38	266	184	87	298
Left-Turn	30	0	30	0	266	0	87	0
Right-Turn	0	125	0	33	0	10	0	16
Prop. Left-Turns	0.9	0.0	1.0	0.0	1.0	0.0	1.0	0.0
Prop. Right-Turns	0.0	1.0	0.0	0.9	0.0	0.1	0.0	0.1
Prop. Heavy Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Geometry Group	5		5		5		5	
Adjustments Exhibit 17-33:								
hLT-adj	0.5		0.5		0.5		0.5	

hRT-adj	-0.7		-0.7		-0.7		-0.7	
hHV-adj	1.7		1.7		1.7		1.7	
hadj, computed	0.5	-0.7	0.5	-0.6	0.5	-0.0	0.5	-0.0

Worksheet 4 - Departure Headway and Service Time

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow rate	33	125	30	38	266	184	87	298
hd, initial value	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
x, initial	0.03	0.11	0.03	0.03	0.24	0.16	0.08	0.26
hd, final value	7.13	5.98	7.34	6.23	6.19	5.65	6.28	5.74
x, final value	0.07	0.21	0.06	0.07	0.46	0.29	0.15	0.48
Move-up time, m	2.3		2.3		2.3		2.3	
Service Time	4.8	3.7	5.0	3.9	3.9	3.3	4.0	3.4

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	33	125	30	38	266	184	87	298
Service Time	4.8	3.7	5.0	3.9	3.9	3.3	4.0	3.4
Utilization, x	0.07	0.21	0.06	0.07	0.46	0.29	0.15	0.48
Dep. headway, hd	7.13	5.98	7.34	6.23	6.19	5.65	6.28	5.74
Capacity	283	375	280	288	516	434	337	548
Delay	10.33	10.24	10.52	9.37	13.99	10.62	10.10	13.53
LOS	B	B	B	A	B	B	B	B
Approach:								
Delay	10.26		9.88		12.61		12.76	
LOS	B		A		B		B	

Intersection Delay 12.14 Intersection LOS B

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: PM Peak Hour
Intersection: #13 NW 54th Ave & N. Access
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: N. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		237			138	111
Peak-Hour Factor, PHF		0.92			0.92	0.92
Hourly Flow Rate, HFR		257			149	120
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						
Lanes		2			2	0
Configuration		T			T	TR
Upstream Signal?		No			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						165
Peak Hour Factor, PHF						0.92
Hourly Flow Rate, HFR						179
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								179
C(m) (vph)								914
v/c								0.20
95% queue length								0.72
Control Delay								9.9
LOS								A
Approach Delay							9.9	
Approach LOS							A	

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/12/2012
Analysis Time Period: PM Peak Hour
Intersection: #16 Wiles Rd & Banks Road
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: Existing 2012 PM Peak Hour
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Wiles Rd
North/South Street: Banks Road
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1103	3	3	1465	
Peak-Hour Factor, PHF		0.88	0.88	0.88	0.88	
Hourly Flow Rate, HFR		1253	3	3	1664	
Percent Heavy Vehicles		--	--	2	--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						
Lanes		2	0	1	2	
Configuration		T	TR	L	T	
Upstream Signal?		No			No	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	6		7			
Peak Hour Factor, PHF	0.88		0.88			
Hourly Flow Rate, HFR	6		7			
Percent Heavy Vehicles	2		2			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes		1	1			
Configuration		L	R			

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config		L	L		R			
v (vph)		3	6		7			
C(m) (vph)		550	151		481			
v/c		0.01	0.04		0.01			
95% queue length		0.02	0.12		0.04			
Control Delay		11.6	29.8		12.6			
LOS		B	D		B			
Approach Delay				20.5				
Approach LOS				C				

Appendix K-2

2015 Phase III Background PM Peak Hour Intersection Analysis Alternatives A and C and Sub-Alternative A-1

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	272	1456	305	2093	235	173
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	283	1517	318	2180	245	180
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	283	1517	318	2180	245	180
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	17.5	104.1	19.2	105.8	15.7	15.7
Effective Green, g (s)	17.5	104.1	19.2	105.8	15.7	15.7
Actuated g/C Ratio	0.11	0.65	0.12	0.66	0.10	0.10
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	363	3295	398	3349	326	326
v/s Ratio Prot	0.09	0.30	c0.10	c0.43	c0.07	0.05
v/s Ratio Perm						
v/c Ratio	0.78	0.46	0.80	0.65	0.75	0.55
Uniform Delay, d1	69.4	13.9	68.5	16.1	70.3	68.8
Progression Factor	1.00	1.00	0.99	0.67	1.00	1.00
Incremental Delay, d2	9.3	0.5	7.4	0.7	8.4	1.2
Delay (s)	78.7	14.4	75.3	11.5	78.6	69.9
Level of Service	E	B	E	B	E	E
Approach Delay (s)		24.5		19.6		
Approach LOS		C		B		

Intersection Summary			
HCM Average Control Delay	26.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/24/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2015 Backg - Alt. A - Phase 3
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		996			1800	44
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1402			2535	61
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						103
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						145
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								145
C(m) (vph)								544
v/c								0.27
95% queue length								1.07
Control Delay								14.0
LOS								B
Approach Delay							14.0	
Approach LOS							B	

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	60	263	1788	41	367	2333	353	155	154	349	399	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.68	1.00	1.00	0.47	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1221	3539	1583	841	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	63	277	1882	43	386	2456	372	163	162	367	420	117
RTOR Reduction (vph)	0	0	0	15	0	0	184	0	0	162	0	0
Lane Group Flow (vph)	0	340	1882	28	386	2456	188	163	162	205	420	117
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		16.0	72.0	72.0	21.0	77.0	77.0	32.6	19.0	19.0	49.0	29.4
Effective Green, g (s)		16.0	72.0	72.0	21.0	77.0	77.0	32.6	19.0	19.0	49.0	29.4
Actuated g/C Ratio		0.10	0.45	0.45	0.13	0.48	0.48	0.20	0.12	0.12	0.31	0.18
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		332	2279	712	436	2438	762	290	420	188	388	650
v/s Ratio Prot		0.10	0.37		c0.12	c0.48		0.05	0.05		c0.16	0.03
v/s Ratio Perm				0.02			0.12	0.07		0.13	c0.17	
v/c Ratio		1.02	0.83	0.04	0.89	1.01	0.25	0.56	0.39	1.09	1.08	0.18
Uniform Delay, d1		72.0	38.5	24.6	68.3	41.5	24.4	56.1	65.1	70.5	52.5	55.1
Progression Factor		1.07	0.86	0.81	1.23	0.53	0.46	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		54.9	3.5	0.1	7.3	12.3	0.3	1.5	0.2	91.6	69.6	0.0
Delay (s)		132.1	36.7	19.9	91.2	34.2	11.4	57.5	65.3	162.1	122.1	55.2
Level of Service		F	D	B	F	C	B	E	E	F	F	E
Approach Delay (s)			50.7			38.4			114.8			93.0
Approach LOS			D			D			F			F

Intersection Summary

HCM Average Control Delay	56.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	101.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	210
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	221
RTOR Reduction (vph)	103
Lane Group Flow (vph)	118
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	29.4
Effective Green, g (s)	29.4
Actuated g/C Ratio	0.18
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	291
v/s Ratio Prot	
v/s Ratio Perm	0.07
v/c Ratio	0.41
Uniform Delay, d1	57.6
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	57.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

Timings
3: Sample Rd & NW 54th Ave

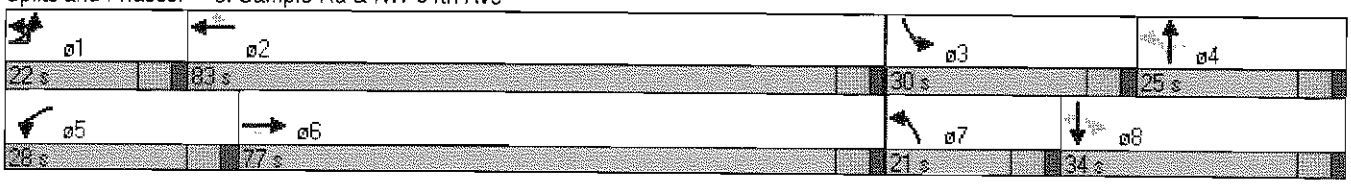
2015 Background PM Peak - Alternative A - Phase 3

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	263	1788	41	367	2333	353	155	154	349	399	111	210
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	22.0	77.0	77.0	28.0	83.0	83.0	21.0	25.0	25.0	30.0	34.0	34.0
Total Split (%)	13.8%	48.1%	48.1%	17.5%	51.9%	51.9%	13.1%	15.6%	15.6%	18.8%	21.3%	21.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	16.0	72.0	72.0	21.0	77.0	77.0	32.6	19.0	19.0	49.0	29.4	29.4
Actuated g/C Ratio	0.10	0.45	0.45	0.13	0.48	0.48	0.20	0.12	0.12	0.31	0.18	0.18
v/c Ratio	1.02	0.83	0.06	0.89	1.01	0.39	0.56	0.39	1.05	1.08	0.18	0.56
Control Delay	128.0	37.1	9.8	92.2	35.0	1.7	52.3	68.1	93.4	117.2	56.6	31.4
Queue Delay	0.0	0.0	0.0	0.0	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.0	37.1	9.8	92.2	72.5	1.7	52.3	68.1	93.4	117.2	56.6	31.4
LOS	F	D	A	F	E	A	D	E	F	F	E	C
Approach Delay		50.3			66.7			77.8			82.8	
Approach LOS		D			E			E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 22 (14%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 64.2 Intersection LOS: E
Intersection Capacity Utilization 101.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	340	1882	43	386	2456	372	163	162	367	420	117	221
v/c Ratio	1.02	0.83	0.06	0.89	1.01	0.39	0.56	0.39	1.05	1.08	0.18	0.56
Control Delay	128.0	37.1	9.8	92.2	35.0	1.7	52.3	68.1	93.4	117.2	56.6	31.4
Queue Delay	0.0	0.0	0.0	0.0	37.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	128.0	37.1	9.8	92.2	72.5	1.7	52.3	68.1	93.4	117.2	56.6	31.4
Queue Length 50th (ft)	~197	650	3	197	~850	23	131	83	~236	~451	55	91
Queue Length 95th (ft)	#301	468	m29	m209	m#1041	m24	201	124	#449	#711	87	185
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	332	2280	728	456	2438	946	305	420	350	388	650	394
Starvation Cap Reductn	0	0	0	0	214	0	0	0	0	0	0	0
Spillback Cap Reductn	0	3	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.02	0.83	0.06	0.85	1.10	0.39	0.53	0.39	1.05	1.08	0.18	0.56

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
4: Sample Rd & Banks Rd

2015 Background PM Peak - Alternative A - Phase 3

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	42	2076	120	6	204	3030	111	10	31	215	128	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5038		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.72	1.00	1.00	0.65	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5038		1349	3539	1583	1219	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	45	2232	129	6	219	3258	119	11	33	231	138	48
RTOR Reduction (vph)	0	0	59	0	0	0	0	0	0	203	0	0
Lane Group Flow (vph)	45	2232	70	0	225	3377	0	11	33	28	138	48
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	5.0	86.9	86.9		25.5	107.4		21.2	19.6	19.6	26.0	22.0
Effective Green, g (s)	5.0	86.9	86.9		25.5	107.4		21.2	19.6	19.6	26.0	22.0
Actuated g/C Ratio	0.03	0.54	0.54		0.16	0.67		0.13	0.12	0.12	0.16	0.14
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	53	2751	860		273	3382		183	434	194	212	487
v/s Ratio Prot	0.03	0.44			c0.13	c0.67		0.00	0.01		c0.02	0.01
v/s Ratio Perm			0.04					0.01		0.02	c0.09	
v/c Ratio	0.85	0.81	0.08		0.82	1.00		0.06	0.08	0.15	0.65	0.10
Uniform Delay, d1	77.1	29.9	17.5		65.1	26.2		60.6	62.2	62.7	63.0	60.3
Progression Factor	0.94	0.51	0.32		1.31	0.37		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	38.2	1.2	0.1		1.9	4.3		0.1	0.3	1.6	7.0	0.4
Delay (s)	110.7	16.4	5.7		87.4	14.1		60.7	62.5	64.3	69.9	60.7
Level of Service	F	B	A		F	B		E	E	E	E	E
Approach Delay (s)		17.5				18.7			63.9			65.4
Approach LOS		B				B			E			E

Intersection Summary

HCM Average Control Delay	22.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	93.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	81
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	87
RTOR Reduction (vph)	72
Lane Group Flow (vph)	15
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	22.0
Effective Green, g (s)	22.0
Actuated g/C Ratio	0.14
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	218
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.07
Uniform Delay, d1	60.1
Progression Factor	1.00
Incremental Delay, d2	0.6
Delay (s)	60.7
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	298	1517	526	11	171	2204	450	550	1238	147	10	361
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	324	1649	572	12	186	2396	489	598	1346	160	11	392
RTOR Reduction (vph)	0	0	174	0	0	0	120	0	0	93	0	0
Lane Group Flow (vph)	324	1649	398	0	198	2396	369	598	1346	67	0	403
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	13.5	69.4	69.4		12.1	68.0	68.0	23.5	37.5	37.5		16.5
Effective Green, g (s)	13.5	69.4	69.4		12.1	68.0	68.0	23.5	37.5	37.5		16.5
Actuated g/C Ratio	0.08	0.43	0.43		0.08	0.42	0.42	0.15	0.23	0.23		0.10
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	280	2197	687		251	2153	673	487	1192	371		342
v/s Ratio Prot	c0.10	0.33			0.06	c0.47		c0.18	c0.26			0.12
v/s Ratio Perm			0.25				0.23			0.04		
v/c Ratio	1.16	0.75	0.58		0.79	1.11	0.55	1.23	1.13	0.18		1.18
Uniform Delay, d1	73.2	38.0	34.3		72.7	46.0	34.5	68.2	61.2	49.0		71.8
Progression Factor	0.81	1.22	1.86		1.00	1.00	1.00	1.00	1.00	1.00		1.23
Incremental Delay, d2	93.2	1.5	2.2		14.0	58.0	3.2	119.6	69.2	0.2		102.5
Delay (s)	152.2	47.8	65.9		86.7	104.0	37.7	187.9	130.5	49.1		190.5
Level of Service	F	D	E		F	F	D	F	F	D		F
Approach Delay (s)		65.2				92.4			140.6			
Approach LOS		E				F			F			

Intersection Summary

HCM Average Control Delay	108.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1065	449
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1158	488
RTOR Reduction (vph)	0	1
Lane Group Flow (vph)	1158	487
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	44.0
Effective Green, g (s)	30.5	44.0
Actuated g/C Ratio	0.19	0.28
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	435
v/s Ratio Prot	0.23	0.09
v/s Ratio Perm		0.21
v/c Ratio	1.20	1.12
Uniform Delay, d1	64.8	58.0
Progression Factor	0.82	0.89
Incremental Delay, d2	96.3	76.4
Delay (s)	149.3	128.3
Level of Service	F	F
Approach Delay (s)	152.4	
Approach LOS	F	

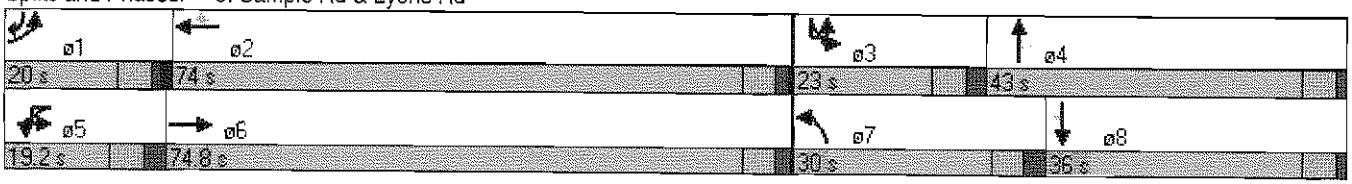
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	298	1517	526	171	2204	450	550	1238	147	361	1065	449
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	20.0	74.8	74.8	19.2	74.0	74.0	30.0	43.0	43.0	23.0	36.0	20.0
Total Split (%)	12.5%	46.8%	46.8%	12.0%	46.3%	46.3%	18.8%	26.9%	26.9%	14.4%	22.5%	12.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	13.5	69.4	69.4	12.1	68.0	68.0	23.5	37.5	37.5	16.5	30.5	49.5
Actuated g/C Ratio	0.08	0.43	0.43	0.08	0.42	0.42	0.15	0.23	0.23	0.10	0.19	0.31
v/c Ratio	1.16	0.75	0.67	0.79	1.11	0.62	1.23	1.13	0.34	1.18	1.20	1.00
Control Delay	144.2	48.3	32.0	94.2	100.5	23.3	173.7	123.2	16.3	172.6	141.5	84.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.2	48.3	32.0	94.2	100.5	23.3	173.7	123.2	16.3	172.6	141.5	84.6
LOS	F	D	C	F	F	C	F	F	B	F	F	F
Approach Delay		56.9			87.9			129.4			134.1	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 112 (70%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.23
Intersection Signal Delay: 98.4 Intersection LOS: F
Intersection Capacity Utilization 107.8% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	324	1649	572	198	2396	489	598	1346	160	403	1158	488
v/c Ratio	1.16	0.75	0.67	0.79	1.11	0.62	1.23	1.13	0.34	1.18	1.20	1.00
Control Delay	144.2	48.3	32.0	94.2	100.5	23.3	173.7	123.2	16.3	172.6	141.5	84.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.2	48.3	32.0	94.2	100.5	23.3	173.7	123.2	16.3	172.6	141.5	84.6
Queue Length 50th (ft)	~203	660	454	106	~1047	230	~395	~595	32	~253	~547	541
Queue Length 95th (ft)	m#306	705	601	#162	#1130	357	#521	#693	99	#367	#623	#758
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	280	2196	860	263	2153	793	487	1192	464	342	969	490
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.75	0.67	0.75	1.11	0.62	1.23	1.13	0.34	1.18	1.20	1.00

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/24/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2015 Backg - Alt. A - Phase 3
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		874	133			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1079	164			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			254			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			313			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					313			
C(m) (vph)					485			
v/c					0.65			
95% queue length					4.51			
Control Delay					24.9			
LOS					C			
Approach Delay				24.9				
Approach LOS				C				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2015 Background PM Peak - Alternative A - Phase 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	220	39	30	67	59	317	49	153	1837	156	41	323
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.93		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1723		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1723		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	234	41	32	71	63	337	52	163	1954	166	44	344
RTOR Reduction (vph)	0	0	0	0	0	106	0	0	0	54	0	0
Lane Group Flow (vph)	234	73	0	71	63	231	0	215	1954	112	0	388
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	13.7	28.9		11.1	26.3	26.3		14.0	76.8	76.8		21.2
Effective Green, g (s)	13.7	28.9		11.1	26.3	26.3		14.0	76.8	76.8		21.2
Actuated g/C Ratio	0.09	0.18		0.07	0.16	0.16		0.09	0.48	0.48		0.13
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	281	311		118	576	258		288	2417	753		435
v/s Ratio Prot	c0.07	c0.04		0.04	0.02			0.07	c0.39			c0.12
v/s Ratio Perm						c0.15				0.07		
v/c Ratio	0.83	0.23		0.60	0.11	0.89		0.75	0.81	0.15		0.89
Uniform Delay, d1	72.0	56.1		72.3	56.9	65.5		71.3	35.3	23.3		68.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.05	0.90	0.75		1.16
Incremental Delay, d2	18.6	0.1		8.4	0.0	29.4		8.9	3.0	0.4		9.2
Delay (s)	90.6	56.2		80.7	56.9	94.9		83.9	34.7	18.0		88.5
Level of Service	F	E		F	E	F		F	C	B		F
Approach Delay (s)		82.5			87.7				38.1			
Approach LOS		F			F				D			

Intersection Summary

HCM Average Control Delay	39.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1602	304
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	1704	323
RTOR Reduction (vph)	0	82
Lane Group Flow (vph)	1704	241
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	84.0	84.0
Effective Green, g (s)	84.0	84.0
Actuated g/C Ratio	0.52	0.52
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2644	823
v/s Ratio Prot	0.34	
v/s Ratio Perm		0.15
v/c Ratio	0.64	0.29
Uniform Delay, d1	27.3	21.3
Progression Factor	0.49	0.32
Incremental Delay, d2	0.5	0.4
Delay (s)	13.7	7.2
Level of Service	B	A
Approach Delay (s)	24.9	
Approach LOS	C	

Intersection Summary

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	42	524	762	292	257	1002	197	52	350	1633	183	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	43	540	786	301	265	1033	203	54	361	1684	189	55
RTOR Reduction (vph)	0	0	0	0	0	0	48	0	0	0	17	0
Lane Group Flow (vph)	0	583	786	301	265	1033	155	0	415	1684	172	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		25.0	50.8	50.8	16.2	42.0	42.0		18.0	57.0	73.2	
Effective Green, g (s)		25.0	50.8	50.8	16.2	42.0	42.0		18.0	57.0	73.2	
Actuated g/C Ratio		0.16	0.32	0.32	0.10	0.26	0.26		0.11	0.36	0.46	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		519	1124	503	336	929	416		373	1812	784	
v/s Ratio Prot		c0.18	0.22		0.08	c0.29			c0.13	c0.33	0.02	
v/s Ratio Perm				0.19			0.10				0.09	
v/c Ratio		1.12	0.70	0.60	0.79	1.11	0.37		1.11	0.93	0.22	
Uniform Delay, d1		67.5	47.9	46.0	70.2	59.0	48.2		71.0	49.6	26.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.21	0.93	0.67	
Incremental Delay, d2		78.0	1.6	1.3	10.8	65.2	0.2		69.9	6.1	0.0	
Delay (s)		145.5	49.5	47.3	81.0	124.2	48.4		156.0	52.1	17.6	
Level of Service		F	D	D	F	F	D		F	D	B	
Approach Delay (s)			82.6			106.4				68.1		
Approach LOS			F			F				E		

Intersection Summary			
HCM Average Control Delay	85.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	111.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	187	1646	586
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	193	1697	604
RTOR Reduction (vph)	0	0	140
Lane Group Flow (vph)	248	1697	464
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	12.0	51.0	51.0
Effective Green, g (s)	12.0	51.0	51.0
Actuated g/C Ratio	0.08	0.32	0.32
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	249	1621	505
v/s Ratio Prot	0.07	c0.33	
v/s Ratio Perm			0.29
v/c Ratio	1.00	1.05	0.92
Uniform Delay, d1	74.0	54.5	52.5
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	55.5	35.7	24.3
Delay (s)	129.5	90.2	76.9
Level of Service	F	F	E
Approach Delay (s)		90.9	
Approach LOS		F	

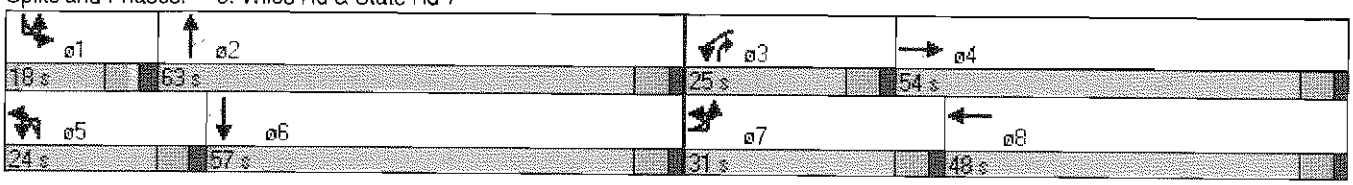
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	524	762	292	257	1002	197	350	1633	183	187	1646	586
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	31.0	54.0	54.0	25.0	48.0	48.0	24.0	63.0	25.0	18.0	57.0	57.0
Total Split (%)	19.4%	33.8%	33.8%	15.6%	30.0%	30.0%	15.0%	39.4%	15.6%	11.3%	35.6%	35.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	25.0	50.8	50.8	16.2	42.0	42.0	18.0	57.0	79.2	12.0	51.0	51.0
Actuated g/C Ratio	0.16	0.32	0.32	0.10	0.26	0.26	0.11	0.36	0.50	0.08	0.32	0.32
v/c Ratio	1.12	0.70	0.60	0.79	1.11	0.44	1.11	0.93	0.24	1.00	1.05	0.94
Control Delay	136.9	52.3	52.6	87.2	118.1	36.2	143.5	52.2	13.0	128.1	87.7	57.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	136.9	52.3	52.6	87.2	118.1	36.2	143.5	52.2	13.0	128.1	87.7	57.7
LOS	F	D	D	F	F	D	F	D	B	F	F	E
Approach Delay		81.9			101.6			65.5			84.5	
Approach LOS		F			F			E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 155 (97%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.12
Intersection Signal Delay: 81.7 Intersection LOS: F
Intersection Capacity Utilization 111.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	583	786	301	265	1033	203	415	1684	189	248	1697	604
v/c Ratio	1.12	0.70	0.60	0.79	1.11	0.44	1.11	0.93	0.24	1.00	1.05	0.94
Control Delay	136.9	52.3	52.6	87.2	118.1	36.2	143.5	52.2	13.0	128.1	87.7	57.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	136.9	52.3	52.6	87.2	118.1	36.2	143.5	52.2	13.0	128.1	87.7	57.7
Queue Length 50th (ft)	~361	382	267	141	~648	120	~260	429	36	136	~704	448
Queue Length 95th (ft)	#485	471	383	190	#788	203	m#370	600	m73	#234	#798	#701
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	519	1125	503	394	929	463	373	1812	827	249	1621	644
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.70	0.60	0.67	1.11	0.44	1.11	0.93	0.23	1.00	1.05	0.94

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	126	5	100	16	5	33	75	2119	28	7	59	1953
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.86		1.00	0.87		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3036		1770	1622		1770	5085	1583		1770	5085
Flt Permitted	0.73	1.00		0.68	1.00		0.06	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1358	3036		1263	1622		106	5085	1583		78	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	140	6	111	18	6	37	83	2354	31	8	66	2170
RTOR Reduction (vph)	0	96	0	0	32	0	0	0	6	0	0	0
Lane Group Flow (vph)	140	21	0	18	11	0	83	2354	25	0	74	2170
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	21.7	21.7		21.7	21.7		119.6	111.6	111.6		121.0	112.3
Effective Green, g (s)	21.7	21.7		21.7	21.7		119.6	111.6	111.6		121.0	112.3
Actuated g/C Ratio	0.14	0.14		0.14	0.14		0.75	0.70	0.70		0.76	0.70
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	184	412		171	220		162	3547	1104		151	3569
v/s Ratio Prot		0.01			0.01		0.03	c0.46			c0.03	0.43
v/s Ratio Perm	c0.10			0.01			0.36		0.02		0.34	
v/c Ratio	0.76	0.05		0.11	0.05		0.51	0.66	0.02		0.49	0.61
Uniform Delay, d1	66.6	60.2		60.6	60.2		12.3	13.6	7.4		17.5	12.4
Progression Factor	1.00	1.00		1.00	1.00		2.20	0.84	0.41		1.69	0.91
Incremental Delay, d2	16.8	0.1		0.3	0.1		1.2	0.4	0.0		1.2	0.4
Delay (s)	83.4	60.2		60.9	60.3		28.2	11.8	3.1		30.8	11.7
Level of Service	F	E		E	E		C	B	A		C	B
Approach Delay (s)		72.9			60.5			12.3				12.0
Approach LOS		E			E			B				B

Intersection Summary

HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	78
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	87
RTOR Reduction (vph)	26
Lane Group Flow (vph)	61
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	112.3
Effective Green, g (s)	112.3
Actuated g/C Ratio	0.70
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1111
v/s Ratio Prot	
v/s Ratio Perm	0.04
v/c Ratio	0.05
Uniform Delay, d1	7.4
Progression Factor	0.64
Incremental Delay, d2	0.0
Delay (s)	4.7
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	438	572	382	408	919	318	337	1634	332	146	1320	298
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	476	622	415	443	999	346	366	1776	361	159	1435	324
RTOR Reduction (vph)	0	0	117	0	0	77	0	0	170	0	0	0
Lane Group Flow (vph)	476	622	298	443	999	269	366	1776	191	159	1435	324
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	45.4	45.4	23.6	46.0	46.0	18.0	59.0	59.0	8.0	49.0	49.0
Effective Green, g (s)	23.0	45.4	45.4	23.6	46.0	46.0	18.0	59.0	59.0	8.0	49.0	49.0
Actuated g/C Ratio	0.14	0.28	0.28	0.15	0.29	0.29	0.11	0.37	0.37	0.05	0.31	0.31
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	1004	449	490	1017	455	373	1875	584	166	1557	485
v/s Ratio Prot	c0.14	0.18		0.13	c0.28		c0.11	c0.35		0.05	0.28	
v/s Ratio Perm			0.19			0.17			0.12			0.20
v/c Ratio	1.00	0.62	0.66	0.90	0.98	0.59	0.98	0.95	0.33	0.96	0.92	0.67
Uniform Delay, d1	68.5	49.8	50.6	67.1	56.6	48.9	70.8	49.0	36.3	75.8	53.6	48.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.29	0.67	0.72	1.00	1.00	1.00
Incremental Delay, d2	40.3	0.8	2.9	19.5	23.8	1.4	35.5	9.4	1.1	56.4	10.5	7.1
Delay (s)	108.8	50.6	53.4	86.6	80.4	50.3	127.1	42.3	27.4	132.2	64.1	55.5
Level of Service	E	D	D	F	F	D	F	D	C	F	E	E
Approach Delay (s)		69.7			76.1			52.5			68.3	
Approach LOS		E			E			D			E	

Intersection Summary			
HCM Average Control Delay	65.3	HCM Level of Service	E
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

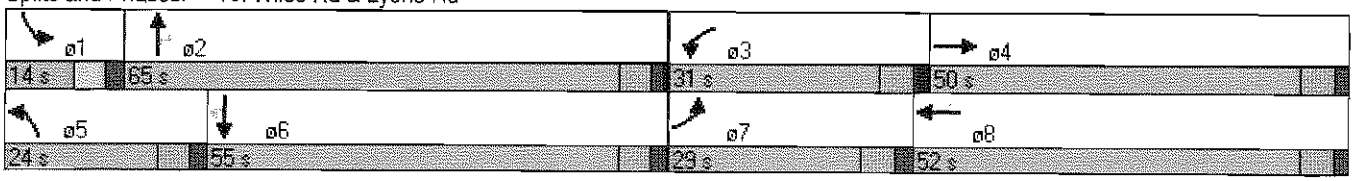
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	438	572	382	408	919	318	337	1634	332	146	1320	298
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	50.0	50.0	31.0	52.0	52.0	24.0	65.0	65.0	14.0	55.0	55.0
Total Split (%)	18.1%	31.3%	31.3%	19.4%	32.5%	32.5%	15.0%	40.6%	40.6%	8.8%	34.4%	34.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	45.4	45.4	23.6	46.0	46.0	18.0	59.0	59.0	8.0	49.0	49.0
Actuated g/C Ratio	0.14	0.28	0.28	0.15	0.29	0.29	0.11	0.37	0.37	0.05	0.31	0.31
v/c Ratio	1.00	0.62	0.73	0.90	0.98	0.65	0.98	0.95	0.48	0.96	0.92	0.67
Control Delay	107.8	53.3	39.7	89.4	80.2	40.2	124.6	42.6	8.6	133.2	64.1	56.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.8	53.3	39.7	89.4	80.2	40.2	124.6	42.6	8.6	133.2	64.1	56.4
LOS	F	D	D	F	F	D	F	D	A	F	E	E
Approach Delay		66.7			74.7			49.7			68.5	
Approach LOS		E			E			D			E	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 64 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 120
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.00
Intersection Signal Delay: 63.5 Intersection LOS: E
Intersection Capacity Utilization 93.6% ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	476	622	415	443	999	346	366	1776	361	159	1435	324
v/c Ratio	1.00	0.62	0.73	0.90	0.98	0.65	0.98	0.95	0.48	0.96	0.92	0.67
Control Delay	107.8	53.3	39.7	89.4	80.2	40.2	124.6	42.6	8.6	133.2	64.1	56.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.8	53.3	39.7	89.4	80.2	40.2	124.6	42.6	8.6	133.2	64.1	56.4
Queue Length 50th (ft)	260	303	252	236	549	223	188	698	18	87	534	297
Queue Length 95th (ft)	#382	373	392	#320	#698	341	#317	#656	155	#165	#600	414
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	1004	566	519	1017	532	373	1875	754	166	1557	485
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.62	0.73	0.85	0.98	0.65	0.98	0.95	0.48	0.96	0.92	0.67

Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	40	164	656	38	144	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.26	1.00
Satd. Flow (perm)	1770	1583	3539	1583	473	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	47	191	763	44	167	621
RTOR Reduction (vph)	0	163	0	27	0	0
Lane Group Flow (vph)	47	28	763	17	167	621
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	7.2	7.2	19.2	19.2	29.2	29.2
Effective Green, g (s)	7.2	7.2	19.2	19.2	29.2	29.2
Actuated g/C Ratio	0.15	0.15	0.40	0.40	0.60	0.60
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	235	1404	628	439	2135
v/s Ratio Prot			c0.22		c0.05	0.18
v/s Ratio Perm	c0.03	0.02		0.01	0.18	
v/c Ratio	0.18	0.12	0.54	0.03	0.38	0.29
Uniform Delay, d1	18.0	17.9	11.2	8.9	4.8	4.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2	0.4	0.0	0.6	0.1
Delay (s)	18.3	18.1	11.7	8.9	5.3	4.7
Level of Service	B	B	B	A	A	A
Approach Delay (s)	18.1		11.5			4.8
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	9.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	48.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	165	515	531	300	139	329
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	560	577	326	151	358
RTOR Reduction (vph)	0	0	0	0	0	303
Lane Group Flow (vph)	739	0	577	326	151	55
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	20.0		15.6	31.4	9.8	9.8
Effective Green, g (s)	20.0		15.6	31.4	9.8	9.8
Actuated g/C Ratio	0.32		0.25	0.50	0.15	0.15
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	998		845	923	547	245
v/s Ratio Prot	c0.23		c0.17	c0.18	0.04	
v/s Ratio Perm						0.03
v/c Ratio	1.11dr		0.68	0.35	0.28	0.23
Uniform Delay, d1	19.4		21.7	9.8	23.7	23.5
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0		2.3	0.2	0.3	0.5
Delay (s)	22.4		24.0	10.0	23.9	23.9
Level of Service	C		C	B	C	C
Approach Delay (s)	22.4			18.9	23.9	
Approach LOS	C			B	C	

Intersection Summary			
HCM Average Control Delay	21.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	63.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2015 Background PM Peak - Alternative A - Phase 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	96	294	116	9	24	244	92	130	22	65	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	104	320	126	10	26	265	100	141	24	71	0
Approach Volume (veh/h)		424			162			507			95	
Crossing Volume (veh/h)		221			365			128			401	
High Capacity (veh/h)		1165			1039			1253			1010	
High v/c (veh/h)		0.36			0.16			0.40			0.09	
Low Capacity (veh/h)		962			849			1041			823	
Low v/c (veh/h)		0.44			0.19			0.49			0.11	

Intersection Summary			
Maximum v/c High	0.40		
Maximum v/c Low	0.49		
Intersection Capacity Utilization	48.8%	ICU Level of Service	A

HCM Unsignalized Intersection Capacity Analysis
15: Cullum Rd & Banks Road

2015 Background PM Peak - Alternative A - Phase 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	76	68	73	30	55	24	0	70	64	29	75	84
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	83	74	79	33	60	26	0	76	70	32	82	91
Approach Volume (veh/h)		236			118			146			204	
Crossing Volume (veh/h)		146			159			188			92	
High Capacity (veh/h)		1236			1223			1195			1288	
High v/c (veh/h)		0.19			0.10			0.12			0.16	
Low Capacity (veh/h)		1026			1014			989			1074	
Low v/c (veh/h)		0.23			0.12			0.15			0.19	

Intersection Summary			
Maximum v/c High	0.19		
Maximum v/c Low	0.23		
Intersection Capacity Utilization	32.7%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1070	45	140	1455	61	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3518		1770	3539	1770	1583
Flt Permitted	1.00		0.14	1.00	0.95	1.00
Satd. Flow (perm)	3518		264	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1216	51	159	1653	69	136
RTOR Reduction (vph)	0	0	0	0	0	123
Lane Group Flow (vph)	1267	0	159	1653	69	13
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	42.6		54.5	54.5	6.9	6.9
Effective Green, g (s)	42.6		54.5	54.5	6.9	6.9
Actuated g/C Ratio	0.58		0.74	0.74	0.09	0.09
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	2042		348	2628	166	149
v/s Ratio Prot	0.36		0.05	c0.47	c0.04	
v/s Ratio Perm			0.29			0.01
v/c Ratio	0.62		0.46	0.63	0.42	0.09
Uniform Delay, d1	10.1		5.8	4.6	31.3	30.4
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4		1.0	1.2	1.7	0.2
Delay (s)	11.5		6.7	5.7	33.0	30.6
Level of Service	B		A	A	C	C
Approach Delay (s)	11.5			5.8	31.4	
Approach LOS	B			A	C	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	73.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Appendix K-3

2018 Phase IV Background PM Peak Hour Intersection Analysis
Alternatives A and C and Sub-Alternative A-1

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	310	1604	353	2272	250	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	323	1671	368	2367	260	188
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	323	1671	368	2367	260	188
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	19.3	101.2	21.6	103.5	16.2	16.2
Effective Green, g (s)	19.3	101.2	21.6	103.5	16.2	16.2
Actuated g/C Ratio	0.12	0.63	0.14	0.65	0.10	0.10
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	400	3204	448	3276	336	336
v/s Ratio Prot	0.10	0.33	c0.11	c0.47	c0.08	0.06
v/s Ratio Perm						
v/c Ratio	0.81	0.52	0.82	0.72	0.77	0.56
Uniform Delay, d1	68.5	16.1	67.3	18.7	70.1	68.5
Progression Factor	1.00	1.00	1.04	0.61	1.00	1.00
Incremental Delay, d2	10.7	0.6	7.0	0.9	9.7	1.2
Delay (s)	79.3	16.7	77.2	12.2	79.8	69.7
Level of Service	E	B	E	B	E	E
Approach Delay (s)		26.9		21.0		
Approach LOS		C		C		

Intersection Summary			
HCM Average Control Delay	28.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/24/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2018 Backg - Alt. A - Phase 4
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1105			1962	50
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1556			2763	70
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						114
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						160
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								160
C(m) (vph)								561
v/c								0.29
95% queue length								1.17
Control Delay								14.0
LOS								B
Approach Delay							14.0	
Approach LOS							B	

HCM Signalized Intersection Capacity Analysis
3: Sample Rd & NW 54th Ave

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	62	346	1925	42	391	2519	428	160	169	371	486	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.67	1.00	1.00	0.41	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1207	3539	1583	738	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	364	2026	44	412	2652	451	168	178	391	512	129
RTOR Reduction (vph)	0	0	0	15	0	0	207	0	0	165	0	0
Lane Group Flow (vph)	0	429	2026	29	412	2652	244	168	178	226	512	129
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		17.0	70.1	70.1	20.9	74.0	74.0	26.8	16.0	16.0	51.0	34.2
Effective Green, g (s)		17.0	70.1	70.1	20.9	74.0	74.0	26.8	16.0	16.0	51.0	34.2
Actuated g/C Ratio		0.11	0.44	0.44	0.13	0.46	0.46	0.17	0.10	0.10	0.32	0.21
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		353	2219	694	434	2343	732	236	354	158	412	756
v/s Ratio Prot		c0.13	0.40		0.12	c0.52		0.05	0.05		c0.23	0.04
v/s Ratio Perm				0.02			0.15	0.07		0.14	c0.17	
v/c Ratio		1.22	0.91	0.04	0.95	1.13	0.33	0.71	0.50	1.43	1.24	0.17
Uniform Delay, d1		71.5	42.1	25.7	69.0	43.0	27.3	61.7	68.2	72.0	50.8	51.3
Progression Factor		1.05	0.90	1.03	1.23	0.55	0.37	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		119.3	6.9	0.1	5.1	59.9	0.1	8.2	0.4	226.9	128.3	0.0
Delay (s)		194.3	44.6	26.5	90.3	83.5	10.2	69.8	68.6	298.9	179.1	51.4
Level of Service		F	D	C	F	F	B	E	E	F	F	D
Approach Delay (s)			70.0			74.9			191.1			124.3
Approach LOS			E			E			F			F

Intersection Summary

HCM Average Control Delay	90.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	112.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	266
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	280
RTOR Reduction (vph)	88
Lane Group Flow (vph)	192
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	34.2
Effective Green, g (s)	34.2
Actuated g/C Ratio	0.21
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	338
v/s Ratio Prot	
v/s Ratio Perm	0.12
v/c Ratio	0.57
Uniform Delay, d1	56.3
Progression Factor	1.00
Incremental Delay, d2	1.3
Delay (s)	57.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

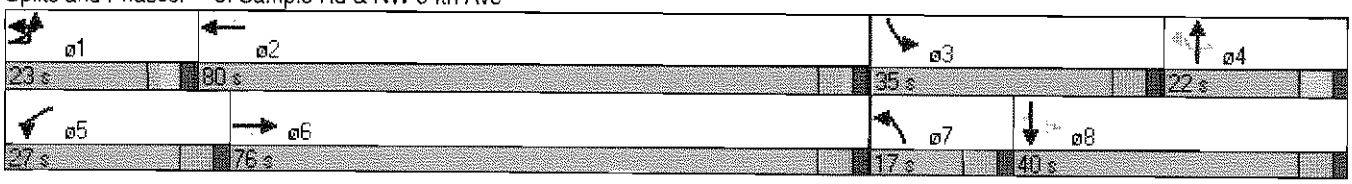
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	346	1925	42	391	2519	428	160	169	371	486	123	266
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	23.0	76.0	76.0	27.0	80.0	80.0	17.0	22.0	22.0	35.0	40.0	40.0
Total Split (%)	14.4%	47.5%	47.5%	16.9%	50.0%	50.0%	10.6%	13.8%	13.8%	21.9%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	17.0	70.1	70.1	20.9	74.0	74.0	26.8	16.0	16.0	51.0	34.2	34.2
Actuated g/C Ratio	0.11	0.44	0.44	0.13	0.46	0.46	0.17	0.10	0.10	0.32	0.21	0.21
v/c Ratio	1.22	0.91	0.06	0.95	1.13	0.48	0.71	0.50	1.21	1.24	0.17	0.66
Control Delay	178.4	45.0	13.8	88.6	84.5	1.9	64.2	73.6	149.6	169.8	52.2	42.1
Queue Delay	0.0	0.6	0.0	0.0	46.4	0.6	0.0	0.0	1.6	0.0	0.0	0.0
Total Delay	178.4	45.5	13.8	88.6	130.9	2.5	64.2	73.6	151.2	169.8	52.2	42.1
LOS	F	D	B	F	F	A	E	E	F	F	D	D
Approach Delay		67.8			109.5			112.6			114.5	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 23 (14%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.24
Intersection Signal Delay: 96.8 — Intersection LOS: F
Intersection Capacity Utilization 112.2% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Queues

3: Sample Rd & NW 54th Ave

2018 Background PM Peak - Alternative A - Phase 4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	429	2026	44	412	2652	451	168	178	391	512	129	280
v/c Ratio	1.22	0.91	0.06	0.95	1.13	0.48	0.71	0.50	1.21	1.24	0.17	0.66
Control Delay	178.4	45.0	13.8	88.6	84.5	1.9	64.2	73.6	149.6	169.8	52.2	42.1
Queue Delay	0.0	0.6	0.0	0.0	46.4	0.6	0.0	0.0	1.6	0.0	0.0	0.0
Total Delay	178.4	45.5	13.8	88.6	130.9	2.5	64.2	73.6	151.2	169.8	52.2	42.1
Queue Length 50th (ft)	~287	735	4	217	~1165	35	133	94	~316	~552	58	164
Queue Length 95th (ft)	#398	608	m38	m196	m#981	m27	#206	137	#536	#785	91	274
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	353	2218	708	436	2343	939	238	354	323	412	756	426
Starvation Cap Reductn	0	0	0	0	198	202	0	0	0	0	0	0
Spillback Cap Reductn	0	38	0	0	0	0	0	0	1	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.93	0.06	0.94	1.24	0.61	0.71	0.50	1.21	1.24	0.17	0.66

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	75	2276	125	6	210	3268	174	12	52	222	191	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5027		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.71	1.00	1.00	0.56	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5027		1317	3539	1583	1049	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	81	2447	134	6	226	3514	187	13	56	239	205	73
RTOR Reduction (vph)	0	0	63	0	0	0	0	0	0	169	0	0
Lane Group Flow (vph)	81	2447	71	0	232	3701	0	13	56	70	205	73
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	6.0	85.0	85.0		24.4	103.4		21.2	19.6	19.6	32.0	25.0
Effective Green, g (s)	6.0	85.0	85.0		24.4	103.4		21.2	19.6	19.6	32.0	25.0
Actuated g/C Ratio	0.04	0.53	0.53		0.15	0.65		0.13	0.12	0.12	0.20	0.16
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	64	2691	841		261	3249		179	434	194	241	553
v/s Ratio Prot	0.05	0.48			c0.14	c0.74		0.00	0.02		c0.04	0.02
v/s Ratio Perm			0.04					0.01		0.04	c0.13	
v/c Ratio	1.27	0.91	0.08		0.89	1.14		0.07	0.13	0.36	0.85	0.13
Uniform Delay, d1	77.0	34.0	18.4		66.5	28.3		60.7	62.6	64.4	61.9	58.2
Progression Factor	0.92	0.54	0.53		1.33	0.40		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	130.6	0.6	0.0		3.7	63.0		0.2	0.6	5.1	23.9	0.5
Delay (s)	201.4	18.9	9.8		92.4	74.4		60.8	63.2	69.5	85.7	58.6
Level of Service	F	B	A		F	E		E	E	E	F	E
Approach Delay (s)		24.0				75.5			68.0			72.9
Approach LOS		C				E			E			E

Intersection Summary

HCM Average Control Delay	56.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	103.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	129
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	139
RTOR Reduction (vph)	78
Lane Group Flow (vph)	61
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	25.0
Effective Green, g (s)	25.0
Actuated g/C Ratio	0.16
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	247
v/s Ratio Prot	
v/s Ratio Perm	0.04
v/c Ratio	0.25
Uniform Delay, d1	59.2
Progression Factor	1.00
Incremental Delay, d2	2.3
Delay (s)	61.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

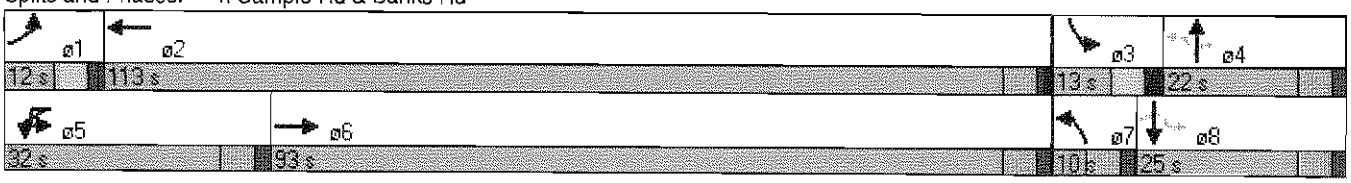
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	75	2276	125	210	3268	12	52	222	191	68	129
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	12.0	93.0	93.0	32.0	113.0	10.0	22.0	22.0	13.0	25.0	25.0
Total Split (%)	7.5%	58.1%	58.1%	20.0%	70.6%	6.3%	13.8%	13.8%	8.1%	15.6%	15.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	6.0	88.6	88.6	24.4	107.0	20.0	16.0	16.0	27.8	25.0	25.0
Actuated g/C Ratio	0.04	0.55	0.55	0.15	0.67	0.12	0.10	0.10	0.17	0.16	0.16
v/c Ratio	1.27	0.87	0.14	0.89	1.10	0.07	0.16	0.72	0.96	0.13	0.43
Control Delay	183.7	17.4	1.4	91.5	60.1	55.5	67.1	28.9	113.5	60.8	27.5
Queue Delay	0.0	0.9	0.0	0.0	124.6	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	183.7	18.3	1.4	91.5	184.6	55.5	67.1	28.9	113.5	60.8	27.7
LOS	F	B	A	F	F	E	E	C	F	E	C
Approach Delay		22.5			179.1		37.0			75.7	
Approach LOS		C			F		D			E	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 24 (15%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.27
Intersection Signal Delay: 110.3 Intersection LOS: F
Intersection Capacity Utilization 103.4% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	81	2447	134	232	3701	13	56	239	205	73	139
v/c Ratio	1.27	0.87	0.14	0.89	1.10	0.07	0.16	0.72	0.96	0.13	0.43
Control Delay	183.7	17.4	1.4	91.5	60.1	55.5	67.1	28.9	113.5	60.8	27.5
Queue Delay	0.0	0.9	0.0	0.0	124.6	0.0	0.0	0.0	0.0	0.0	0.1
Total Delay	183.7	18.3	1.4	91.5	184.6	55.5	67.1	28.9	113.5	60.8	27.7
Queue Length 50th (ft)	~107	315	0	247	~1608	11	28	45	201	34	41
Queue Length 95th (ft)	m#107	m362	m3	m203	m176	33	53	148	#399	64	120
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	64	2805	936	278	3360	176	354	332	214	553	326
Starvation Cap Reductn	0	148	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	679	0	0	0	0	0	12
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.27	0.92	0.14	0.83	1.38	0.07	0.16	0.72	0.96	0.13	0.44

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
5: Sample Rd & Lyons Rd

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	343	1713	596	12	178	2404	507	622	1312	152	11	413
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	373	1862	648	13	193	2613	551	676	1426	165	12	449
RTOR Reduction (vph)	0	0	174	0	0	0	125	0	0	92	0	0
Lane Group Flow (vph)	373	1862	474	0	206	2613	426	676	1426	73	0	461
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	14.5	68.2	68.2		12.3	66.0	66.0	24.5	37.5	37.5		17.5
Effective Green, g (s)	14.5	68.2	68.2		12.3	66.0	66.0	24.5	37.5	37.5		17.5
Actuated g/C Ratio	0.09	0.43	0.43		0.08	0.41	0.41	0.15	0.23	0.23		0.11
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	301	2159	675		255	2089	653	508	1192	371		363
v/s Ratio Prot	c0.11	0.37			0.06	c0.52		c0.20	c0.28			0.14
v/s Ratio Perm			0.30				0.27			0.05		
v/c Ratio	1.24	0.86	0.70		0.81	1.25	0.65	1.33	1.20	0.20		1.27
Uniform Delay, d1	72.8	41.6	37.6		72.7	47.0	37.8	67.8	61.2	49.2		71.2
Progression Factor	0.85	1.13	1.58		1.00	1.00	1.00	1.00	1.00	1.00		1.15
Incremental Delay, d2	120.8	2.4	2.9		16.0	117.0	5.0	161.9	96.7	0.2		136.7
Delay (s)	182.7	49.4	62.2		88.7	164.0	42.8	229.7	158.0	49.4		218.8
Level of Service	F	D	E		F	F	D	F	F	D		F
Approach Delay (s)		69.5				139.6			171.5			
Approach LOS		E				F			F			

Intersection Summary

HCM Average Control Delay	136.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.5
Intersection Capacity Utilization	116.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1152	469
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1252	510
RTOR Reduction (vph)	0	1
Lane Group Flow (vph)	1252	509
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	45.0
Effective Green, g (s)	30.5	45.0
Actuated g/C Ratio	0.19	0.28
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	445
v/s Ratio Prot	0.25	0.10
v/s Ratio Perm		0.22
v/c Ratio	1.29	1.14
Uniform Delay, d1	64.8	57.5
Progression Factor	0.77	0.93
Incremental Delay, d2	137.2	83.4
Delay (s)	187.0	136.8
Level of Service	F	F
Approach Delay (s)	182.1	
Approach LOS	F	

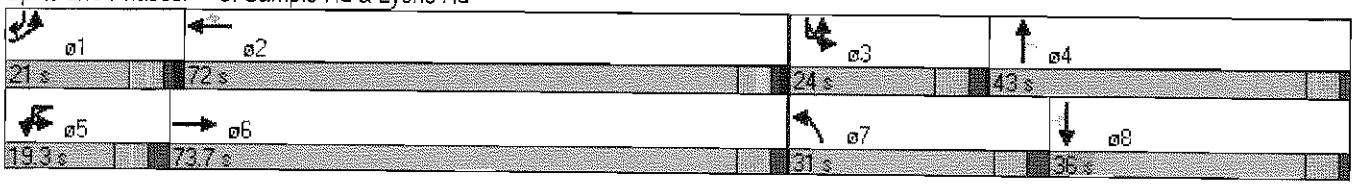
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	343	1713	596	178	2404	507	622	1312	152	413	1152	469
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	21.0	73.7	73.7	19.3	72.0	72.0	31.0	43.0	43.0	24.0	36.0	21.0
Total Split (%)	13.1%	46.1%	46.1%	12.1%	45.0%	45.0%	19.4%	26.9%	26.9%	15.0%	22.5%	13.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	14.5	68.2	68.2	12.3	66.0	66.0	24.5	37.5	37.5	17.5	30.5	50.5
Actuated g/C Ratio	0.09	0.43	0.43	0.08	0.41	0.41	0.15	0.23	0.23	0.11	0.19	0.32
v/c Ratio	1.24	0.86	0.76	0.80	1.25	0.71	1.33	1.20	0.36	1.27	1.29	1.02
Control Delay	170.3	49.9	35.0	95.3	156.7	28.8	211.4	147.8	17.8	197.2	177.5	89.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	170.3	49.9	35.0	95.3	156.7	28.8	211.4	147.8	17.8	197.2	177.5	89.0
LOS	F	D	C	F	F	C	F	F	B	F	F	F
Approach Delay		62.1			132.0			157.3			161.3	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 112 (70%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.33
Intersection Signal Delay: 124.7 Intersection LOS: F
Intersection Capacity Utilization 116.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Queues

5: Sample Rd & Lyons Rd

2018 Background PM Peak - Alternative A - Phase 4

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	373	1862	648	206	2613	551	676	1426	165	461	1252	510
v/c Ratio	1.24	0.86	0.76	0.80	1.25	0.71	1.33	1.20	0.36	1.27	1.29	1.02
Control Delay	170.3	49.9	35.0	95.3	156.7	28.8	211.4	147.8	17.8	197.2	177.5	89.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	170.3	49.9	35.0	95.3	156.7	28.8	211.4	147.8	17.8	197.2	177.5	89.0
Queue Length 50th (ft)	~246	750	546	110	~1245	304	~471	~658	37	~306	~604	~577
Queue Length 95th (ft)	m#310	m801	m673	#171	#1323	456	#600	#756	107	#426	#704	#813
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	301	2158	849	266	2089	778	508	1192	463	363	969	500
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.24	0.86	0.76	0.77	1.25	0.71	1.33	1.20	0.36	1.27	1.29	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/24/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2018 Backg - Alt. A - Phase 4
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		972	156			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1199	192			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			298			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			367			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					367			
C(m) (vph)					440			
v/c					0.83			
95% queue length					8.02			
Control Delay					42.7			
LOS					E			
Approach Delay				42.7				
Approach LOS				E				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	226	47	31	103	69	422	50	158	1962	294	42	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1735		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1735		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	240	50	33	110	73	449	53	168	2087	313	45	479
RTOR Reduction (vph)	0	0	0	0	0	126	0	0	0	100	0	0
Lane Group Flow (vph)	240	83	0	110	73	323	0	221	2087	213	0	524
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	12.0	27.6		14.9	30.5	30.5		14.2	69.2	69.2		26.3
Effective Green, g (s)	12.0	27.6		14.9	30.5	30.5		14.2	69.2	69.2		26.3
Actuated g/C Ratio	0.08	0.17		0.09	0.19	0.19		0.09	0.43	0.43		0.16
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	246	299		158	668	299		292	2178	678		540
v/s Ratio Prot	c0.07	0.05		0.06	0.02			0.07	c0.41			c0.16
v/s Ratio Perm						c0.21				0.14		
v/c Ratio	0.98	0.28		0.70	0.11	1.08		0.76	0.96	0.31		0.97
Uniform Delay, d1	73.9	57.5		70.4	53.5	64.8		71.2	44.0	29.8		66.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.04	0.90	0.74		0.72
Incremental Delay, d2	50.1	0.2		12.5	0.0	74.8		9.5	11.7	1.2		12.6
Delay (s)	123.9	57.7		82.9	53.5	139.6		83.7	51.2	23.3		60.7
Level of Service	F	E		F	D	F		F	D	C		E
Approach Delay (s)		106.9			119.8				50.6			
Approach LOS		F			F				D			

Intersection Summary

HCM Average Control Delay	54.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	1660	313
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	1766	333
RTOR Reduction (vph)	0	86
Lane Group Flow (vph)	1766	247
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	81.3	81.3
Effective Green, g (s)	81.3	81.3
Actuated g/C Ratio	0.51	0.51
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2559	797
v/s Ratio Prot	0.35	
v/s Ratio Perm		0.16
v/c Ratio	0.69	0.31
Uniform Delay, d1	29.8	23.0
Progression Factor	1.00	1.22
Incremental Delay, d2	0.4	0.2
Delay (s)	30.2	28.4
Level of Service	C	C
Approach Delay (s)	36.1	
Approach LOS	D	

Intersection Summary

HCM Signalized Intersection Capacity Analysis
8: Wiles Rd & State Rd 7

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	43	546	810	322	267	1057	237	54	388	1798	190	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	44	563	835	332	275	1090	244	56	400	1854	196	57
RTOR Reduction (vph)	0	0	0	0	0	0	45	0	0	0	15	0
Lane Group Flow (vph)	0	607	835	332	275	1090	199	0	456	1854	181	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		25.0	50.7	50.7	15.3	41.0	41.0		18.0	58.0	73.3	
Effective Green, g (s)		25.0	50.7	50.7	15.3	41.0	41.0		18.0	58.0	73.3	
Actuated g/C Ratio		0.16	0.32	0.32	0.10	0.26	0.26		0.11	0.36	0.46	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		519	1121	502	317	907	406		373	1843	785	
v/s Ratio Prot		c0.18	0.24		0.08	c0.31			c0.14	c0.36	0.02	
v/s Ratio Perm				0.21			0.13				0.09	
v/c Ratio		1.17	0.74	0.66	0.87	1.20	0.49		1.22	1.01	0.23	
Uniform Delay, d1		67.5	48.9	47.2	71.4	59.5	50.6		71.0	51.0	26.3	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		0.71	0.98	1.41	
Incremental Delay, d2		95.4	2.4	2.5	20.7	101.4	0.3		107.2	12.6	0.0	
Delay (s)		162.9	51.3	49.8	92.0	160.9	50.9		157.3	62.8	37.1	
Level of Service		F	D	D	F	F	D		F	E	D	
Approach Delay (s)			89.2			132.4				78.0		
Approach LOS			F			F				E		

Intersection Summary			
HCM Average Control Delay	101.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	116.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	210	1802	606
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	216	1858	625
RTOR Reduction (vph)	0	0	138
Lane Group Flow (vph)	273	1858	487
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	12.0	52.0	52.0
Effective Green, g (s)	12.0	52.0	52.0
Actuated g/C Ratio	0.08	0.32	0.32
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	249	1653	514
v/s Ratio Prot	0.08	c0.37	
v/s Ratio Perm			0.31
v/c Ratio	1.10	1.12	0.95
Uniform Delay, d1	74.0	54.0	52.7
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	85.2	64.4	28.7
Delay (s)	159.2	118.4	81.4
Level of Service	F	F	F
Approach Delay (s)		114.0	
Approach LOS		F	

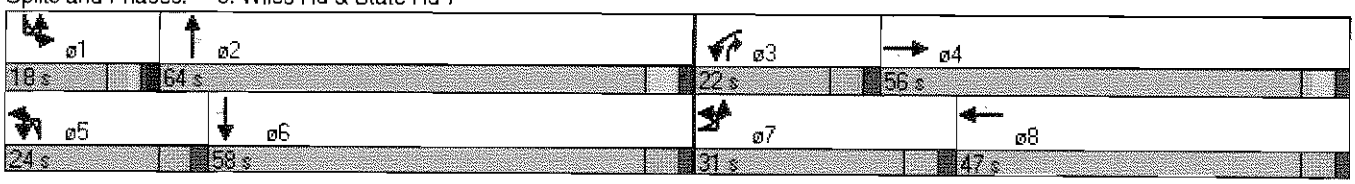
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	546	810	322	267	1057	237	388	1798	190	210	1802	606
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	31.0	56.0	56.0	22.0	47.0	47.0	24.0	64.0	22.0	18.0	58.0	58.0
Total Split (%)	19.4%	35.0%	35.0%	13.8%	29.4%	29.4%	15.0%	40.0%	13.8%	11.3%	36.3%	36.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	25.0	50.7	50.7	15.3	41.0	41.0	18.0	58.0	79.3	12.0	52.0	52.0
Actuated g/C Ratio	0.16	0.32	0.32	0.10	0.26	0.26	0.11	0.36	0.50	0.08	0.32	0.32
v/c Ratio	1.17	0.74	0.66	0.86	1.20	0.54	1.22	1.01	0.25	1.10	1.12	0.96
Control Delay	151.9	53.9	55.0	96.5	150.9	43.1	149.7	62.0	28.0	150.5	112.9	61.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.9	53.9	55.0	96.5	150.9	43.1	149.7	62.0	28.0	150.5	112.9	61.6
LOS	F	D	E	F	F	D	F	E	C	F	F	E
Approach Delay		87.6			125.3			75.3			105.0	
Approach LOS		F			F			E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 88 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.22
Intersection Signal Delay: 96.6 Intersection LOS: F
Intersection Capacity Utilization 116.2% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	607	835	332	275	1090	244	456	1854	196	273	1858	625
v/c Ratio	1.17	0.74	0.66	0.86	1.20	0.54	1.22	1.01	0.25	1.10	1.12	0.96
Control Delay	151.9	53.9	55.0	96.5	150.9	43.1	149.7	62.0	28.0	150.5	112.9	61.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.9	53.9	55.0	96.5	150.9	43.1	149.7	62.0	28.0	150.5	112.9	61.6
Queue Length 50th (ft)	~388	415	303	148	~726	167	~296	~741	154	~165	~819	479
Queue Length 95th (ft)	#513	496	422	#221	#866	262	m#313	m#797	m159	#265	#912	#742
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	519	1122	502	332	907	451	373	1843	806	249	1653	652
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.17	0.74	0.66	0.83	1.20	0.54	1.22	1.01	0.24	1.10	1.12	0.96

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cullum Rd & Lyons Rd

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	159	11	111	16	10	34	84	2413	29	8	61	2151
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.86		1.00	0.88		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3056		1770	1646		1770	5085	1583		1770	5085
Flt Permitted	0.73	1.00		0.67	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1351	3056		1241	1646		69	5085	1583		69	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	177	12	123	18	11	38	93	2681	32	9	68	2390
RTOR Reduction (vph)	0	81	0	0	32	0	0	0	6	0	0	0
Lane Group Flow (vph)	177	54	0	18	17	0	93	2681	26	0	77	2390
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	25.7	25.7		25.7	25.7		117.3	108.4	108.4		115.3	107.4
Effective Green, g (s)	25.7	25.7		25.7	25.7		117.3	108.4	108.4		115.3	107.4
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.73	0.68	0.68		0.72	0.67
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	217	491		199	264		145	3445	1072		134	3413
v/s Ratio Prot		0.02			0.01		c0.04	c0.53			0.03	0.47
v/s Ratio Perm	c0.13			0.01			0.44		0.02		0.38	
v/c Ratio	0.82	0.11		0.09	0.06		0.64	0.78	0.02		0.57	0.70
Uniform Delay, d1	64.9	57.4		57.2	57.0		34.9	17.6	8.5		29.8	16.3
Progression Factor	1.00	1.00		1.00	1.00		1.93	0.69	0.11		1.20	0.97
Incremental Delay, d2	20.5	0.1		0.2	0.1		3.8	0.7	0.0		2.1	0.4
Delay (s)	85.3	57.5		57.4	57.1		71.2	12.9	0.9		38.0	16.3
Level of Service	F	E		E	E		E	B	A		D	B
Approach Delay (s)		73.3			57.1			14.7				16.6
Approach LOS		E			E			B				B

Intersection Summary

HCM Average Control Delay	19.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	102
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	113
RTOR Reduction (vph)	37
Lane Group Flow (vph)	76
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	107.4
Effective Green, g (s)	107.4
Actuated g/C Ratio	0.67
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1063
v/s Ratio Prot	
v/s Ratio Perm	0.05
v/c Ratio	0.07
Uniform Delay, d1	9.1
Progression Factor	0.85
Incremental Delay, d2	0.0
Delay (s)	7.7
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Signalized Intersection Capacity Analysis
10: Wiles Rd & Lyons Rd

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	478	607	400	441	987	328	347	1866	393	150	1491	353
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	520	660	435	479	1073	357	377	2028	427	163	1621	384
RTOR Reduction (vph)	0	0	118	0	0	75	0	0	176	0	0	0
Lane Group Flow (vph)	520	660	317	479	1073	282	377	2028	251	163	1621	384
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	42.6	42.6	25.4	45.0	45.0	18.0	60.0	60.0	8.0	50.0	50.0
Effective Green, g (s)	23.0	42.6	42.6	25.4	45.0	45.0	18.0	60.0	60.0	8.0	50.0	50.0
Actuated g/C Ratio	0.14	0.27	0.27	0.16	0.28	0.28	0.11	0.38	0.38	0.05	0.31	0.31
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	942	421	527	995	445	373	1907	594	166	1589	495
v/s Ratio Prot	c0.16	0.19		0.14	c0.30		c0.11	c0.40		0.05	0.32	
v/s Ratio Perm			0.20			0.18			0.16			0.24
v/c Ratio	1.09	0.70	0.75	0.91	1.08	0.63	1.01	1.06	0.42	0.98	1.02	0.78
Uniform Delay, d1	68.5	52.9	53.9	66.2	57.5	50.3	71.0	50.0	37.1	75.9	55.0	49.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.30	0.67	0.49	1.00	1.00	1.00
Incremental Delay, d2	67.8	1.9	6.6	19.1	52.1	2.2	39.7	36.4	1.4	64.0	27.8	11.3
Delay (s)	136.3	54.9	60.5	85.2	109.6	52.4	132.0	69.8	19.4	139.9	82.8	61.2
Level of Service	F	D	E	F	F	D	F	E	B	F	F	E
Approach Delay (s)		82.6			92.8			70.5			83.3	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM Average Control Delay	81.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	101.3%	ICU Level of Service	G
Analysis Period (min)	15		

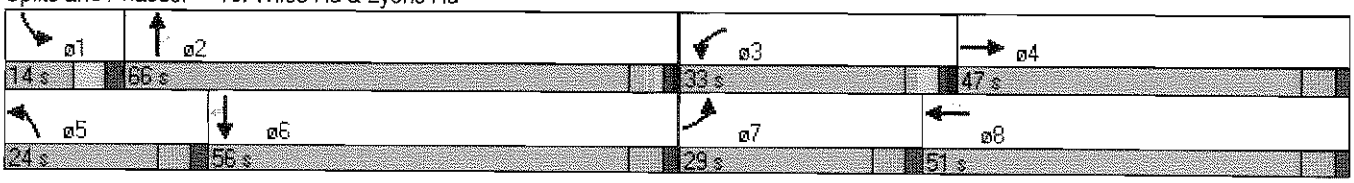
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	478	607	400	441	987	328	347	1866	393	150	1491	353
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	47.0	47.0	33.0	51.0	51.0	24.0	66.0	66.0	14.0	56.0	56.0
Total Split (%)	18.1%	29.4%	29.4%	20.6%	31.9%	31.9%	15.0%	41.3%	41.3%	8.8%	35.0%	35.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	42.6	42.6	25.4	45.0	45.0	18.0	60.0	60.0	8.0	50.0	50.0
Actuated g/C Ratio	0.14	0.27	0.27	0.16	0.28	0.28	0.11	0.38	0.38	0.05	0.31	0.31
v/c Ratio	1.09	0.70	0.81	0.91	1.08	0.69	1.01	1.06	0.56	0.98	1.02	0.78
Control Delay	129.3	58.0	46.9	87.8	105.2	43.2	127.2	69.4	8.0	138.9	81.2	62.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.3	58.0	46.9	87.8	105.2	43.2	127.2	69.4	8.0	138.9	81.2	62.1
LOS	F	E	D	F	F	D	F	E	A	F	F	E
Approach Delay		78.0			89.2			67.8			82.2	
Approach LOS		E			F			E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 64 (40%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 78.2 Intersection LOS: E
Intersection Capacity Utilization 101.3% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	520	660	435	479	1073	357	377	2028	427	163	1621	384
v/c Ratio	1.09	0.70	0.81	0.91	1.08	0.69	1.01	1.06	0.56	0.98	1.02	0.78
Control Delay	129.3	58.0	46.9	87.8	105.2	43.2	127.2	69.4	8.0	138.9	81.2	62.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.3	58.0	46.9	87.8	105.2	43.2	127.2	69.4	8.0	138.9	81.2	62.1
Queue Length 50th (ft)	~314	334	288	254	~656	241	~201	~839	15	89	~656	366
Queue Length 95th (ft)	#435	409	#464	#340	#796	364	#319	#933	116	#172	#752	502
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	942	539	560	995	521	373	1907	769	166	1589	495
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.70	0.81	0.86	1.08	0.69	1.01	1.06	0.56	0.98	1.02	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	77	226	779	68	231	651
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.19	1.00
Satd. Flow (perm)	1770	1583	3539	1583	335	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	90	263	906	79	269	757
RTOR Reduction (vph)	0	222	0	49	0	0
Lane Group Flow (vph)	90	41	906	30	269	757
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	8.7	8.7	21.4	21.4	35.0	35.0
Effective Green, g (s)	8.7	8.7	21.4	21.4	35.0	35.0
Actuated g/C Ratio	0.16	0.16	0.38	0.38	0.63	0.63
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	276	247	1360	608	448	2224
v/s Ratio Prot			0.26		c0.10	0.21
v/s Ratio Perm	c0.05	0.03		0.02	c0.27	
v/c Ratio	0.33	0.17	0.67	0.05	0.60	0.34
Uniform Delay, d1	20.9	20.4	14.2	10.8	6.4	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.3	1.2	0.0	2.3	0.1
Delay (s)	21.6	20.7	15.4	10.8	8.7	5.0
Level of Service	C	C	B	B	A	A
Approach Delay (s)	20.9		15.1			5.9
Approach LOS	C		B			A

Intersection Summary			
HCM Average Control Delay	12.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	10.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	193	603	622	396	268	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	210	655	676	430	291	420
RTOR Reduction (vph)	0	0	0	0	0	344
Lane Group Flow (vph)	865	0	676	430	291	76
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	23.1		17.6	36.6	13.0	13.0
Effective Green, g (s)	23.1		17.6	36.6	13.0	13.0
Actuated g/C Ratio	0.32		0.25	0.51	0.18	0.18
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1020		843	951	642	287
v/s Ratio Prot	c0.27		c0.20	c0.23	0.08	
v/s Ratio Perm						0.05
v/c Ratio	1.26dr		0.80	0.45	0.45	0.27
Uniform Delay, d1	22.7		25.4	11.2	26.2	25.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7		5.5	0.3	0.5	0.5
Delay (s)	29.3		30.9	11.5	26.7	25.7
Level of Service	C		C	B	C	C
Approach Delay (s)	29.3			23.4	26.1	
Approach LOS	C			C	C	

Intersection Summary			
HCM Average Control Delay	26.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	71.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	192	379	152	17	49	258	184	176	43	129	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	209	412	165	18	53	280	200	191	47	140	0
Approach Volume (veh/h)		621			237			672			187	
Crossing Volume (veh/h)		352			480			255			464	
High Capacity (veh/h)		1050			948			1134			961	
High v/c (veh/h)		0.59			0.25			0.59			0.19	
Low Capacity (veh/h)		858			767			933			779	
Low v/c (veh/h)		0.72			0.31			0.72			0.24	

Intersection Summary			
Maximum v/c High	0.59		
Maximum v/c Low	0.72		
Intersection Capacity Utilization	62.3%	ICU Level of Service	B

HCM Unsignalized Intersection Capacity Analysis
15: Cullum Rd & Banks Road

2018 Background PM Peak - Alternative A - Phase 4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	110	94	146	51	71	49	0	127	89	57	147	128
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	120	102	159	55	77	53	0	138	97	62	160	139
Approach Volume (veh/h)		380			186			235			361	
Crossing Volume (veh/h)		277			258			284			133	
High Capacity (veh/h)		1114			1132			1109			1248	
High v/c (veh/h)		0.34			0.16			0.21			0.29	
Low Capacity (veh/h)		916			932			911			1037	
Low v/c (veh/h)		0.42			0.20			0.26			0.35	

Intersection Summary			
Maximum v/c High	0.34		
Maximum v/c Low	0.42		
Intersection Capacity Utilization	45.0%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1107	87	233	1507	116	178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3500		1770	3539	1770	1583
Flt Permitted	1.00		0.09	1.00	0.95	1.00
Satd. Flow (perm)	3500		172	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1258	99	265	1712	132	202
RTOR Reduction (vph)	0	0	0	0	0	174
Lane Group Flow (vph)	1357	0	265	1712	132	28
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	38.9		54.1	54.1	10.7	10.7
Effective Green, g (s)	38.9		54.1	54.1	10.7	10.7
Actuated g/C Ratio	0.51		0.70	0.70	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1773		344	2493	247	221
v/s Ratio Prot	0.39		0.11	c0.48	c0.07	
v/s Ratio Perm			c0.44			0.02
v/c Ratio	0.77		0.77	0.69	0.53	0.13
Uniform Delay, d1	15.3		18.1	6.5	30.7	29.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2		10.2	1.6	2.2	0.3
Delay (s)	18.5		28.3	8.1	33.0	29.2
Level of Service	B		C	A	C	C
Approach Delay (s)	18.5			10.8	30.7	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	15.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	76.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Appendix K-4

2020 Background PM Peak Hour Intersection Analysis
Alternatives A and C and Sub-Alternative A-1

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	343	1715	393	2405	261	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	357	1786	409	2505	272	193
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	357	1786	409	2505	272	193
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	20.8	99.1	23.3	101.6	16.6	16.6
Effective Green, g (s)	20.8	99.1	23.3	101.6	16.6	16.6
Actuated g/C Ratio	0.13	0.62	0.15	0.64	0.10	0.10
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	431	3137	483	3216	344	344
v/s Ratio Prot	0.11	0.35	c0.12	c0.49	c0.08	0.06
v/s Ratio Perm						
v/c Ratio	0.83	0.57	0.85	0.78	0.79	0.56
Uniform Delay, d1	67.9	17.9	66.6	21.1	70.0	68.2
Progression Factor	1.00	1.00	1.07	0.54	1.00	1.00
Incremental Delay, d2	11.8	0.8	7.0	1.0	11.0	1.2
Delay (s)	79.7	18.7	78.6	12.3	81.0	69.5
Level of Service	E	B	E	B	F	E
Approach Delay (s)		28.8		21.6		
Approach LOS		C		C		

Intersection Summary			
HCM Average Control Delay	29.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/19/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 Backg - Alt. A, A-1 and C
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1192			2094	50
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1678			2949	70
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						115
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						161
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								161
C(m) (vph)								513
v/c								0.31
95% queue length								1.33
Control Delay								15.2
LOS								C
Approach Delay							15.2	
Approach LOS							C	

HCM Signalized Intersection Capacity Analysis
3: Sample Rd & NW 54th Ave

2020 Background PM Peak - Alternatives A, A-1 And C

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	63	401	2044	43	414	2676	463	163	172	389	526	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.67	1.00	1.00	0.40	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1207	3539	1583	728	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	66	422	2152	45	436	2817	487	172	181	409	554	129
RTOR Reduction (vph)	0	0	0	14	0	0	210	0	0	169	0	0
Lane Group Flow (vph)	0	488	2152	31	436	2817	277	172	181	240	554	129
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		18.0	70.0	70.0	21.0	73.0	73.0	26.9	16.0	16.0	51.0	34.1
Effective Green, g (s)		18.0	70.0	70.0	21.0	73.0	73.0	26.9	16.0	16.0	51.0	34.1
Actuated g/C Ratio		0.11	0.44	0.44	0.13	0.46	0.46	0.17	0.10	0.10	0.32	0.21
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		373	2216	693	436	2311	722	237	354	158	410	754
v/s Ratio Prot		c0.15	0.42		0.13	c0.56		0.05	0.05		c0.24	0.04
v/s Ratio Perm				0.02			0.17	0.07		0.15	c0.19	
v/c Ratio		1.31	0.97	0.04	1.00	1.22	0.38	0.73	0.51	1.52	1.35	0.17
Uniform Delay, d1		71.0	44.0	25.8	69.5	43.5	28.7	61.8	68.3	72.0	50.7	51.4
Progression Factor		1.04	0.89	1.06	1.30	0.64	0.38	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		156.1	13.0	0.1	12.9	98.9	0.1	9.0	0.5	262.6	173.4	0.0
Delay (s)		229.8	52.3	27.4	103.5	126.9	11.0	70.8	68.8	334.6	224.1	51.4
Level of Service		F	D	C	F	F	B	E	E	F	F	D
Approach Delay (s)			84.1			109.1			211.9			150.3
Approach LOS			F			F			F			F

Intersection Summary

HCM Average Control Delay	115.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	119.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	303
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	319
RTOR Reduction (vph)	93
Lane Group Flow (vph)	226
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	34.1
Effective Green, g (s)	34.1
Actuated g/C Ratio	0.21
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	337
v/s Ratio Prot	
v/s Ratio Perm	0.14
v/c Ratio	0.67
Uniform Delay, d1	57.8
Progression Factor	1.00
Incremental Delay, d2	4.1
Delay (s)	61.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

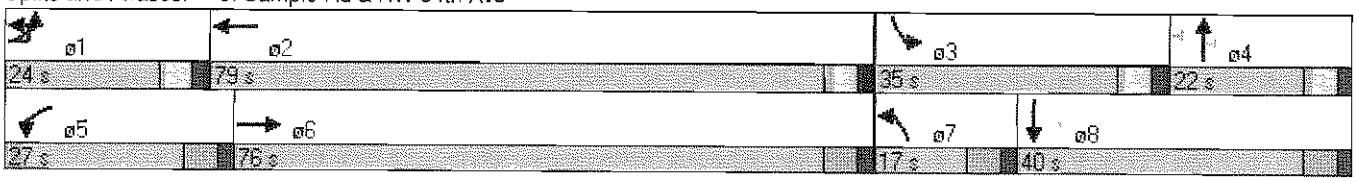
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	401	2044	43	414	2676	463	163	172	389	526	123	303
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	24.0	76.0	76.0	27.0	79.0	79.0	17.0	22.0	22.0	35.0	40.0	40.0
Total Split (%)	15.0%	47.5%	47.5%	16.9%	49.4%	49.4%	10.6%	13.8%	13.8%	21.9%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	18.0	70.0	70.0	21.0	73.0	73.0	26.9	16.0	16.0	51.0	34.1	34.1
Actuated g/C Ratio	0.11	0.44	0.44	0.13	0.46	0.46	0.17	0.10	0.10	0.32	0.21	0.21
v/c Ratio	1.31	0.97	0.06	1.00	1.22	0.52	0.73	0.51	1.25	1.35	0.17	0.74
Control Delay	209.8	52.2	15.0	100.2	126.6	2.5	65.5	73.8	163.1	212.2	52.2	48.1
Queue Delay	0.0	2.5	0.0	0.0	49.4	0.8	0.0	0.0	1.7	0.0	0.0	0.0
Total Delay	209.8	54.8	15.0	100.2	176.1	3.3	65.5	73.8	164.8	212.2	52.2	48.1
LOS	F	D	B	F	F	A	E	E	F	F	D	D
Approach Delay		82.3			144.7			120.8			139.4	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 121.4 — Intersection LOS: F
Intersection Capacity Utilization 119.1% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Queues
3: Sample Rd & NW 54th Ave

2020 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	488	2152	45	436	2817	487	172	181	409	554	129	319
v/c Ratio	1.31	0.97	0.06	1.00	1.22	0.52	0.73	0.51	1.25	1.35	0.17	0.74
Control Delay	209.8	52.2	15.0	100.2	126.6	2.5	65.5	73.8	163.1	212.2	52.2	48.1
Queue Delay	0.0	2.5	0.0	0.0	49.4	0.8	0.0	0.0	1.7	0.0	0.0	0.0
Total Delay	209.8	54.8	15.0	100.2	176.1	3.3	65.5	73.8	164.8	212.2	52.2	48.1
Queue Length 50th (ft)	~342	809	5	~232	~1310	40	137	96	~346	~645	58	204
Queue Length 95th (ft)	#457	#817	m37	m195	m#965	m25	#217	140	#567	#883	91	325
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	373	2216	707	436	2311	933	238	354	328	410	754	430
Starvation Cap Reductn	0	0	0	0	192	194	0	0	0	0	0	0
Spillback Cap Reductn	0	39	0	0	0	0	0	0	1	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.99	0.06	1.00	1.33	0.66	0.72	0.51	1.25	1.35	0.17	0.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	108	2410	127	7	214	3436	229	12	70	226	249	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5018		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.69	1.00	1.00	0.55	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5018		1287	3539	1583	1031	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	116	2591	137	8	230	3695	246	13	75	243	268	97
RTOR Reduction (vph)	0	0	63	0	0	0	0	0	0	140	0	0
Lane Group Flow (vph)	116	2591	74	0	238	3941	0	13	75	103	268	97
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	8.0	86.4	86.4		23.0	101.4		21.2	19.6	19.6	32.0	25.0
Effective Green, g (s)	8.0	86.4	86.4		23.0	101.4		21.2	19.6	19.6	32.0	25.0
Actuated g/C Ratio	0.05	0.54	0.54		0.14	0.63		0.13	0.12	0.12	0.20	0.16
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	2735	855		246	3180		175	434	194	239	553
v/s Ratio Prot	0.07	0.51			c0.14	c0.79		0.00	0.02		c0.05	0.03
v/s Ratio Perm			0.05					0.01		0.07	c0.18	
v/c Ratio	1.35	0.95	0.09		0.97	1.24		0.07	0.17	0.53	1.12	0.18
Uniform Delay, d1	76.0	34.7	17.8		68.1	29.3		60.7	62.9	65.9	64.2	58.6
Progression Factor	0.95	0.45	0.20		0.85	1.18		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	164.0	1.0	0.0		10.6	108.0		0.2	0.9	10.1	94.7	0.7
Delay (s)	236.2	16.6	3.6		68.7	142.6		60.8	63.8	76.0	158.9	59.2
Level of Service	F	B	A		E	F		E	E	E	F	E
Approach Delay (s)		24.9				138.4			72.7			109.3
Approach LOS		C				F			E			F

Intersection Summary

HCM Average Control Delay	92.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Volume (vph)	178
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	191
RTOR Reduction (vph)	95
Lane Group Flow (vph)	97
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	25.0
Effective Green, g (s)	25.0
Actuated g/C Ratio	0.16
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	247
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.39
Uniform Delay, d1	60.7
Progression Factor	1.00
Incremental Delay, d2	4.6
Delay (s)	65.3
Level of Service	E
Approach Delay (s)	
Approach LOS	

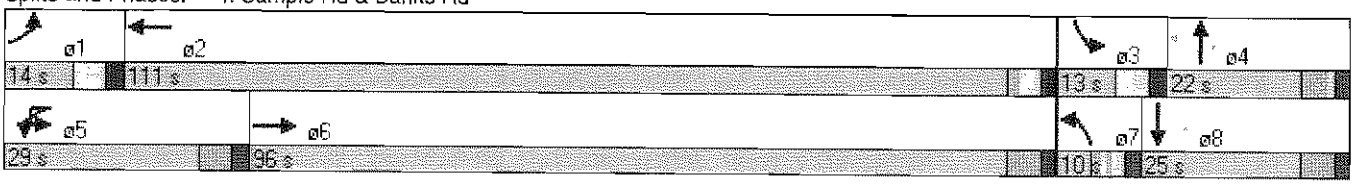
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	108	2410	127	214	3436	12	70	226	249	90	178
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	14.0	96.0	96.0	29.0	111.0	10.0	22.0	22.0	13.0	25.0	25.0
Total Split (%)	8.8%	60.0%	60.0%	18.1%	69.4%	6.3%	13.8%	13.8%	8.1%	15.6%	15.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	8.0	90.0	90.0	23.0	105.0	20.0	16.0	16.0	27.8	25.0	25.0
Actuated g/C Ratio	0.05	0.56	0.56	0.14	0.66	0.12	0.10	0.10	0.17	0.16	0.16
v/c Ratio	1.35	0.91	0.14	0.97	1.20	0.08	0.21	0.81	1.27	0.18	0.56
Control Delay	214.5	15.0	0.5	68.8	119.7	55.5	67.9	45.0	201.7	61.2	33.6
Queue Delay	0.0	2.5	0.0	0.0	177.2	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay	214.5	17.5	0.5	68.8	296.8	55.5	67.9	45.0	201.7	61.2	34.0
LOS	F	B	A	E	F	E	E	D	F	E	C
Approach Delay		24.7			283.9		50.6			119.6	
Approach LOS		C			F		D			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 5 (3%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 169.4 — Intersection LOS: F
Intersection Capacity Utilization 112.9% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Queues

4: Sample Rd & Banks Rd

2020 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	116	2591	137	238	3941	13	75	243	268	97	191
v/c Ratio	1.35	0.91	0.14	0.97	1.20	0.08	0.21	0.81	1.27	0.18	0.56
Control Delay	214.5	15.0	0.5	68.8	119.7	55.5	67.9	45.0	201.7	61.2	33.6
Queue Delay	0.0	2.5	0.0	0.0	177.2	0.0	0.0	0.0	0.0	0.0	0.4
Total Delay	214.5	17.5	0.5	68.8	296.8	55.5	67.9	45.0	201.7	61.2	34.0
Queue Length 50th (ft)	~161	297	0	264	~1800	11	38	87	~335	45	73
Queue Length 95th (ft)	m#147	m292	m1	m199	m702	33	67	#228	#555	81	172
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	86	2849	950	246	3294	173	354	301	211	553	342
Starvation Cap Reductn	0	164	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	817	0	0	0	0	0	18
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.35	0.96	0.14	0.97	1.59	0.08	0.21	0.81	1.27	0.18	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
5: Sample Rd & Lyons Rd

2020 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	383	1862	648	12	183	2541	559	679	1375	156	11	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	416	2024	704	13	199	2762	608	738	1495	170	12	502
RTOR Reduction (vph)	0	0	175	0	0	0	130	0	0	79	0	0
Lane Group Flow (vph)	416	2024	529	0	212	2762	478	738	1495	91	0	514
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	15.5	68.4	68.4		11.1	64.0	64.0	25.5	38.5	38.5		17.5
Effective Green, g (s)	15.5	68.4	68.4		11.1	64.0	64.0	25.5	38.5	38.5		17.5
Actuated g/C Ratio	0.10	0.43	0.43		0.07	0.40	0.40	0.16	0.24	0.24		0.11
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	322	2165	677		230	2026	633	529	1224	381		363
v/s Ratio Prot	c0.13	c0.40			0.06	c0.55		c0.22	c0.29			0.15
v/s Ratio Perm			0.33				0.30			0.06		
v/c Ratio	1.29	0.93	0.78		0.92	1.36	0.76	1.40	1.22	0.24		1.42
Uniform Delay, d1	72.2	43.7	39.4		74.0	48.0	41.3	67.2	60.8	48.9		71.2
Progression Factor	0.91	1.15	1.36		1.00	1.00	1.00	1.00	1.00	1.00		1.01
Incremental Delay, d2	140.1	4.0	3.5		38.0	166.7	8.2	189.1	107.2	0.2		197.5
Delay (s)	205.9	54.2	57.2		112.0	214.7	49.5	256.3	167.9	49.2		269.6
Level of Service	F	D	E		F	F	D	F	F	D		F
Approach Delay (s)		75.0				180.6			186.7			
Approach LOS		E				F			F			

Intersection Summary

HCM Average Control Delay	160.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	123.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑↑	↱
Volume (vph)	1230	485
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1337	527
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1337	527
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	46.0
Effective Green, g (s)	30.5	46.0
Actuated g/C Ratio	0.19	0.29
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	455
v/s Ratio Prot	c0.26	0.11
v/s Ratio Perm		0.22
v/c Ratio	1.38	1.16
Uniform Delay, d1	64.8	57.0
Progression Factor	0.71	1.00
Incremental Delay, d2	175.2	86.6
Delay (s)	221.4	143.7
Level of Service	F	F
Approach Delay (s)	214.6	
Approach LOS	F	

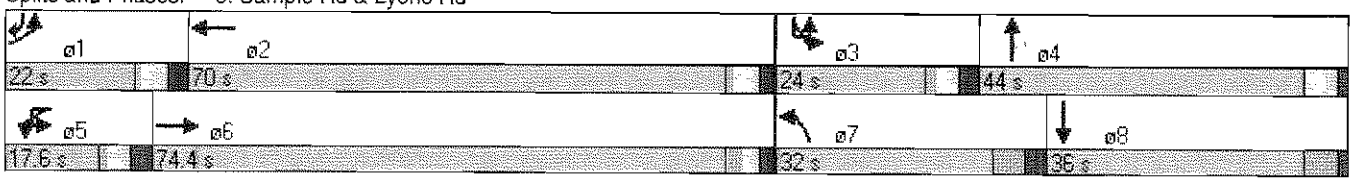
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	383	1862	648	183	2541	559	679	1375	156	462	1230	485
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	22.0	74.4	74.4	17.6	70.0	70.0	32.0	44.0	44.0	24.0	36.0	22.0
Total Split (%)	13.8%	46.5%	46.5%	11.0%	43.8%	43.8%	20.0%	27.5%	27.5%	15.0%	22.5%	13.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	15.5	68.4	68.4	11.1	64.0	64.0	25.5	38.5	38.5	17.5	30.5	51.5
Actuated g/C Ratio	0.10	0.43	0.43	0.07	0.40	0.40	0.16	0.24	0.24	0.11	0.19	0.32
v/c Ratio	1.29	0.93	0.83	0.92	1.36	0.80	1.40	1.22	0.37	1.42	1.38	1.03
Control Delay	189.9	54.2	34.3	114.6	204.3	35.5	235.8	156.8	22.3	245.9	211.4	92.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	189.9	54.2	34.3	114.6	204.3	35.5	235.8	156.8	22.3	245.9	211.4	92.9
LOS	F	D	C	F	F	D	F	F	C	F	F	F
Approach Delay		67.7			170.3			171.6			192.6	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 149 (93%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.42
Intersection Signal Delay: 147.2 Intersection LOS: F
Intersection Capacity Utilization 123.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Queues

5: Sample Rd & Lyons Rd

2020 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	416	2024	704	212	2762	608	738	1495	170	514	1337	527
v/c Ratio	1.29	0.93	0.83	0.92	1.36	0.80	1.40	1.22	0.37	1.42	1.38	1.03
Control Delay	189.9	54.2	34.3	114.6	204.3	35.5	235.8	156.8	22.3	245.9	211.4	92.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	189.9	54.2	34.3	114.6	204.3	35.5	235.8	156.8	22.3	245.9	211.4	92.9
Queue Length 50th (ft)	~289	551	357	115	~1388	383	~528	~701	55	~367	~681	~603
Queue Length 95th (ft)	m#327	m671	m447	#198	#1462	561	#659	#798	129	#489	#784	#841
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	322	2165	852	230	2026	763	529	1224	460	363	969	510
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.29	0.93	0.83	0.92	1.36	0.80	1.40	1.22	0.37	1.42	1.38	1.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/19/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 Backg - Alt. A, A-1 and C
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1064	156			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1313	192			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			300			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			370			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					370			
C(m) (vph)					409			
v/c					0.90			
95% queue length					9.59			
Control Delay					55.9			
LOS					F			
Approach Delay				55.9				
Approach LOS				F				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2020 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	231	52	32	137	75	523	51	161	2032	433	43	541
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1739		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1739		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	246	55	34	146	80	556	54	171	2162	461	46	576
RTOR Reduction (vph)	0	0	0	0	0	139	0	0	0	144	0	0
Lane Group Flow (vph)	246	89	0	146	80	417	0	225	2162	317	0	622
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	11.0	27.8		18.2	35.0	35.0		14.4	64.0	64.0		28.0
Effective Green, g (s)	11.0	27.8		18.2	35.0	35.0		14.4	64.0	64.0		28.0
Actuated g/C Ratio	0.07	0.17		0.11	0.22	0.22		0.09	0.40	0.40		0.18
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	226	302		193	767	343		296	2014	627		575
v/s Ratio Prot	c0.07	0.05		0.09	0.02			0.07	c0.43			c0.19
v/s Ratio Perm						c0.27				0.20		
v/c Ratio	1.09	0.29		0.76	0.10	1.22		0.76	1.07	0.51		1.08
Uniform Delay, d1	74.5	57.6		68.8	50.0	62.5		71.1	48.0	36.1		66.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.06	0.96	0.84		0.66
Incremental Delay, d2	85.5	0.2		15.5	0.0	120.8		9.9	43.1	2.9		40.2
Delay (s)	160.0	57.8		84.2	50.0	183.3		85.2	89.3	33.3		84.0
Level of Service	F	E		F	D	F		F	F	C		F
Approach Delay (s)		132.8			151.1				79.9			
Approach LOS		F			F				E			

Intersection Summary

HCM Average Control Delay	76.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	113.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1701	319
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	1810	339
RTOR Reduction (vph)	0	87
Lane Group Flow (vph)	1810	252
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	77.6	77.6
Effective Green, g (s)	77.6	77.6
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2442	760
v/s Ratio Prot	0.36	
v/s Ratio Perm		0.16
v/c Ratio	0.74	0.33
Uniform Delay, d1	33.1	25.3
Progression Factor	1.00	1.18
Incremental Delay, d2	0.2	0.1
Delay (s)	33.2	29.9
Level of Service	C	C
Approach Delay (s)	44.2	
Approach LOS	D	

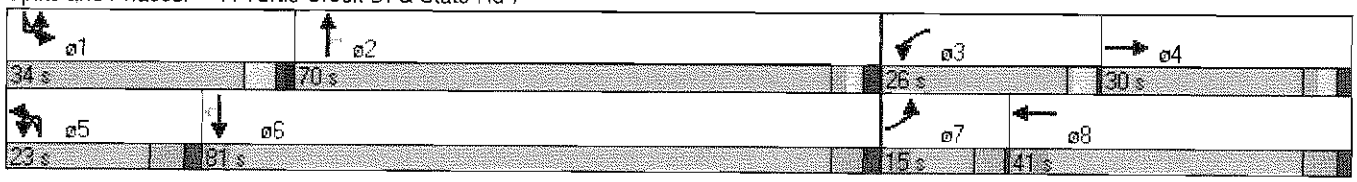
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	231	52	137	75	523	161	2032	433	541	1701	319
Turn Type	Prot		Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	6.0	4.0	6.0	6.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	8.0	12.0	8.0	12.0	12.0	11.0	13.0	13.0	11.0	13.0	13.0
Total Split (s)	15.0	30.0	26.0	41.0	41.0	23.0	70.0	70.0	34.0	81.0	81.0
Total Split (%)	9.4%	18.8%	16.3%	25.6%	25.6%	14.4%	43.8%	43.8%	21.3%	50.6%	50.6%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	2.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.0	27.8	18.2	35.0	35.0	14.4	64.0	64.0	28.0	77.6	77.6
Actuated g/C Ratio	0.07	0.17	0.11	0.22	0.22	0.09	0.40	0.40	0.18	0.48	0.48
v/c Ratio	1.09	0.29	0.76	0.10	1.15	0.76	1.07	0.60	1.08	0.74	0.40
Control Delay	151.5	62.1	92.0	50.5	126.7	92.0	86.8	17.9	82.1	33.7	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.5	62.1	92.0	50.5	126.7	92.0	86.8	17.9	82.1	33.7	15.2
LOS	F	E	F	D	F	F	F	B	F	C	B
Approach Delay		127.8		112.4			76.1			42.3	
Approach LOS		F		F			E			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 17 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 69.0 — Intersection LOS: E
Intersection Capacity Utilization 113.2% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 7: Turtle Creek Dr & State Rd 7



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	246	89	146	80	556	225	2162	461	622	1810	339
v/c Ratio	1.09	0.29	0.76	0.10	1.15	0.76	1.07	0.60	1.08	0.74	0.40
Control Delay	151.5	62.1	92.0	50.5	126.7	92.0	86.8	17.9	82.1	33.7	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.5	62.1	92.0	50.5	126.7	92.0	86.8	17.9	82.1	33.7	15.2
Queue Length 50th (ft)	~148	83	150	35	~530	121	~920	206	~363	655	225
Queue Length 95th (ft)	#243	145	227	61	#772	168	#1009	279	m#303	m602	m212
Internal Link Dist (ft)		595		1522			330			1350	
Turn Bay Length (ft)	200		235		185	320			250		170
Base Capacity (vph)	226	302	233	767	482	349	2014	771	575	2444	848
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.29	0.63	0.10	1.15	0.64	1.07	0.60	1.08	0.74	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: Wiles Rd & State Rd 7

2020 Background PM Peak - Alternatives A, A-1 And C

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	44	563	851	343	274	1100	277	55	417	1909	195	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	45	580	877	354	282	1134	286	57	430	1968	201	58
RTOR Reduction (vph)	0	0	0	0	0	0	37	0	0	0	9	0
Lane Group Flow (vph)	0	625	877	354	282	1134	249	0	487	1968	192	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		24.0	49.1	49.1	15.9	41.0	41.0		18.0	60.0	75.9	
Effective Green, g (s)		24.0	49.1	49.1	15.9	41.0	41.0		18.0	60.0	75.9	
Actuated g/C Ratio		0.15	0.31	0.31	0.10	0.26	0.26		0.11	0.38	0.47	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		498	1086	486	330	907	406		373	1907	810	
v/s Ratio Prot		c0.19	0.25		0.08	c0.32			c0.15	c0.39	0.02	
v/s Ratio Perm				0.22			0.16				0.10	
v/c Ratio		1.26	0.81	0.73	0.85	1.25	0.61		1.31	1.03	0.24	
Uniform Delay, d1		68.0	51.1	49.5	70.9	59.5	52.5		71.0	50.0	24.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		0.70	0.93	1.32	
Incremental Delay, d2		130.4	4.2	4.6	18.3	121.8	1.9		139.4	16.7	0.0	
Delay (s)		198.4	55.3	54.1	89.2	181.3	54.4		188.9	63.4	32.9	
Level of Service		F	E	D	F	F	D		F	E	C	
Approach Delay (s)			103.3			144.7				84.1		
Approach LOS			F			F				F		

Intersection Summary

HCM Average Control Delay	116.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	119.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	232	1914	622
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	239	1973	641
RTOR Reduction (vph)	0	0	128
Lane Group Flow (vph)	297	1973	513
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	11.0	53.0	53.0
Effective Green, g (s)	11.0	53.0	53.0
Actuated g/C Ratio	0.07	0.33	0.33
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	228	1684	524
v/s Ratio Prot	0.09	c0.39	
v/s Ratio Perm			0.32
v/c Ratio	1.30	1.17	0.98
Uniform Delay, d1	74.5	53.5	53.0
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	164.3	83.9	34.6
Delay (s)	238.8	137.4	87.5
Level of Service	F	F	F
Approach Delay (s)		136.8	
Approach LOS		F	

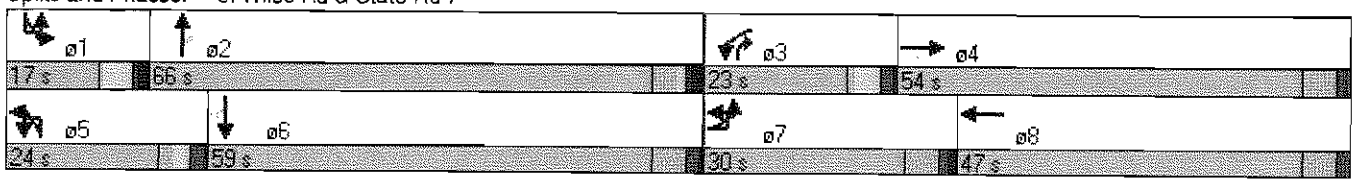
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	563	851	343	274	1100	277	417	1909	195	232	1914	622
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	54.0	54.0	23.0	47.0	47.0	24.0	66.0	23.0	17.0	59.0	59.0
Total Split (%)	18.8%	33.8%	33.8%	14.4%	29.4%	29.4%	15.0%	41.3%	14.4%	10.6%	36.9%	36.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	24.0	49.1	49.1	15.9	41.0	41.0	18.0	60.0	81.9	11.0	53.0	53.0
Actuated g/C Ratio	0.15	0.31	0.31	0.10	0.26	0.26	0.11	0.38	0.51	0.07	0.33	0.33
v/c Ratio	1.26	0.81	0.73	0.85	1.25	0.65	1.31	1.03	0.25	1.30	1.17	0.98
Control Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.1	26.1	218.6	130.4	68.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.1	26.1	218.6	130.4	68.0
LOS	F	E	E	F	F	D	F	E	C	F	F	E
Approach Delay		100.7			137.0			80.8			125.6	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 92 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 109.6 Intersection LOS: F
Intersection Capacity Utilization 119.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Queues
8: Wiles Rd & State Rd 7

2020 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	625	877	354	282	1134	286	487	1968	201	297	1973	641
v/c Ratio	1.26	0.81	0.73	0.85	1.25	0.65	1.31	1.03	0.25	1.30	1.17	0.98
Control Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.1	26.1	218.6	130.4	68.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.1	26.1	218.6	130.4	68.0
Queue Length 50th (ft)	~420	451	336	151	~776	224	~331	~814	161	~204	~897	518
Queue Length 95th (ft)	#546	537	464	#218	#916	333	m#287	m704	m147	#306	#989	#791
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	498	1085	485	353	907	443	373	1907	830	228	1684	652
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.81	0.73	0.80	1.25	0.65	1.31	1.03	0.24	1.30	1.17	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	181	16	122	16	15	35	93	2689	30	8	62	2332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3070		1770	1668		1770	5085	1583		1770	5085
Flt Permitted	0.72	1.00		0.65	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1342	3070		1208	1668		69	5085	1583		71	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	201	18	136	18	17	39	103	2988	33	9	69	2591
RTOR Reduction (vph)	0	62	0	0	32	0	0	0	6	0	0	0
Lane Group Flow (vph)	201	92	0	18	24	0	103	2988	27	0	78	2591
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	27.5	27.5		27.5	27.5		117.2	107.5	107.5		111.8	104.8
Effective Green, g (s)	27.5	27.5		27.5	27.5		117.2	107.5	107.5		111.8	104.8
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.73	0.67	0.67		0.70	0.66
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	231	528		208	287		154	3416	1064		124	3331
v/s Ratio Prot		0.03			0.01		c0.04	c0.59			0.03	0.51
v/s Ratio Perm	c0.15			0.01			0.45		0.02		0.41	
v/c Ratio	0.87	0.17		0.09	0.08		0.67	0.87	0.03		0.63	0.78
Uniform Delay, d1	64.5	56.6		55.7	55.7		41.3	20.9	8.8		35.3	19.4
Progression Factor	1.00	1.00		1.00	1.00		1.73	0.64	0.26		1.21	0.69
Incremental Delay, d2	28.0	0.2		0.2	0.1		4.3	1.4	0.0		2.6	0.5
Delay (s)	92.5	56.7		55.9	55.8		75.6	14.9	2.3		45.2	13.9
Level of Service	F	E		E	E		E	B	A		D	B
Approach Delay (s)		77.0			55.8			16.7				14.4
Approach LOS		E			E			B				B

Intersection Summary

HCM Average Control Delay	19.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	117
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	130
RTOR Reduction (vph)	42
Lane Group Flow (vph)	88
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	104.8
Effective Green, g (s)	104.8
Actuated g/C Ratio	0.66
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1037
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.09
Uniform Delay, d1	10.1
Progression Factor	0.74
Incremental Delay, d2	0.0
Delay (s)	7.5
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Signalized Intersection Capacity Analysis
10: Wiles Rd & Lyons Rd

2020 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	509	632	415	468	1042	335	354	2075	448	153	1647	404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	553	687	451	509	1133	364	385	2255	487	166	1790	439
RTOR Reduction (vph)	0	0	87	0	0	56	0	0	181	0	0	0
Lane Group Flow (vph)	553	687	364	509	1133	308	385	2255	306	166	1790	439
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	41.0	41.0	25.0	43.0	43.0	15.0	64.0	64.0	6.0	55.0	55.0
Effective Green, g (s)	23.0	41.0	41.0	25.0	43.0	43.0	15.0	64.0	64.0	6.0	55.0	55.0
Actuated g/C Ratio	0.14	0.26	0.26	0.16	0.27	0.27	0.09	0.40	0.40	0.04	0.34	0.34
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	907	406	519	951	425	311	2034	633	124	1748	544
v/s Ratio Prot	c0.17	0.19		0.15	c0.32		c0.12	c0.44		0.05	0.35	
v/s Ratio Perm			0.23			0.19			0.19			0.28
v/c Ratio	1.16	0.76	0.90	0.98	1.19	0.72	1.24	1.11	0.48	1.34	1.02	0.81
Uniform Delay, d1	68.5	54.9	57.5	67.3	58.5	53.1	72.5	48.0	35.7	77.0	52.5	47.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.31	0.73	0.65	1.00	1.00	1.00
Incremental Delay, d2	92.9	3.2	21.2	34.3	96.6	5.1	120.1	52.9	1.3	196.8	27.9	12.1
Delay (s)	161.4	58.2	78.6	101.6	155.1	58.2	215.3	88.1	24.4	273.8	80.4	59.8
Level of Service	F	E	E	F	F	E	F	F	C	F	F	E
Approach Delay (s)		97.4			124.0			93.8			90.0	
Approach LOS		F			F			F			F	

Intersection Summary

HCM Average Control Delay	100.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		

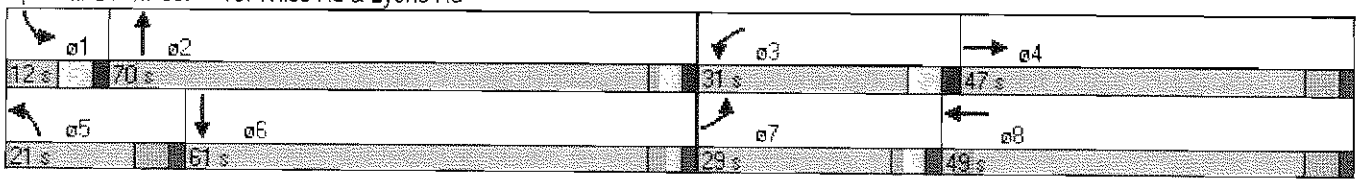
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	509	632	415	468	1042	335	354	2075	448	153	1647	404
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	47.0	47.0	31.0	49.0	49.0	21.0	70.0	70.0	12.0	61.0	61.0
Total Split (%)	18.1%	29.4%	29.4%	19.4%	30.6%	30.6%	13.1%	43.8%	43.8%	7.5%	38.1%	38.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	41.0	41.0	25.0	43.0	43.0	15.0	64.0	64.0	6.0	55.0	55.0
Actuated g/C Ratio	0.14	0.26	0.26	0.16	0.27	0.27	0.09	0.40	0.40	0.04	0.34	0.34
v/c Ratio	1.16	0.76	0.91	0.98	1.19	0.76	1.24	1.11	0.60	1.34	1.02	0.81
Control Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.7	86.9	10.3	250.5	78.8	60.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.7	86.9	10.3	250.5	78.8	60.6
LOS	F	E	E	F	F	D	F	F	B	F	E	E
Approach Delay		91.8			117.7			87.7			87.4	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 88 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 94.9 Intersection LOS: F
Intersection Capacity Utilization 107.8% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	553	687	451	509	1133	364	385	2255	487	166	1790	439
v/c Ratio	1.16	0.76	0.91	0.98	1.19	0.76	1.24	1.11	0.60	1.34	1.02	0.81
Control Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.7	86.9	10.3	250.5	78.8	60.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.7	86.9	10.3	250.5	78.8	60.6
Queue Length 50th (ft)	~351	352	360	277	~750	283	~253	~971	73	~115	~727	418
Queue Length 95th (ft)	#473	428	#574	#399	#890	414	m#320	#1062	m135	#198	#820	567
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	907	493	519	951	482	311	2034	814	124	1748	544
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.76	0.91	0.98	1.19	0.76	1.24	1.11	0.60	1.34	1.02	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	114	279	820	97	311	687
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.15	1.00
Satd. Flow (perm)	1770	1583	3539	1583	274	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	133	324	953	113	362	799
RTOR Reduction (vph)	0	270	0	70	0	0
Lane Group Flow (vph)	133	54	953	43	362	799
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	10.6	10.6	23.5	23.5	41.2	41.2
Effective Green, g (s)	10.6	10.6	23.5	23.5	41.2	41.2
Actuated g/C Ratio	0.17	0.17	0.37	0.37	0.65	0.65
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	294	263	1304	583	486	2285
v/s Ratio Prot			0.27		c0.16	0.23
v/s Ratio Perm	c0.08	0.03		0.03	c0.32	
v/c Ratio	0.45	0.20	0.73	0.07	0.74	0.35
Uniform Delay, d1	24.0	23.0	17.4	13.1	11.8	5.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	0.4	2.1	0.1	6.1	0.1
Delay (s)	25.1	23.3	19.6	13.1	17.9	5.3
Level of Service	C	C	B	B	B	A
Approach Delay (s)	23.9		18.9			9.2
Approach LOS	C		B			A

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	63.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	194	606	624	492	396	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	659	678	535	430	421
RTOR Reduction (vph)	0	0	0	0	0	336
Lane Group Flow (vph)	870	0	678	535	430	85
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	23.9		17.8	38.9	15.1	15.1
Effective Green, g (s)	23.9		17.8	38.9	15.1	15.1
Actuated g/C Ratio	0.32		0.24	0.52	0.20	0.20
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1011		817	969	714	320
v/s Ratio Prot	c0.27		c0.20	c0.29	0.12	
v/s Ratio Perm						0.05
v/c Ratio	1.28dr		0.83	0.55	0.60	0.27
Uniform Delay, d1	23.9		27.1	12.1	27.1	25.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6		7.0	0.7	1.4	0.4
Delay (s)	31.5		34.1	12.8	28.6	25.6
Level of Service	C		C	B	C	C
Approach Delay (s)	31.5			24.7	27.1	
Approach LOS	C			C	C	

Intersection Summary			
HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	74.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2020 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	424	172	26	73	261	276	204	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	461	187	28	79	284	300	222	71	211	0
Approach Volume (veh/h)		774			295			805			282	
Crossing Volume (veh/h)		468			584			384			499	
High Capacity (veh/h)		957			873			1024			934	
High v/c (veh/h)		0.81			0.34			0.79			0.30	
Low Capacity (veh/h)		776			701			835			755	
Low v/c (veh/h)		1.00			0.42			0.96			0.37	

Intersection Summary			
Maximum v/c High	0.81		
Maximum v/c Low	1.00		
Intersection Capacity Utilization	73.5%	ICU Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	134	110	219	73	79	73	0	184	113	86	219	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	146	120	238	79	86	79	0	200	123	93	238	179
Approach Volume (veh/h)		503			245			323			511	
Crossing Volume (veh/h)		411			346			359			165	
High Capacity (veh/h)		1002			1055			1045			1217	
High v/c (veh/h)		0.50			0.23			0.31			0.42	
Low Capacity (veh/h)		816			863			854			1009	
Low v/c (veh/h)		0.62			0.28			0.38			0.51	

Intersection Summary			
Maximum v/c High	0.50		
Maximum v/c Low	0.62		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1133	129	320	1543	172	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3485		1770	3539	1770	1583
Flt Permitted	1.00		0.10	1.00	0.95	1.00
Satd. Flow (perm)	3485		178	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1288	147	364	1753	195	257
RTOR Reduction (vph)	0	0	0	0	0	220
Lane Group Flow (vph)	1435	0	364	1753	195	37
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	37.3		56.0	56.0	11.4	11.4
Effective Green, g (s)	37.3		56.0	56.0	11.4	11.4
Actuated g/C Ratio	0.47		0.71	0.71	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1637		410	2496	254	227
v/s Ratio Prot	0.41		c0.16	0.50	c0.11	
v/s Ratio Perm			c0.47			0.02
v/c Ratio	0.88		0.89	0.70	0.77	0.16
Uniform Delay, d1	19.0		22.3	6.8	32.7	29.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	6.9		20.1	1.7	13.0	0.3
Delay (s)	25.9		42.4	8.5	45.7	30.2
Level of Service	C		D	A	D	C
Approach Delay (s)	25.9			14.3	36.9	
Approach LOS	C			B	D	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix K-5

2035 Background PM Peak Hour Intersection Analysis
Alternatives A and C and Sub-Alternative A-1

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	377	1915	426	2702	299	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	393	1995	444	2815	311	219
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	393	1995	444	2815	311	219
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	21.5	96.9	25.0	100.4	17.1	17.1
Effective Green, g (s)	21.5	96.9	25.0	100.4	17.1	17.1
Actuated g/C Ratio	0.13	0.61	0.16	0.63	0.11	0.11
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	446	3067	519	3178	355	355
v/s Ratio Prot	0.12	0.39	c0.13	c0.56	c0.09	0.07
v/s Ratio Perm						
v/c Ratio	0.88	0.65	0.86	0.89	0.88	0.62
Uniform Delay, d1	68.0	20.5	65.7	25.0	70.4	68.3
Progression Factor	1.00	1.00	1.08	0.38	1.00	1.00
Incremental Delay, d2	17.6	1.1	5.4	1.7	20.2	2.2
Delay (s)	85.6	21.6	76.5	11.2	90.6	70.6
Level of Service	F	C	E	B	F	E
Approach Delay (s)		32.2		20.1		
Approach LOS		C		C		

Intersection Summary			
HCM Average Control Delay	30.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 Bakg - Alt. A, A-1 and C
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1331			2356	52
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1874			3318	73
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						122
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						171
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								171
C(m) (vph)								367
v/c								0.47
95% queue length								2.39
Control Delay								23.1
LOS								C
Approach Delay							23.1	
Approach LOS							C	

HCM Signalized Intersection Capacity Analysis
3: Sample Rd & NW 54th Ave

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	74	407	2326	50	473	3037	476	189	184	447	535	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.67	1.00	1.00	0.41	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1198	3539	1583	731	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	78	428	2448	53	498	3197	501	199	194	471	563	137
RTOR Reduction (vph)	0	0	0	15	0	0	191	0	0	153	0	0
Lane Group Flow (vph)	0	506	2448	38	498	3197	310	199	194	318	563	137
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		17.0	76.0	76.0	17.0	76.0	76.0	30.0	18.0	18.0	49.0	31.0
Effective Green, g (s)		17.0	76.0	76.0	17.0	76.0	76.0	30.0	18.0	18.0	49.0	31.0
Actuated g/C Ratio		0.11	0.48	0.48	0.11	0.48	0.48	0.19	0.11	0.11	0.31	0.19
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		353	2406	752	353	2406	752	263	398	178	377	686
v/s Ratio Prot		c0.15	0.48		0.15	c0.63		0.06	0.05		c0.23	0.04
v/s Ratio Perm				0.02			0.20	0.09		c0.20	0.22	
v/c Ratio		1.43	1.02	0.05	1.41	1.33	0.41	0.76	0.49	1.79	1.49	0.20
Uniform Delay, d1		71.5	42.0	22.6	71.5	42.0	27.4	60.1	66.7	71.0	51.9	54.1
Progression Factor		1.01	0.83	0.97	1.29	0.55	0.26	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		209.6	22.2	0.1	186.4	148.2	0.2	10.5	0.3	376.4	235.6	0.1
Delay (s)		282.1	56.9	22.1	278.5	171.2	7.2	70.6	67.0	447.4	287.5	54.1
Level of Service		F	E	C	F	F	A	E	E	F	F	D
Approach Delay (s)			94.2			164.3			275.2			189.3
Approach LOS			F			F			F			F

Intersection Summary

HCM Average Control Delay	154.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	127.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	303
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	319
RTOR Reduction (vph)	74
Lane Group Flow (vph)	245
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	31.0
Effective Green, g (s)	31.0
Actuated g/C Ratio	0.19
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	307
v/s Ratio Prot	
v/s Ratio Perm	0.15
v/c Ratio	0.80
Uniform Delay, d1	61.5
Progression Factor	1.00
Incremental Delay, d2	12.6
Delay (s)	74.1
Level of Service	E
Approach Delay (s)	
Approach LOS	

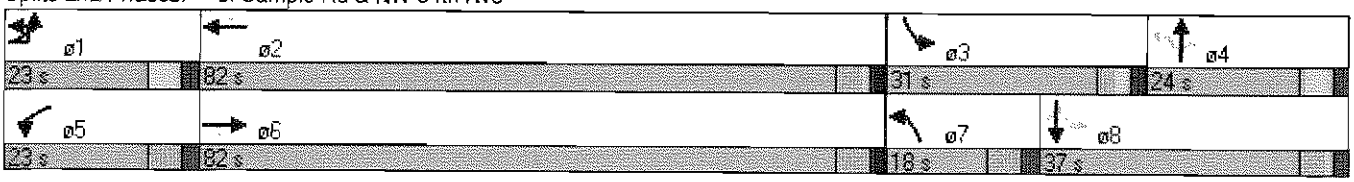
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	407	2326	50	473	3037	476	189	184	447	535	130	303
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	23.0	82.0	82.0	23.0	82.0	82.0	18.0	24.0	24.0	31.0	37.0	37.0
Total Split (%)	14.4%	51.3%	51.3%	14.4%	51.3%	51.3%	11.3%	15.0%	15.0%	19.4%	23.1%	23.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	17.0	76.0	76.0	17.0	76.0	76.0	30.0	18.0	18.0	49.0	31.0	31.0
Actuated g/C Ratio	0.11	0.48	0.48	0.11	0.48	0.48	0.19	0.11	0.11	0.31	0.19	0.19
v/c Ratio	1.43	1.02	0.07	1.41	1.33	0.53	0.76	0.49	1.42	1.49	0.20	0.84
Control Delay	257.5	56.7	12.2	245.1	172.4	2.1	67.7	71.2	236.5	271.6	55.0	63.2
Queue Delay	0.0	58.1	0.0	0.0	57.7	1.0	0.0	0.0	19.8	0.0	0.0	0.0
Total Delay	257.5	114.8	12.2	245.1	230.0	3.0	67.7	71.2	256.3	271.6	55.0	63.2
LOS	F	F	B	F	F	A	E	E	F	F	E	E
Approach Delay		137.0			204.7			171.3			177.2	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 24 (15%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.49
Intersection Signal Delay: 176.1 — Intersection LOS: F
Intersection Capacity Utilization 127.1% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Queues

3: Sample Rd & NW 54th Ave

2035 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	506	2448	53	498	3197	501	199	194	471	563	137	319
v/c Ratio	1.43	1.02	0.07	1.41	1.33	0.53	0.76	0.49	1.42	1.49	0.20	0.84
Control Delay	257.5	56.7	12.2	245.1	172.4	2.1	67.7	71.2	236.5	271.6	55.0	63.2
Queue Delay	0.0	58.1	0.0	0.0	57.7	1.0	0.0	0.0	19.8	0.0	0.0	0.0
Total Delay	257.5	114.8	12.2	245.1	230.0	3.0	67.7	71.2	256.3	271.6	55.0	63.2
Queue Length 50th (ft)	~375	~991	7	~357	~1576	36	164	102	~497	~690	64	238
Queue Length 95th (ft)	m#494	#1057	m32	m#228	m#855	m17	#261	146	#727	#927	97	#399
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	353	2406	767	353	2406	943	263	398	331	377	686	381
Starvation Cap Reductn	0	0	0	0	212	213	0	0	0	0	0	0
Spillback Cap Reductn	0	292	0	0	0	0	0	0	10	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.43	1.16	0.07	1.41	1.46	0.69	0.76	0.49	1.47	1.49	0.20	0.84

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
4: Sample Rd & Banks Rd

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	109	2688	146	8	249	3880	230	12	70	263	249	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5022		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.69	1.00	1.00	0.55	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5022		1287	3539	1583	1031	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	117	2890	157	9	268	4172	247	13	75	283	268	97
RTOR Reduction (vph)	0	0	73	0	0	0	0	0	0	146	0	0
Lane Group Flow (vph)	117	2890	84	0	277	4419	0	13	75	137	268	97
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	8.0	85.4	85.4		24.0	101.4		21.2	19.6	19.6	32.0	25.0
Effective Green, g (s)	8.0	85.4	85.4		24.0	101.4		21.2	19.6	19.6	32.0	25.0
Actuated g/C Ratio	0.05	0.53	0.53		0.15	0.63		0.13	0.12	0.12	0.20	0.16
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	2703	845		257	3183		175	434	194	239	553
v/s Ratio Prot	0.07	0.57			c0.16	c0.88		0.00	0.02		c0.05	0.03
v/s Ratio Perm			0.05					0.01		0.09	c0.18	
v/c Ratio	1.36	1.07	0.10		1.08	1.39		0.07	0.17	0.71	1.12	0.18
Uniform Delay, d1	76.0	37.3	18.4		68.0	29.3		60.7	62.9	67.4	64.2	58.6
Progression Factor	0.95	0.57	0.47		1.15	0.52		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	169.0	32.0	0.0		42.3	174.9		0.2	0.9	19.6	94.7	0.7
Delay (s)	241.3	53.3	8.7		120.1	190.2		60.8	63.8	87.0	158.9	59.2
Level of Service	F	D	A		F	F		E	E	F	F	E
Approach Delay (s)		58.0				186.1			81.4			109.3
Approach LOS		E				F			F			F

Intersection Summary

HCM Average Control Delay	130.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.38		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	121.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	179
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	192
RTOR Reduction (vph)	95
Lane Group Flow (vph)	98
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	25.0
Effective Green, g (s)	25.0
Actuated g/C Ratio	0.16
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	247
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.39
Uniform Delay, d1	60.7
Progression Factor	1.00
Incremental Delay, d2	4.7
Delay (s)	65.4
Level of Service	E
Approach Delay (s)	
Approach LOS	

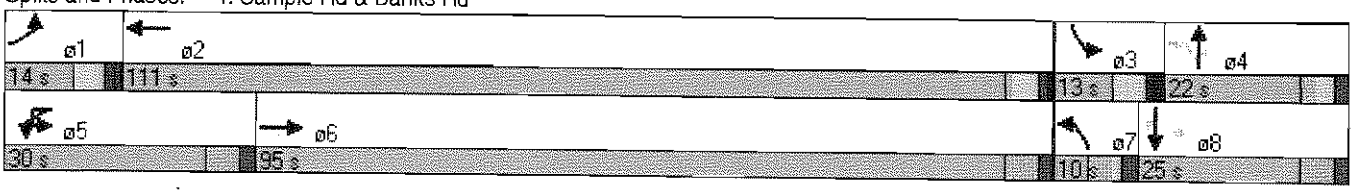
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	109	2688	146	249	3880	12	70	263	249	90	179
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	14.0	95.0	95.0	30.0	111.0	10.0	22.0	22.0	13.0	25.0	25.0
Total Split (%)	8.8%	59.4%	59.4%	18.8%	69.4%	6.3%	13.8%	13.8%	8.1%	15.6%	15.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	8.0	89.0	89.0	24.0	105.0	20.0	16.0	16.0	27.8	25.0	25.0
Actuated g/C Ratio	0.05	0.56	0.56	0.15	0.66	0.12	0.10	0.10	0.17	0.16	0.16
v/c Ratio	1.36	1.03	0.17	1.08	1.34	0.08	0.21	0.92	1.27	0.18	0.56
Control Delay	219.1	34.7	1.1	111.4	172.7	55.5	67.9	62.8	201.7	61.2	33.8
Queue Delay	0.0	25.6	0.0	0.0	131.9	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	219.1	60.3	1.1	111.4	304.6	55.5	67.9	62.8	201.7	61.2	34.1
LOS	F	E	A	F	F	E	E	E	F	E	C
Approach Delay		63.3			293.2		63.6			119.5	
Approach LOS		E			F		E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 26 (16%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 189.7 — Intersection LOS: F
Intersection Capacity Utilization 121.6% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	2890	157	277	4419	13	75	283	268	97	192
v/c Ratio	1.36	1.03	0.17	1.08	1.34	0.08	0.21	0.92	1.27	0.18	0.56
Control Delay	219.1	34.7	1.1	111.4	172.7	55.5	67.9	62.8	201.7	61.2	33.8
Queue Delay	0.0	25.6	0.0	0.0	131.9	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	219.1	60.3	1.1	111.4	304.6	55.5	67.9	62.8	201.7	61.2	34.1
Queue Length 50th (ft)	~162	~1160	2	~328	~2217	11	38	128	~335	45	74
Queue Length 95th (ft)	m#135	m400	m1	m208	m365	33	67	#311	#555	81	173
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	86	2817	950	257	3297	173	354	308	211	553	342
Starvation Cap Reductn	0	164	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	592	0	0	0	0	0	13
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.36	1.09	0.17	1.08	1.63	0.08	0.21	0.92	1.27	0.18	0.58

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
5: Sample Rd & Lyons Rd

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	427	2049	711	14	212	2848	627	755	1577	181	13	516
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	464	2227	773	15	230	3096	682	821	1714	197	14	561
RTOR Reduction (vph)	0	0	175	0	0	0	130	0	0	77	0	0
Lane Group Flow (vph)	464	2227	598	0	245	3096	552	821	1714	120	0	575
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	15.5	68.2	68.2		11.3	64.0	64.0	25.5	38.5	38.5		17.5
Effective Green, g (s)	15.5	68.2	68.2		11.3	64.0	64.0	25.5	38.5	38.5		17.5
Actuated g/C Ratio	0.10	0.43	0.43		0.07	0.40	0.40	0.16	0.24	0.24		0.11
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	322	2159	675		234	2026	633	529	1224	381		363
v/s Ratio Prot	c0.14	c0.44			0.07	c0.61		c0.25	c0.34			0.17
v/s Ratio Perm			0.38				0.35			0.08		
v/c Ratio	1.44	1.03	0.89		1.05	1.53	0.87	1.55	1.40	0.31		1.58
Uniform Delay, d1	72.2	45.9	42.3		74.4	48.0	44.2	67.2	60.8	49.9		71.2
Progression Factor	0.69	1.56	2.00		1.00	1.00	1.00	1.00	1.00	1.00		0.82
Incremental Delay, d2	200.1	16.3	1.8		71.7	240.2	15.3	257.6	185.2	0.3		269.7
Delay (s)	250.1	87.7	86.3		146.1	288.2	59.5	324.9	245.9	50.2		327.7
Level of Service	F	F	F		F	F	E	F	F	D		F
Approach Delay (s)		109.1				240.8			255.5			
Approach LOS		F				F			F			

Intersection Summary

HCM Average Control Delay	219.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	136.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↗
Volume (vph)	1399	559
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1521	608
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1521	608
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	46.0
Effective Green, g (s)	30.5	46.0
Actuated g/C Ratio	0.19	0.29
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	455
v/s Ratio Prot	c0.30	0.13
v/s Ratio Perm		0.25
v/c Ratio	1.57	1.34
Uniform Delay, d1	64.8	57.0
Progression Factor	0.77	1.08
Incremental Delay, d2	259.0	159.1
Delay (s)	308.8	220.7
Level of Service	F	F
Approach Delay (s)	293.0	
Approach LOS	F	

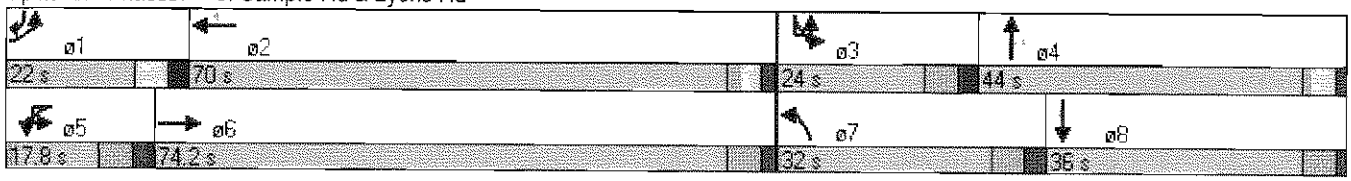
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	427	2049	711	212	2848	627	755	1577	181	516	1399	559
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	22.0	74.2	74.2	17.8	70.0	70.0	32.0	44.0	44.0	24.0	36.0	22.0
Total Split (%)	13.8%	46.4%	46.4%	11.1%	43.8%	43.8%	20.0%	27.5%	27.5%	15.0%	22.5%	13.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	15.5	68.2	68.2	11.3	64.0	64.0	25.5	38.5	38.5	17.5	30.5	51.5
Actuated g/C Ratio	0.10	0.43	0.43	0.07	0.40	0.40	0.16	0.24	0.24	0.11	0.19	0.32
v/c Ratio	1.44	1.03	0.91	1.05	1.53	0.89	1.55	1.40	0.43	1.58	1.57	1.19
Control Delay	236.9	83.8	52.0	140.5	274.3	45.5	299.3	228.4	27.4	306.8	293.1	145.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	236.9	83.8	52.0	140.5	274.3	45.5	299.3	228.4	27.4	306.8	293.1	145.7
LOS	F	F	D	F	F	D	F	F	C	F	F	F
Approach Delay		97.2			227.4			235.2			262.9	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 136 (85%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.58
Intersection Signal Delay: 201.6 Intersection LOS: F
Intersection Capacity Utilization 136.2% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Queues
5: Sample Rd & Lyons Rd

2035 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	464	2227	773	245	3096	682	821	1714	197	575	1521	608
v/c Ratio	1.44	1.03	0.91	1.05	1.53	0.89	1.55	1.40	0.43	1.58	1.57	1.19
Control Delay	236.9	83.8	52.0	140.5	274.3	45.5	299.3	228.4	27.4	306.8	293.1	145.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	236.9	83.8	52.0	140.5	274.3	45.5	299.3	228.4	27.4	306.8	293.1	145.7
Queue Length 50th (ft)	~336	~932	665	~142	~1653	495	~621	~875	82	~437	~831	~784
Queue Length 95th (ft)	m#321	m874	m641	#237	#1717	#756	#755	#969	164	m#540	#932	m#995
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	322	2159	850	234	2026	763	529	1224	458	363	969	510
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.44	1.03	0.91	1.05	1.53	0.89	1.55	1.40	0.43	1.58	1.57	1.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 Bakg - Alt. A, A-1 and C
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1196	156			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1476	192			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			300			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			370			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					370			
C(m) (vph)					367			
v/c					1.01			
95% queue length					11.97			
Control Delay					83.4			
LOS					F			
Approach Delay				83.4				
Approach LOS				F				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	268	56	37	140	80	548	60	187	2287	436	50	541
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1736		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1736		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	285	60	39	149	85	583	64	199	2433	464	53	576
RTOR Reduction (vph)	0	0	0	0	0	102	0	0	0	129	0	0
Lane Group Flow (vph)	285	99	0	149	85	481	0	263	2433	335	0	629
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	11.0	27.1		18.9	35.0	35.0		13.9	68.0	68.0		24.0
Effective Green, g (s)	11.0	27.1		18.9	35.0	35.0		13.9	68.0	68.0		24.0
Actuated g/C Ratio	0.07	0.17		0.12	0.22	0.22		0.09	0.42	0.42		0.15
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	226	294		200	767	343		285	2140	666		493
v/s Ratio Prot	c0.09	0.06		0.09	0.02			0.08	c0.48			c0.19
v/s Ratio Perm						c0.31				0.21		
v/c Ratio	1.26	0.34		0.74	0.11	1.40		0.92	1.14	0.50		1.28
Uniform Delay, d1	74.5	58.5		68.2	50.0	62.5		72.5	46.0	33.6		68.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.05	0.90	0.75		1.26
Incremental Delay, d2	148.0	0.2		14.0	0.0	198.3		33.1	67.9	2.7		125.6
Delay (s)	222.5	58.8		82.2	50.1	260.8		109.2	109.3	27.9		211.3
Level of Service	F	E		F	D	F		F	F	C		F
Approach Delay (s)		180.3			206.3				97.4			
Approach LOS		F			F				F			

Intersection Summary

HCM Average Control Delay	95.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	121.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	1961	371
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	2086	395
RTOR Reduction (vph)	0	91
Lane Group Flow (vph)	2086	304
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	78.1	78.1
Effective Green, g (s)	78.1	78.1
Actuated g/C Ratio	0.49	0.49
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2458	765
v/s Ratio Prot	0.41	
v/s Ratio Perm		0.19
v/c Ratio	0.85	0.40
Uniform Delay, d1	35.8	26.0
Progression Factor	0.43	0.29
Incremental Delay, d2	0.4	0.1
Delay (s)	15.7	7.7
Level of Service	B	A
Approach Delay (s)	54.2	
Approach LOS	D	

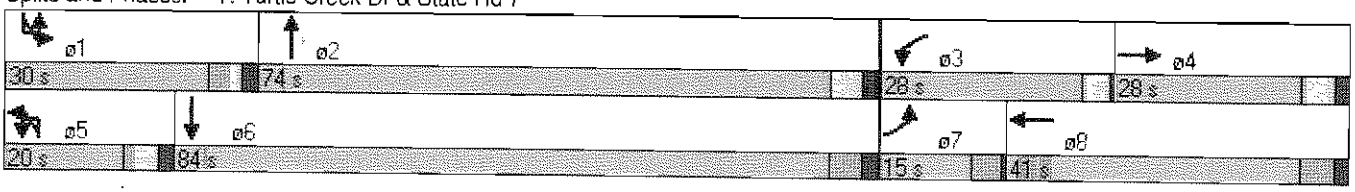
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	268	56	140	80	548	187	2287	436	541	1961	371
Turn Type	Prot		Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	6.0	4.0	6.0	6.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	8.0	12.0	8.0	12.0	12.0	11.0	13.0	13.0	11.0	13.0	13.0
Total Split (s)	15.0	28.0	28.0	41.0	41.0	20.0	74.0	74.0	30.0	84.0	84.0
Total Split (%)	9.4%	17.5%	17.5%	25.6%	25.6%	12.5%	46.3%	46.3%	18.8%	52.5%	52.5%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	2.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.0	27.1	18.9	35.0	35.0	13.9	68.0	68.0	24.0	78.1	78.1
Actuated g/C Ratio	0.07	0.17	0.12	0.22	0.22	0.09	0.42	0.42	0.15	0.49	0.49
v/c Ratio	1.26	0.34	0.74	0.11	1.31	0.92	1.14	0.58	1.28	0.85	0.46
Control Delay	204.2	63.9	89.9	50.6	191.5	111.2	106.3	16.0	188.3	15.9	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.2	63.9	89.9	50.6	191.5	111.2	106.3	16.0	188.3	15.9	4.3
LOS	F	E	F	D	F	F	F	B	F	B	A
Approach Delay		168.1		158.3			93.5			49.3	
Approach LOS		F		F			F			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 19 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 86.0 Intersection LOS: F
Intersection Capacity Utilization 121.0% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 7: Turtle Creek Dr & State Rd 7



Queues

7: Turtle Creek Dr & State Rd 7

2035 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	285	99	149	85	583	263	2433	464	629	2086	395
v/c Ratio	1.26	0.34	0.74	0.11	1.31	0.92	1.14	0.58	1.28	0.85	0.46
Control Delay	204.2	63.9	89.9	50.6	191.5	111.2	106.3	16.0	188.3	15.9	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.2	63.9	89.9	50.6	191.5	111.2	106.3	16.0	188.3	15.9	4.3
Queue Length 50th (ft)	~192	93	153	37	~673	144	~1087	140	~437	230	28
Queue Length 95th (ft)	#292	160	228	64	#916	m#227	#1170	m235	m#332	m188	m16
Internal Link Dist (ft)		595		1522			330			1350	
Turn Bay Length (ft)	200		235		185	320			250		170
Base Capacity (vph)	226	295	254	767	445	288	2140	795	493	2459	856
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.34	0.59	0.11	1.31	0.91	1.14	0.58	1.28	0.85	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: Wiles Rd & State Rd 7

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	51	650	976	381	317	1266	304	63	464	2120	226	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	53	670	1006	393	327	1305	313	65	478	2186	233	67
RTOR Reduction (vph)	0	0	0	0	0	0	30	0	0	0	6	0
Lane Group Flow (vph)	0	723	1006	393	327	1305	283	0	543	2186	227	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		24.0	49.0	49.0	16.0	41.0	41.0		18.0	60.0	76.0	
Effective Green, g (s)		24.0	49.0	49.0	16.0	41.0	41.0		18.0	60.0	76.0	
Actuated g/C Ratio		0.15	0.31	0.31	0.10	0.26	0.26		0.11	0.38	0.48	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		498	1084	485	332	907	406		373	1907	811	
v/s Ratio Prot		c0.22	0.28		0.10	c0.37			c0.16	c0.43	0.03	
v/s Ratio Perm				0.25			0.18				0.12	
v/c Ratio		1.45	0.93	0.81	0.98	1.44	0.70		1.46	1.15	0.28	
Uniform Delay, d1		68.0	53.8	51.2	71.9	59.5	53.9		71.0	50.0	25.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.05	1.14	1.00	
Incremental Delay, d2		214.3	13.1	9.4	44.9	203.8	4.2		206.5	66.5	0.0	
Delay (s)		282.3	66.9	60.6	116.7	263.3	58.0		281.3	123.3	25.4	
Level of Service		F	E	E	F	F	E		F	F	C	
Approach Delay (s)			139.1			205.6				144.6		
Approach LOS			F			F				F		

Intersection Summary			
HCM Average Control Delay	172.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	134.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	260	2145	721
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	268	2211	743
RTOR Reduction (vph)	0	0	118
Lane Group Flow (vph)	335	2211	625
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	11.0	53.0	53.0
Effective Green, g (s)	11.0	53.0	53.0
Actuated g/C Ratio	0.07	0.33	0.33
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	228	1684	524
v/s Ratio Prot	0.10	c0.43	
v/s Ratio Perm			0.39
v/c Ratio	1.47	1.31	1.19
Uniform Delay, d1	74.5	53.5	53.5
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	233.5	145.2	104.1
Delay (s)	308.0	198.7	157.6
Level of Service	F	F	F
Approach Delay (s)		200.5	
Approach LOS		F	

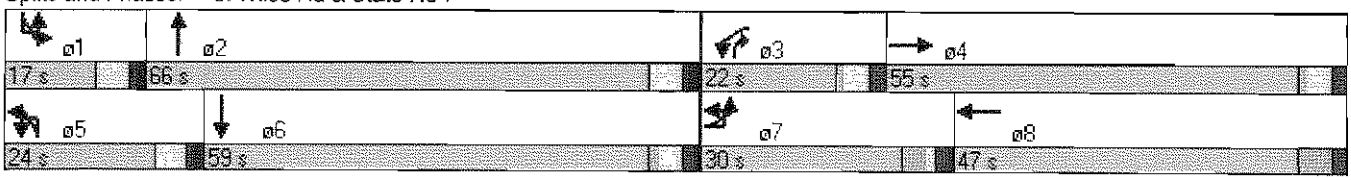
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	650	976	381	317	1266	304	464	2120	226	260	2145	721
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	55.0	55.0	22.0	47.0	47.0	24.0	66.0	22.0	17.0	59.0	59.0
Total Split (%)	18.8%	34.4%	34.4%	13.8%	29.4%	29.4%	15.0%	41.3%	13.8%	10.6%	36.9%	36.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	24.0	49.0	49.0	16.0	41.0	41.0	18.0	60.0	82.0	11.0	53.0	53.0
Actuated g/C Ratio	0.15	0.31	0.31	0.10	0.26	0.26	0.11	0.38	0.51	0.07	0.33	0.33
v/c Ratio	1.45	0.93	0.81	0.98	1.44	0.72	1.46	1.15	0.29	1.47	1.31	1.16
Control Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.4	21.4	281.0	187.1	122.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.4	21.4	281.0	187.1	122.6
LOS	F	E	E	F	F	E	F	F	C	F	F	F
Approach Delay		133.0			193.3			134.3			182.1	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.47
Intersection Signal Delay: 160.4 Intersection LOS: F
Intersection Capacity Utilization 134.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	723	1006	393	327	1305	313	543	2186	233	335	2211	743
v/c Ratio	1.45	0.93	0.81	0.98	1.44	0.72	1.46	1.15	0.29	1.47	1.31	1.16
Control Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.4	21.4	281.0	187.1	122.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.4	21.4	281.0	187.1	122.6
Queue Length 50th (ft)	~529	539	381	179	~971	264	~408	~964	101	~246	~1086	~785
Queue Length 95th (ft)	#660	#668	#543	#285	#1111	383	m#314	m583	m84	#353	#1173	#1042
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	498	1084	485	332	907	436	373	1907	817	228	1684	643
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.45	0.93	0.81	0.98	1.44	0.72	1.46	1.15	0.29	1.47	1.31	1.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cullum Rd & Lyons Rd

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	185	16	135	19	15	41	104	3007	34	9	72	2637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.87		1.00	0.89		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3065		1770	1659		1770	5085	1583		1770	5085
Flt Permitted	0.72	1.00		0.62	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1334	3065		1159	1659		67	5085	1583		70	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	206	18	150	21	17	46	116	3341	38	10	80	2930
RTOR Reduction (vph)	0	44	0	0	34	0	0	0	6	0	0	0
Lane Group Flow (vph)	206	124	0	21	29	0	116	3341	32	0	90	2930
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	25.8	25.8		25.8	25.8		120.8	111.0	111.0		111.6	106.4
Effective Green, g (s)	25.8	25.8		25.8	25.8		120.8	111.0	111.0		111.6	106.4
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.76	0.69	0.69		0.70	0.66
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	215	494		187	268		155	3528	1098		104	3382
v/s Ratio Prot		0.04			0.02		c0.05	c0.66			0.03	0.58
v/s Ratio Perm	c0.15			0.02			0.52		0.02		0.57	
v/c Ratio	0.96	0.25		0.11	0.11		0.75	0.95	0.03		0.87	0.87
Uniform Delay, d1	66.6	58.7		57.3	57.3		49.7	21.9	7.7		47.4	21.2
Progression Factor	1.00	1.00		1.00	1.00		1.63	0.65	0.28		1.48	0.36
Incremental Delay, d2	49.0	0.3		0.3	0.2		1.8	0.8	0.0		7.0	0.3
Delay (s)	115.5	58.9		57.6	57.4		83.1	15.0	2.2		77.1	7.9
Level of Service	F	E		E	E		F	B	A		E	A
Approach Delay (s)		90.1			57.5			17.2				9.5
Approach LOS		F			E			B				A

Intersection Summary

HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	119
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	132
RTOR Reduction (vph)	41
Lane Group Flow (vph)	91
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	106.4
Effective Green, g (s)	106.4
Actuated g/C Ratio	0.66
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1053
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.09
Uniform Delay, d1	9.5
Progression Factor	0.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Signalized Intersection Capacity Analysis
10: Wiles Rd & Lyons Rd

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	574	720	478	530	1187	389	411	2305	492	178	1842	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	624	783	520	576	1290	423	447	2505	535	193	2002	479
RTOR Reduction (vph)	0	0	96	0	0	65	0	0	178	0	0	0
Lane Group Flow (vph)	624	783	424	576	1290	358	447	2505	357	193	2002	479
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	40.0	40.0	26.0	43.0	43.0	16.0	63.0	63.0	7.0	54.0	54.0
Effective Green, g (s)	23.0	40.0	40.0	26.0	43.0	43.0	16.0	63.0	63.0	7.0	54.0	54.0
Actuated g/C Ratio	0.14	0.25	0.25	0.16	0.27	0.27	0.10	0.39	0.39	0.04	0.34	0.34
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	885	396	539	951	425	332	2002	623	145	1716	534
v/s Ratio Prot	c0.19	0.22		0.17	c0.36		c0.13	c0.49		0.06	0.39	
v/s Ratio Perm			0.27			0.23			0.23			0.30
v/c Ratio	1.31	0.88	1.07	1.07	1.36	0.84	1.35	1.25	0.57	1.33	1.17	0.90
Uniform Delay, d1	68.5	57.8	60.0	67.0	58.5	55.3	72.0	48.5	38.0	76.5	53.0	50.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.04	1.12	1.45	1.00	1.00	1.00
Incremental Delay, d2	153.2	10.2	65.3	58.4	167.3	13.5	163.0	114.6	1.4	188.4	81.7	20.4
Delay (s)	221.7	68.0	125.3	125.4	225.8	68.8	238.1	168.7	56.5	264.9	134.7	70.7
Level of Service	F	E	F	F	F	E	F	F	E	F	F	E
Approach Delay (s)		133.2			171.5			160.4			132.7	
Approach LOS		F			F			F			F	

Intersection Summary

HCM Average Control Delay	150.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		

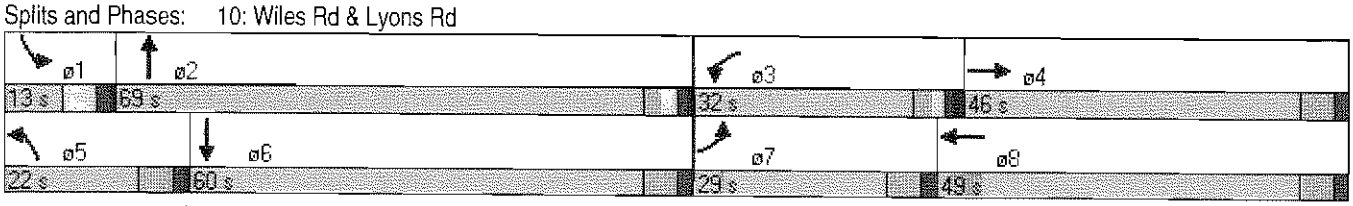
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	574	720	478	530	1187	389	411	2305	492	178	1842	441
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	46.0	46.0	32.0	49.0	49.0	22.0	69.0	69.0	13.0	60.0	60.0
Total Split (%)	18.1%	28.8%	28.8%	20.0%	30.6%	30.6%	13.8%	43.1%	43.1%	8.1%	37.5%	37.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	40.0	40.0	26.0	43.0	43.0	16.0	63.0	63.0	7.0	54.0	54.0
Actuated g/C Ratio	0.14	0.25	0.25	0.16	0.27	0.27	0.10	0.39	0.39	0.04	0.34	0.34
v/c Ratio	1.31	0.88	1.06	1.07	1.36	0.86	1.35	1.25	0.67	1.33	1.17	0.90
Control Delay	204.0	70.4	98.5	119.9	210.7	61.6	215.8	158.8	26.3	242.3	128.0	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.0	70.4	98.5	119.9	210.7	61.6	215.8	158.8	26.3	242.3	128.0	71.0
LOS	F	E	F	F	F	E	F	F	C	F	F	E
Approach Delay		121.3			160.3			145.8			126.0	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 42 (26%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 139.3 Intersection LOS: F
Intersection Capacity Utilization 118.8% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Queues
10: Wiles Rd & Lyons Rd

2035 Background PM Peak - Alternatives A, A-1 And C

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	624	783	520	576	1290	423	447	2505	535	193	2002	479
v/c Ratio	1.31	0.88	1.06	1.07	1.36	0.86	1.35	1.25	0.67	1.33	1.17	0.90
Control Delay	204.0	70.4	98.5	119.9	210.7	61.6	215.8	158.8	26.3	242.3	128.0	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.0	70.4	98.5	119.9	210.7	61.6	215.8	158.8	26.3	242.3	128.0	71.0
Queue Length 50th (ft)	~430	418	~488	~342	~928	346	~319	~1188	211	~134	~908	477
Queue Length 95th (ft)	#556	#523	#725	#466	#1069	#535	m#350	#1270	m249	#221	#998	#689
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	885	492	539	951	491	332	2002	802	145	1716	534
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.88	1.06	1.07	1.36	0.86	1.35	1.25	0.67	1.33	1.17	0.90

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	115	280	843	98	313	691
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.15	1.00
Satd. Flow (perm)	1770	1583	3539	1583	263	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	134	326	980	114	364	803
RTOR Reduction (vph)	0	273	0	69	0	0
Lane Group Flow (vph)	134	53	980	45	364	803
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	10.6	10.6	24.3	24.3	42.0	42.0
Effective Green, g (s)	10.6	10.6	24.3	24.3	42.0	42.0
Actuated g/C Ratio	0.16	0.16	0.38	0.38	0.65	0.65
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	290	260	1331	595	478	2301
v/s Ratio Prot			0.28		c0.16	0.23
v/s Ratio Perm	c0.08	0.03		0.03	c0.33	
v/c Ratio	0.46	0.21	0.74	0.08	0.76	0.35
Uniform Delay, d1	24.4	23.4	17.4	12.9	12.6	5.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.4	2.2	0.1	7.0	0.1
Delay (s)	25.6	23.8	19.5	13.0	19.7	5.2
Level of Service	C	C	B	B	B	A
Approach Delay (s)	24.3		18.9			9.7
Approach LOS	C		B			A

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	64.6	Sum of lost time (s)	10.0
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	194	606	624	518	396	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	659	678	563	430	421
RTOR Reduction (vph)	0	0	0	0	0	336
Lane Group Flow (vph)	870	0	678	563	430	85
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	23.9		17.8	38.9	15.1	15.1
Effective Green, g (s)	23.9		17.8	38.9	15.1	15.1
Actuated g/C Ratio	0.32		0.24	0.52	0.20	0.20
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1011		817	969	714	320
v/s Ratio Prot	c0.27		c0.20	c0.30	0.12	
v/s Ratio Perm						0.05
v/c Ratio	1.28dr		0.83	0.58	0.60	0.27
Uniform Delay, d1	23.9		27.1	12.3	27.1	25.2
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6		7.0	0.9	1.4	0.4
Delay (s)	31.5		34.1	13.2	28.6	25.6
Level of Service	C		C	B	C	C
Approach Delay (s)	31.5			24.6	27.1	
Approach LOS	C			C	C	

Intersection Summary			
HCM Average Control Delay	27.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	74.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	424	172	26	73	283	276	204	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	461	187	28	79	308	300	222	71	211	0
Approach Volume (veh/h)		774			295			829			282	
Crossing Volume (veh/h)		468			608			384			523	
High Capacity (veh/h)		957			856			1024			917	
High v/c (veh/h)		0.81			0.34			0.81			0.31	
Low Capacity (veh/h)		776			686			835			739	
Low v/c (veh/h)		1.00			0.43			0.99			0.38	

Intersection Summary			
Maximum v/c High	0.81		
Maximum v/c Low	1.00		
Intersection Capacity Utilization	74.1%	ICU Level of Service	D

HCM Unsignalized Intersection Capacity Analysis
15: Cullum Rd & Banks Road

2035 Background PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	134	110	219	73	79	73	0	184	113	86	219	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	146	120	238	79	86	79	0	200	123	93	238	179
Approach Volume (veh/h)		503			245			323			511	
Crossing Volume (veh/h)		411			346			359			165	
High Capacity (veh/h)		1002			1055			1045			1217	
High v/c (veh/h)		0.50			0.23			0.31			0.42	
Low Capacity (veh/h)		816			863			854			1009	
Low v/c (veh/h)		0.62			0.28			0.38			0.51	

Intersection Summary			
Maximum v/c High	0.50		
Maximum v/c Low	0.62		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1313	130	321	1788	173	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3491		1770	3539	1770	1583
Flt Permitted	1.00		0.09	1.00	0.95	1.00
Satd. Flow (perm)	3491		171	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1492	148	365	2032	197	258
RTOR Reduction (vph)	0	0	0	0	0	221
Lane Group Flow (vph)	1640	0	365	2032	197	37
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	39.0		56.0	56.0	11.4	11.4
Effective Green, g (s)	39.0		56.0	56.0	11.4	11.4
Actuated g/C Ratio	0.49		0.71	0.71	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1715		372	2496	254	227
v/s Ratio Prot	0.47		c0.15	0.57	c0.11	
v/s Ratio Perm			c0.54			0.02
v/c Ratio	0.96		0.98	0.81	0.78	0.16
Uniform Delay, d1	19.4		24.7	8.1	32.8	29.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	13.6		41.4	3.0	13.8	0.3
Delay (s)	33.0		66.1	11.1	46.5	30.2
Level of Service	C		E	B	D	C
Approach Delay (s)	33.0			19.5	37.2	
Approach LOS	C			B	D	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix K-6

2020 Background PM Peak Hour Intersection Analysis
Alternative B

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	343	1716	393	2406	261	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	357	1788	409	2506	272	193
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	357	1788	409	2506	272	193
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	20.8	99.1	23.3	101.6	16.6	16.6
Effective Green, g (s)	20.8	99.1	23.3	101.6	16.6	16.6
Actuated g/C Ratio	0.13	0.62	0.15	0.64	0.10	0.10
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	431	3137	483	3216	344	344
v/s Ratio Prot	0.11	0.35	c0.12	c0.49	c0.08	0.06
v/s Ratio Perm						
v/c Ratio	0.83	0.57	0.85	0.78	0.79	0.56
Uniform Delay, d1	67.9	17.9	66.6	21.1	70.0	68.2
Progression Factor	1.00	1.00	1.07	0.56	1.00	1.00
Incremental Delay, d2	11.8	0.8	7.9	1.2	11.0	1.2
Delay (s)	79.7	18.7	79.2	13.0	81.0	69.5
Level of Service	E	B	E	B	F	E
Approach Delay (s)		28.8		22.3		
Approach LOS		C		C		

Intersection Summary			
HCM Average Control Delay	29.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/23/2012
Analysis Time Period: PM Peak
Intersection: # 2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 Backg PM Peak - Alt. B
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1193			2094	197
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1680			2949	277
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						116
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						163
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes						1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								163
C(m) (vph)								513
v/c								0.32
95% queue length								1.36
Control Delay								15.3
LOS								C
Approach Delay							15.3	
Approach LOS							C	

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	63	402	2044	43	414	2641	367	163	172	389	527	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.67	1.00	1.00	0.40	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1207	3539	1583	728	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	66	423	2152	45	436	2780	386	172	181	409	555	129
RTOR Reduction (vph)	0	0	0	14	0	0	169	0	0	169	0	0
Lane Group Flow (vph)	0	489	2152	31	436	2780	217	172	181	240	555	129
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		18.0	70.0	70.0	21.0	73.0	73.0	26.9	16.0	16.0	51.0	34.1
Effective Green, g (s)		18.0	70.0	70.0	21.0	73.0	73.0	26.9	16.0	16.0	51.0	34.1
Actuated g/C Ratio		0.11	0.44	0.44	0.13	0.46	0.46	0.17	0.10	0.10	0.32	0.21
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		373	2216	693	436	2311	722	237	354	158	410	754
v/s Ratio Prot		c0.15	0.42		0.13	c0.55		0.05	0.05		c0.25	0.04
v/s Ratio Perm				0.02			0.14	0.07		0.15	c0.19	
v/c Ratio		1.31	0.97	0.04	1.00	1.20	0.30	0.73	0.51	1.52	1.35	0.17
Uniform Delay, d1		71.0	44.0	25.8	69.5	43.5	27.4	61.8	68.3	72.0	50.7	51.4
Progression Factor		1.04	0.89	1.06	1.27	0.69	0.38	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		157.2	13.0	0.1	12.9	91.7	0.1	9.0	0.5	262.6	174.5	0.0
Delay (s)		230.8	52.3	27.4	101.3	121.9	10.4	70.8	68.8	334.6	225.2	51.4
Level of Service		F	D	C	F	F	B	E	E	F	F	D
Approach Delay (s)			84.4			107.5			211.9			150.9
Approach LOS			F			F			F			F

Intersection Summary

HCM Average Control Delay	115.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	118.5%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	303
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	319
RTOR Reduction (vph)	93
Lane Group Flow (vph)	226
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	34.1
Effective Green, g (s)	34.1
Actuated g/C Ratio	0.21
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	337
v/s Ratio Prot	
v/s Ratio Perm	0.14
v/c Ratio	0.67
Uniform Delay, d1	57.8
Progression Factor	1.00
Incremental Delay, d2	4.1
Delay (s)	61.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

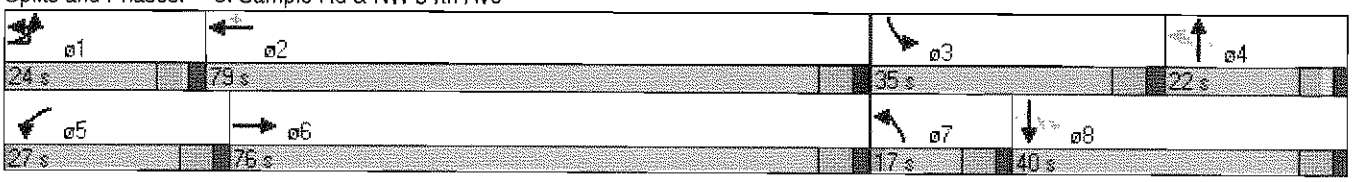
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	402	2044	43	414	2641	367	163	172	389	527	123	303
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	24.0	76.0	76.0	27.0	79.0	79.0	17.0	22.0	22.0	35.0	40.0	40.0
Total Split (%)	15.0%	47.5%	47.5%	16.9%	49.4%	49.4%	10.6%	13.8%	13.8%	21.9%	25.0%	25.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	18.0	70.0	70.0	21.0	73.0	73.0	26.9	16.0	16.0	51.0	34.1	34.1
Actuated g/C Ratio	0.11	0.44	0.44	0.13	0.46	0.46	0.17	0.10	0.10	0.32	0.21	0.21
v/c Ratio	1.31	0.97	0.06	1.00	1.20	0.43	0.73	0.51	1.25	1.35	0.17	0.74
Control Delay	210.7	52.3	15.0	98.1	121.0	2.3	65.5	73.8	163.1	213.2	52.2	48.1
Queue Delay	0.0	2.6	0.0	0.0	55.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0
Total Delay	210.7	54.9	15.0	98.1	176.2	2.3	65.5	73.8	164.8	213.2	52.2	48.1
LOS	F	D	B	F	F	A	E	E	F	F	D	D
Approach Delay		82.6			148.1			120.8			140.0	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 122.7 — Intersection LOS: F
Intersection Capacity Utilization 118.5% — CU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	489	2152	45	436	2780	386	172	181	409	555	129	319
v/c Ratio	1.31	0.97	0.06	1.00	1.20	0.43	0.73	0.51	1.25	1.35	0.17	0.74
Control Delay	210.7	52.3	15.0	98.1	121.0	2.3	65.5	73.8	163.1	213.2	52.2	48.1
Queue Delay	0.0	2.6	0.0	0.0	55.2	0.0	0.0	0.0	1.7	0.0	0.0	0.0
Total Delay	210.7	54.9	15.0	98.1	176.2	2.3	65.5	73.8	164.8	213.2	52.2	48.1
Queue Length 50th (ft)	~343	809	5	~235	~1283	27	137	96	~346	~648	58	204
Queue Length 95th (ft)	#458	#816	m37	m198	m#954	m18	#217	140	#567	#885	91	325
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	373	2216	707	436	2311	891	238	354	328	410	754	430
Starvation Cap Reductn	0	0	0	0	215	0	0	0	0	0	0	0
Spillback Cap Reductn	0	40	0	0	0	0	0	0	1	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.99	0.06	1.00	1.33	0.43	0.72	0.51	1.25	1.35	0.17	0.74

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	108	2412	127	7	214	3450	217	136	82	226	249	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5020		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.69	1.00	1.00	0.66	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5020		1287	3539	1583	1222	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	116	2594	137	8	230	3710	233	146	88	243	268	97
RTOR Reduction (vph)	0	0	60	0	0	0	0	0	0	141	0	0
Lane Group Flow (vph)	116	2594	77	0	238	3943	0	146	88	102	268	97
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	8.0	90.0	90.0		23.0	105.0		22.0	16.0	16.0	24.0	17.0
Effective Green, g (s)	8.0	90.0	90.0		23.0	105.0		22.0	16.0	16.0	24.0	17.0
Actuated g/C Ratio	0.05	0.56	0.56		0.14	0.66		0.14	0.10	0.10	0.15	0.11
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	2849	890		246	3294		195	354	158	207	376
v/s Ratio Prot	0.07	0.51			c0.14	c0.79		0.03	0.02		c0.06	0.03
v/s Ratio Perm			0.05					0.07		0.06	c0.14	
v/c Ratio	1.35	0.91	0.09		0.97	1.20		0.75	0.25	0.64	1.29	0.26
Uniform Delay, d1	76.0	31.4	16.1		68.1	27.5		65.5	66.5	69.3	67.3	65.7
Progression Factor	0.95	0.45	0.21		0.84	1.20		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	164.0	0.6	0.0		10.6	89.0		14.5	1.7	18.5	163.6	1.7
Delay (s)	236.2	14.7	3.3		68.1	122.1		80.0	68.1	87.7	230.9	67.4
Level of Service	F	B	A		E	F		E	E	F	F	E
Approach Delay (s)		23.2				119.0			81.7			153.3
Approach LOS		C				F			F			F

Intersection Summary

HCM Average Control Delay	85.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	178
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	191
RTOR Reduction (vph)	79
Lane Group Flow (vph)	112
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	17.0
Effective Green, g (s)	17.0
Actuated g/C Ratio	0.11
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	168
v/s Ratio Prot	
v/s Ratio Perm	0.07
v/c Ratio	0.67
Uniform Delay, d1	68.8
Progression Factor	1.00
Incremental Delay, d2	19.2
Delay (s)	88.0
Level of Service	F
Approach Delay (s)	
Approach LOS	

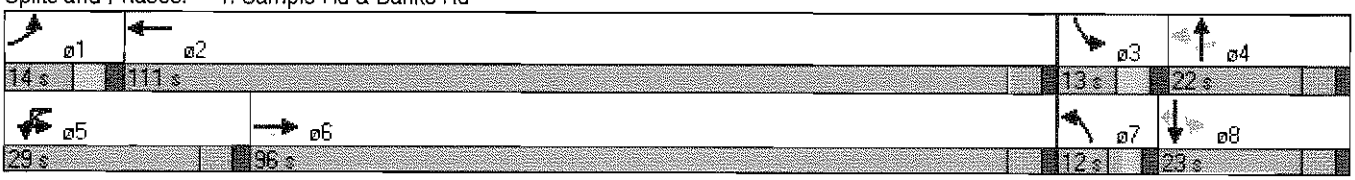
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	108	2412	127	214	3450	136	82	226	249	90	178
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	14.0	96.0	96.0	29.0	111.0	12.0	22.0	22.0	13.0	23.0	23.0
Total Split (%)	8.8%	60.0%	60.0%	18.1%	69.4%	7.5%	13.8%	13.8%	8.1%	14.4%	14.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	8.0	90.0	90.0	23.0	105.0	22.0	16.0	16.0	24.0	17.0	17.0
Actuated g/C Ratio	0.05	0.56	0.56	0.14	0.66	0.14	0.10	0.10	0.15	0.11	0.11
v/c Ratio	1.35	0.91	0.14	0.97	1.20	0.75	0.25	0.81	1.29	0.26	0.77
Control Delay	214.5	15.0	0.5	68.3	120.3	85.6	68.4	45.7	212.6	67.7	57.9
Queue Delay	0.0	2.6	0.0	0.0	186.9	0.0	0.0	0.0	0.0	0.0	2.7
Total Delay	214.5	17.6	0.5	68.3	307.2	85.6	68.4	45.7	212.6	67.7	60.6
LOS	F	B	A	E	F	F	E	D	F	E	E
Approach Delay		24.8			293.6		62.1			135.1	
Approach LOS		C			F		E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 5 (3%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 174.1 Intersection LOS: F
Intersection Capacity Utilization 112.9% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	116	2594	137	238	3943	146	88	243	268	97	191
v/c Ratio	1.35	0.91	0.14	0.97	1.20	0.75	0.25	0.81	1.29	0.26	0.77
Control Delay	214.5	15.0	0.5	68.3	120.3	85.6	68.4	45.7	212.6	67.7	57.9
Queue Delay	0.0	2.6	0.0	0.0	186.9	0.0	0.0	0.0	0.0	0.0	2.7
Total Delay	214.5	17.6	0.5	68.3	307.2	85.6	68.4	45.7	212.6	67.7	60.6
Queue Length 50th (ft)	~161	297	0	0	~1802	138	45	90	~351	50	107
Queue Length 95th (ft)	m#144	m292	m1	m0	m715	#239	76	#232	#547	82	#229
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	86	2849	950	246	3294	195	354	300	207	376	247
Starvation Cap Reductn	0	164	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	850	0	0	0	0	0	15
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.35	0.97	0.14	0.97	1.61	0.75	0.25	0.81	1.29	0.26	0.82

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	383	1863	649	12	183	2543	559	679	1375	156	11	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	416	2025	705	13	199	2764	608	738	1495	170	12	502
RTOR Reduction (vph)	0	0	175	0	0	0	130	0	0	79	0	0
Lane Group Flow (vph)	416	2025	530	0	212	2764	478	738	1495	91	0	514
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	15.5	68.4	68.4		11.1	64.0	64.0	25.5	38.5	38.5		17.5
Effective Green, g (s)	15.5	68.4	68.4		11.1	64.0	64.0	25.5	38.5	38.5		17.5
Actuated g/C Ratio	0.10	0.43	0.43		0.07	0.40	0.40	0.16	0.24	0.24		0.11
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	322	2165	677		230	2026	633	529	1224	381		363
v/s Ratio Prot	c0.13	c0.40			0.06	c0.55		c0.22	c0.29			0.15
v/s Ratio Perm			0.33				0.30			0.06		
v/c Ratio	1.29	0.94	0.78		0.92	1.36	0.76	1.40	1.22	0.24		1.42
Uniform Delay, d1	72.2	43.7	39.4		74.0	48.0	41.3	67.2	60.8	48.9		71.2
Progression Factor	0.92	1.13	1.34		1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	140.0	3.9	3.4		38.0	167.2	8.2	189.1	107.2	0.2		197.5
Delay (s)	206.3	53.5	56.1		112.0	215.2	49.5	256.3	167.9	49.2		268.8
Level of Service	F	D	E		F	F	D	F	F	D		F
Approach Delay (s)		74.3				181.0			186.7			
Approach LOS		E				F			F			

Intersection Summary

HCM Average Control Delay	160.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	123.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1230	485
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1337	527
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1337	527
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	46.0
Effective Green, g (s)	30.5	46.0
Actuated g/C Ratio	0.19	0.29
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	455
v/s Ratio Prot	c0.26	0.11
v/s Ratio Perm		0.22
v/c Ratio	1.38	1.16
Uniform Delay, d1	64.8	57.0
Progression Factor	0.72	1.02
Incremental Delay, d2	175.2	86.6
Delay (s)	222.1	144.7
Level of Service	F	F
Approach Delay (s)	215.0	
Approach LOS	F	

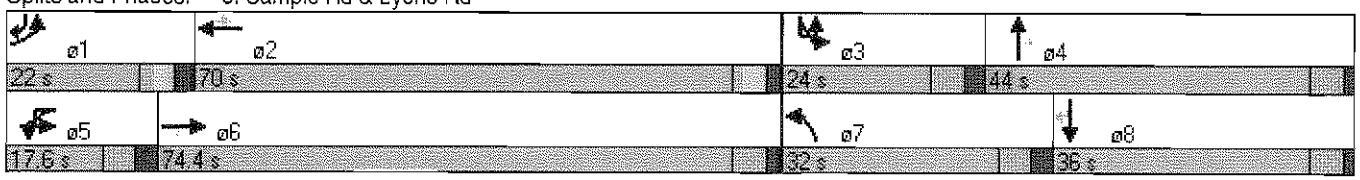
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	383	1863	649	183	2543	559	679	1375	156	462	1230	485
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	22.0	74.4	74.4	17.6	70.0	70.0	32.0	44.0	44.0	24.0	36.0	22.0
Total Split (%)	13.8%	46.5%	46.5%	11.0%	43.8%	43.8%	20.0%	27.5%	27.5%	15.0%	22.5%	13.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	15.5	68.4	68.4	11.1	64.0	64.0	25.5	38.5	38.5	17.5	30.5	51.5
Actuated g/C Ratio	0.10	0.43	0.43	0.07	0.40	0.40	0.16	0.24	0.24	0.11	0.19	0.32
v/c Ratio	1.29	0.94	0.83	0.92	1.36	0.80	1.40	1.22	0.37	1.42	1.38	1.03
Control Delay	190.1	53.5	33.7	114.6	204.7	35.5	235.8	156.8	22.3	245.5	211.7	93.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	190.1	53.5	33.7	114.6	204.7	35.5	235.8	156.8	22.3	245.5	211.7	93.7
LOS	F	D	C	F	F	D	F	F	C	F	F	F
Approach Delay		67.1			170.7			171.6			192.9	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 150 (94%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.42
Intersection Signal Delay: 147.1 Intersection LOS: F
Intersection Capacity Utilization 123.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	416	2025	705	212	2764	608	738	1495	170	514	1337	527
v/c Ratio	1.29	0.94	0.83	0.92	1.36	0.80	1.40	1.22	0.37	1.42	1.38	1.03
Control Delay	190.1	53.5	33.7	114.6	204.7	35.5	235.8	156.8	22.3	245.5	211.7	93.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	190.1	53.5	33.7	114.6	204.7	35.5	235.8	156.8	22.3	245.5	211.7	93.7
Queue Length 50th (ft)	~288	554	341	115	~1390	383	~528	~701	55	~367	~684	~603
Queue Length 95th (ft)	m#326	m668	m436	#198	#1464	561	#659	#798	129	#489	#784	#841
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	322	2165	852	230	2026	763	529	1224	460	363	969	510
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.29	0.94	0.83	0.92	1.36	0.80	1.40	1.22	0.37	1.42	1.38	1.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/23/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 Backg PM Peak - Alt. B
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1064	157			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1313	193			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			301			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			371			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					371			
C(m) (vph)					408			
v/c					0.91			
95% queue length					9.71			
Control Delay					56.9			
LOS					F			
Approach Delay				56.9				
Approach LOS				F				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2020 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	231	52	32	137	75	523	51	161	2033	433	43	543
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1739		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1739		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	246	55	34	146	80	556	54	171	2163	461	46	578
RTOR Reduction (vph)	0	0	0	0	0	139	0	0	0	144	0	0
Lane Group Flow (vph)	246	89	0	146	80	417	0	225	2163	317	0	624
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	11.0	27.8		18.2	35.0	35.0		14.4	64.0	64.0		28.0
Effective Green, g (s)	11.0	27.8		18.2	35.0	35.0		14.4	64.0	64.0		28.0
Actuated g/C Ratio	0.07	0.17		0.11	0.22	0.22		0.09	0.40	0.40		0.18
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	226	302		193	767	343		296	2014	627		575
v/s Ratio Prot	c0.07	0.05		0.09	0.02			0.07	c0.43			c0.19
v/s Ratio Perm						c0.27				0.20		
v/c Ratio	1.09	0.29		0.76	0.10	1.22		0.76	1.07	0.51		1.09
Uniform Delay, d1	74.5	57.6		68.8	50.0	62.5		71.1	48.0	36.1		66.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.06	0.96	0.84		0.66
Incremental Delay, d2	85.5	0.2		15.5	0.0	120.8		9.9	43.3	2.9		41.7
Delay (s)	160.0	57.8		84.2	50.0	183.3		85.2	89.5	33.3		85.5
Level of Service	F	E		F	D	F		F	F	C		F
Approach Delay (s)		132.8			151.1				80.1			
Approach LOS		F			F				F			

Intersection Summary

HCM Average Control Delay	76.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	113.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1701	319
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	1810	339
RTOR Reduction (vph)	0	87
Lane Group Flow (vph)	1810	252
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	77.6	77.6
Effective Green, g (s)	77.6	77.6
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2442	760
v/s Ratio Prot	0.36	
v/s Ratio Perm		0.16
v/c Ratio	0.74	0.33
Uniform Delay, d1	33.1	25.3
Progression Factor	1.00	1.18
Incremental Delay, d2	0.2	0.1
Delay (s)	33.2	29.8
Level of Service	C	C
Approach Delay (s)	44.5	
Approach LOS	D	

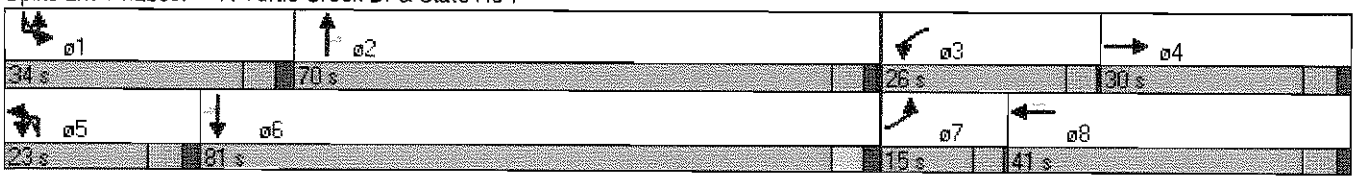
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	231	52	137	75	523	161	2033	433	543	1701	319
Turn Type	Prot		Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	6.0	4.0	6.0	6.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	8.0	12.0	8.0	12.0	12.0	11.0	13.0	13.0	11.0	13.0	13.0
Total Split (s)	15.0	30.0	26.0	41.0	41.0	23.0	70.0	70.0	34.0	81.0	81.0
Total Split (%)	9.4%	18.8%	16.3%	25.6%	25.6%	14.4%	43.8%	43.8%	21.3%	50.6%	50.6%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	2.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.0	27.8	18.2	35.0	35.0	14.4	64.0	64.0	28.0	77.6	77.6
Actuated g/C Ratio	0.07	0.17	0.11	0.22	0.22	0.09	0.40	0.40	0.18	0.48	0.48
v/c Ratio	1.09	0.29	0.76	0.10	1.15	0.76	1.07	0.60	1.09	0.74	0.40
Control Delay	151.5	62.1	92.0	50.5	126.7	92.0	87.0	17.9	83.5	33.7	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.5	62.1	92.0	50.5	126.7	92.0	87.0	17.9	83.5	33.7	15.2
LOS	F	E	F	D	F	F	F	B	F	C	B
Approach Delay		127.8		112.4			76.2			42.7	
Approach LOS		F		F			E			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 17 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.15
Intersection Signal Delay: 69.2 Intersection LOS: E
Intersection Capacity Utilization 113.3% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 7: Turtle Creek Dr & State Rd 7



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	246	89	146	80	556	225	2163	461	624	1810	339
v/c Ratio	1.09	0.29	0.76	0.10	1.15	0.76	1.07	0.60	1.09	0.74	0.40
Control Delay	151.5	62.1	92.0	50.5	126.7	92.0	87.0	17.9	83.5	33.7	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	151.5	62.1	92.0	50.5	126.7	92.0	87.0	17.9	83.5	33.7	15.2
Queue Length 50th (ft)	~148	83	150	35	~530	121	~921	206	~365	655	225
Queue Length 95th (ft)	#243	145	227	61	#772	168	#1009	279	m#304	m602	m213
Internal Link Dist (ft)		595		1522			330			1350	
Turn Bay Length (ft)	200		235		185	320			250		170
Base Capacity (vph)	226	302	233	767	482	349	2014	771	575	2444	848
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.09	0.29	0.63	0.10	1.15	0.64	1.07	0.60	1.09	0.74	0.40

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	44	563	851	343	274	1100	277	55	417	1911	195	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	45	580	877	354	282	1134	286	57	430	1970	201	58
RTOR Reduction (vph)	0	0	0	0	0	0	37	0	0	0	9	0
Lane Group Flow (vph)	0	625	877	354	282	1134	249	0	487	1970	192	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		24.0	49.1	49.1	15.9	41.0	41.0		18.0	60.0	75.9	
Effective Green, g (s)		24.0	49.1	49.1	15.9	41.0	41.0		18.0	60.0	75.9	
Actuated g/C Ratio		0.15	0.31	0.31	0.10	0.26	0.26		0.11	0.38	0.47	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		498	1086	486	330	907	406		373	1907	810	
v/s Ratio Prot		c0.19	0.25		0.08	c0.32			c0.15	c0.39	0.02	
v/s Ratio Perm				0.22			0.16				0.10	
v/c Ratio		1.26	0.81	0.73	0.85	1.25	0.61		1.31	1.03	0.24	
Uniform Delay, d1		68.0	51.1	49.5	70.9	59.5	52.5		71.0	50.0	24.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		0.70	0.93	1.32	
Incremental Delay, d2		130.4	4.2	4.6	18.3	121.8	1.9		139.4	17.2	0.0	
Delay (s)		198.4	55.3	54.1	89.2	181.3	54.4		188.8	63.8	32.9	
Level of Service		F	E	D	F	F	D		F	E	C	
Approach Delay (s)			103.3			144.7				84.4		
Approach LOS			F			F				F		

Intersection Summary			
HCM Average Control Delay	116.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	119.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	232	1915	622
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	239	1974	641
RTOR Reduction (vph)	0	0	128
Lane Group Flow (vph)	297	1974	513
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	11.0	53.0	53.0
Effective Green, g (s)	11.0	53.0	53.0
Actuated g/C Ratio	0.07	0.33	0.33
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	228	1684	524
v/s Ratio Prot	0.09	c0.39	
v/s Ratio Perm			0.32
v/c Ratio	1.30	1.17	0.98
Uniform Delay, d1	74.5	53.5	53.0
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	164.3	84.2	34.6
Delay (s)	238.8	137.7	87.5
Level of Service	F	F	F
Approach Delay (s)		137.0	
Approach LOS		F	

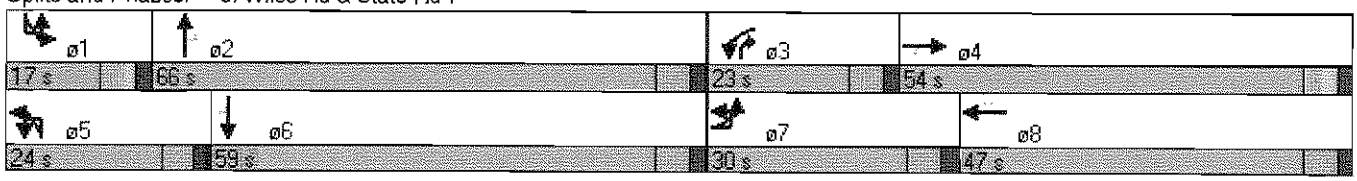
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	563	851	343	274	1100	277	417	1911	195	232	1915	622
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	54.0	54.0	23.0	47.0	47.0	24.0	66.0	23.0	17.0	59.0	59.0
Total Split (%)	18.8%	33.8%	33.8%	14.4%	29.4%	29.4%	15.0%	41.3%	14.4%	10.6%	36.9%	36.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	24.0	49.1	49.1	15.9	41.0	41.0	18.0	60.0	81.9	11.0	53.0	53.0
Actuated g/C Ratio	0.15	0.31	0.31	0.10	0.26	0.26	0.11	0.38	0.51	0.07	0.33	0.33
v/c Ratio	1.26	0.81	0.73	0.85	1.25	0.65	1.31	1.03	0.25	1.30	1.17	0.98
Control Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.5	26.1	218.6	130.6	68.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.5	26.1	218.6	130.6	68.0
LOS	F	E	E	F	F	D	F	E	C	F	F	E
Approach Delay		100.7			137.0			81.1			125.8	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 92 (58%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 109.8 Intersection LOS: F
Intersection Capacity Utilization 119.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Queues
8: Wiles Rd & State Rd 7

2020 Background PM Peak - Alternative B

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	625	877	354	282	1134	286	487	1970	201	297	1974	641
v/c Ratio	1.26	0.81	0.73	0.85	1.25	0.65	1.31	1.03	0.25	1.30	1.17	0.98
Control Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.5	26.1	218.6	130.6	68.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.2	58.3	60.0	93.7	169.5	51.1	179.2	62.5	26.1	218.6	130.6	68.0
Queue Length 50th (ft)	~420	451	336	151	~776	224	~331	~816	160	~204	~898	518
Queue Length 95th (ft)	#546	537	464	#218	#916	333	m#287	m705	m146	#306	#989	#791
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	498	1085	485	353	907	443	373	1907	830	228	1684	652
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.81	0.73	0.80	1.25	0.65	1.31	1.03	0.24	1.30	1.17	0.98

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cullum Rd & Lyons Rd

2020 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	181	16	122	16	15	35	93	2689	30	8	62	2332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3070		1770	1668		1770	5085	1583		1770	5085
Flt Permitted	0.72	1.00		0.65	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1342	3070		1208	1668		69	5085	1583		71	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	201	18	136	18	17	39	103	2988	33	9	69	2591
RTOR Reduction (vph)	0	62	0	0	32	0	0	0	6	0	0	0
Lane Group Flow (vph)	201	92	0	18	24	0	103	2988	27	0	78	2591
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	27.5	27.5		27.5	27.5		117.2	107.5	107.5		111.8	104.8
Effective Green, g (s)	27.5	27.5		27.5	27.5		117.2	107.5	107.5		111.8	104.8
Actuated g/C Ratio	0.17	0.17		0.17	0.17		0.73	0.67	0.67		0.70	0.66
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	231	528		208	287		154	3416	1064		124	3331
v/s Ratio Prot		0.03			0.01		c0.04	c0.59			0.03	0.51
v/s Ratio Perm	c0.15			0.01			0.45		0.02		0.41	
v/c Ratio	0.87	0.17		0.09	0.08		0.67	0.87	0.03		0.63	0.78
Uniform Delay, d1	64.5	56.6		55.7	55.7		41.3	20.9	8.8		35.3	19.4
Progression Factor	1.00	1.00		1.00	1.00		1.71	0.63	0.27		1.21	0.69
Incremental Delay, d2	28.0	0.2		0.2	0.1		4.3	1.4	0.0		2.6	0.5
Delay (s)	92.5	56.7		55.9	55.8		75.1	14.7	2.4		45.2	13.9
Level of Service	F	E		E	E		E	B	A		D	B
Approach Delay (s)		77.0			55.8			16.5				14.4
Approach LOS		E			E			B				B

Intersection Summary

HCM Average Control Delay	19.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	117
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	130
RTOR Reduction (vph)	42
Lane Group Flow (vph)	88
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	104.8
Effective Green, g (s)	104.8
Actuated g/C Ratio	0.66
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1037
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.09
Uniform Delay, d1	10.1
Progression Factor	0.74
Incremental Delay, d2	0.0
Delay (s)	7.5
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	509	632	415	468	1042	335	354	2076	448	153	1647	404
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	553	687	451	509	1133	364	385	2257	487	166	1790	439
RTOR Reduction (vph)	0	0	87	0	0	56	0	0	180	0	0	0
Lane Group Flow (vph)	553	687	364	509	1133	308	385	2257	307	166	1790	439
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	41.0	41.0	25.0	43.0	43.0	15.0	64.0	64.0	6.0	55.0	55.0
Effective Green, g (s)	23.0	41.0	41.0	25.0	43.0	43.0	15.0	64.0	64.0	6.0	55.0	55.0
Actuated g/C Ratio	0.14	0.26	0.26	0.16	0.27	0.27	0.09	0.40	0.40	0.04	0.34	0.34
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	907	406	519	951	425	311	2034	633	124	1748	544
v/s Ratio Prot	c0.17	0.19		0.15	c0.32		c0.12	c0.44		0.05	0.35	
v/s Ratio Perm			0.23			0.19			0.19			0.28
v/c Ratio	1.16	0.76	0.90	0.98	1.19	0.72	1.24	1.11	0.48	1.34	1.02	0.81
Uniform Delay, d1	68.5	54.9	57.5	67.3	58.5	53.1	72.5	48.0	35.7	77.0	52.5	47.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.31	0.74	0.65	1.00	1.00	1.00
Incremental Delay, d2	92.9	3.2	21.2	34.3	96.6	5.1	120.1	53.4	1.3	196.8	27.9	12.1
Delay (s)	161.4	58.2	78.6	101.6	155.1	58.2	215.1	88.8	24.6	273.8	80.4	59.8
Level of Service	F	E	E	F	F	E	F	F	C	F	F	E
Approach Delay (s)		97.4			124.0			94.4			90.0	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	100.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		

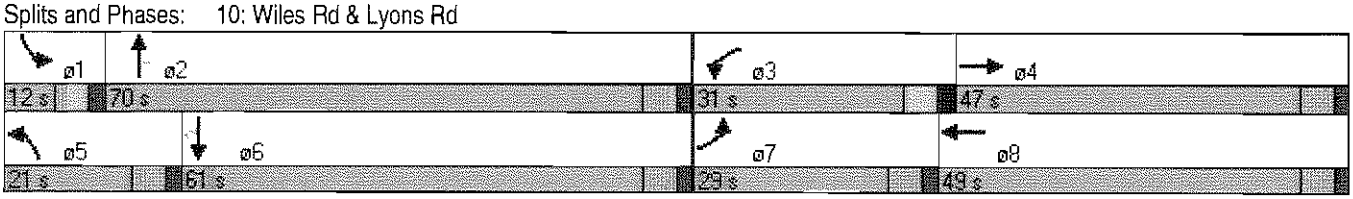
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	509	632	415	468	1042	335	354	2076	448	153	1647	404
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	47.0	47.0	31.0	49.0	49.0	21.0	70.0	70.0	12.0	61.0	61.0
Total Split (%)	18.1%	29.4%	29.4%	19.4%	30.6%	30.6%	13.1%	43.8%	43.8%	7.5%	38.1%	38.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	41.0	41.0	25.0	43.0	43.0	15.0	64.0	64.0	6.0	55.0	55.0
Actuated g/C Ratio	0.14	0.26	0.26	0.16	0.27	0.27	0.09	0.40	0.40	0.04	0.34	0.34
v/c Ratio	1.16	0.76	0.91	0.98	1.19	0.76	1.24	1.11	0.60	1.34	1.02	0.81
Control Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.6	87.5	10.4	250.5	78.8	60.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.6	87.5	10.4	250.5	78.8	60.6
LOS	F	E	E	F	F	D	F	F	B	F	E	E
Approach Delay		91.8			117.7			88.2			87.4	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 88 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 95.1 — Intersection LOS: F
Intersection Capacity Utilization 107.8% — ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	553	687	451	509	1133	364	385	2257	487	166	1790	439
v/c Ratio	1.16	0.76	0.91	0.98	1.19	0.76	1.24	1.11	0.60	1.34	1.02	0.81
Control Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.6	87.5	10.4	250.5	78.8	60.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	150.6	61.2	66.5	101.2	145.8	53.1	190.6	87.5	10.4	250.5	78.8	60.6
Queue Length 50th (ft)	~351	352	360	277	~750	283	~253	~972	73	~115	~727	418
Queue Length 95th (ft)	#473	428	#574	#399	#890	414	m#320	#1063	m135	#198	#820	567
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	907	493	519	951	482	311	2034	813	124	1748	544
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.16	0.76	0.91	0.98	1.19	0.76	1.24	1.11	0.60	1.34	1.02	0.81

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
12: NW 40 Street & NW 54th Ave

2020 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	24	281	114	58	221	424	253	97	323	327	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	11	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1785	1583	1770	1638		1770	3539	1583	1711	3539	1583
Flt Permitted		0.45	1.00	0.63	1.00		0.49	1.00	1.00	0.57	1.00	1.00
Satd. Flow (perm)		844	1583	1178	1638		920	3539	1583	1030	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Adj. Flow (vph)	174	26	305	133	63	257	461	294	113	376	380	237
RTOR Reduction (vph)	0	0	210	0	0	0	0	0	90	0	0	190
Lane Group Flow (vph)	0	200	95	133	320	0	461	294	23	376	380	47
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)		20.6	20.6	20.6	20.6		29.5	13.2	13.2	27.1	13.0	13.0
Effective Green, g (s)		20.6	20.6	20.6	20.6		29.5	13.2	13.2	27.1	13.0	13.0
Actuated g/C Ratio		0.31	0.31	0.31	0.31		0.45	0.20	0.20	0.41	0.20	0.20
Clearance Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		264	495	368	512		622	709	317	569	698	312
v/s Ratio Prot					0.20		c0.18	0.08		0.14	0.11	
v/s Ratio Perm		c0.24	0.06	0.11			c0.15		0.01	0.13		0.03
v/c Ratio		0.76	0.19	0.36	0.62		0.74	0.41	0.07	0.66	0.54	0.15
Uniform Delay, d1		20.4	16.6	17.6	19.4		13.6	23.0	21.4	14.6	23.8	21.9
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		11.7	0.2	0.6	2.4		4.7	0.4	0.1	2.9	0.9	0.2
Delay (s)		32.1	16.8	18.2	21.7		18.3	23.4	21.5	17.5	24.7	22.1
Level of Service		C	B	B	C		B	C	C	B	C	C
Approach Delay (s)		22.8			20.7			20.5			21.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	65.9	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/23/2012
Analysis Time Period: PM Peak Hour
Intersection: #13 N. Access & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 Backg PM Peak - Alt. B
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: N. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		492			614	172
Peak-Hour Factor, PHF		0.92			0.92	0.92
Hourly Flow Rate, HFR		534			667	186
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						258
Peak Hour Factor, PHF						0.92
Hourly Flow Rate, HFR						280
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes						1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								280
C(m) (vph)								706
v/c								0.40
95% queue length								1.90
Control Delay								13.4
LOS								B
Approach Delay							13.4	
Approach LOS							B	

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2020 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	426	173	26	73	261	276	204	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	463	188	28	79	284	300	222	71	211	0
Approach Volume (veh/h)		776			296			805			282	
Crossing Volume (veh/h)		470			584			384			500	
High Capacity (veh/h)		956			873			1024			933	
High v/c (veh/h)		0.81			0.34			0.79			0.30	
Low Capacity (veh/h)		775			701			835			754	
Low v/c (veh/h)		1.00			0.42			0.96			0.37	

Intersection Summary			
Maximum v/c High	0.81		
Maximum v/c Low	1.00		
Intersection Capacity Utilization	73.6%	ICU Level of Service	D

HCM Unsignalized Intersection Capacity Analysis
15: Cullum Rd & Banks Road

2020 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	134	110	219	73	79	73	0	184	113	86	219	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	146	120	238	79	86	79	0	200	123	93	238	179
Approach Volume (veh/h)		503			245			323			511	
Crossing Volume (veh/h)		411			346			359			165	
High Capacity (veh/h)		1002			1055			1045			1217	
High v/c (veh/h)		0.50			0.23			0.31			0.42	
Low Capacity (veh/h)		816			863			854			1009	
Low v/c (veh/h)		0.62			0.28			0.38			0.51	

Intersection Summary				
Maximum v/c High	0.50			
Maximum v/c Low	0.62			
Intersection Capacity Utilization	56.5%	ICU Level of Service	B	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1133	129	320	1543	172	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3485		1770	3539	1770	1583
Flt Permitted	1.00		0.10	1.00	0.95	1.00
Satd. Flow (perm)	3485		178	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1288	147	364	1753	195	257
RTOR Reduction (vph)	0	0	0	0	0	220
Lane Group Flow (vph)	1435	0	364	1753	195	37
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	37.3		56.0	56.0	11.4	11.4
Effective Green, g (s)	37.3		56.0	56.0	11.4	11.4
Actuated g/C Ratio	0.47		0.71	0.71	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1637		410	2496	254	227
v/s Ratio Prot	0.41		c0.16	0.50	c0.11	
v/s Ratio Perm			c0.47			0.02
v/c Ratio	0.88		0.89	0.70	0.77	0.16
Uniform Delay, d1	19.0		22.3	6.8	32.7	29.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	6.9		20.1	1.7	13.0	0.3
Delay (s)	25.9		42.4	8.5	45.7	30.2
Level of Service	C		D	A	D	C
Approach Delay (s)	25.9			14.3	36.9	
Approach LOS	C			B	D	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Appendix K-7

2035 Background PM Peak Hour Intersection Analysis
Alternative B

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	377	1916	426	2703	299	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	393	1996	444	2816	311	219
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	393	1996	444	2816	311	219
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	21.5	96.9	25.0	100.4	17.1	17.1
Effective Green, g (s)	21.5	96.9	25.0	100.4	17.1	17.1
Actuated g/C Ratio	0.13	0.61	0.16	0.63	0.11	0.11
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	446	3067	519	3178	355	355
v/s Ratio Prot	0.12	0.39	c0.13	c0.56	c0.09	0.07
v/s Ratio Perm						
v/c Ratio	0.88	0.65	0.86	0.89	0.88	0.62
Uniform Delay, d1	68.0	20.5	65.7	25.0	70.4	68.3
Progression Factor	1.00	1.00	1.07	0.39	1.00	1.00
Incremental Delay, d2	17.6	1.1	6.0	1.9	20.2	2.2
Delay (s)	85.6	21.6	76.0	11.7	90.6	70.6
Level of Service	F	C	E	B	F	E
Approach Delay (s)		32.2		20.5		
Approach LOS		C		C		

Intersection Summary			
HCM Average Control Delay	30.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/23/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 Backg PM Peak - Alt. B
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: W Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1331			2356	199
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1874			3318	280
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						123
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						173
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes						1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								173
C(m) (vph)								334
v/c								0.52
95% queue length								2.83
Control Delay								26.8
LOS								D
Approach Delay							26.8	
Approach LOS							D	

HCM Signalized Intersection Capacity Analysis
3: Sample Rd & NW 54th Ave

2035 Background PM Peak - Alternative B

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	74	408	2326	50	473	3002	380	189	184	447	536	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.67	1.00	1.00	0.42	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1198	3539	1583	749	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	78	429	2448	53	498	3160	400	199	194	471	564	137
RTOR Reduction (vph)	0	0	0	15	0	0	154	0	0	163	0	0
Lane Group Flow (vph)	0	507	2448	38	498	3160	246	199	194	308	564	137
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		18.0	73.0	73.0	18.0	73.0	73.0	31.0	19.0	19.0	51.0	33.0
Effective Green, g (s)		18.0	73.0	73.0	18.0	73.0	73.0	31.0	19.0	19.0	51.0	33.0
Actuated g/C Ratio		0.11	0.46	0.46	0.11	0.46	0.46	0.19	0.12	0.12	0.32	0.21
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		373	2311	722	373	2311	722	271	420	188	395	730
v/s Ratio Prot		c0.15	0.48		0.15	c0.62		0.06	0.05		c0.23	0.04
v/s Ratio Perm				0.02			0.16	0.09		c0.19	0.22	
v/c Ratio		1.36	1.06	0.05	1.34	1.37	0.34	0.73	0.46	1.64	1.43	0.19
Uniform Delay, d1		71.0	43.5	24.2	71.0	43.5	28.0	59.2	65.7	70.5	50.8	52.4
Progression Factor		1.04	0.84	0.96	1.29	0.70	0.40	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		177.1	36.2	0.1	152.5	165.6	0.1	8.6	0.3	309.9	206.7	0.0
Delay (s)		250.9	72.5	23.5	244.1	196.1	11.2	67.7	66.0	380.4	257.5	52.5
Level of Service		F	E	C	F	F	B	E	E	F	F	D
Approach Delay (s)			101.7			183.7			237.8			170.2
Approach LOS			F			F			F			F

Intersection Summary			
HCM Average Control Delay	159.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	126.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Volume (vph)	303
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	319
RTOR Reduction (vph)	81
Lane Group Flow (vph)	238
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	33.0
Effective Green, g (s)	33.0
Actuated g/C Ratio	0.21
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	326
v/s Ratio Prot	
v/s Ratio Perm	0.15
v/c Ratio	0.73
Uniform Delay, d1	59.3
Progression Factor	1.00
Incremental Delay, d2	7.1
Delay (s)	66.4
Level of Service	E
Approach Delay (s)	
Approach LOS	

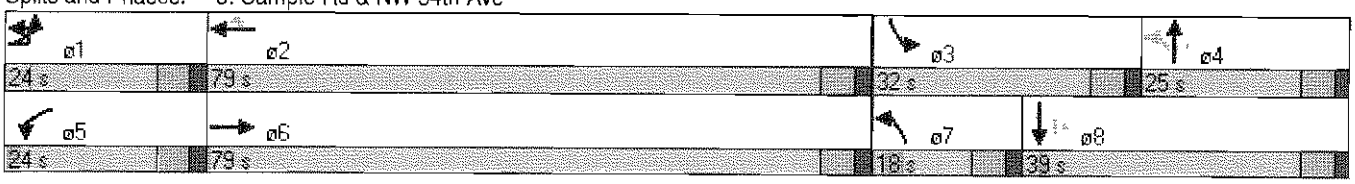
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	408	2326	50	473	3002	380	189	184	447	536	130	303
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	24.0	79.0	79.0	24.0	79.0	79.0	18.0	25.0	25.0	32.0	39.0	39.0
Total Split (%)	15.0%	49.4%	49.4%	15.0%	49.4%	49.4%	11.3%	15.6%	15.6%	20.0%	24.4%	24.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	18.0	73.0	73.0	18.0	73.0	73.0	31.0	19.0	19.0	51.0	33.0	33.0
Actuated g/C Ratio	0.11	0.46	0.46	0.11	0.46	0.46	0.19	0.12	0.12	0.32	0.21	0.21
v/c Ratio	1.36	1.06	0.07	1.34	1.37	0.46	0.74	0.46	1.34	1.43	0.19	0.78
Control Delay	228.7	71.7	13.3	215.0	193.7	3.4	64.5	69.7	201.7	243.6	53.3	54.8
Queue Delay	0.0	24.2	0.0	0.0	60.8	0.0	0.0	0.0	6.9	0.0	0.0	0.0
Total Delay	228.7	95.9	13.3	215.0	254.4	3.4	64.5	69.7	208.5	243.6	53.3	54.8
LOS	F	F	B	F	F	A	E	E	F	F	D	D
Approach Delay		116.8			224.8			144.2			159.0	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.43
Intersection Signal Delay: 173.3 Intersection LOS: F
Intersection Capacity Utilization 126.5% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	507	2448	53	498	3160	400	199	194	471	564	137	319
v/c Ratio	1.36	1.06	0.07	1.34	1.37	0.46	0.74	0.46	1.34	1.43	0.19	0.78
Control Delay	228.7	71.7	13.3	215.0	193.7	3.4	64.5	69.7	201.7	243.6	53.3	54.8
Queue Delay	0.0	24.2	0.0	0.0	60.8	0.0	0.0	0.0	6.9	0.0	0.0	0.0
Total Delay	228.7	95.9	13.3	215.0	254.4	3.4	64.5	69.7	208.5	243.6	53.3	54.8
Queue Length 50th (ft)	~363	~1029	7	~345	~1586	36	161	101	~463	~664	63	223
Queue Length 95th (ft)	m#485	#1094	m33	m#224	m#1000	m19	#247	145	#693	#902	96	#353
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	373	2311	737	373	2311	876	270	420	351	395	730	407
Starvation Cap Reductn	0	0	0	0	208	0	0	0	0	0	0	0
Spillback Cap Reductn	0	118	0	0	0	0	0	0	4	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.36	1.12	0.07	1.34	1.50	0.46	0.74	0.46	1.36	1.43	0.19	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	109	2690	146	8	249	3894	218	158	82	263	249	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5025		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.69	1.00	1.00	0.66	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5025		1287	3539	1583	1222	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	117	2892	157	9	268	4187	234	170	88	283	268	97
RTOR Reduction (vph)	0	0	70	0	0	0	0	0	0	148	0	0
Lane Group Flow (vph)	117	2892	87	0	277	4421	0	170	88	135	268	97
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	8.0	89.0	89.0		24.0	105.0		22.0	16.0	16.0	24.0	17.0
Effective Green, g (s)	8.0	89.0	89.0		24.0	105.0		22.0	16.0	16.0	24.0	17.0
Actuated g/C Ratio	0.05	0.56	0.56		0.15	0.66		0.14	0.10	0.10	0.15	0.11
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	2817	881		257	3298		195	354	158	207	376
v/s Ratio Prot	0.07	0.57			c0.16	c0.88		0.03	0.02		c0.06	0.03
v/s Ratio Perm			0.06					0.09		0.09	c0.14	
v/c Ratio	1.36	1.03	0.10		1.08	1.34		0.87	0.25	0.86	1.29	0.26
Uniform Delay, d1	76.0	35.5	16.7		68.0	27.5		66.8	66.5	70.9	67.3	65.7
Progression Factor	0.95	0.45	0.12		0.76	1.32		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	169.0	13.9	0.0		42.3	153.4		32.0	1.7	41.5	163.6	1.7
Delay (s)	241.4	29.8	2.0		94.1	189.8		98.8	68.1	112.4	230.9	67.4
Level of Service	F	C	A		F	F		F	E	F	F	E
Approach Delay (s)		36.2				184.2			100.9			153.8
Approach LOS		D				F			F			F

Intersection Summary

HCM Average Control Delay	125.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	121.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	179
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	192
RTOR Reduction (vph)	76
Lane Group Flow (vph)	116
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	17.0
Effective Green, g (s)	17.0
Actuated g/C Ratio	0.11
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	168
v/s Ratio Prot	
v/s Ratio Perm	0.07
v/c Ratio	0.69
Uniform Delay, d1	69.0
Progression Factor	1.00
Incremental Delay, d2	20.8
Delay (s)	89.8
Level of Service	F
Approach Delay (s)	
Approach LOS	

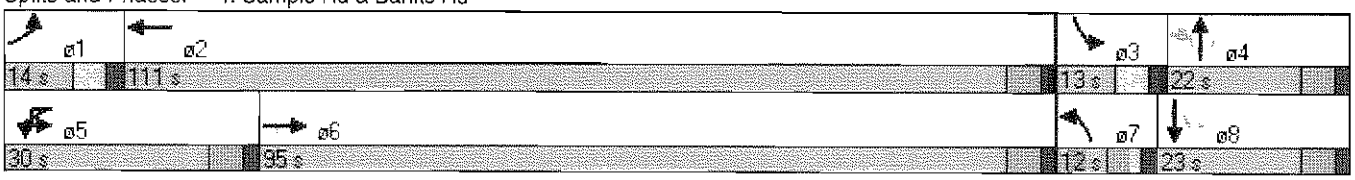
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	109	2690	146	249	3894	158	82	263	249	90	179
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	14.0	95.0	95.0	30.0	111.0	12.0	22.0	22.0	13.0	23.0	23.0
Total Split (%)	8.8%	59.4%	59.4%	18.8%	69.4%	7.5%	13.8%	13.8%	8.1%	14.4%	14.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	8.0	89.0	89.0	24.0	105.0	22.0	16.0	16.0	24.0	17.0	17.0
Actuated g/C Ratio	0.05	0.56	0.56	0.15	0.66	0.14	0.10	0.10	0.15	0.11	0.11
v/c Ratio	1.36	1.03	0.17	1.08	1.34	0.87	0.25	0.92	1.29	0.26	0.79
Control Delay	219.2	31.0	0.3	91.0	185.2	101.4	68.4	64.4	212.6	67.7	60.7
Queue Delay	0.0	25.2	0.0	0.0	299.1	0.0	0.0	0.0	0.0	0.0	4.0
Total Delay	219.2	56.2	0.3	91.0	484.3	101.4	68.4	64.4	212.6	67.7	64.6
LOS	F	E	A	F	F	F	E	E	F	E	E
Approach Delay		59.5			461.1		76.7			136.4	
Approach LOS		E			F		E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 6 (4%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 275.8 — Intersection LOS: F
Intersection Capacity Utilization 121.6% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	2892	157	277	4421	170	88	283	268	97	192
v/c Ratio	1.36	1.03	0.17	1.08	1.34	0.87	0.25	0.92	1.29	0.26	0.79
Control Delay	219.2	31.0	0.3	91.0	185.2	101.4	68.4	64.4	212.6	67.7	60.7
Queue Delay	0.0	25.2	0.0	0.0	299.1	0.0	0.0	0.0	0.0	0.0	4.0
Total Delay	219.2	56.2	0.3	91.0	484.3	101.4	68.4	64.4	212.6	67.7	64.6
Queue Length 50th (ft)	~161	~1160	0	~323	~2181	163	45	131	~351	50	112
Queue Length 95th (ft)	m#131	m280	m0	m194	m808	#308	76	#315	#547	82	#237
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	86	2817	950	257	3297	195	354	306	207	376	244
Starvation Cap Reductn	0	161	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	1093	0	0	0	0	0	18
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.36	1.09	0.17	1.08	2.01	0.87	0.25	0.92	1.29	0.26	0.85

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	427	2050	712	14	212	2850	627	755	1577	181	13	516
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	464	2228	774	15	230	3098	682	821	1714	197	14	561
RTOR Reduction (vph)	0	0	175	0	0	0	130	0	0	77	0	0
Lane Group Flow (vph)	464	2228	599	0	245	3098	552	821	1714	120	0	575
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	15.5	68.2	68.2		11.3	64.0	64.0	25.5	38.5	38.5		17.5
Effective Green, g (s)	15.5	68.2	68.2		11.3	64.0	64.0	25.5	38.5	38.5		17.5
Actuated g/C Ratio	0.10	0.43	0.43		0.07	0.40	0.40	0.16	0.24	0.24		0.11
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	322	2159	675		234	2026	633	529	1224	381		363
v/s Ratio Prot	c0.14	c0.44			0.07	c0.61		c0.25	c0.34			0.17
v/s Ratio Perm			0.38				0.35			0.08		
v/c Ratio	1.44	1.03	0.89		1.05	1.53	0.87	1.55	1.40	0.31		1.58
Uniform Delay, d1	72.2	45.9	42.4		74.4	48.0	44.2	67.2	60.8	49.9		71.2
Progression Factor	0.98	1.08	1.19		1.00	1.00	1.00	1.00	1.00	1.00		0.80
Incremental Delay, d2	200.1	16.5	1.8		71.7	240.6	15.4	257.6	185.2	0.3		269.7
Delay (s)	270.7	65.9	52.3		146.1	288.6	59.6	324.9	245.9	50.2		326.5
Level of Service	F	E	D		F	F	E	F	F	D		F
Approach Delay (s)		90.3				241.2			255.5			
Approach LOS		F				F			F			

Intersection Summary

HCM Average Control Delay	214.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	186.2%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1399	559
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1521	608
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1521	608
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	46.0
Effective Green, g (s)	30.5	46.0
Actuated g/C Ratio	0.19	0.29
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	455
v/s Ratio Prot	c0.30	0.13
v/s Ratio Perm		0.25
v/c Ratio	1.57	1.34
Uniform Delay, d1	64.8	57.0
Progression Factor	0.79	1.11
Incremental Delay, d2	259.0	159.1
Delay (s)	310.1	222.3
Level of Service	F	F
Approach Delay (s)	293.8	
Approach LOS	F	

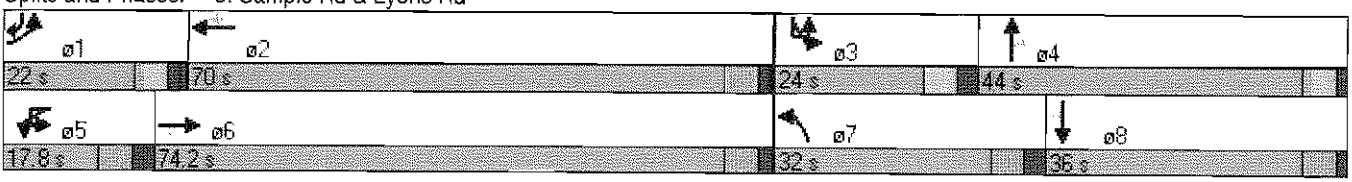
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	427	2050	712	212	2850	627	755	1577	181	516	1399	559
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	22.0	74.2	74.2	17.8	70.0	70.0	32.0	44.0	44.0	24.0	36.0	22.0
Total Split (%)	13.8%	46.4%	46.4%	11.1%	43.8%	43.8%	20.0%	27.5%	27.5%	15.0%	22.5%	13.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	15.5	68.2	68.2	11.3	64.0	64.0	25.5	38.5	38.5	17.5	30.5	51.5
Actuated g/C Ratio	0.10	0.43	0.43	0.07	0.40	0.40	0.16	0.24	0.24	0.11	0.19	0.32
v/c Ratio	1.44	1.03	0.91	1.05	1.53	0.89	1.55	1.40	0.43	1.58	1.57	1.19
Control Delay	246.8	64.2	32.5	140.5	274.8	45.6	299.3	228.4	27.4	306.3	293.6	146.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	246.8	64.2	32.5	140.5	274.8	45.6	299.3	228.4	27.4	306.3	293.6	146.8
LOS	F	E	C	F	F	D	F	F	C	F	F	F
Approach Delay		81.6			227.8			235.2			263.3	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 158 (99%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.58
Intersection Signal Delay: 197.6 Intersection LOS: F
Intersection Capacity Utilization 136.2% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	464	2228	774	245	3098	682	821	1714	197	575	1521	608
v/c Ratio	1.44	1.03	0.91	1.05	1.53	0.89	1.55	1.40	0.43	1.58	1.57	1.19
Control Delay	246.8	64.2	32.5	140.5	274.8	45.6	299.3	228.4	27.4	306.3	293.6	146.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	246.8	64.2	32.5	140.5	274.8	45.6	299.3	228.4	27.4	306.3	293.6	146.8
Queue Length 50th (ft)	~346	~900	392	~142	~1655	496	~621	~875	82	~437	~834	~784
Queue Length 95th (ft)	m#330	m720	m359	#237	#1719	#758	#755	#969	164	m#540	#932	m#996
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	322	2159	850	234	2026	763	529	1224	458	363	969	510
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.44	1.03	0.91	1.05	1.53	0.89	1.55	1.40	0.43	1.58	1.57	1.19

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A
Date Performed: 04/23/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 Backg PM Peak - Alt. B
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1196	157			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1476	193			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			301			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			371			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					371			
C(m) (vph)					367			
v/c					1.01			
95% queue length					12.05			
Control Delay					84.1			
LOS					F			
Approach Delay				84.1				
Approach LOS				F				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2035 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	268	56	37	140	80	548	60	187	2288	436	50	543
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1736		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1736		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	285	60	39	149	85	583	64	199	2434	464	53	578
RTOR Reduction (vph)	0	0	0	0	0	102	0	0	0	129	0	0
Lane Group Flow (vph)	285	99	0	149	85	481	0	263	2434	335	0	631
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	11.0	27.1		18.9	35.0	35.0		13.9	68.0	68.0		24.0
Effective Green, g (s)	11.0	27.1		18.9	35.0	35.0		13.9	68.0	68.0		24.0
Actuated g/C Ratio	0.07	0.17		0.12	0.22	0.22		0.09	0.42	0.42		0.15
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	226	294		200	767	343		285	2140	666		493
v/s Ratio Prot	c0.09	0.06		0.09	0.02			0.08	c0.48			c0.19
v/s Ratio Perm						c0.31				0.21		
v/c Ratio	1.26	0.34		0.74	0.11	1.40		0.92	1.14	0.50		1.28
Uniform Delay, d1	74.5	58.5		68.2	50.0	62.5		72.5	46.0	33.6		68.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.07	0.97	0.86		1.26
Incremental Delay, d2	148.0	0.2		14.0	0.0	198.3		33.1	68.1	2.7		127.4
Delay (s)	222.5	58.8		82.2	50.1	260.8		110.3	112.6	31.7		213.1
Level of Service	F	E		F	D	F		F	F	C		F
Approach Delay (s)		180.3			206.3				100.6			
Approach LOS		F			F				F			

Intersection Summary

HCM Average Control Delay	97.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	121.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations		
Volume (vph)	1961	371
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	2086	395
RTOR Reduction (vph)	0	91
Lane Group Flow (vph)	2086	304
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	78.1	78.1
Effective Green, g (s)	78.1	78.1
Actuated g/C Ratio	0.49	0.49
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2458	765
v/s Ratio Prot	0.41	
v/s Ratio Perm		0.19
v/c Ratio	0.85	0.40
Uniform Delay, d1	35.8	26.0
Progression Factor	0.43	0.29
Incremental Delay, d2	0.4	0.1
Delay (s)	15.7	7.7
Level of Service	B	A
Approach Delay (s)	54.7	
Approach LOS	D	

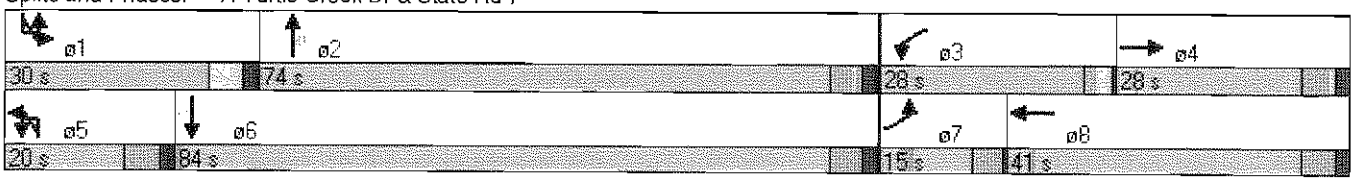
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	268	56	140	80	548	187	2288	436	543	1961	371
Turn Type	Prot		Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	6.0	4.0	6.0	6.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	8.0	12.0	8.0	12.0	12.0	11.0	13.0	13.0	11.0	13.0	13.0
Total Split (s)	15.0	28.0	28.0	41.0	41.0	20.0	74.0	74.0	30.0	84.0	84.0
Total Split (%)	9.4%	17.5%	17.5%	25.6%	25.6%	12.5%	46.3%	46.3%	18.8%	52.5%	52.5%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	2.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.0	27.1	18.9	35.0	35.0	13.9	68.0	68.0	24.0	78.1	78.1
Actuated g/C Ratio	0.07	0.17	0.12	0.22	0.22	0.09	0.42	0.42	0.15	0.49	0.49
v/c Ratio	1.26	0.34	0.74	0.11	1.31	0.92	1.14	0.58	1.28	0.85	0.46
Control Delay	204.2	63.9	89.9	50.6	191.5	112.3	108.9	18.0	189.8	15.8	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.2	63.9	89.9	50.6	191.5	112.3	108.9	18.0	189.8	15.8	4.3
LOS	F	E	F	D	F	F	F	B	F	B	A
Approach Delay		168.1		158.3			95.8			49.7	
Approach LOS		F		F			F			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 19 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.31
Intersection Signal Delay: 87.1 Intersection LOS: F
Intersection Capacity Utilization 121.0% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 7: Turtle Creek Dr & State Rd 7



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	285	99	149	85	583	263	2434	464	631	2086	395
v/c Ratio	1.26	0.34	0.74	0.11	1.31	0.92	1.14	0.58	1.28	0.85	0.46
Control Delay	204.2	63.9	89.9	50.6	191.5	112.3	108.9	18.0	189.8	15.8	4.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.2	63.9	89.9	50.6	191.5	112.3	108.9	18.0	189.8	15.8	4.3
Queue Length 50th (ft)	~192	93	153	37	~673	144	~1088	204	~438	230	29
Queue Length 95th (ft)	#292	160	228	64	#916	m#228	#1171	m337	m#334	m188	m16
Internal Link Dist (ft)		595		1522			330			1350	
Turn Bay Length (ft)	200		235		185	320			250		170
Base Capacity (vph)	226	295	254	767	445	288	2140	795	493	2459	856
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.34	0.59	0.11	1.31	0.91	1.14	0.58	1.28	0.85	0.46

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	51	650	976	381	317	1266	304	63	464	2122	226	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	53	670	1006	393	327	1305	313	65	478	2188	233	67
RTOR Reduction (vph)	0	0	0	0	0	0	30	0	0	0	6	0
Lane Group Flow (vph)	0	723	1006	393	327	1305	283	0	543	2188	227	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		24.0	49.0	49.0	16.0	41.0	41.0		18.0	60.0	76.0	
Effective Green, g (s)		24.0	49.0	49.0	16.0	41.0	41.0		18.0	60.0	76.0	
Actuated g/C Ratio		0.15	0.31	0.31	0.10	0.26	0.26		0.11	0.38	0.48	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		498	1084	485	332	907	406		373	1907	811	
v/s Ratio Prot		c0.22	0.28		0.10	c0.37			c0.16	c0.43	0.03	
v/s Ratio Perm				0.25			0.18				0.12	
v/c Ratio		1.45	0.93	0.81	0.98	1.44	0.70		1.46	1.15	0.28	
Uniform Delay, d1		68.0	53.8	51.2	71.9	59.5	53.9		71.0	50.0	25.4	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.05	1.14	1.00	
Incremental Delay, d2		214.3	13.1	9.4	44.9	203.8	4.2		206.5	67.0	0.0	
Delay (s)		282.3	66.9	60.6	116.7	263.3	58.0		281.2	123.8	25.4	
Level of Service		F	E	E	F	F	E		F	F	C	
Approach Delay (s)			139.1			205.6				144.9		
Approach LOS			F			F				F		

Intersection Summary

HCM Average Control Delay	172.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	134.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	260	2146	721
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	268	2212	743
RTOR Reduction (vph)	0	0	118
Lane Group Flow (vph)	335	2212	625
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	11.0	53.0	53.0
Effective Green, g (s)	11.0	53.0	53.0
Actuated g/C Ratio	0.07	0.33	0.33
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	228	1684	524
v/s Ratio Prot	0.10	c0.43	
v/s Ratio Perm			0.39
v/c Ratio	1.47	1.31	1.19
Uniform Delay, d1	74.5	53.5	53.5
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	233.5	145.4	104.1
Delay (s)	308.0	198.9	157.6
Level of Service	F	F	F
Approach Delay (s)		200.7	
Approach LOS		F	

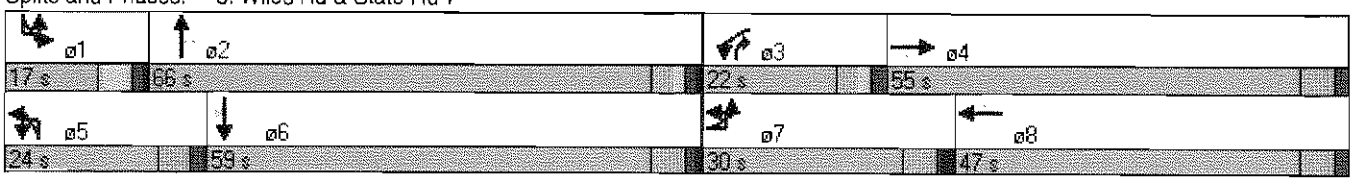
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	650	976	381	317	1266	304	464	2122	226	260	2146	721
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	55.0	55.0	22.0	47.0	47.0	24.0	66.0	22.0	17.0	59.0	59.0
Total Split (%)	18.8%	34.4%	34.4%	13.8%	29.4%	29.4%	15.0%	41.3%	13.8%	10.6%	36.9%	36.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	24.0	49.0	49.0	16.0	41.0	41.0	18.0	60.0	82.0	11.0	53.0	53.0
Actuated g/C Ratio	0.15	0.31	0.31	0.10	0.26	0.26	0.11	0.38	0.51	0.07	0.33	0.33
v/c Ratio	1.45	0.93	0.81	0.98	1.44	0.72	1.46	1.15	0.29	1.47	1.31	1.16
Control Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.8	21.5	281.0	187.3	122.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.8	21.5	281.0	187.3	122.6
LOS	F	E	E	F	F	E	F	F	C	F	F	F
Approach Delay		133.0			193.3			134.6			182.2	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.47
Intersection Signal Delay: 160.5 Intersection LOS: F
Intersection Capacity Utilization 134.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	723	1006	393	327	1305	313	543	2188	233	335	2212	743
v/c Ratio	1.45	0.93	0.81	0.98	1.44	0.72	1.46	1.15	0.29	1.47	1.31	1.16
Control Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.8	21.5	281.0	187.3	122.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	259.5	68.5	65.5	116.1	245.2	57.3	254.6	116.8	21.5	281.0	187.3	122.6
Queue Length 50th (ft)	~529	539	381	179	~971	264	~408	~966	101	~246	~1087	~785
Queue Length 95th (ft)	#660	#668	#543	#285	#1111	383	m#314	m583	m85	#353	#1173	#1042
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	498	1084	485	332	907	436	373	1907	817	228	1684	643
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.45	0.93	0.81	0.98	1.44	0.72	1.46	1.15	0.29	1.47	1.31	1.16

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cullum Rd & Lyons Rd

2035 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	185	16	135	19	15	41	104	3007	34	9	72	2637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.87		1.00	0.89		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3065		1770	1659		1770	5085	1583		1770	5085
Flt Permitted	0.72	1.00		0.62	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1334	3065		1159	1659		67	5085	1583		70	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	206	18	150	21	17	46	116	3341	38	10	80	2930
RTOR Reduction (vph)	0	44	0	0	34	0	0	0	6	0	0	0
Lane Group Flow (vph)	206	124	0	21	29	0	116	3341	32	0	90	2930
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	25.8	25.8		25.8	25.8		120.8	111.0	111.0		111.6	106.4
Effective Green, g (s)	25.8	25.8		25.8	25.8		120.8	111.0	111.0		111.6	106.4
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.76	0.69	0.69		0.70	0.66
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	215	494		187	268		155	3528	1098		104	3382
v/s Ratio Prot		0.04			0.02		c0.05	c0.66			0.03	0.58
v/s Ratio Perm	c0.15			0.02			0.52		0.02		0.57	
v/c Ratio	0.96	0.25		0.11	0.11		0.75	0.95	0.03		0.87	0.87
Uniform Delay, d1	66.6	58.7		57.3	57.3		49.7	21.9	7.7		47.4	21.2
Progression Factor	1.00	1.00		1.00	1.00		1.62	0.64	0.29		1.48	0.35
Incremental Delay, d2	49.0	0.3		0.3	0.2		1.8	0.8	0.0		7.0	0.3
Delay (s)	115.5	58.9		57.6	57.4		82.4	14.8	2.2		77.3	7.8
Level of Service	F	E		E	E		F	B	A		E	A
Approach Delay (s)		90.1			57.5			16.9				9.4
Approach LOS		F			E			B				A

Intersection Summary

HCM Average Control Delay	17.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	94.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	119
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	132
RTOR Reduction (vph)	41
Lane Group Flow (vph)	91
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	106.4
Effective Green, g (s)	106.4
Actuated g/C Ratio	0.66
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1053
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.09
Uniform Delay, d1	9.5
Progression Factor	0.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	574	720	478	530	1187	389	411	2306	492	178	1842	441
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	624	783	520	576	1290	423	447	2507	535	193	2002	479
RTOR Reduction (vph)	0	0	97	0	0	65	0	0	178	0	0	0
Lane Group Flow (vph)	624	783	423	576	1290	358	447	2507	357	193	2002	479
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	39.0	39.0	27.0	43.0	43.0	16.0	63.0	63.0	7.0	54.0	54.0
Effective Green, g (s)	23.0	39.0	39.0	27.0	43.0	43.0	16.0	63.0	63.0	7.0	54.0	54.0
Actuated g/C Ratio	0.14	0.24	0.24	0.17	0.27	0.27	0.10	0.39	0.39	0.04	0.34	0.34
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	863	386	560	951	425	332	2002	623	145	1716	534
v/s Ratio Prot	c0.19	0.22		0.17	c0.36		c0.13	c0.49		0.06	0.39	
v/s Ratio Perm			0.27			0.23			0.23			0.30
v/c Ratio	1.31	0.91	1.10	1.03	1.36	0.84	1.35	1.25	0.57	1.33	1.17	0.90
Uniform Delay, d1	68.5	58.7	60.5	66.5	58.5	55.3	72.0	48.5	38.0	76.5	53.0	50.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.03	1.13	1.48	1.00	1.00	1.00
Incremental Delay, d2	153.2	12.8	74.3	45.5	167.3	13.5	163.0	115.1	1.4	188.4	81.7	20.4
Delay (s)	221.7	71.6	134.8	112.0	225.8	68.8	237.2	169.8	57.6	264.9	134.7	70.7
Level of Service	F	E	F	F	F	E	F	F	E	F	F	E
Approach Delay (s)		137.2			168.2			161.2			132.7	
Approach LOS		F			F			F			F	

Intersection Summary

HCM Average Control Delay	151.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		

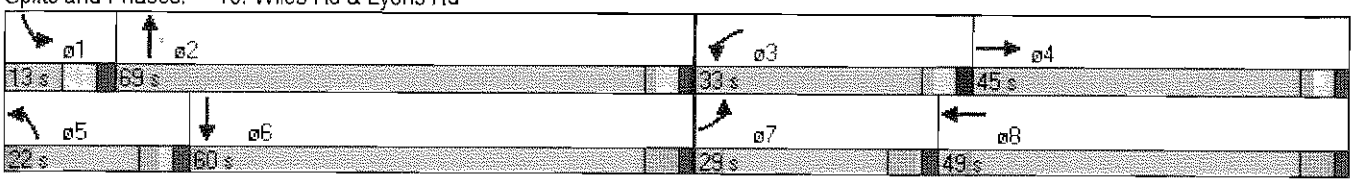
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	574	720	478	530	1187	389	411	2306	492	178	1842	441
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	45.0	45.0	33.0	49.0	49.0	22.0	69.0	69.0	13.0	60.0	60.0
Total Split (%)	18.1%	28.1%	28.1%	20.6%	30.6%	30.6%	13.8%	43.1%	43.1%	8.1%	37.5%	37.5%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	39.0	39.0	27.0	43.0	43.0	16.0	63.0	63.0	7.0	54.0	54.0
Actuated g/C Ratio	0.14	0.24	0.24	0.17	0.27	0.27	0.10	0.39	0.39	0.04	0.34	0.34
v/c Ratio	1.31	0.91	1.08	1.03	1.36	0.86	1.35	1.25	0.67	1.33	1.17	0.90
Control Delay	204.0	73.7	104.8	109.0	210.7	61.6	215.3	159.6	26.8	242.3	128.0	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.0	73.7	104.8	109.0	210.7	61.6	215.3	159.6	26.8	242.3	128.0	71.0
LOS	F	E	F	F	F	E	F	F	C	F	F	E
Approach Delay		124.3			157.6			146.4			126.0	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 62 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 139.5 — Intersection LOS: F
Intersection Capacity Utilization 118.8% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	624	783	520	576	1290	423	447	2507	535	193	2002	479
v/c Ratio	1.31	0.91	1.08	1.03	1.36	0.86	1.35	1.25	0.67	1.33	1.17	0.90
Control Delay	204.0	73.7	104.8	109.0	210.7	61.6	215.3	159.6	26.8	242.3	128.0	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.0	73.7	104.8	109.0	210.7	61.6	215.3	159.6	26.8	242.3	128.0	71.0
Queue Length 50th (ft)	~430	422	~497	~330	~928	346	~319	~1189	215	~134	~908	477
Queue Length 95th (ft)	#556	#535	#734	#454	#1069	#535	m#350	#1271	m253	#221	#998	#689
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	863	483	560	951	491	332	2002	802	145	1716	534
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	0.91	1.08	1.03	1.36	0.86	1.35	1.25	0.67	1.33	1.17	0.90

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
12: NW 40 Street & NW 54th Ave

2035 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	160	24	281	115	58	222	424	276	98	325	331	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	11	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1785	1583	1770	1638		1770	3539	1583	1711	3539	1583
Flt Permitted		0.45	1.00	0.63	1.00		0.49	1.00	1.00	0.56	1.00	1.00
Satd. Flow (perm)		840	1583	1178	1638		916	3539	1583	1004	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.86	0.92	0.86	0.92	0.86	0.86	0.86	0.86	0.92
Adj. Flow (vph)	174	26	305	134	63	258	461	321	114	378	385	237
RTOR Reduction (vph)	0	0	210	0	0	0	0	0	91	0	0	190
Lane Group Flow (vph)	0	200	95	134	321	0	461	321	23	378	385	47
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)		20.7	20.7	20.7	20.7		29.6	13.3	13.3	27.4	13.2	13.2
Effective Green, g (s)		20.7	20.7	20.7	20.7		29.6	13.3	13.3	27.4	13.2	13.2
Actuated g/C Ratio		0.31	0.31	0.31	0.31		0.45	0.20	0.20	0.41	0.20	0.20
Clearance Time (s)		6.0	6.0	6.0	6.0		4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		263	495	368	512		620	711	318	567	706	316
v/s Ratio Prot					0.20		c0.18	0.09		0.14	0.11	
v/s Ratio Perm		c0.24	0.06	0.11			c0.15		0.01	0.13		0.03
v/c Ratio		0.76	0.19	0.36	0.63		0.74	0.45	0.07	0.67	0.55	0.15
Uniform Delay, d1		20.5	16.6	17.6	19.4		13.7	23.2	21.4	14.6	23.8	21.9
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		12.2	0.2	0.6	2.4		4.8	0.5	0.1	3.0	0.9	0.2
Delay (s)		32.7	16.8	18.3	21.8		18.5	23.7	21.5	17.6	24.7	22.1
Level of Service		C	B	B	C		B	C	C	B	C	C
Approach Delay (s)		23.1			20.8			20.8			21.4	
Approach LOS		C			C			C			C	

Intersection Summary

HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	66.2	Sum of lost time (s)	10.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A
Date Performed: 04/23/2012
Analysis Time Period: PM Peak Hour
Intersection: #13 N. Access & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 Backg PM Peak - Alt. B
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: N. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		518			614	172
Peak-Hour Factor, PHF		0.92			0.92	0.92
Hourly Flow Rate, HFR		563			667	186
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						258
Peak Hour Factor, PHF						0.92
Hourly Flow Rate, HFR						280
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes						1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								280
C(m) (vph)								706
v/c								0.40
95% queue length								1.90
Control Delay								13.4
LOS								B
Approach Delay							13.4	
Approach LOS							B	

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2035 Background PM Peak - Alternative B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	427	173	26	73	283	276	204	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	464	188	28	79	308	300	222	71	211	0
Approach Volume (veh/h)		777			296			829			282	
Crossing Volume (veh/h)		470			608			384			524	
High Capacity (veh/h)		956			856			1024			916	
High v/c (veh/h)		0.81			0.35			0.81			0.31	
Low Capacity (veh/h)		775			686			835			739	
Low v/c (veh/h)		1.00			0.43			0.99			0.38	

Intersection Summary			
Maximum v/c High	0.81		
Maximum v/c Low	1.00		
Intersection Capacity Utilization	74.3%	ICU Level of Service	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	134	110	219	73	79	73	0	184	113	86	219	165
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	146	120	238	79	86	79	0	200	123	93	238	179
Approach Volume (veh/h)		503			245			323			511	
Crossing Volume (veh/h)		411			346			359			165	
High Capacity (veh/h)		1002			1055			1045			1217	
High v/c (veh/h)		0.50			0.23			0.31			0.42	
Low Capacity (veh/h)		816			863			854			1009	
Low v/c (veh/h)		0.62			0.28			0.38			0.51	

Intersection Summary			
Maximum v/c High	0.50		
Maximum v/c Low	0.62		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1313	130	321	1788	173	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3491		1770	3539	1770	1583
Flt Permitted	1.00		0.09	1.00	0.95	1.00
Satd. Flow (perm)	3491		171	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1492	148	365	2032	197	258
RTOR Reduction (vph)	0	0	0	0	0	221
Lane Group Flow (vph)	1640	0	365	2032	197	37
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	39.0		56.0	56.0	11.4	11.4
Effective Green, g (s)	39.0		56.0	56.0	11.4	11.4
Actuated g/C Ratio	0.49		0.71	0.71	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1715		372	2496	254	227
v/s Ratio Prot	0.47		c0.15	0.57	c0.11	
v/s Ratio Perm			c0.54			0.02
v/c Ratio	0.96		0.98	0.81	0.78	0.16
Uniform Delay, d1	19.4		24.7	8.1	32.8	29.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	13.6		41.4	3.0	13.8	0.3
Delay (s)	33.0		66.1	11.1	46.5	30.2
Level of Service	C		E	B	D	C
Approach Delay (s)	33.0			19.5	37.2	
Approach LOS	C			B	D	

Intersection Summary			
HCM Average Control Delay	26.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Appendix K-8

2020 Background PM Peak Hour Intersection Analysis
Sub-Alternative C-1

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	336	1656	383	2339	261	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	350	1725	399	2436	272	193
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	350	1725	399	2436	272	193
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	20.3	99.7	22.7	102.1	16.6	16.6
Effective Green, g (s)	20.3	99.7	22.7	102.1	16.6	16.6
Actuated g/C Ratio	0.13	0.62	0.14	0.64	0.10	0.10
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	421	3156	471	3232	344	344
v/s Ratio Prot	0.11	0.34	c0.12	c0.48	c0.08	0.06
v/s Ratio Perm						
v/c Ratio	0.83	0.55	0.85	0.75	0.79	0.56
Uniform Delay, d1	68.2	17.2	67.0	20.2	70.0	68.2
Progression Factor	1.00	1.00	1.04	0.61	1.00	1.00
Incremental Delay, d2	12.6	0.7	8.5	1.1	11.0	1.2
Delay (s)	80.7	17.9	78.4	13.3	81.0	69.5
Level of Service	F	B	E	B	F	E
Approach Delay (s)		28.5		22.5		
Approach LOS		C		C		

Intersection Summary

HCM Average Control Delay	29.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/19/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 PM Peak Hour - Alt. C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1159			2060	38
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1632			2901	53
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						90
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						126
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes						1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								126
C(m) (vph)								505
v/c								0.25
95% queue length								0.98
Control Delay								14.5
LOS								B
Approach Delay							14.5	
Approach LOS							B	

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	63	334	2044	43	414	2664	362	163	139	389	396	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.69	1.00	1.00	0.49	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1236	3539	1583	874	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	66	352	2152	45	436	2804	381	172	146	409	417	104
RTOR Reduction (vph)	0	0	0	14	0	0	165	0	0	162	0	0
Lane Group Flow (vph)	0	418	2152	31	436	2804	216	172	146	247	417	104
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		17.0	77.0	77.0	22.0	82.0	82.0	28.0	18.0	18.0	43.0	27.0
Effective Green, g (s)		17.0	77.0	77.0	22.0	82.0	82.0	28.0	18.0	18.0	43.0	27.0
Actuated g/C Ratio		0.11	0.48	0.48	0.14	0.51	0.51	0.18	0.11	0.11	0.27	0.17
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		353	2438	762	456	2596	811	246	398	178	334	597
v/s Ratio Prot		c0.13	0.42		0.13	c0.55		0.04	0.04		c0.15	0.03
v/s Ratio Perm				0.02			0.14	0.08		0.16	c0.19	
v/c Ratio		1.18	0.88	0.04	0.96	1.08	0.27	0.70	0.37	1.39	1.25	0.17
Uniform Delay, d1		71.5	37.4	22.0	68.5	39.0	22.0	60.8	65.7	71.0	56.2	57.0
Progression Factor		1.04	0.84	0.92	1.26	0.46	0.25	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		107.1	4.9	0.1	5.5	36.9	0.1	6.8	0.2	206.3	134.4	0.1
Delay (s)		181.5	36.3	20.2	91.9	54.9	5.6	67.7	65.9	277.3	190.5	57.0
Level of Service		F	D	C	F	D	A	E	E	F	F	E
Approach Delay (s)			59.2			54.2			185.3			131.4
Approach LOS			E			D			F			F

Intersection Summary

HCM Average Control Delay	76.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	109.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	252
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	265
RTOR Reduction (vph)	86
Lane Group Flow (vph)	179
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	27.0
Effective Green, g (s)	27.0
Actuated g/C Ratio	0.17
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	267
v/s Ratio Prot	
v/s Ratio Perm	0.11
v/c Ratio	0.67
Uniform Delay, d1	62.3
Progression Factor	1.00
Incremental Delay, d2	5.1
Delay (s)	67.5
Level of Service	E
Approach Delay (s)	
Approach LOS	

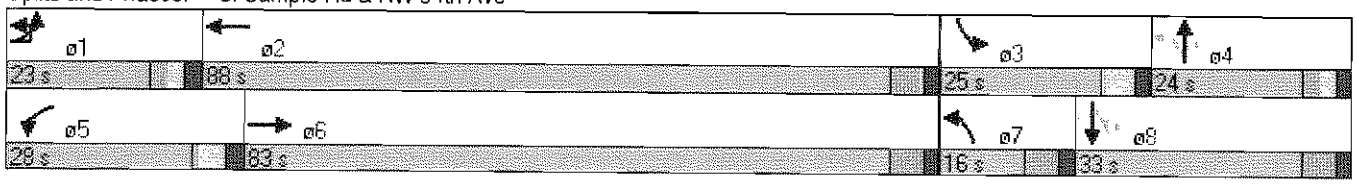
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	334	2044	43	414	2664	362	163	139	389	396	99	252
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	23.0	83.0	83.0	28.0	88.0	88.0	16.0	24.0	24.0	25.0	33.0	33.0
Total Split (%)	14.4%	51.9%	51.9%	17.5%	55.0%	55.0%	10.0%	15.0%	15.0%	15.6%	20.6%	20.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	17.0	77.0	77.0	22.0	82.0	82.0	28.0	18.0	18.0	43.0	27.0	27.0
Actuated g/C Ratio	0.11	0.48	0.48	0.14	0.51	0.51	0.18	0.11	0.11	0.27	0.17	0.17
v/c Ratio	1.18	0.88	0.06	0.96	1.08	0.39	0.70	0.37	1.20	1.25	0.17	0.75
Control Delay	167.5	36.6	10.3	90.1	56.6	0.9	68.4	68.6	146.9	178.9	57.9	52.4
Queue Delay	0.0	0.3	0.0	0.0	53.3	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Total Delay	167.5	37.0	10.3	90.1	109.9	0.9	68.4	68.6	148.4	178.9	57.9	52.4
LOS	F	D	B	F	F	A	E	E	F	F	E	D
Approach Delay		57.4			96.1			113.4			120.2	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 18 (11%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.25
Intersection Signal Delay: 87.1 Intersection LOS: F
Intersection Capacity Utilization 109.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	418	2152	45	436	2804	381	172	146	409	417	104	265
v/c Ratio	1.18	0.88	0.06	0.96	1.08	0.39	0.70	0.37	1.20	1.25	0.17	0.75
Control Delay	167.5	36.6	10.3	90.1	56.6	0.9	68.4	68.6	146.9	178.9	57.9	52.4
Queue Delay	0.0	0.3	0.0	0.0	53.3	0.0	0.0	0.0	1.5	0.0	0.0	0.0
Total Delay	167.5	37.0	10.3	90.1	109.9	0.9	68.4	68.6	148.4	178.9	57.9	52.4
Queue Length 50th (ft)	~274	752	4	229	~1184	18	148	75	~341	~542	50	166
Queue Length 95th (ft)	#385	547	m31	m200	m698	m12	#224	114	#563	#761	81	#279
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	353	2438	776	456	2596	977	246	398	340	334	597	353
Starvation Cap Reductn	0	0	0	0	262	0	0	0	0	0	0	0
Spillback Cap Reductn	0	48	0	0	0	0	0	0	1	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.90	0.06	0.96	1.20	0.39	0.70	0.37	1.21	1.25	0.17	0.75

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	108	2285	123	7	214	3327	213	8	66	226	243	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5019		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.69	1.00	1.00	0.58	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5019		1293	3539	1583	1078	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	116	2457	132	8	230	3577	229	9	71	243	261	92
RTOR Reduction (vph)	0	0	61	0	0	0	0	0	0	163	0	0
Lane Group Flow (vph)	116	2457	71	0	238	3806	0	9	71	80	261	92
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	8.0	85.7	85.7		24.7	102.4		21.2	19.6	19.6	30.0	24.0
Effective Green, g (s)	8.0	85.7	85.7		24.7	102.4		21.2	19.6	19.6	30.0	24.0
Actuated g/C Ratio	0.05	0.54	0.54		0.15	0.64		0.13	0.12	0.12	0.19	0.15
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	2713	848		264	3212		176	434	194	228	531
v/s Ratio Prot	c0.07	0.49			0.14	c0.76		0.00	0.02		c0.04	0.03
v/s Ratio Perm			0.04					0.01		0.05	c0.17	
v/c Ratio	1.35	0.91	0.08		0.90	1.18		0.05	0.16	0.41	1.14	0.17
Uniform Delay, d1	76.0	33.5	18.1		66.5	28.8		60.5	62.9	64.9	65.2	59.3
Progression Factor	0.94	0.55	0.67		0.93	1.04		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	176.3	1.6	0.1		4.3	83.5		0.1	0.8	6.3	104.2	0.7
Delay (s)	247.9	19.9	12.1		66.1	113.4		60.6	63.7	71.2	169.4	60.1
Level of Service	F	B	B		E	F		E	E	E	F	E
Approach Delay (s)		29.3				110.6			69.2			114.8
Approach LOS		C				F			E			F

Intersection Summary

HCM Average Control Delay	80.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	110.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	178
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	191
RTOR Reduction (vph)	96
Lane Group Flow (vph)	95
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	24.0
Effective Green, g (s)	24.0
Actuated g/C Ratio	0.15
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	237
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.40
Uniform Delay, d1	61.5
Progression Factor	1.00
Incremental Delay, d2	5.0
Delay (s)	66.5
Level of Service	E
Approach Delay (s)	
Approach LOS	

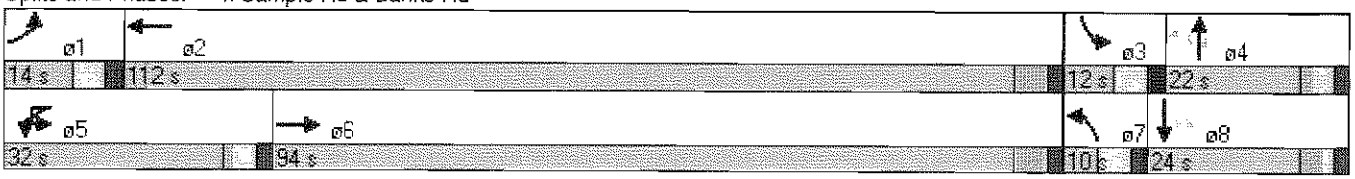
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	108	2285	123	214	3327	8	66	226	243	86	178
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	14.0	94.0	94.0	32.0	112.0	10.0	22.0	22.0	12.0	24.0	24.0
Total Split (%)	8.8%	58.8%	58.8%	20.0%	70.0%	6.3%	13.8%	13.8%	7.5%	15.0%	15.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	8.0	89.3	89.3	24.7	106.0	20.0	16.0	16.0	26.4	24.0	24.0
Actuated g/C Ratio	0.05	0.56	0.56	0.15	0.66	0.12	0.10	0.10	0.16	0.15	0.15
v/c Ratio	1.35	0.87	0.14	0.90	1.14	0.05	0.20	0.75	1.28	0.17	0.57
Control Delay	226.6	18.0	1.8	66.3	93.4	55.8	67.7	32.9	208.3	62.0	34.3
Queue Delay	0.0	1.0	0.0	0.0	99.6	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	226.6	19.0	1.8	66.3	193.0	55.8	67.7	32.9	208.3	62.0	34.6
LOS	F	B	A	E	F	E	E	C	F	E	C
Approach Delay		27.1			185.5		41.2			122.5	
Approach LOS		C			F		D			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 15 (9%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 118.6 Intersection LOS: F
Intersection Capacity Utilization 110.1% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	116	2457	132	238	3806	9	71	243	261	92	191
v/c Ratio	1.35	0.87	0.14	0.90	1.14	0.05	0.20	0.75	1.28	0.17	0.57
Control Delay	226.6	18.0	1.8	66.3	93.4	55.8	67.7	32.9	208.3	62.0	34.3
Queue Delay	0.0	1.0	0.0	0.0	99.6	0.0	0.0	0.0	0.0	0.0	0.3
Total Delay	226.6	19.0	1.8	66.3	193.0	55.8	67.7	32.9	208.3	62.0	34.6
Queue Length 50th (ft)	~160	301	0	257	~1680	8	36	57	~326	43	72
Queue Length 95th (ft)	m#171	m368	m5	m206	m591	26	64	#168	#551	77	172
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	86	2826	941	278	3325	174	354	326	204	531	333
Starvation Cap Reductn	0	162	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	541	0	0	0	0	0	12
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.35	0.92	0.14	0.86	1.37	0.05	0.20	0.75	1.28	0.17	0.60

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
5: Sample Rd & Lyons Rd

2020 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	383	1763	616	12	183	2432	559	662	1375	156	11	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	416	1916	670	13	199	2643	608	720	1495	170	12	502
RTOR Reduction (vph)	0	0	176	0	0	0	136	0	0	81	0	0
Lane Group Flow (vph)	416	1916	494	0	212	2643	472	720	1495	89	0	514
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	15.5	68.2	68.2		11.3	64.0	64.0	25.5	37.5	37.5		18.5
Effective Green, g (s)	15.5	68.2	68.2		11.3	64.0	64.0	25.5	37.5	37.5		18.5
Actuated g/C Ratio	0.10	0.43	0.43		0.07	0.40	0.40	0.16	0.23	0.23		0.12
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	322	2159	675		234	2026	633	529	1192	371		384
v/s Ratio Prot	c0.13	c0.38			0.06	c0.52		c0.22	c0.29			0.15
v/s Ratio Perm			0.31				0.30			0.06		
v/c Ratio	1.29	0.89	0.73		0.91	1.30	0.75	1.36	1.25	0.24		1.34
Uniform Delay, d1	72.2	42.4	38.3		73.8	48.0	41.1	67.2	61.2	49.7		70.8
Progression Factor	0.86	1.29	1.65		1.00	1.00	1.00	1.00	1.00	1.00		0.98
Incremental Delay, d2	141.5	2.8	3.1		33.8	140.7	7.8	174.4	121.4	0.2		163.8
Delay (s)	203.4	57.5	66.1		107.6	188.7	48.9	241.7	182.7	49.9		233.1
Level of Service	F	E	E		F	F	D	F	F	D		F
Approach Delay (s)		79.6				159.2			191.0			
Approach LOS		E				F			F			

Intersection Summary

HCM Average Control Delay	155.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	121.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1230	485
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1337	527
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1337	527
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	30.5	46.0
Effective Green, g (s)	30.5	46.0
Actuated g/C Ratio	0.19	0.29
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	969	455
v/s Ratio Prot	c0.26	0.11
v/s Ratio Perm		0.22
v/c Ratio	1.38	1.16
Uniform Delay, d1	64.8	57.0
Progression Factor	0.77	1.05
Incremental Delay, d2	175.3	87.0
Delay (s)	225.1	146.6
Level of Service	F	F
Approach Delay (s)	209.4	
Approach LOS	F	

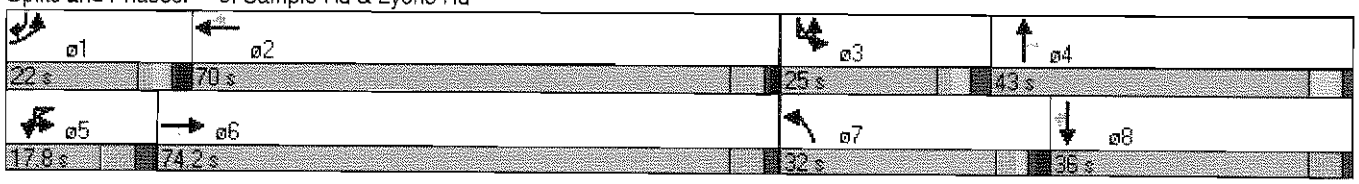
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	383	1763	616	183	2432	559	662	1375	156	462	1230	485
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	22.0	74.2	74.2	17.8	70.0	70.0	32.0	43.0	43.0	25.0	36.0	22.0
Total Split (%)	13.8%	46.4%	46.4%	11.1%	43.8%	43.8%	20.0%	26.9%	26.9%	15.6%	22.5%	13.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	15.5	68.2	68.2	11.3	64.0	64.0	25.5	37.5	37.5	18.5	30.5	51.5
Actuated g/C Ratio	0.10	0.43	0.43	0.07	0.40	0.40	0.16	0.23	0.23	0.12	0.19	0.32
v/c Ratio	1.29	0.89	0.79	0.91	1.30	0.79	1.36	1.25	0.38	1.34	1.38	1.03
Control Delay	189.0	57.8	37.8	111.3	179.7	34.3	222.4	170.0	22.3	213.8	213.4	95.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	189.0	57.8	37.8	111.3	179.7	34.3	222.4	170.0	22.3	213.8	213.4	95.4
LOS	F	E	D	F	F	C	F	F	C	F	F	F
Approach Delay		71.5			150.0			175.3			187.3	
Approach LOS		E			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 151 (94%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.38
Intersection Signal Delay: 142.3 Intersection LOS: F
Intersection Capacity Utilization 121.0% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	416	1916	670	212	2643	608	720	1495	170	514	1337	527
v/c Ratio	1.29	0.89	0.79	0.91	1.30	0.79	1.36	1.25	0.38	1.34	1.38	1.03
Control Delay	189.0	57.8	37.8	111.3	179.7	34.3	222.4	170.0	22.3	213.8	213.4	95.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	189.0	57.8	37.8	111.3	179.7	34.3	222.4	170.0	22.3	213.8	213.4	95.4
Queue Length 50th (ft)	~287	580	394	115	~1294	373	~508	~713	54	~355	~689	~603
Queue Length 95th (ft)	m#346	m626	m499	#196	#1371	549	#638	#810	128	#477	#783	#840
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	322	2159	851	234	2026	769	529	1192	452	384	969	510
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.29	0.89	0.79	0.91	1.30	0.79	1.36	1.25	0.38	1.34	1.38	1.03

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/19/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 PM Peak Hour - Alt. C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1064	101			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1313	124			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			194			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			239			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					239			
C(m) (vph)					427			
v/c					0.56			
95% queue length					3.34			
Control Delay					23.6			
LOS					C			
Approach Delay				23.6				
Approach LOS				C				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2020 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	231	48	32	130	66	513	51	161	1926	433	43	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1734		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1734		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	246	51	34	138	70	546	54	171	2049	461	46	477
RTOR Reduction (vph)	0	0	0	0	0	117	0	0	0	152	0	0
Lane Group Flow (vph)	246	85	0	138	70	429	0	225	2049	309	0	523
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	12.0	33.3		17.7	39.0	39.0		14.4	62.0	62.0		25.0
Effective Green, g (s)	12.0	33.3		17.7	39.0	39.0		14.4	62.0	62.0		25.0
Actuated g/C Ratio	0.08	0.21		0.11	0.24	0.24		0.09	0.39	0.39		0.16
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	246	361		187	854	382		296	1951	608		513
v/s Ratio Prot	c0.07	0.05		0.08	0.02			0.07	c0.41			c0.16
v/s Ratio Perm						c0.27				0.20		
v/c Ratio	1.00	0.24		0.74	0.08	1.12		0.76	1.05	0.51		1.02
Uniform Delay, d1	74.0	52.8		68.9	46.7	60.5		71.1	49.0	37.4		67.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.06	0.93	0.77		0.65
Incremental Delay, d2	57.4	0.1		14.1	0.0	83.6		9.9	35.0	3.0		17.2
Delay (s)	131.4	52.9		83.0	46.7	144.1		85.4	80.8	31.7		61.3
Level of Service	F	D		F	D	F		F	F	C		E
Approach Delay (s)		111.2			123.9				72.9			
Approach LOS		F			F				E			

Intersection Summary

HCM Average Control Delay	67.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1701	319
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	1810	339
RTOR Reduction (vph)	0	87
Lane Group Flow (vph)	1810	252
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	72.6	72.6
Effective Green, g (s)	72.6	72.6
Actuated g/C Ratio	0.45	0.45
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2285	711
v/s Ratio Prot	0.36	
v/s Ratio Perm		0.16
v/c Ratio	0.79	0.35
Uniform Delay, d1	37.3	28.4
Progression Factor	0.97	1.13
Incremental Delay, d2	0.3	0.1
Delay (s)	36.2	32.3
Level of Service	D	C
Approach Delay (s)	40.7	
Approach LOS	D	

Intersection Summary

Timings
7: Turtle Creek Dr & State Rd 7

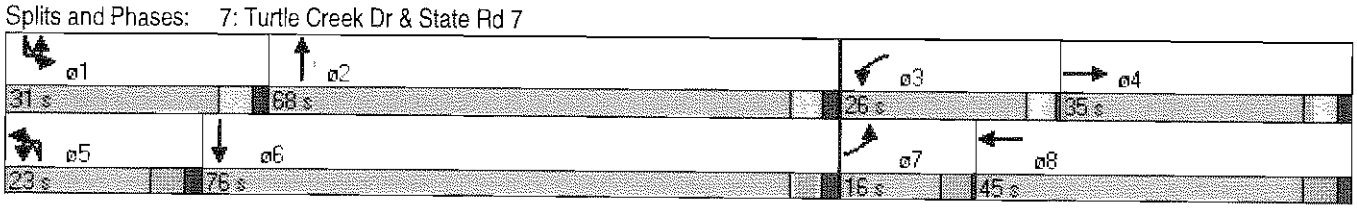
2020 PM Peak - Alternative C-1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	231	48	130	66	513	161	1926	433	448	1701	319
Turn Type	Prot		Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	6.0	4.0	6.0	6.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	8.0	12.0	8.0	12.0	12.0	11.0	13.0	13.0	11.0	13.0	13.0
Total Split (s)	16.0	35.0	26.0	45.0	45.0	23.0	68.0	68.0	31.0	76.0	76.0
Total Split (%)	10.0%	21.9%	16.3%	28.1%	28.1%	14.4%	42.5%	42.5%	19.4%	47.5%	47.5%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	2.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	12.0	33.3	17.7	39.0	39.0	14.4	62.0	62.0	25.0	72.6	72.6
Actuated g/C Ratio	0.08	0.21	0.11	0.24	0.24	0.09	0.39	0.39	0.16	0.45	0.45
v/c Ratio	1.00	0.24	0.74	0.08	1.09	0.76	1.05	0.61	1.02	0.79	0.42
Control Delay	129.4	56.3	90.9	47.1	107.4	92.2	79.0	16.8	61.4	36.8	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.4	56.3	90.9	47.1	107.4	92.2	79.0	16.8	61.4	36.8	17.4
LOS	F	E	F	D	F	F	E	B	E	D	B
Approach Delay		110.6		98.8			69.6			39.2	
Approach LOS		F		F			E			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 19 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.09
Intersection Signal Delay: 62.6 Intersection LOS: E
Intersection Capacity Utilization 107.9% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 7: Turtle Creek Dr & State Rd 7



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	246	85	138	70	546	225	2049	461	523	1810	339
v/c Ratio	1.00	0.24	0.74	0.08	1.09	0.76	1.05	0.61	1.02	0.79	0.42
Control Delay	129.4	56.3	90.9	47.1	107.4	92.2	79.0	16.8	61.4	36.8	17.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	129.4	56.3	90.9	47.1	107.4	92.2	79.0	16.8	61.4	36.8	17.4
Queue Length 50th (ft)	135	75	142	30	~513	121	~855	154	~271	673	228
Queue Length 95th (ft)	#231	133	216	53	#752	168	#946	221	m242	m614	m220
Internal Link Dist (ft)		595		1522			330			1350	
Turn Bay Length (ft)	200		235		185	320			250		170
Base Capacity (vph)	246	361	233	854	499	349	1951	760	513	2286	799
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.24	0.59	0.08	1.09	0.64	1.05	0.61	1.02	0.79	0.42

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: Wiles Rd & State Rd 7

2020 PM Peak - Alternative C-1

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	44	563	851	327	274	1100	277	55	407	1804	195	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	45	580	877	337	282	1134	286	57	420	1860	201	58
RTOR Reduction (vph)	0	0	0	0	0	0	52	0	0	0	12	0
Lane Group Flow (vph)	0	625	877	337	282	1134	234	0	477	1860	189	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		24.0	50.1	50.1	15.9	42.0	42.0		19.0	57.0	72.9	
Effective Green, g (s)		24.0	50.1	50.1	15.9	42.0	42.0		19.0	57.0	72.9	
Actuated g/C Ratio		0.15	0.31	0.31	0.10	0.26	0.26		0.12	0.36	0.46	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		498	1108	496	330	929	416		394	1812	781	
v/s Ratio Prot		c0.19	0.25		0.08	c0.32			c0.14	c0.37	0.02	
v/s Ratio Perm				0.21			0.15				0.10	
v/c Ratio		1.26	0.79	0.68	0.85	1.22	0.56		1.21	1.03	0.24	
Uniform Delay, d1		68.0	50.2	47.9	70.9	59.0	51.0		70.5	51.5	26.6	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		0.67	0.95	1.32	
Incremental Delay, d2		130.4	3.7	2.9	18.3	109.1	1.0		97.1	14.7	0.0	
Delay (s)		198.4	53.9	50.9	89.2	168.1	52.1		144.2	63.6	35.2	
Level of Service		F	D	D	F	F	D		F	E	D	
Approach Delay (s)			102.4			135.5				76.5		
Approach LOS			F			F				E		

Intersection Summary

HCM Average Control Delay	110.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	119.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	232	1837	622
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	239	1894	641
RTOR Reduction (vph)	0	0	127
Lane Group Flow (vph)	297	1894	514
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	13.0	51.0	51.0
Effective Green, g (s)	13.0	51.0	51.0
Actuated g/C Ratio	0.08	0.32	0.32
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	270	1621	505
v/s Ratio Prot	0.09	c0.37	
v/s Ratio Perm			0.32
v/c Ratio	1.10	1.17	1.02
Uniform Delay, d1	73.5	54.5	54.5
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	84.2	82.8	44.8
Delay (s)	157.7	137.3	99.3
Level of Service	F	F	F
Approach Delay (s)		130.9	
Approach LOS		F	

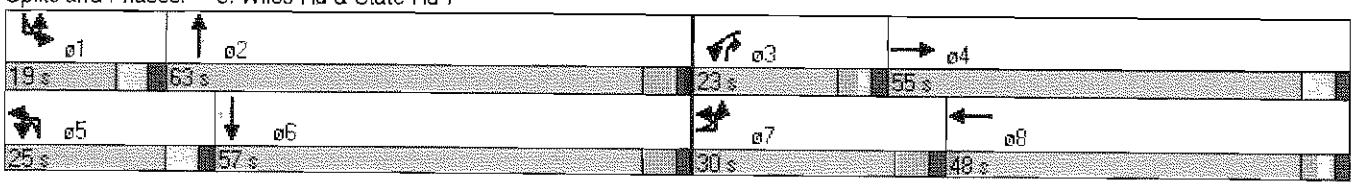
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	563	851	327	274	1100	277	407	1804	195	232	1837	622
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	55.0	55.0	23.0	48.0	48.0	25.0	63.0	23.0	19.0	57.0	57.0
Total Split (%)	18.8%	34.4%	34.4%	14.4%	30.0%	30.0%	15.6%	39.4%	14.4%	11.9%	35.6%	35.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	24.0	50.1	50.1	15.9	42.0	42.0	19.0	57.0	78.9	13.0	51.0	51.0
Actuated g/C Ratio	0.15	0.31	0.31	0.10	0.26	0.26	0.12	0.36	0.49	0.08	0.32	0.32
v/c Ratio	1.26	0.79	0.68	0.85	1.22	0.61	1.21	1.03	0.25	1.10	1.17	1.02
Control Delay	183.2	56.7	56.5	93.7	157.5	44.8	138.0	62.3	27.5	148.8	130.2	77.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.2	56.7	56.5	93.7	157.5	44.8	138.0	62.3	27.5	148.8	130.2	77.3
LOS	F	E	E	F	F	D	F	E	C	F	F	E
Approach Delay		99.6			128.0			73.7			120.2	
Approach LOS		F			F			E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 95 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay: 104.2 Intersection LOS: F
Intersection Capacity Utilization 119.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	625	877	337	282	1134	286	477	1860	201	297	1894	641
v/c Ratio	1.26	0.79	0.68	0.85	1.22	0.61	1.21	1.03	0.25	1.10	1.17	1.02
Control Delay	183.2	56.7	56.5	93.7	157.5	44.8	138.0	62.3	27.5	148.8	130.2	77.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	183.2	56.7	56.5	93.7	157.5	44.8	138.0	62.3	27.5	148.8	130.2	77.3
Queue Length 50th (ft)	~420	447	312	151	~763	201	~307	~765	159	~180	~860	~565
Queue Length 95th (ft)	#546	533	433	#218	#904	307	m#280	m694	m148	#282	#953	#815
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	498	1107	495	353	929	468	394	1812	803	270	1621	631
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.79	0.68	0.80	1.22	0.61	1.21	1.03	0.25	1.10	1.17	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	159	16	122	16	15	35	93	2689	30	8	62	2332
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.87		1.00	0.90		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3070		1770	1668		1770	5085	1583		1770	5085
Flt Permitted	0.72	1.00		0.64	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1342	3070		1201	1668		68	5085	1583		69	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	177	18	136	18	17	39	103	2988	33	9	69	2591
RTOR Reduction (vph)	0	70	0	0	33	0	0	0	6	0	0	0
Lane Group Flow (vph)	177	84	0	18	23	0	103	2988	27	0	78	2591
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	25.0	25.0		25.0	25.0		119.4	109.7	109.7		114.6	107.3
Effective Green, g (s)	25.0	25.0		25.0	25.0		119.4	109.7	109.7		114.6	107.3
Actuated g/C Ratio	0.16	0.16		0.16	0.16		0.75	0.69	0.69		0.72	0.67
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	210	480		188	261		154	3486	1085		127	3410
v/s Ratio Prot		0.03			0.01		c0.04	c0.59			0.03	0.51
v/s Ratio Perm	c0.13			0.01			0.46		0.02		0.41	
v/c Ratio	0.84	0.17		0.10	0.09		0.67	0.86	0.03		0.61	0.76
Uniform Delay, d1	65.6	58.6		57.8	57.8		41.1	19.2	8.0		35.0	17.7
Progression Factor	1.00	1.00		1.00	1.00		1.65	0.62	0.27		1.14	0.73
Incremental Delay, d2	25.2	0.2		0.2	0.1		4.0	1.1	0.0		2.5	0.5
Delay (s)	90.8	58.7		58.0	57.9		71.8	13.1	2.2		42.5	13.4
Level of Service	F	E		E	E		E	B	A		D	B
Approach Delay (s)		75.9			57.9			14.9				13.9
Approach LOS		E			E			B				B

Intersection Summary

HCM Average Control Delay	18.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	↱
Volume (vph)	97
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	108
RTOR Reduction (vph)	34
Lane Group Flow (vph)	74
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	107.3
Effective Green, g (s)	107.3
Actuated g/C Ratio	0.67
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1062
v/s Ratio Prot	
v/s Ratio Perm	0.05
v/c Ratio	0.07
Uniform Delay, d1	9.1
Progression Factor	0.77
Incremental Delay, d2	0.0
Delay (s)	7.1
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Signalized Intersection Capacity Analysis
10: Wiles Rd & Lyons Rd

2020 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	497	623	415	459	1033	335	354	2050	439	153	1636	393
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	540	677	451	499	1123	364	385	2228	477	166	1778	427
RTOR Reduction (vph)	0	0	97	0	0	56	0	0	179	0	0	0
Lane Group Flow (vph)	540	677	354	499	1123	308	385	2228	298	166	1778	427
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	22.0	40.1	40.1	24.9	43.0	43.0	16.0	65.0	65.0	6.0	55.0	55.0
Effective Green, g (s)	22.0	40.1	40.1	24.9	43.0	43.0	16.0	65.0	65.0	6.0	55.0	55.0
Actuated g/C Ratio	0.14	0.25	0.25	0.16	0.27	0.27	0.10	0.41	0.41	0.04	0.34	0.34
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	456	887	397	517	951	425	332	2066	643	124	1748	544
v/s Ratio Prot	c0.16	0.19		0.15	c0.32		c0.12	c0.44		0.05	0.35	
v/s Ratio Perm			0.22			0.19			0.19			0.27
v/c Ratio	1.18	0.76	0.89	0.97	1.18	0.72	1.16	1.08	0.46	1.34	1.02	0.78
Uniform Delay, d1	69.0	55.6	57.9	67.1	58.5	53.1	72.0	47.5	34.8	77.0	52.5	47.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.29	0.73	0.64	1.00	1.00	1.00
Incremental Delay, d2	103.3	3.5	21.0	30.4	92.3	5.1	88.3	40.6	1.2	196.8	25.9	10.9
Delay (s)	172.3	59.1	78.9	97.6	150.8	58.2	181.5	75.5	23.3	273.8	78.4	58.0
Level of Service	F	E	E	F	F	E	F	E	C	F	E	E
Approach Delay (s)		101.1			120.4			80.7			88.4	
Approach LOS		F			F			F			F	

Intersection Summary

HCM Average Control Delay	95.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		

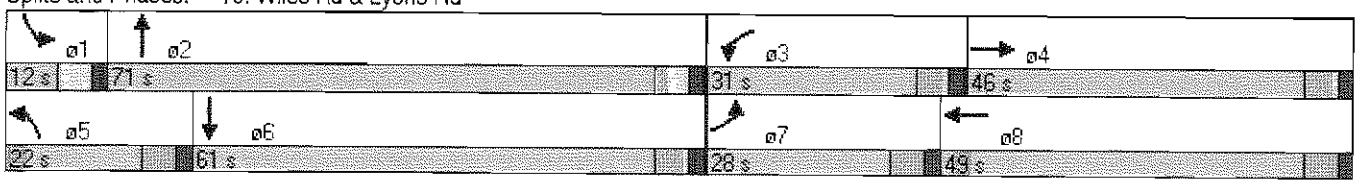
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	497	623	415	459	1033	335	354	2050	439	153	1636	393
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	28.0	46.0	46.0	31.0	49.0	49.0	22.0	71.0	71.0	12.0	61.0	61.0
Total Split (%)	17.5%	28.8%	28.8%	19.4%	30.6%	30.6%	13.8%	44.4%	44.4%	7.5%	38.1%	38.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	22.0	40.1	40.1	24.9	43.0	43.0	16.0	65.0	65.0	6.0	55.0	55.0
Actuated g/C Ratio	0.14	0.25	0.25	0.16	0.27	0.27	0.10	0.41	0.41	0.04	0.34	0.34
v/c Ratio	1.18	0.76	0.91	0.97	1.18	0.76	1.16	1.08	0.58	1.34	1.02	0.78
Control Delay	160.0	62.1	65.1	98.1	141.9	53.1	163.5	74.7	9.6	250.5	77.1	58.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	160.0	62.1	65.1	98.1	141.9	53.1	163.5	74.7	9.6	250.5	77.1	58.9
LOS	F	E	E	F	F	D	F	E	A	F	E	E
Approach Delay		94.6			114.6			75.7			86.0	
Approach LOS		F			F			E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 88 (55%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.34
Intersection Signal Delay: 90.3 Intersection LOS: F
Intersection Capacity Utilization 106.7% ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	540	677	451	499	1123	364	385	2228	477	166	1778	427
v/c Ratio	1.18	0.76	0.91	0.97	1.18	0.76	1.16	1.08	0.58	1.34	1.02	0.78
Control Delay	160.0	62.1	65.1	98.1	141.9	53.1	163.5	74.7	9.6	250.5	77.1	58.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	160.0	62.1	65.1	98.1	141.9	53.1	163.5	74.7	9.6	250.5	77.1	58.9
Queue Length 50th (ft)	~348	348	349	271	~738	283	~242	~937	54	~115	~717	402
Queue Length 95th (ft)	#470	425	#563	#387	#878	414	m#318	#1027	m132	#198	#811	546
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	456	887	494	519	951	482	332	2066	822	124	1748	544
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.18	0.76	0.91	0.96	1.18	0.76	1.16	1.08	0.58	1.34	1.02	0.78

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst:	MEAY
Agency/Co.:	Keith and Schnars, P.A.
Date Performed:	04/19/2012
Analysis Time Period:	PM Peak Hour
Intersection:	#11 S. Access & NW 54th Ave
Jurisdiction:	Broward County
Units: U. S. Customary	
Analysis Year:	2020 PM Peak Hour - Alt. C-1
Project ID: Seminole	Fee-to-Trust Development Project
East/West Street:	S. Casino Access
North/South Street:	NW 54th Ave
Intersection Orientation: NS	Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	114	697			559	76
Peak-Hour Factor, PHF	0.95	0.95			0.95	0.95
Hourly Flow Rate, HFR	120	733			588	80
Percent Heavy Vehicles	5	--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes	1	2			2	1
Configuration	L	T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume				18		113
Peak Hour Factor, PHF				0.95		0.95
Hourly Flow Rate, HFR				18		118
Percent Heavy Vehicles				5		5
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		No /
Lanes				0		0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L						LR	
v (vph)	120						136	
C(m) (vph)	1006						779	
v/c	0.12						0.17	
95% queue length	0.40						0.63	
Control Delay	9.1						10.6	
LOS	A						B	
Approach Delay							10.6	
Approach LOS							B	

HCM Signalized Intersection Capacity Analysis
12: NW 40 Street & NW 54th Ave

2020 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	24	114	114	37	221	252	271	97	302	332	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	11	12	12	11	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85	1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1793	1583	1770	1623		1711	3539	1583	1711	3539	1583
Flt Permitted		0.49	1.00	0.68	1.00		0.52	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)		914	1583	1258	1623		943	3539	1583	926	3539	1583
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	99	28	133	133	43	257	293	315	113	351	386	27
RTOR Reduction (vph)	0	0	100	0	193	0	0	0	90	0	0	21
Lane Group Flow (vph)	0	127	33	133	107	0	293	315	23	351	386	6
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)		13.8	13.8	13.8	13.8		22.9	11.1	11.1	24.9	12.1	12.1
Effective Green, g (s)		13.8	13.8	13.8	13.8		22.9	11.1	11.1	24.9	12.1	12.1
Actuated g/C Ratio		0.25	0.25	0.25	0.25		0.41	0.20	0.20	0.45	0.22	0.22
Clearance Time (s)		6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		226	392	312	402		550	705	315	594	769	344
v/s Ratio Prot					0.07		0.11	0.09		c0.14	0.11	
v/s Ratio Perm		c0.14	0.02	0.11			0.11		0.01	c0.13		0.00
v/c Ratio		0.56	0.08	0.43	0.27		0.53	0.45	0.07	0.59	0.50	0.02
Uniform Delay, d1		18.3	16.1	17.6	16.9		11.7	19.6	18.1	10.7	19.2	17.1
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.2	0.1	0.9	0.4		1.0	0.5	0.1	1.6	0.5	0.0
Delay (s)		21.5	16.2	18.6	17.2		12.6	20.1	18.2	12.3	19.7	17.1
Level of Service		C	B	B	B		B	C	B	B	B	B
Approach Delay (s)		18.8			17.6			16.8			16.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	55.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/19/2012
Analysis Time Period: PM Peak Hour
Intersection: #13 N. Access & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 PM Peak Hour - Alt. C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: N. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		492			396	151
Peak-Hour Factor, PHF		0.92			0.92	0.92
Hourly Flow Rate, HFR		534			430	164
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						
Lanes		2			2	0
Configuration		T			T	TR
Upstream Signal?		Yes			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						166
Peak Hour Factor, PHF						0.92
Hourly Flow Rate, HFR						180
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								180
C(m) (vph)								741
v/c								0.24
95% queue length								0.95
Control Delay								11.4
LOS								B
Approach Delay							11.4	
Approach LOS							B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	327	132	26	73	235	276	161	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	355	143	28	79	255	300	175	71	211	0
Approach Volume (veh/h)		668			251			730			282	
Crossing Volume (veh/h)		425			555			384			427	
High Capacity (veh/h)		991			893			1024			989	
High v/c (veh/h)		0.67			0.28			0.71			0.28	
Low Capacity (veh/h)		806			719			835			804	
Low v/c (veh/h)		0.83			0.35			0.87			0.35	

Intersection Summary			
Maximum v/c High	0.71		
Maximum v/c Low	0.87		
Intersection Capacity Utilization	66.0%	ICU Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	112	88	219	73	59	73	0	184	113	86	219	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	122	96	238	79	64	79	0	200	123	93	238	158
Approach Volume (veh/h)		455			223			323			489	
Crossing Volume (veh/h)		411			322			311			143	
High Capacity (veh/h)		1002			1076			1085			1238	
High v/c (veh/h)		0.45			0.21			0.30			0.40	
Low Capacity (veh/h)		816			881			890			1028	
Low v/c (veh/h)		0.56			0.25			0.36			0.48	

Intersection Summary			
Maximum v/c High	0.45		
Maximum v/c Low	0.56		
Intersection Capacity Utilization	54.1%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1133	129	300	1543	172	204
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.98		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3485		1770	3539	1770	1583
Flt Permitted	1.00		0.09	1.00	0.95	1.00
Satd. Flow (perm)	3485		174	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1288	147	341	1753	195	232
RTOR Reduction (vph)	0	0	0	0	0	199
Lane Group Flow (vph)	1435	0	341	1753	195	33
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	38.3		56.1	56.1	11.4	11.4
Effective Green, g (s)	38.3		56.1	56.1	11.4	11.4
Actuated g/C Ratio	0.48		0.71	0.71	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1679		390	2497	254	227
v/s Ratio Prot	0.41		c0.15	0.50	c0.11	
v/s Ratio Perm			c0.47			0.02
v/c Ratio	0.85		0.87	0.70	0.77	0.15
Uniform Delay, d1	18.1		22.1	6.8	32.8	29.8
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	5.8		19.0	1.7	13.0	0.3
Delay (s)	23.9		41.1	8.5	45.8	30.1
Level of Service	C		D	A	D	C
Approach Delay (s)	23.9			13.8	37.3	
Approach LOS	C			B	D	

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	79.5	Sum of lost time (s)	10.5
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Appendix K-9

2035 Background PM Peak Hour Intersection Analysis
Sub-Alternative C-1

Movement	EBL	EBT	WBL	WBT	SEL	NWL
Lane Configurations						
Volume (vph)	370	1856	416	2636	299	210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	11	12	11	12	11	11
Total Lost time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Lane Util. Factor	0.97	0.91	0.97	0.91	0.97	0.97
Frt	1.00	1.00	1.00	1.00	1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (prot)	3319	5065	3319	5065	3319	3319
Flt Permitted	0.95	1.00	0.95	1.00	0.95	0.95
Satd. Flow (perm)	3319	5065	3319	5065	3319	3319
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	385	1933	433	2746	311	219
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	385	1933	433	2746	311	219
Bus Blockages (#/hr)	0	3	0	3	0	0
Turn Type	Prot		Prot		Prot	Prot
Protected Phases	1	6	5	2	8	4
Permitted Phases						
Actuated Green, G (s)	21.2	97.0	24.4	100.2	17.6	17.6
Effective Green, g (s)	21.2	97.0	24.4	100.2	17.6	17.6
Actuated g/C Ratio	0.13	0.61	0.15	0.63	0.11	0.11
Clearance Time (s)	6.0	8.0	6.0	8.0	7.0	7.0
Vehicle Extension (s)	1.5	3.0	1.5	3.0	1.5	1.5
Lane Grp Cap (vph)	440	3071	506	3172	365	365
v/s Ratio Prot	0.12	0.38	c0.13	c0.54	c0.09	0.07
v/s Ratio Perm						
v/c Ratio	0.88	0.63	0.86	0.87	0.85	0.60
Uniform Delay, d1	68.1	20.1	66.1	24.4	69.9	67.8
Progression Factor	1.00	1.00	1.08	0.48	1.00	1.00
Incremental Delay, d2	16.9	1.0	7.0	1.8	16.6	1.9
Delay (s)	85.0	21.0	78.1	13.6	86.5	69.7
Level of Service	F	C	E	B	F	E
Approach Delay (s)		31.7		22.4		
Approach LOS		C		C		

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #2 Sample Rd & SW Service Rd
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 PM Peak Hour - Alt.C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: Sample Rd
North/South Street: SW Service Rd
Intersection Orientation: EW Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Eastbound			Westbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1297			2321	40
Peak-Hour Factor, PHF		0.71			0.71	0.71
Hourly Flow Rate, HFR		1826			3269	56
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes		2			2	1
Configuration		T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						97
Peak Hour Factor, PHF						0.71
Hourly Flow Rate, HFR						136
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes						1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	EB	WB	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								136
C(m) (vph)								492
v/c								0.28
95% queue length								1.12
Control Delay								15.1
LOS								C
Approach Delay							15.1	
Approach LOS							C	

HCM Signalized Intersection Capacity Analysis
3: Sample Rd & NW 54th Ave

2035 PM Peak - Alternative C-1

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	74	340	2326	50	473	3025	375	189	151	447	405	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	8	11	12	12	11	12	12	11	12	12	11	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)		3319	5065	1583	3319	5065	1583	1711	3539	1583	1711	3539
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00	0.68	1.00	1.00	0.50	1.00
Satd. Flow (perm)		3319	5065	1583	3319	5065	1583	1227	3539	1583	899	3539
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	78	358	2448	53	498	3184	395	199	159	471	426	112
RTOR Reduction (vph)	0	0	0	15	0	0	151	0	0	151	0	0
Lane Group Flow (vph)	0	436	2448	38	498	3184	244	199	159	320	426	112
Bus Blockages (#/hr)	0	0	3	0	0	3	0	0	0	0	0	0
Turn Type	Prot	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	1	6		5	2		7	4		3	8
Permitted Phases				6			2	4		4	8	
Actuated Green, G (s)		16.0	77.0	77.0	22.0	83.0	83.0	32.0	20.0	20.0	42.0	25.0
Effective Green, g (s)		16.0	77.0	77.0	22.0	83.0	83.0	32.0	20.0	20.0	42.0	25.0
Actuated g/C Ratio		0.10	0.48	0.48	0.14	0.52	0.52	0.20	0.12	0.12	0.26	0.16
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		2.0	3.0	3.0	2.0	3.0	3.0	1.5	2.0	2.0	1.5	2.0
Lane Grp Cap (vph)		332	2438	762	456	2627	821	282	442	198	322	553
v/s Ratio Prot		0.13	0.48		c0.15	c0.63		0.05	0.04		c0.14	0.03
v/s Ratio Perm				0.02			0.15	0.09		c0.20	0.21	
v/c Ratio		1.31	1.00	0.05	1.09	1.21	0.30	0.71	0.36	1.61	1.32	0.20
Uniform Delay, d1		72.0	41.5	22.1	69.0	38.5	21.9	58.2	64.1	70.0	56.9	58.8
Progression Factor		1.00	0.81	0.89	1.35	0.65	0.56	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		159.7	18.6	0.1	45.3	95.8	0.1	6.4	0.2	298.5	165.5	0.1
Delay (s)		231.8	52.2	19.7	138.6	120.7	12.3	64.6	64.3	368.5	222.4	58.9
Level of Service		F	D	B	F	F	B	E	E	F	F	E
Approach Delay (s)			78.3			112.4			237.2			151.8
Approach LOS			E			F			F			F

Intersection Summary

HCM Average Control Delay	116.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	117.7%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	252
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.95
Adj. Flow (vph)	265
RTOR Reduction (vph)	73
Lane Group Flow (vph)	192
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	25.0
Effective Green, g (s)	25.0
Actuated g/C Ratio	0.16
Clearance Time (s)	6.0
Vehicle Extension (s)	2.0
Lane Grp Cap (vph)	247
v/s Ratio Prot	
v/s Ratio Perm	0.12
v/c Ratio	0.78
Uniform Delay, d1	64.8
Progression Factor	1.00
Incremental Delay, d2	13.0
Delay (s)	77.8
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

Timings
3: Sample Rd & NW 54th Ave

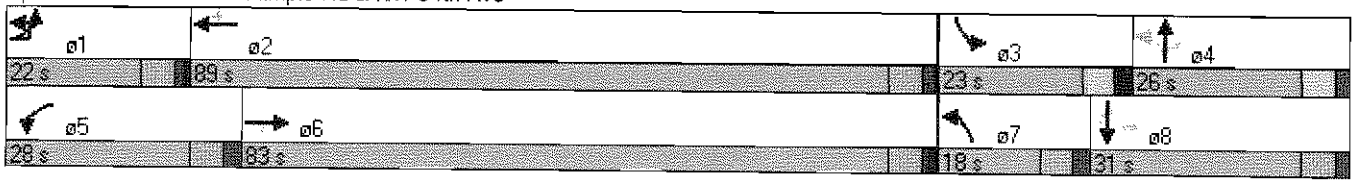
2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	2326	50	473	3025	375	189	151	447	405	106	252
Turn Type	Prot		Perm	Prot		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2	4		4	8		8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	12.0	12.0	5.0	12.0	12.0	4.0	6.0	6.0	4.0	6.0	6.0
Minimum Split (s)	11.0	18.0	18.0	11.0	18.0	18.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Split (s)	22.0	83.0	83.0	28.0	89.0	89.0	18.0	26.0	26.0	23.0	31.0	31.0
Total Split (%)	13.8%	51.9%	51.9%	17.5%	55.6%	55.6%	11.3%	16.3%	16.3%	14.4%	19.4%	19.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?							Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	16.0	77.0	77.0	22.0	83.0	83.0	32.0	20.0	20.0	42.0	25.0	25.0
Actuated g/C Ratio	0.10	0.48	0.48	0.14	0.52	0.52	0.20	0.12	0.12	0.26	0.16	0.16
v/c Ratio	1.31	1.00	0.07	1.09	1.21	0.41	0.71	0.36	1.35	1.32	0.20	0.83
Control Delay	212.2	52.2	10.9	126.4	121.4	2.7	66.5	66.7	206.0	207.9	59.9	64.6
Queue Delay	0.0	42.1	0.0	0.0	59.9	0.0	0.0	0.0	14.0	0.0	0.0	0.0
Total Delay	212.2	94.3	10.9	126.4	181.3	2.7	66.5	66.7	220.1	207.9	59.9	64.6
LOS	F	F	B	F	F	A	E	E	F	F	E	E
Approach Delay		110.3			157.3			153.8			139.9	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 151 (94%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 139.4 Intersection LOS: F
Intersection Capacity Utilization 117.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 3: Sample Rd & NW 54th Ave



Queues
3: Sample Rd & NW 54th Ave

2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	436	2448	53	498	3184	395	199	159	471	426	112	265
v/c Ratio	1.31	1.00	0.07	1.09	1.21	0.41	0.71	0.36	1.35	1.32	0.20	0.83
Control Delay	212.2	52.2	10.9	126.4	121.4	2.7	66.5	66.7	206.0	207.9	59.9	64.6
Queue Delay	0.0	42.1	0.0	0.0	59.9	0.0	0.0	0.0	14.0	0.0	0.0	0.0
Total Delay	212.2	94.3	10.9	126.4	181.3	2.7	66.5	66.7	220.1	207.9	59.9	64.6
Queue Length 50th (ft)	~303	~921	6	~308	~1476	40	174	81	~478	~420	54	187
Queue Length 95th (ft)	#419	#1042	m31	m226	m696	m20	256	121	#708	#640	87	#337
Internal Link Dist (ft)		460			636			624			999	
Turn Bay Length (ft)	220			305		470	155		170	195		185
Base Capacity (vph)	332	2438	776	456	2627	972	282	442	349	322	553	321
Starvation Cap Reductn	0	0	0	0	261	0	0	0	0	0	0	0
Spillback Cap Reductn	0	238	0	0	0	0	0	0	8	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.31	1.11	0.07	1.09	1.35	0.41	0.71	0.36	1.38	1.32	0.20	0.83

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
4: Sample Rd & Banks Rd

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Volume (vph)	109	2563	142	8	249	3771	214	8	66	263	243	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	12	12	12	12	12
Total Lost time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91		1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	0.99		1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1711	5065	1583		1711	5024		1770	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00		0.95	1.00		0.69	1.00	1.00	0.58	1.00
Satd. Flow (perm)	1711	5065	1583		1711	5024		1293	3539	1583	1078	3539
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	117	2756	153	9	268	4055	230	9	71	283	261	92
RTOR Reduction (vph)	0	0	71	0	0	0	0	0	0	153	0	0
Lane Group Flow (vph)	117	2756	82	0	277	4285	0	9	71	130	261	92
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot			pm+pt		Perm	pm+pt	
Protected Phases	1	6		5	5	2		7	4		3	8
Permitted Phases			6					4		4	8	
Actuated Green, G (s)	8.0	85.4	85.4		25.0	102.4		21.2	19.6	19.6	30.0	24.0
Effective Green, g (s)	8.0	85.4	85.4		25.0	102.4		21.2	19.6	19.6	30.0	24.0
Actuated g/C Ratio	0.05	0.53	0.53		0.16	0.64		0.13	0.12	0.12	0.19	0.15
Clearance Time (s)	6.0	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	2703	845		267	3215		176	434	194	228	531
v/s Ratio Prot	0.07	0.54			c0.16	c0.85		0.00	0.02		c0.04	0.03
v/s Ratio Perm			0.05					0.01		0.08	c0.17	
v/c Ratio	1.36	1.02	0.10		1.04	1.33		0.05	0.16	0.67	1.14	0.17
Uniform Delay, d1	76.0	37.3	18.3		67.5	28.8		60.5	62.9	67.1	65.2	59.3
Progression Factor	0.94	0.48	0.12		0.76	1.37		1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	169.0	11.3	0.0		27.2	150.0		0.1	0.8	17.0	104.2	0.7
Delay (s)	240.5	29.2	2.2		78.4	189.4		60.6	63.7	84.1	169.4	60.1
Level of Service	F	C	A		E	F		E	E	F	F	E
Approach Delay (s)		36.0				182.6			79.6			114.7
Approach LOS		D				F			E			F

Intersection Summary

HCM Average Control Delay	121.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	179
Ideal Flow (vphpl)	1900
Lane Width	12
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	192
RTOR Reduction (vph)	96
Lane Group Flow (vph)	96
Bus Blockages (#/hr)	0
Turn Type	Perm
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	24.0
Effective Green, g (s)	24.0
Actuated g/C Ratio	0.15
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	237
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.40
Uniform Delay, d1	61.5
Progression Factor	1.00
Incremental Delay, d2	5.1
Delay (s)	66.6
Level of Service	E
Approach Delay (s)	
Approach LOS	

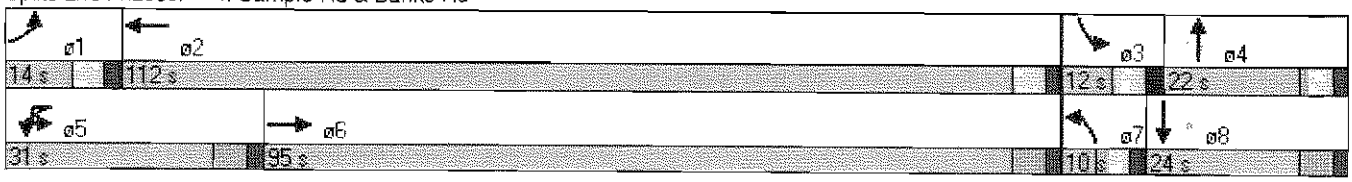
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	109	2563	142	249	3771	8	66	263	243	86	179
Turn Type	Prot		Perm	Prot		pm+pt		Perm	pm+pt		Perm
Protected Phases	1	6		5	2	7	4		3	8	
Permitted Phases			6			4		4	8		8
Detector Phase	1	6	6	5	2	7	4	4	3	8	8
Switch Phase											
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	10.0	10.0	10.0	10.0	22.0	10.0	22.0	22.0	10.0	22.0	22.0
Total Split (s)	14.0	95.0	95.0	31.0	112.0	10.0	22.0	22.0	12.0	24.0	24.0
Total Split (%)	8.8%	59.4%	59.4%	19.4%	70.0%	6.3%	13.8%	13.8%	7.5%	15.0%	15.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Min	C-Min	Min	C-Max	None	Max	Max	None	Max	Max
Act Effct Green (s)	8.0	89.0	89.0	25.0	106.0	20.0	16.0	16.0	26.4	24.0	24.0
Actuated g/C Ratio	0.05	0.56	0.56	0.16	0.66	0.12	0.10	0.10	0.16	0.15	0.15
v/c Ratio	1.36	0.98	0.16	1.04	1.29	0.05	0.20	0.90	1.28	0.17	0.58
Control Delay	218.7	19.4	0.3	77.0	162.3	55.8	67.7	57.1	208.3	62.0	34.5
Queue Delay	0.0	26.4	0.0	0.0	90.9	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	218.7	45.9	0.3	77.0	253.2	55.8	67.7	57.1	208.3	62.0	34.8
LOS	F	D	A	E	F	E	E	E	F	E	C
Approach Delay		50.2			242.5		59.1			122.5	
Approach LOS		D			F		E			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 4 (3%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.36
Intersection Signal Delay: 158.5 Intersection LOS: F
Intersection Capacity Utilization 118.8% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 4: Sample Rd & Banks Rd



Queues
4: Sample Rd & Banks Rd

2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	2756	153	277	4285	9	71	283	261	92	192
v/c Ratio	1.36	0.98	0.16	1.04	1.29	0.05	0.20	0.90	1.28	0.17	0.58
Control Delay	218.7	19.4	0.3	77.0	162.3	55.8	67.7	57.1	208.3	62.0	34.5
Queue Delay	0.0	26.4	0.0	0.0	90.9	0.0	0.0	0.0	0.0	0.0	0.2
Total Delay	218.7	45.9	0.3	77.0	253.2	55.8	67.7	57.1	208.3	62.0	34.8
Queue Length 50th (ft)	~163	640	0	~312	~2061	8	36	118	~326	43	73
Queue Length 95th (ft)	m#143	m409	m0	m200	m802	26	64	#295	#551	77	173
Internal Link Dist (ft)		636			2633		1455			1420	
Turn Bay Length (ft)	155		500	285		200		200	200		200
Base Capacity (vph)	86	2817	948	267	3328	174	354	315	204	531	333
Starvation Cap Reductn	0	227	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	452	0	0	0	0	0	10
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.36	1.06	0.16	1.04	1.49	0.05	0.20	0.90	1.28	0.17	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
5: Sample Rd & Lyons Rd

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	427	1950	679	14	212	2739	627	738	1577	181	13	516
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	12	11	12	12	11	12	12	12	11
Total Lost time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Lane Util. Factor	0.97	0.91	1.00		0.97	0.91	1.00	0.97	0.91	1.00		0.97
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (prot)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00		0.95
Satd. Flow (perm)	3319	5065	1583		3319	5065	1583	3319	5085	1583		3319
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	464	2120	738	15	230	2977	682	802	1714	197	14	561
RTOR Reduction (vph)	0	0	175	0	0	0	135	0	0	80	0	0
Lane Group Flow (vph)	464	2120	563	0	245	2977	547	802	1714	117	0	575
Bus Blockages (#/hr)	0	3	0	0	0	3	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot	Prot		Perm	Prot		Perm	Prot	Prot
Protected Phases	1	6		5	5	2		7	4		3	3
Permitted Phases			6				2			4		
Actuated Green, G (s)	15.5	66.8	66.8		11.7	63.0	63.0	25.5	38.5	38.5		18.5
Effective Green, g (s)	15.5	66.8	66.8		11.7	63.0	63.0	25.5	38.5	38.5		18.5
Actuated g/C Ratio	0.10	0.42	0.42		0.07	0.39	0.39	0.16	0.24	0.24		0.12
Clearance Time (s)	6.5	6.0	6.0		6.5	6.0	6.0	6.5	5.5	5.5		6.5
Vehicle Extension (s)	1.5	3.0	3.0		2.0	3.0	3.0	2.0	2.5	2.5		2.0
Lane Grp Cap (vph)	322	2115	661		243	1994	623	529	1224	381		384
v/s Ratio Prot	c0.14	c0.42			0.07	c0.59		c0.24	c0.34			0.17
v/s Ratio Perm			0.36				0.35			0.07		
v/c Ratio	1.44	1.00	0.85		1.01	1.49	0.88	1.52	1.40	0.31		1.50
Uniform Delay, d1	72.2	46.6	42.1		74.2	48.5	44.9	67.2	60.8	49.8		70.8
Progression Factor	1.00	1.07	1.19		1.00	1.00	1.00	1.00	1.00	1.00		0.82
Incremental Delay, d2	202.9	10.3	3.6		59.9	224.5	16.1	241.8	185.2	0.3		231.3
Delay (s)	275.4	60.0	53.9		134.0	273.0	61.0	309.1	245.9	50.1		289.2
Level of Service	F	E	D		F	F	E	F	F	D		F
Approach Delay (s)		88.7				227.3			250.4			
Approach LOS		F				F			F			

Intersection Summary

HCM Average Control Delay	204.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	36.0
Intersection Capacity Utilization	133.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1399	559
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	5.5	6.5
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1521	608
RTOR Reduction (vph)	0	0
Lane Group Flow (vph)	1521	608
Bus Blockages (#/hr)	0	0
Turn Type		pm+ov
Protected Phases	8	1
Permitted Phases		8
Actuated Green, G (s)	31.5	47.0
Effective Green, g (s)	31.5	47.0
Actuated g/C Ratio	0.20	0.29
Clearance Time (s)	5.5	6.5
Vehicle Extension (s)	2.5	1.5
Lane Grp Cap (vph)	1001	465
v/s Ratio Prot	c0.30	0.13
v/s Ratio Perm		0.26
v/c Ratio	1.52	1.31
Uniform Delay, d1	64.2	56.5
Progression Factor	0.77	1.09
Incremental Delay, d2	236.6	146.8
Delay (s)	286.3	208.2
Level of Service	F	F
Approach Delay (s)	269.4	
Approach LOS	F	

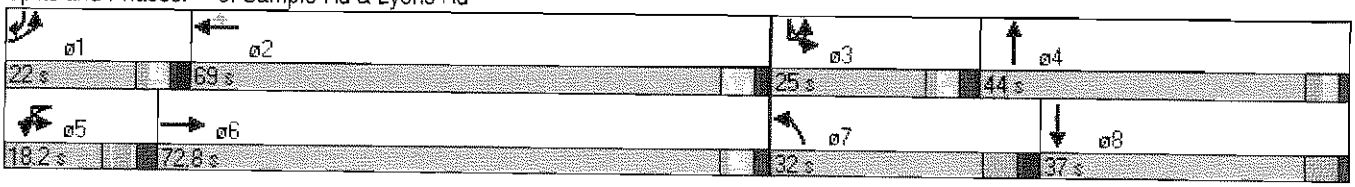
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	427	1950	679	212	2739	627	738	1577	181	516	1399	559
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	1	6		5	2		7	4		3	8	1
Permitted Phases			6			2			4			8
Detector Phase	1	6	6	5	2	2	7	4	4	3	8	1
Switch Phase												
Minimum Initial (s)	5.0	7.0	7.0	5.0	7.0	7.0	5.0	6.0	6.0	5.0	6.0	5.0
Minimum Split (s)	11.5	13.0	13.0	11.5	13.0	13.0	11.5	11.5	11.5	11.5	11.5	11.5
Total Split (s)	22.0	72.8	72.8	18.2	69.0	69.0	32.0	44.0	44.0	25.0	37.0	22.0
Total Split (%)	13.8%	45.5%	45.5%	11.4%	43.1%	43.1%	20.0%	27.5%	27.5%	15.6%	23.1%	13.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.5	2.0	2.0	2.5	2.0	2.0	2.5	1.5	1.5	2.5	1.5	2.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.5	6.0	6.0	6.5	6.0	6.0	6.5	5.5	5.5	6.5	5.5	6.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?												
Recall Mode	None	C-Min	C-Min	None	C-Min	C-Min	None	None	None	None	None	None
Act Effct Green (s)	15.5	66.8	66.8	11.7	63.0	63.0	25.5	38.5	38.5	18.5	31.5	52.5
Actuated g/C Ratio	0.10	0.42	0.42	0.07	0.39	0.39	0.16	0.24	0.24	0.12	0.20	0.33
v/c Ratio	1.44	1.00	0.88	1.01	1.49	0.90	1.52	1.40	0.43	1.50	1.52	1.17
Control Delay	250.5	59.2	33.6	131.4	259.6	46.1	284.6	228.4	26.2	270.4	271.6	138.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	250.5	59.2	33.6	131.4	259.6	46.1	284.6	228.4	26.2	270.4	271.6	138.1
LOS	F	E	C	F	F	D	F	F	C	F	F	F
Approach Delay		80.3			214.2			230.3			241.3	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 156 (98%), Referenced to phase 2:WBT and 6:EBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.52
Intersection Signal Delay: 188.3 — Intersection LOS: F
Intersection Capacity Utilization 133.6% — ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 5: Sample Rd & Lyons Rd



Queues
5: Sample Rd & Lyons Rd

2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	464	2120	738	245	2977	682	802	1714	197	575	1521	608
v/c Ratio	1.44	1.00	0.88	1.01	1.49	0.90	1.52	1.40	0.43	1.50	1.52	1.17
Control Delay	250.5	59.2	33.6	131.4	259.6	46.1	284.6	228.4	26.2	270.4	271.6	138.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	250.5	59.2	33.6	131.4	259.6	46.1	284.6	228.4	26.2	270.4	271.6	138.1
Queue Length 50th (ft)	~346	~722	348	~136	~1571	494	~600	~875	78	~424	~817	~773
Queue Length 95th (ft)	m#353	m#760	m367	#232	#1639	#756	#733	#969	160	m#541	#920	m#1011
Internal Link Dist (ft)		2633			1245			496			2933	
Turn Bay Length (ft)	255		180	225		215	315		315	310		190
Base Capacity (vph)	322	2115	836	243	1994	759	529	1224	461	384	1001	519
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.44	1.00	0.88	1.01	1.49	0.90	1.52	1.40	0.43	1.50	1.52	1.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 PM Peak Hour - Alt.C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1196	101			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1476	124			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			194			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			239			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					239			
C(m) (vph)					383			
v/c					0.62			
95% queue length					4.06			
Control Delay					28.8			
LOS					D			
Approach Delay				28.8				
Approach LOS				D				

HCM Signalized Intersection Capacity Analysis
7: Turtle Creek Dr & State Rd 7

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Volume (vph)	268	52	37	133	71	538	60	187	2181	436	50	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	12	11	12	12	12	11
Total Lost time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Lane Util. Factor	0.97	1.00		1.00	0.95	1.00		0.97	0.91	1.00		0.97
Frt	1.00	0.94		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	3286	1730		1694	3505	1568		3286	5036	1568		3286
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (perm)	3286	1730		1694	3505	1568		3286	5036	1568		3286
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	285	55	39	141	76	572	64	199	2320	464	53	477
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	0	135	0	0
Lane Group Flow (vph)	285	94	0	141	76	485	0	263	2320	329	0	530
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Prot		Perm	Prot	Prot		Perm	Prot	Prot
Protected Phases	7	4		3	8		5	5	2		1	1
Permitted Phases						8				2		
Actuated Green, G (s)	11.0	31.1		17.9	38.0	38.0		13.0	67.0	67.0		22.0
Effective Green, g (s)	11.0	31.1		17.9	38.0	38.0		13.0	67.0	67.0		22.0
Actuated g/C Ratio	0.07	0.19		0.11	0.24	0.24		0.08	0.42	0.42		0.14
Clearance Time (s)	4.0	6.0		4.0	6.0	6.0		6.0	6.0	6.0		6.0
Vehicle Extension (s)	3.0	2.0		3.0	2.0	2.0		1.5	0.2	0.2		1.5
Lane Grp Cap (vph)	226	336		190	832	372		267	2109	657		452
v/s Ratio Prot	c0.09	0.05		0.08	0.02			0.08	c0.46			c0.16
v/s Ratio Perm						c0.31				0.21		
v/c Ratio	1.26	0.28		0.74	0.09	1.30		0.99	1.10	0.50		1.17
Uniform Delay, d1	74.5	54.9		68.8	47.5	61.0		73.4	46.5	34.2		69.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.07	0.99	0.92		1.27
Incremental Delay, d2	148.0	0.2		14.4	0.0	155.1		50.4	53.0	2.7		80.0
Delay (s)	222.5	55.1		83.3	47.6	216.1		128.7	99.0	34.0		167.3
Level of Service	F	E		F	D	F		F	F	C		F
Approach Delay (s)		181.0			176.1				91.7			
Approach LOS		F			F				F			

Intersection Summary

HCM Average Control Delay	85.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	22.0
Intersection Capacity Utilization	115.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBT	SBR
Lane Configurations	↑↑↑	↱
Volume (vph)	1961	371
Ideal Flow (vphpl)	1900	1900
Lane Width	12	12
Total Lost time (s)	6.0	6.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5036	1568
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5036	1568
Peak-hour factor, PHF	0.94	0.94
Adj. Flow (vph)	2086	395
RTOR Reduction (vph)	0	91
Lane Group Flow (vph)	2086	304
Heavy Vehicles (%)	3%	3%
Turn Type		Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	76.0	76.0
Effective Green, g (s)	76.0	76.0
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	6.0	6.0
Vehicle Extension (s)	0.2	0.2
Lane Grp Cap (vph)	2392	745
v/s Ratio Prot	0.41	
v/s Ratio Perm		0.19
v/c Ratio	0.87	0.41
Uniform Delay, d1	37.6	27.4
Progression Factor	0.44	0.30
Incremental Delay, d2	0.5	0.1
Delay (s)	17.0	8.5
Level of Service	B	A
Approach Delay (s)	42.4	
Approach LOS	D	

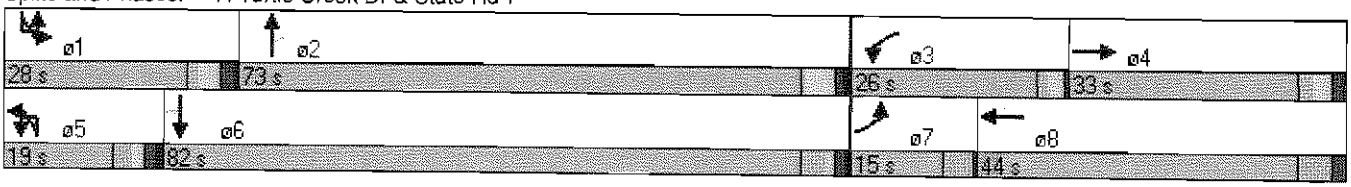
Intersection Summary

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	268	52	133	71	538	187	2181	436	448	1961	371
Turn Type	Prot		Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	4.0	6.0	4.0	6.0	6.0	5.0	7.0	7.0	5.0	7.0	7.0
Minimum Split (s)	8.0	12.0	8.0	12.0	12.0	11.0	13.0	13.0	11.0	13.0	13.0
Total Split (s)	15.0	33.0	26.0	44.0	44.0	19.0	73.0	73.0	28.0	82.0	82.0
Total Split (%)	9.4%	20.6%	16.3%	27.5%	27.5%	11.9%	45.6%	45.6%	17.5%	51.3%	51.3%
Yellow Time (s)	3.5	4.0	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.5	2.0	0.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes						
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.0	31.1	17.9	38.0	38.0	13.0	67.0	67.0	22.0	76.0	76.0
Actuated g/C Ratio	0.07	0.19	0.11	0.24	0.24	0.08	0.42	0.42	0.14	0.48	0.48
v/c Ratio	1.26	0.28	0.74	0.09	1.25	0.99	1.10	0.59	1.17	0.87	0.47
Control Delay	204.2	59.0	91.2	48.0	166.8	127.4	95.9	18.7	150.3	17.2	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.2	59.0	91.2	48.0	166.8	127.4	95.9	18.7	150.3	17.2	4.8
LOS	F	E	F	D	F	F	F	B	F	B	A
Approach Delay		168.2		141.9			86.8			39.0	
Approach LOS		F		F			F			D	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 19 (12%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 140
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.26
Intersection Signal Delay: 77.2 Intersection LOS: E
Intersection Capacity Utilization 115.6% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 7: Turtle Creek Dr & State Rd 7



Queues
7: Turtle Creek Dr & State Rd 7

2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	285	94	141	76	572	263	2320	464	530	2086	395
v/c Ratio	1.26	0.28	0.74	0.09	1.25	0.99	1.10	0.59	1.17	0.87	0.47
Control Delay	204.2	59.0	91.2	48.0	166.8	127.4	95.9	18.7	150.3	17.2	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	204.2	59.0	91.2	48.0	166.8	127.4	95.9	18.7	150.3	17.2	4.8
Queue Length 50th (ft)	~192	85	145	33	~649	145	~1009	213	~347	235	32
Queue Length 95th (ft)	#292	148	221	57	#892	m#241	#1094	335	m#268	m195	m18
Internal Link Dist (ft)		595		1522			330			1350	
Turn Bay Length (ft)	200		235		185	320			250		170
Base Capacity (vph)	226	336	233	832	459	267	2109	791	452	2392	836
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.26	0.28	0.61	0.09	1.25	0.99	1.10	0.59	1.17	0.87	0.47

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
8: Wiles Rd & State Rd 7

2035 PM Peak - Alternative C-1

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Volume (vph)	51	650	976	365	317	1266	304	63	454	2015	226	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	11	12	12	11	12	12	12	11	12	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Lane Util. Factor		0.97	0.95	1.00	0.97	0.95	1.00		0.97	0.91	1.00	
Frt		1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Flt Permitted		0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (perm)		3319	3539	1583	3319	3539	1583		3319	5085	1583	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	53	670	1006	376	327	1305	313	65	468	2077	233	67
RTOR Reduction (vph)	0	0	0	0	0	0	31	0	0	0	6	0
Lane Group Flow (vph)	0	723	1006	376	327	1305	282	0	533	2077	227	0
Turn Type	Prot	Prot		Perm	Prot		Perm	Prot	Prot		pm+ov	Prot
Protected Phases	7	7	4		3	8		5	5	2	3	1
Permitted Phases				4			8				2	
Actuated Green, G (s)		24.0	50.0	50.0	16.0	42.0	42.0		18.0	59.0	75.0	
Effective Green, g (s)		24.0	50.0	50.0	16.0	42.0	42.0		18.0	59.0	75.0	
Actuated g/C Ratio		0.15	0.31	0.31	0.10	0.26	0.26		0.11	0.37	0.47	
Clearance Time (s)		6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0	
Vehicle Extension (s)		1.5	2.0	2.0	1.5	2.0	2.0		1.5	3.0	1.5	
Lane Grp Cap (vph)		498	1106	495	332	929	416		373	1875	801	
v/s Ratio Prot		c0.22	0.28		0.10	c0.37			c0.16	0.41	0.03	
v/s Ratio Perm				0.24			0.18				0.11	
v/c Ratio		1.45	0.91	0.76	0.98	1.40	0.68		1.43	1.11	0.28	
Uniform Delay, d1		68.0	52.8	49.6	71.9	59.0	52.9		71.0	50.5	26.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00		1.05	1.14	0.99	
Incremental Delay, d2		214.3	10.6	5.9	44.9	188.6	3.4		194.5	49.4	0.0	
Delay (s)		282.3	63.5	55.5	116.7	247.6	56.4		269.1	107.0	25.9	
Level of Service		F	E	E	F	F	E		F	F	C	
Approach Delay (s)			137.2			194.8				130.8		
Approach LOS			F			F				F		

Intersection Summary

HCM Average Control Delay	165.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	134.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBT	SBR
Lane Configurations			
Volume (vph)	260	2068	721
Ideal Flow (vphpl)	1900	1900	1900
Lane Width	11	12	12
Total Lost time (s)	6.0	6.0	6.0
Lane Util. Factor	0.97	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	3319	5085	1583
Flt Permitted	0.95	1.00	1.00
Satd. Flow (perm)	3319	5085	1583
Peak-hour factor, PHF	0.97	0.97	0.97
Adj. Flow (vph)	268	2132	743
RTOR Reduction (vph)	0	0	118
Lane Group Flow (vph)	335	2132	625
Turn Type	Prot		Perm
Protected Phases	1	6	
Permitted Phases			6
Actuated Green, G (s)	11.0	52.0	52.0
Effective Green, g (s)	11.0	52.0	52.0
Actuated g/C Ratio	0.07	0.32	0.32
Clearance Time (s)	6.0	6.0	6.0
Vehicle Extension (s)	1.5	3.0	3.0
Lane Grp Cap (vph)	228	1653	514
v/s Ratio Prot	0.10	c0.42	
v/s Ratio Perm			0.39
v/c Ratio	1.47	1.29	1.22
Uniform Delay, d1	74.5	54.0	54.0
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	233.5	135.1	113.9
Delay (s)	308.0	189.1	167.9
Level of Service	F	F	F
Approach Delay (s)		196.6	
Approach LOS		F	

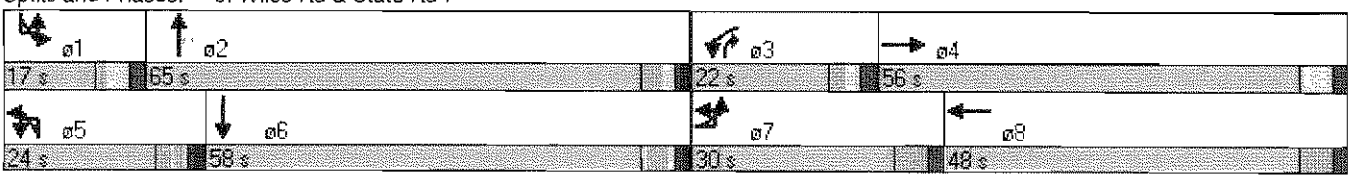
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	650	976	365	317	1266	304	454	2015	226	260	2068	721
Turn Type	Prot		Perm	Prot		Perm	Prot		pm+ov	Prot		Perm
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	3	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	10.0	5.0	5.0	10.0	10.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	16.0	11.0	11.0	16.0	16.0
Total Split (s)	30.0	56.0	56.0	22.0	48.0	48.0	24.0	65.0	22.0	17.0	58.0	58.0
Total Split (%)	18.8%	35.0%	35.0%	13.8%	30.0%	30.0%	15.0%	40.6%	13.8%	10.6%	36.3%	36.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Min	None	None	C-Min	C-Min
Act Effct Green (s)	24.0	50.0	50.0	16.0	42.0	42.0	18.0	59.0	81.0	11.0	52.0	52.0
Actuated g/C Ratio	0.15	0.31	0.31	0.10	0.26	0.26	0.11	0.37	0.51	0.07	0.32	0.32
v/c Ratio	1.45	0.91	0.76	0.98	1.40	0.70	1.43	1.11	0.29	1.47	1.29	1.17
Control Delay	259.5	65.4	61.0	116.1	230.8	55.4	243.6	101.4	21.8	281.0	178.0	129.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	259.5	65.4	61.0	116.1	230.8	55.4	243.6	101.4	21.8	281.0	178.0	129.9
LOS	F	E	E	F	F	E	F	F	C	F	F	F
Approach Delay		131.3			183.3			121.6			177.6	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.47
Intersection Signal Delay: 153.3 Intersection LOS: F
Intersection Capacity Utilization 134.4% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 8: Wiles Rd & State Rd 7



Queues
8: Wiles Rd & State Rd 7

2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	723	1006	376	327	1305	313	533	2077	233	335	2132	743
v/c Ratio	1.45	0.91	0.76	0.98	1.40	0.70	1.43	1.11	0.29	1.47	1.29	1.17
Control Delay	259.5	65.4	61.0	116.1	230.8	55.4	243.6	101.4	21.8	281.0	178.0	129.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	259.5	65.4	61.0	116.1	230.8	55.4	243.6	101.4	21.8	281.0	178.0	129.9
Queue Length 50th (ft)	~529	534	356	179	~958	260	~395	~890	102	~246	~1036	~797
Queue Length 95th (ft)	#660	#655	489	#285	#1098	379	m#322	m575	m89	#353	#1124	#1053
Internal Link Dist (ft)		1420			2326			1350			2548	
Turn Bay Length (ft)	285		250	350		230	305		250	315		205
Base Capacity (vph)	498	1106	495	332	929	447	373	1875	807	228	1653	633
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.45	0.91	0.76	0.98	1.40	0.70	1.43	1.11	0.29	1.47	1.29	1.17

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
9: Cullum Rd & Lyons Rd

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Volume (vph)	163	16	135	19	15	41	104	3007	34	9	72	2637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91	1.00		1.00	0.91
Frt	1.00	0.87		1.00	0.89		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	3065		1770	1659		1770	5085	1583		1770	5085
Flt Permitted	0.72	1.00		0.62	1.00		0.04	1.00	1.00		0.04	1.00
Satd. Flow (perm)	1334	3065		1151	1659		66	5085	1583		69	5085
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	181	18	150	21	17	46	116	3341	38	10	80	2930
RTOR Reduction (vph)	0	43	0	0	35	0	0	0	6	0	0	0
Lane Group Flow (vph)	181	125	0	21	28	0	116	3341	32	0	90	2930
Turn Type	Perm			Perm			pm+pt		Perm	pm+pt	pm+pt	
Protected Phases		4			8		5	2		1	1	6
Permitted Phases	4			8			2		2	6	6	
Actuated Green, G (s)	23.9	23.9		23.9	23.9		122.3	112.5	112.5		113.9	108.3
Effective Green, g (s)	23.9	23.9		23.9	23.9		122.3	112.5	112.5		113.9	108.3
Actuated g/C Ratio	0.15	0.15		0.15	0.15		0.76	0.70	0.70		0.71	0.68
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0		6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	199	458		172	248		155	3575	1113		109	3442
v/s Ratio Prot		0.04			0.02		c0.05	c0.66			0.03	0.58
v/s Ratio Perm	c0.14			0.02			0.52		0.02		0.56	
v/c Ratio	0.91	0.27		0.12	0.11		0.75	0.93	0.03		0.83	0.85
Uniform Delay, d1	67.0	60.3		59.0	58.9		49.4	20.6	7.2		46.9	19.7
Progression Factor	1.00	1.00		1.00	1.00		1.62	0.65	0.29		1.46	0.39
Incremental Delay, d2	39.0	0.3		0.3	0.2		1.8	0.6	0.0		4.7	0.3
Delay (s)	106.0	60.7		59.3	59.1		82.0	14.1	2.1		73.1	7.9
Level of Service	F	E		E	E		F	B	A		E	A
Approach Delay (s)		84.2			59.1			16.2				9.5
Approach LOS		F			E			B				A

Intersection Summary

HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBR
Lane Configurations	
Volume (vph)	99
Ideal Flow (vphpl)	1900
Total Lost time (s)	6.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.90
Adj. Flow (vph)	110
RTOR Reduction (vph)	33
Lane Group Flow (vph)	77
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	108.3
Effective Green, g (s)	108.3
Actuated g/C Ratio	0.68
Clearance Time (s)	6.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1071
v/s Ratio Prot	
v/s Ratio Perm	0.05
v/c Ratio	0.07
Uniform Delay, d1	8.8
Progression Factor	0.00
Incremental Delay, d2	0.0
Delay (s)	0.0
Level of Service	A
Approach Delay (s)	
Approach LOS	

Intersection Summary

HCM Signalized Intersection Capacity Analysis
10: Wiles Rd & Lyons Rd

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	562	711	478	521	1178	389	411	2280	483	178	1831	430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	11	12	12	11	12	12	11	12	12	11	12	12
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3319	3539	1583	3319	3539	1583	3319	5085	1583	3319	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	611	773	520	566	1280	423	447	2478	525	193	1990	467
RTOR Reduction (vph)	0	0	98	0	0	65	0	0	177	0	0	0
Lane Group Flow (vph)	611	773	423	566	1280	358	447	2478	348	193	1990	467
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	23.0	40.0	40.0	27.0	44.0	44.0	16.0	62.0	62.0	7.0	53.0	53.0
Effective Green, g (s)	23.0	40.0	40.0	27.0	44.0	44.0	16.0	62.0	62.0	7.0	53.0	53.0
Actuated g/C Ratio	0.14	0.25	0.25	0.17	0.28	0.28	0.10	0.39	0.39	0.04	0.33	0.33
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.5	2.0	2.0	1.5	2.0	2.0	1.5	3.0	3.0	1.5	3.0	3.0
Lane Grp Cap (vph)	477	885	396	560	973	435	332	1970	613	145	1684	524
v/s Ratio Prot	c0.18	0.22		0.17	c0.36		c0.13	c0.49		0.06	0.39	
v/s Ratio Perm			0.27			0.23			0.22			0.29
v/c Ratio	1.28	0.87	1.07	1.01	1.32	0.82	1.35	1.26	0.57	1.33	1.18	0.89
Uniform Delay, d1	68.5	57.6	60.0	66.5	58.0	54.3	72.0	49.0	38.5	76.5	53.5	50.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.06	1.12	1.46	1.00	1.00	1.00
Incremental Delay, d2	141.8	9.3	64.1	40.7	149.3	11.3	163.5	117.7	1.5	188.4	88.2	20.0
Delay (s)	210.3	66.8	124.1	107.2	207.3	65.7	239.6	172.8	57.7	264.9	141.7	70.7
Level of Service	F	E	F	F	F	E	F	F	E	F	F	E
Approach Delay (s)		128.5			155.9			163.9			138.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	149.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	117.7%	ICU Level of Service	H
Analysis Period (min)	15		

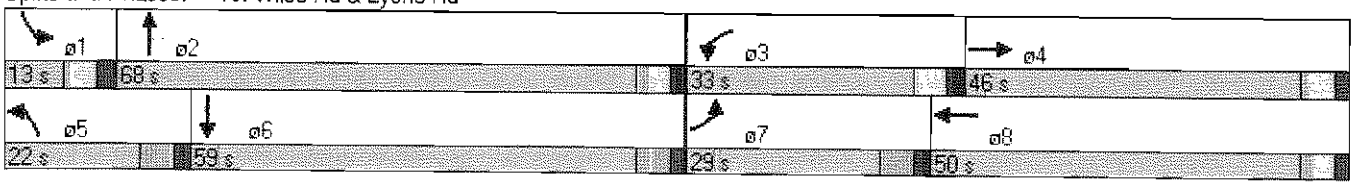
c Critical Lane Group

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	562	711	478	521	1178	389	411	2280	483	178	1831	430
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	6.0	6.0	5.0	6.0	6.0	5.0	12.0	12.0	5.0	12.0	12.0
Minimum Split (s)	11.0	12.0	12.0	11.0	12.0	12.0	11.0	18.0	18.0	11.0	18.0	18.0
Total Split (s)	29.0	46.0	46.0	33.0	50.0	50.0	22.0	68.0	68.0	13.0	59.0	59.0
Total Split (%)	18.1%	28.8%	28.8%	20.6%	31.3%	31.3%	13.8%	42.5%	42.5%	8.1%	36.9%	36.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	23.0	40.0	40.0	27.0	44.0	44.0	16.0	62.0	62.0	7.0	53.0	53.0
Actuated g/C Ratio	0.14	0.25	0.25	0.17	0.28	0.28	0.10	0.39	0.39	0.04	0.33	0.33
v/c Ratio	1.28	0.87	1.05	1.01	1.32	0.84	1.35	1.26	0.66	1.33	1.18	0.89
Control Delay	193.7	69.3	97.7	105.3	193.8	59.0	216.8	162.3	26.9	242.3	134.3	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	193.7	69.3	97.7	105.3	193.8	59.0	216.8	162.3	26.9	242.3	134.3	71.0
LOS	F	E	F	F	F	E	F	F	C	F	F	E
Approach Delay		117.0			146.6			148.7			131.0	
Approach LOS		F			F			F			F	

Intersection Summary

Cycle Length: 160
Actuated Cycle Length: 160
Offset: 63 (39%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.35
Intersection Signal Delay: 137.8 Intersection LOS: F
Intersection Capacity Utilization 117.7% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 10: Wiles Rd & Lyons Rd



Queues
10: Wiles Rd & Lyons Rd

2035 PM Peak - Alternative C-1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	611	773	520	566	1280	423	447	2478	525	193	1990	467
v/c Ratio	1.28	0.87	1.05	1.01	1.32	0.84	1.35	1.26	0.66	1.33	1.18	0.89
Control Delay	193.7	69.3	97.7	105.3	193.8	59.0	216.8	162.3	26.9	242.3	134.3	71.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	193.7	69.3	97.7	105.3	193.8	59.0	216.8	162.3	26.9	242.3	134.3	71.0
Queue Length 50th (ft)	~415	412	~485	~314	~905	342	~321	~1179	207	~134	~911	465
Queue Length 95th (ft)	#542	#501	#722	#443	#1045	#524	m#358	#1261	m252	#221	#1001	#672
Internal Link Dist (ft)		2632			1518			1220			1420	
Turn Bay Length (ft)	350		350	300		200	315		315	300		300
Base Capacity (vph)	477	885	493	560	973	501	332	1970	790	145	1684	524
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.28	0.87	1.05	1.01	1.32	0.84	1.35	1.26	0.66	1.33	1.18	0.89

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #11 S. Access & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 PM Peak Hour - Alt.C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: S. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	114	724			563	76
Peak-Hour Factor, PHF	0.95	0.95			0.95	0.95
Hourly Flow Rate, HFR	120	762			592	80
Percent Heavy Vehicles	5	--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						No
Lanes	1	2			2	1
Configuration	L	T			T	R
Upstream Signal?		Yes			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume				18		113
Peak Hour Factor, PHF				0.95		0.95
Hourly Flow Rate, HFR				18		118
Percent Heavy Vehicles				5		5
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		No /
Lanes				0		0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config	L						LR	
v (vph)	120						136	
C(m) (vph)	1005						776	
v/c	0.12						0.18	
95% queue length	0.41						0.63	
Control Delay	9.1						10.6	
LOS	A						B	
Approach Delay							10.6	
Approach LOS							B	

HCM Signalized Intersection Capacity Analysis
12: NW 40 Street & NW 54th Ave

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	85	25	114	115	37	222	252	294	98	304	336	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	11	12	12	11	12	12
Total Lost time (s)		6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt		1.00	0.85	1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.96	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1793	1583	1770	1623		1711	3539	1583	1711	3539	1583
Flt Permitted		0.49	1.00	0.67	1.00		0.52	1.00	1.00	0.50	1.00	1.00
Satd. Flow (perm)		909	1583	1257	1623		938	3539	1583	897	3539	1583
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	99	29	133	134	43	258	293	342	114	353	391	27
RTOR Reduction (vph)	0	0	100	0	194	0	0	0	91	0	0	21
Lane Group Flow (vph)	0	128	33	134	107	0	293	342	23	353	391	6
Turn Type	Perm		Perm	Perm			pm+pt		Perm	pm+pt		Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		6
Actuated Green, G (s)		14.0	14.0	14.0	14.0		23.2	11.4	11.4	25.4	12.5	12.5
Effective Green, g (s)		14.0	14.0	14.0	14.0		23.2	11.4	11.4	25.4	12.5	12.5
Actuated g/C Ratio		0.25	0.25	0.25	0.25		0.41	0.20	0.20	0.45	0.22	0.22
Clearance Time (s)		6.0	6.0	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		226	394	313	404		549	717	321	591	786	351
v/s Ratio Prot					0.07		0.11	0.10		c0.14	0.11	
v/s Ratio Perm		c0.14	0.02	0.11			0.11		0.01	c0.13		0.00
v/c Ratio		0.57	0.08	0.43	0.27		0.53	0.48	0.07	0.60	0.50	0.02
Uniform Delay, d1		18.5	16.2	17.8	17.0		11.7	19.8	18.2	10.7	19.2	17.1
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		3.2	0.1	0.9	0.4		1.0	0.5	0.1	1.6	0.5	0.0
Delay (s)		21.7	16.3	18.7	17.4		12.7	20.3	18.3	12.3	19.7	17.1
Level of Service		C	B	B	B		B	C	B	B	B	B
Approach Delay (s)		19.0			17.8			17.0			16.2	
Approach LOS		B			B			B			B	

Intersection Summary

HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	56.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #13 N. Access & NW 54th Ave
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 PM Peak Hour - Alt.C-1
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: N. Casino Access
North/South Street: NW 54th Ave
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		518			396	151
Peak-Hour Factor, PHF		0.92			0.92	0.92
Hourly Flow Rate, HFR		563			430	164
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Raised curb			/ 1		
RT Channelized?						
Lanes		2			2	0
Configuration		T			T	TR
Upstream Signal?		Yes			No	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume						166
Peak Hour Factor, PHF						0.92
Hourly Flow Rate, HFR						180
Percent Heavy Vehicles						2
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes					1	
Configuration					R	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config								R
v (vph)								180
C(m) (vph)								741
v/c								0.24
95% queue length								0.95
Control Delay								11.4
LOS								B
Approach Delay							11.4	
Approach LOS							B	

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	328	132	26	73	257	276	161	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	357	143	28	79	279	300	175	71	211	0
Approach Volume (veh/h)		670			251			754			282	
Crossing Volume (veh/h)		425			579			384			451	
High Capacity (veh/h)		991			876			1024			971	
High v/c (veh/h)		0.68			0.29			0.74			0.29	
Low Capacity (veh/h)		806			704			835			787	
Low v/c (veh/h)		0.83			0.36			0.90			0.36	

Intersection Summary			
Maximum v/c High	0.74		
Maximum v/c Low	0.90		
Intersection Capacity Utilization	66.7%	ICU Level of Service	C

HCM Unsignalized Intersection Capacity Analysis
15: Cullum Rd & Banks Road

2035 PM Peak - Alternative C-1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	112	88	219	73	59	73	0	184	113	86	219	145
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	122	96	238	79	64	79	0	200	123	93	238	158
Approach Volume (veh/h)		455			223			323			489	
Crossing Volume (veh/h)		411			322			311			143	
High Capacity (veh/h)		1002			1076			1085			1238	
High v/c (veh/h)		0.45			0.21			0.30			0.40	
Low Capacity (veh/h)		816			881			890			1028	
Low v/c (veh/h)		0.56			0.25			0.36			0.48	

Intersection Summary			
Maximum v/c High	0.45		
Maximum v/c Low	0.56		
Intersection Capacity Utilization	54.1%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1313	130	301	1788	173	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		4.5	6.0	6.0	6.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	3491		1770	3539	1770	1583
Flt Permitted	1.00		0.09	1.00	0.95	1.00
Satd. Flow (perm)	3491		167	3539	1770	1583
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1492	148	342	2032	197	233
RTOR Reduction (vph)	0	0	0	0	0	200
Lane Group Flow (vph)	1640	0	342	2032	197	33
Turn Type			pm+pt			Perm
Protected Phases	4		3	8	5	
Permitted Phases			8			5
Actuated Green, G (s)	40.0		56.0	56.0	11.4	11.4
Effective Green, g (s)	40.0		56.0	56.0	11.4	11.4
Actuated g/C Ratio	0.50		0.71	0.71	0.14	0.14
Clearance Time (s)	6.0		4.5	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1759		350	2496	254	227
v/s Ratio Prot	0.47		c0.14	0.57	c0.11	
v/s Ratio Perm			c0.55			0.02
v/c Ratio	0.93		0.98	0.81	0.78	0.15
Uniform Delay, d1	18.4		24.5	8.1	32.8	29.7
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	10.5		41.5	3.0	13.8	0.3
Delay (s)	28.9		66.0	11.1	46.5	30.0
Level of Service	C		E	B	D	C
Approach Delay (s)	28.9			19.1	37.6	
Approach LOS	C			B	D	

Intersection Summary			
HCM Average Control Delay	24.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	79.4	Sum of lost time (s)	10.5
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Appendix K-10

Impacted Intersection Analysis
Total PM Peak Hour
Phase III, 2012 – 2015
Alternatives A and C and Sub-Alternative A-1

Intersections:
No. 6: SR 7 and NW 40th Street (Unsignalized)
No. 12: NW 54th Avenue and NW 40th Street (Signalized)
No. 13: NW 54th Avenue and North Access (Signalized)
No. 14: NW 54th Avenue and Cullum Road (Roundabout)

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A
Date Performed: 04/24/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2015 Total - Alt. A - Phase 3
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		874	141			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1079	174			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			270			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			333			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					333			
C(m) (vph)					482			
v/c					0.69			
95% queue length					5.23			
Control Delay					27.5			
LOS					D			
Approach Delay				27.5				
Approach LOS				D				

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	40	167	687	38	147	564
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.25	1.00
Satd. Flow (perm)	1770	1583	3539	1583	445	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	47	194	799	44	171	656
RTOR Reduction (vph)	0	165	0	26	0	0
Lane Group Flow (vph)	47	29	799	18	171	656
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	7.3	7.3	19.7	19.7	29.8	29.8
Effective Green, g (s)	7.3	7.3	19.7	19.7	29.8	29.8
Actuated g/C Ratio	0.15	0.15	0.40	0.40	0.61	0.61
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	263	235	1420	635	427	2148
v/s Ratio Prot			c0.23		c0.05	0.19
v/s Ratio Perm	c0.03	0.02		0.01	0.19	
v/c Ratio	0.18	0.12	0.56	0.03	0.40	0.31
Uniform Delay, d1	18.3	18.1	11.4	8.9	4.9	4.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2	0.5	0.0	0.6	0.1
Delay (s)	18.6	18.4	11.9	8.9	5.5	4.7
Level of Service	B	B	B	A	A	A
Approach Delay (s)	18.4		11.7			4.9
Approach LOS	B		B			A

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	49.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	43.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	175	548	565	300	139	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3164		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3164		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	190	596	614	326	151	380
RTOR Reduction (vph)	0	0	0	0	0	322
Lane Group Flow (vph)	786	0	614	326	151	58
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	21.0		16.2	32.1	9.9	9.9
Effective Green, g (s)	21.0		16.2	32.1	9.9	9.9
Actuated g/C Ratio	0.32		0.25	0.49	0.15	0.15
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1021		854	919	538	241
v/s Ratio Prot	c0.25		c0.18	c0.18	0.04	
v/s Ratio Perm						0.04
v/c Ratio	1.15dr		0.72	0.35	0.28	0.24
Uniform Delay, d1	19.9		22.4	10.1	24.4	24.3
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.6		2.9	0.2	0.3	0.5
Delay (s)	23.4		25.3	10.4	24.7	24.8
Level of Service	C		C	B	C	C
Approach Delay (s)	23.4			20.1	24.8	
Approach LOS	C			C	C	

Intersection Summary			
HCM Average Control Delay	22.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2015 Total PM Peak - Alternative A - Phase 3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	96	309	122	9	24	248	92	137	22	65	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	104	336	133	10	26	270	100	149	24	71	0
Approach Volume (veh/h)		440			168			518			95	
Crossing Volume (veh/h)		227			370			128			412	
High Capacity (veh/h)		1159			1036			1253			1001	
High v/c (veh/h)		0.38			0.16			0.41			0.09	
Low Capacity (veh/h)		956			846			1041			815	
Low v/c (veh/h)		0.46			0.20			0.50			0.12	

Intersection Summary			
Maximum v/c High	0.41		
Maximum v/c Low	0.50		
Intersection Capacity Utilization	49.8%	ICU Level of Service	A

Appendix K-11

Impacted Intersection Analysis
Total PM Peak Hour
Phase IV, 2016 – 2018
Alternatives A and C and Sub-Alternative A-1

Intersections:
No. 6: SR 7 and NW 40th Street (Unsignalized)
No. 12: NW 54th Avenue and NW 40th Street (Signalized)
No. 13: NW 54th Avenue and North Access (Signalized)
No. 14: NW 54th Avenue and Cullum Road (Roundabout)

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/24/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2018 Total - Alt. A - Phase 4
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		972	182			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1199	224			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			347			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			428			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage				/		/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					428			
C(m) (vph)					431			
v/c					0.99			
95% queue length					12.48			
Control Delay					72.9			
LOS					F			
Approach Delay				72.9				
Approach LOS				F				

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	77	236	872	68	239	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.15	1.00
Satd. Flow (perm)	1770	1583	3539	1583	270	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	90	274	1014	79	278	864
RTOR Reduction (vph)	0	233	0	46	0	0
Lane Group Flow (vph)	90	41	1014	33	278	864
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	8.9	8.9	23.8	23.8	38.6	38.6
Effective Green, g (s)	8.9	8.9	23.8	23.8	38.6	38.6
Actuated g/C Ratio	0.15	0.15	0.40	0.40	0.65	0.65
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	265	237	1416	633	437	2296
v/s Ratio Prot			c0.29		c0.12	0.24
v/s Ratio Perm	c0.05	0.03		0.02	0.30	
v/c Ratio	0.34	0.17	0.72	0.05	0.64	0.38
Uniform Delay, d1	22.7	22.1	15.0	10.9	7.9	4.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.3	1.8	0.0	3.0	0.1
Delay (s)	23.4	22.4	16.8	11.0	10.9	5.0
Level of Service	C	C	B	B	B	A
Approach Delay (s)	22.7		16.3			6.4
Approach LOS	C		B			A

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	59.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	225	702	725	396	268	450
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	245	763	788	430	291	489
RTOR Reduction (vph)	0	0	0	0	0	405
Lane Group Flow (vph)	1008	0	788	430	291	84
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	26.0		19.0	38.0	13.0	13.0
Effective Green, g (s)	26.0		19.0	38.0	13.0	13.0
Actuated g/C Ratio	0.34		0.25	0.50	0.17	0.17
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1083		858	932	605	271
v/s Ratio Prot	c0.32		c0.23	c0.23	0.08	
v/s Ratio Perm						0.05
v/c Ratio	1.38dr		0.92	0.46	0.48	0.31
Uniform Delay, d1	24.1		27.7	12.3	28.5	27.6
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	13.8		14.5	0.4	0.6	0.7
Delay (s)	37.9		42.2	12.7	29.1	28.2
Level of Service	D		D	B	C	C
Approach Delay (s)	37.9			31.8	28.5	
Approach LOS	D			C	C	

Intersection Summary			
HCM Average Control Delay	33.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	76.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	192	424	171	17	49	270	184	196	43	129	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	209	461	186	18	53	293	200	213	47	140	0
Approach Volume (veh/h)		670			258			707			187	
Crossing Volume (veh/h)		373			493			255			498	
High Capacity (veh/h)		1033			938			1134			935	
High v/c (veh/h)		0.65			0.27			0.62			0.20	
Low Capacity (veh/h)		843			759			933			756	
Low v/c (veh/h)		0.79			0.34			0.76			0.25	

Intersection Summary			
Maximum v/c High	0.65		
Maximum v/c Low	0.79		
Intersection Capacity Utilization	65.8%	ICU Level of Service	C

Appendix K-12

Impacted Intersection Analysis
Total PM Peak Hour
2020 Built-out
Alternatives A and C and Sub-Alternative A-1

Intersections:
No. 6: SR 7 and NW 40th Street (Unsignalized)
No. 12: NW 54th Avenue and NW 40th Street (Signalized)
No. 13: NW 54th Avenue and North Access (Signalized)
No. 14: NW 54th Avenue and Cullum Road (Roundabout)

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2020 Total - Alt. A, A-1 and C
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1064	190			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1313	234			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			366			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			451			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					451			
C(m) (vph)					397			
v/c					1.14			
95% queue length					16.81			
Control Delay					119.3			
LOS					F			
Approach Delay				119.3				
Approach LOS				F				

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	114	292	944	97	321	810
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.13	1.00
Satd. Flow (perm)	1770	1583	3539	1583	236	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	133	340	1098	113	373	942
RTOR Reduction (vph)	0	286	0	60	0	0
Lane Group Flow (vph)	133	54	1098	53	373	942
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	10.7	10.7	26.5	26.5	45.1	45.1
Effective Green, g (s)	10.7	10.7	26.5	26.5	45.1	45.1
Actuated g/C Ratio	0.16	0.16	0.39	0.39	0.67	0.67
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	279	250	1383	619	475	2354
v/s Ratio Prot			0.31		c0.17	0.27
v/s Ratio Perm	c0.08	0.03		0.03	c0.35	
v/c Ratio	0.48	0.21	0.79	0.09	0.79	0.40
Uniform Delay, d1	26.0	24.9	18.2	13.0	14.9	5.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.4	3.2	0.1	8.3	0.1
Delay (s)	27.3	25.3	21.5	13.1	23.2	5.3
Level of Service	C	C	C	B	C	A
Approach Delay (s)	25.9		20.7			10.4
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	67.8	Sum of lost time (s)	10.0
Intersection Capacity Utilization	63.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	237	739	761	492	396	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	258	803	827	535	430	513
RTOR Reduction (vph)	0	0	0	0	0	412
Lane Group Flow (vph)	1061	0	827	535	430	101
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	26.0		19.0	40.4	15.4	15.4
Effective Green, g (s)	26.0		19.0	40.4	15.4	15.4
Actuated g/C Ratio	0.33		0.24	0.52	0.20	0.20
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1050		832	960	695	311
v/s Ratio Prot	c0.34		c0.24	c0.29	0.12	
v/s Ratio Perm						0.06
v/c Ratio	1.50dr		0.99	0.56	0.62	0.32
Uniform Delay, d1	26.2		29.6	12.9	28.8	27.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	30.4		29.5	0.7	1.6	0.6
Delay (s)	56.6		59.2	13.6	30.5	27.6
Level of Service	E		E	B	C	C
Approach Delay (s)	56.6			41.3	28.9	
Approach LOS	E			D	C	

Intersection Summary			
HCM Average Control Delay	42.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2020 Total PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	484	197	26	73	277	276	231	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	526	214	28	79	301	300	251	71	211	0
Approach Volume (veh/h)		839			322			852			282	
Crossing Volume (veh/h)		496			601			384			543	
High Capacity (veh/h)		937			861			1024			902	
High v/c (veh/h)		0.90			0.37			0.83			0.31	
Low Capacity (veh/h)		757			690			835			726	
Low v/c (veh/h)		1.11			0.47			1.02			0.39	

Intersection Summary			
Maximum v/c High	0.90		
Maximum v/c Low	1.11		
Intersection Capacity Utilization	78.1%	ICU Level of Service	D

Appendix K-13

Impacted Intersection Analysis
Total PM Peak Hour
Cumulative 2035
Alternatives A and C and Sub-Alternative A-1

Intersections:
No. 6: SR 7 and NW 40th Street (Unsignalized)
No. 12: NW 54th Avenue and NW 40th Street (Signalized)
No. 13: NW 54th Avenue and North Access (Signalized)
No. 14: NW 54th Avenue and Cullum Road (Roundabout)

HCS+: Unsignalized Intersections Release 5.5

TWO-WAY STOP CONTROL SUMMARY

Analyst: MEAY
Agency/Co.: Keith and Schnars, P.A.
Date Performed: 04/20/2012
Analysis Time Period: PM Peak Hour
Intersection: #6 NW 40 Street & State Rd 7
Jurisdiction: Broward County
Units: U. S. Customary
Analysis Year: 2035 Total- Alt. A, A-1 and C
Project ID: Seminole Fee-to-Trust Development Project
East/West Street: NW 40 Street
North/South Street: State Rd 7
Intersection Orientation: NS Study period (hrs): 0.25

Vehicle Volumes and Adjustments

Major Street: Approach	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume		1196	190			
Peak-Hour Factor, PHF		0.81	0.81			
Hourly Flow Rate, HFR		1476	234			
Percent Heavy Vehicles		--	--		--	--
Median Type/Storage	Undivided			/		
RT Channelized?						
Lanes		2	0			
Configuration		T	TR			
Upstream Signal?		No			Yes	

Minor Street: Approach	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume			366			
Peak Hour Factor, PHF			0.81			
Hourly Flow Rate, HFR			451			
Percent Heavy Vehicles			3			
Percent Grade (%)		0			0	
Flared Approach: Exists?/Storage			/			/
Lanes			1			
Configuration			R			

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Config					R			
v (vph)					451			
C(m) (vph)					356			
v/c					1.27			
95% queue length					20.23			
Control Delay					172.0			
LOS					F			
Approach Delay				172.0				
Approach LOS				F				

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	115	293	967	98	323	814
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	11	12
Total Lost time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	1711	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.13	1.00
Satd. Flow (perm)	1770	1583	3539	1583	228	3539
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	134	341	1124	114	376	947
RTOR Reduction (vph)	0	288	0	59	0	0
Lane Group Flow (vph)	134	53	1124	55	376	947
Turn Type		custom		Perm	pm+pt	
Protected Phases			2		1	6
Permitted Phases	8	8		2	6	
Actuated Green, G (s)	10.8	10.8	27.6	27.6	46.2	46.2
Effective Green, g (s)	10.8	10.8	27.6	27.6	46.2	46.2
Actuated g/C Ratio	0.16	0.16	0.40	0.40	0.67	0.67
Clearance Time (s)	6.0	6.0	6.0	6.0	4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	277	248	1416	633	466	2370
v/s Ratio Prot			0.32		c0.17	0.27
v/s Ratio Perm	c0.08	0.03		0.03	c0.37	
v/c Ratio	0.48	0.22	0.79	0.09	0.81	0.40
Uniform Delay, d1	26.6	25.4	18.2	12.9	15.8	5.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.4	3.2	0.1	9.9	0.1
Delay (s)	27.9	25.8	21.3	12.9	25.7	5.3
Level of Service	C	C	C	B	C	A
Approach Delay (s)	26.4		20.6			11.1
Approach LOS	C		C			B

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	69.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	64.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (vph)	237	739	761	518	396	472
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0		6.0	6.0	6.0	6.0
Lane Util. Factor	0.97		0.97	1.00	0.95	1.00
Frt	0.89		1.00	1.00	1.00	0.85
Flt Protected	0.99		0.95	1.00	1.00	1.00
Satd. Flow (prot)	3165		3433	1863	3539	1583
Flt Permitted	0.99		0.95	1.00	1.00	1.00
Satd. Flow (perm)	3165		3433	1863	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	258	803	827	563	430	513
RTOR Reduction (vph)	0	0	0	0	0	412
Lane Group Flow (vph)	1061	0	827	563	430	101
Turn Type			Prot			Perm
Protected Phases	4		5	2	6	
Permitted Phases						6
Actuated Green, G (s)	26.0		19.0	40.4	15.4	15.4
Effective Green, g (s)	26.0		19.0	40.4	15.4	15.4
Actuated g/C Ratio	0.33		0.24	0.52	0.20	0.20
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	1050		832	960	695	311
v/s Ratio Prot	c0.34		c0.24	c0.30	0.12	
v/s Ratio Perm						0.06
v/c Ratio	1.50dr		0.99	0.59	0.62	0.32
Uniform Delay, d1	26.2		29.6	13.2	28.8	27.0
Progression Factor	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	30.4		29.5	0.9	1.6	0.6
Delay (s)	56.6		59.2	14.1	30.5	27.6
Level of Service	E		E	B	C	C
Approach Delay (s)	56.6			40.9	28.9	
Approach LOS	E			D	C	

Intersection Summary			
HCM Average Control Delay	42.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis
14: Cullum Rd & NW 54th Ave

2035 Total PM Peak - Alternatives A, A-1 And C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Right Turn Channelized												
Volume (veh/h)	0	288	485	197	26	73	299	276	231	65	194	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	313	527	214	28	79	325	300	251	71	211	0
Approach Volume (veh/h)		840			322			876			282	
Crossing Volume (veh/h)		496			625			384			567	
High Capacity (veh/h)		937			844			1024			884	
High v/c (veh/h)		0.90			0.38			0.86			0.32	
Low Capacity (veh/h)		757			676			835			711	
Low v/c (veh/h)		1.11			0.48			1.05			0.40	

Intersection Summary				
Maximum v/c High	0.90			
Maximum v/c Low	1.11			
Intersection Capacity Utilization	78.8%	ICU Level of Service	D	

Appendix K-14

Signalization of Intersection No. 6
SR 7 and NW 40th Street
2018, 2020, and 2035 Total PM Peak Hour
Alternatives A and C and Sub-Alternative A-1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	347	1944	182	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0		
Lane Util. Factor		0.88	0.91	1.00		
Frt		0.85	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		2760	5036	1568		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		2760	5036	1568		
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	0	428	2400	225	0	0
RTOR Reduction (vph)	0	12	0	51	0	0
Lane Group Flow (vph)	0	416	2400	174	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		custom		Perm		
Protected Phases			2			
Permitted Phases		8		2		
Actuated Green, G (s)		29.4	118.6	118.6		
Effective Green, g (s)		29.4	118.6	118.6		
Actuated g/C Ratio		0.18	0.74	0.74		
Clearance Time (s)		6.0	6.0	6.0		
Vehicle Extension (s)		3.0	3.0	3.0		
Lane Grp Cap (vph)		507	3733	1162		
v/s Ratio Prot			c0.48			
v/s Ratio Perm		c0.15		0.11		
v/c Ratio		0.82	0.64	0.15		
Uniform Delay, d1		62.8	10.2	6.0		
Progression Factor		1.00	0.85	0.54		
Incremental Delay, d2		10.2	0.9	0.3		
Delay (s)		73.0	9.6	3.5		
Level of Service		E	A	A		
Approach Delay (s)	73.0		9.0			0.0
Approach LOS	E		A			A

Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	366	2128	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0		
Lane Util. Factor		1.00	0.91	1.00		
Frt		0.86	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		1596	5036	1568		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		1596	5036	1568		
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	0	452	2627	235	0	0
RTOR Reduction (vph)	0	1	0	56	0	0
Lane Group Flow (vph)	0	451	2627	179	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		custom		Perm		
Protected Phases			2			
Permitted Phases		8		2		
Actuated Green, G (s)		49.0	99.0	99.0		
Effective Green, g (s)		49.0	99.0	99.0		
Actuated g/C Ratio		0.31	0.62	0.62		
Clearance Time (s)		6.0	6.0	6.0		
Vehicle Extension (s)		3.0	3.0	3.0		
Lane Grp Cap (vph)		489	3116	970		
v/s Ratio Prot			c0.52			
v/s Ratio Perm		c0.28		0.11		
v/c Ratio		0.92	0.84	0.18		
Uniform Delay, d1		53.6	24.3	13.1		
Progression Factor		1.00	0.77	0.70		
Incremental Delay, d2		22.9	3.0	0.4		
Delay (s)		76.5	21.6	9.6		
Level of Service		E	C	A		
Approach Delay (s)	76.5		20.6			0.0
Approach LOS	E		C			A

Intersection Summary			
HCM Average Control Delay	28.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (vph)	0	366	2391	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0	6.0		
Lane Util. Factor		1.00	0.91	1.00		
Frt		0.86	1.00	0.85		
Flt Protected		1.00	1.00	1.00		
Satd. Flow (prot)		1596	5036	1568		
Flt Permitted		1.00	1.00	1.00		
Satd. Flow (perm)		1596	5036	1568		
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	0	452	2952	235	0	0
RTOR Reduction (vph)	0	1	0	52	0	0
Lane Group Flow (vph)	0	451	2952	183	0	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		custom		Perm		
Protected Phases			2			
Permitted Phases		8		2		
Actuated Green, G (s)		47.3	100.7	100.7		
Effective Green, g (s)		47.3	100.7	100.7		
Actuated g/C Ratio		0.30	0.63	0.63		
Clearance Time (s)		6.0	6.0	6.0		
Vehicle Extension (s)		3.0	3.0	3.0		
Lane Grp Cap (vph)		472	3170	987		
v/s Ratio Prot			c0.59			
v/s Ratio Perm		c0.28		0.12		
v/c Ratio		0.96	0.93	0.19		
Uniform Delay, d1		55.3	26.5	12.4		
Progression Factor		1.00	0.76	0.71		
Incremental Delay, d2		30.2	6.4	0.4		
Delay (s)		85.5	26.4	9.2		
Level of Service		F	C	A		
Approach Delay (s)	85.5		25.1			0.0
Approach LOS	F		C			A

Intersection Summary

HCM Average Control Delay	32.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group