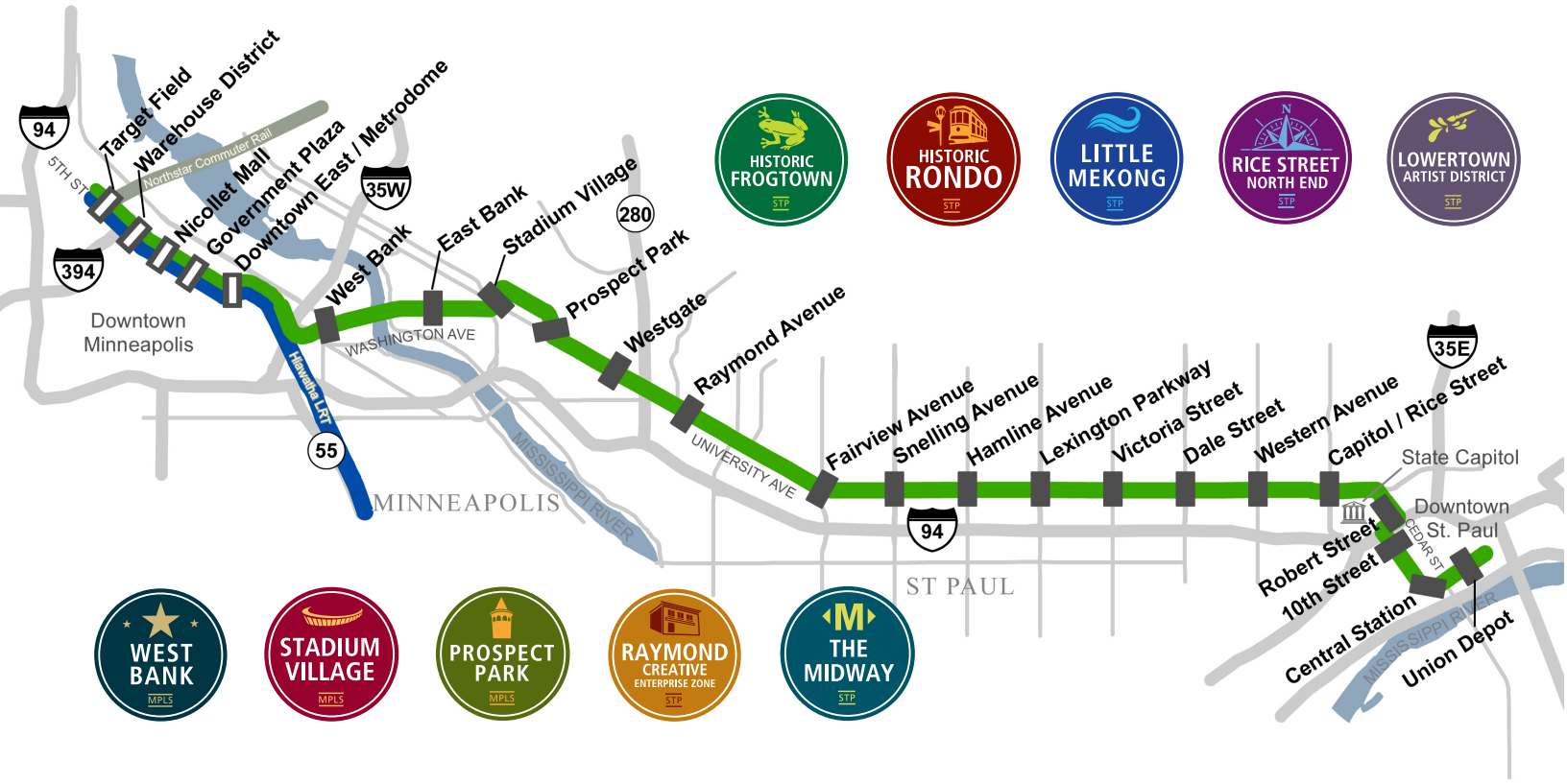
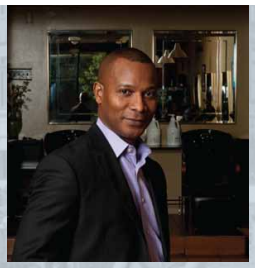
Central Corridor **LIGHT RAIL TRANSIT**

Supplemental Draft Environmental Impact Statement-

Construction-Related Potential Impacts on Business Revenue





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CENTRAL CORRIDOR LIGHT RAIL TRANSIT PROJECT

SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT

CONSTRUCTION-RELATED POTENTIAL IMPACTS ON BUSINESS REVENUES

Prepared by:
Federal Transit Administration
and Metropolitan Council

Pursuant to:

National Environmental Policy Act of 1969 (NEPA), as amended, 42 U.S.C. Section 4321 et seq.; Council on Environmental Quality (CEQ) regulations, 40 C.F.R. Section 1500 et seq. implementing NEPA; Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub.L. No. 109-59 (Aug. 10, 2005); Federal Transit Laws, 49 U.S.C. Chapter 53; Environmental Impact and Related Procedures, 23 C.F.R. Part 771, a joint regulation of the Federal Highway Administration and Federal Transit Administration implementing NEPA and CEQ regulations; Section 106 of the National Historic Preservation Act of 1966, 16 U.S.C. Section 470(f); Section 4(f) of the Department of Transportation Act of 1966, as amended, 49 U.S.C. Section 303; Section 6(f)(3) of the Land and Water Conservation Fund Act of 1965, 16 U.S.C. Section 4601-4 et seq.; Clean Air Act, as amended, 42 U.S.C. Section 7401 et seq.; Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, 42 U.S.C. Section 4601 et seq.; Executive Order No. 12898 (Federal Actions to Address Environmental Justice in Minority and Low Income Populations); Executive Order No. 13166 (Improving Access to Services for Persons with Limited English Proficiency); Executive Order No. 11990 (Protection of Wetlands); Executive Order No. 11988 (Floodplain Management); other applicable Federal laws and procedures.

Date of Approval

Marisol Simon, Region 5
Regional Administrator
Federal Transit Administrator

11.30.12
Date of Approval

Mark W. Fuhrmann
New Starts Program Director
Metropolitan Council

ABSTRACT

The Federal Transit Administration (FTA), the lead federal agency, and the Metropolitan Council, the local lead agency, have prepared this Construction-related Potential Impacts on Business Revenues Supplemental Draft Environmental Impact Statement (EIS) for the Central Corridor Light Rail Transit Project (the Project) pursuant to 23 CFR 771.130(f). The Project is 10.9 miles long (9.7 miles of new alignment, 1.2 miles on shared alignment) and consists of 23 Central Corridor Light Rail Transit (LRT) stations – 18 new stations and five shared with the Hiawatha LRT.

On January 26, 2011, the U.S. District Court for the District of Minnesota in *NAACP, et. al. v. US Department of Transportation, et. al.,* CIV 10-147, held that the Final Environmental Impact Statement ("FEIS"), prepared in June 2009, was deficient in its analysis of effects to business revenue as an adverse impact of construction. In a second Court order dated January 23, 2012, it was clarified that the consideration of impacts on business revenue loss required by the 2011 ruling must be completed in the form of a Supplemental EIS. The intent of this Supplemental Draft EIS is to comply with the Court's orders.

A public comment period has been established for this document. Comments may be submitted in writing or in person at public hearing scheduled for Thursday, January 10, 2013. Two hearings will be held that day, one starting at 8:00 a.m. at Model Cities (849 University Avenue W., St. Paul, MN 55104) and one starting at 6:00 p.m. at Goodwill / Easter Seals (553 Fairview Avenue N., St. Paul, MN 55104).

Written comments should be submitted directly to Ms. Kathryn O'Brien by January 30, 2013 at the address below or by e-mail to centralcorridor@metc.state.mn.us.

FOR ADDITIONAL INFORMATION CONCERNING THIS DOCUMENT, CONTACT:

Maya Sarna
Office of Planning & Environment
Federal Transit Administration
1200 New Jersey Avenue SE
Washington, DC 20036
(202) 366-5811

Kathryn O'Brien
Environmental Project Manager
Central Corridor Project Office
540 Fairview Avenue
Saint Paul, MN 55410
(651) 602-1927

Central Corridor
Light Rail Transit Project

Supplemental Draft Environmental Impact Statement for Construction-Related Potential Impacts on Business Revenues

Federal Transit Administration

Metropolitan Council

December 2012

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ES EXECUTIVE SUMMARY

The Federal Transit Administration (FTA), the lead federal agency, and the Metropolitan Council, the lead local agency, have prepared this Supplemental Draft Environmental Impact Statement (EIS) for the Central Corridor light rail transit (LRT) project in the cities of Saint Paul and Minneapolis. The Project is 10.9 miles long (9.7 miles of new alignment, 1.2 miles on shared alignment) and consists of 23 Central Corridor light rail transit (LRT) stations – 18 new stations and five shared with the Hiawatha LRT.

Why was a supplement to the EIS completed?

A Final Environmental Impact Statement (FEIS) for the Central Corridor LRT project was issued in June 2009 and a Record of Decision (ROD) in August 2009.[1] Following the FEIS and ROD, a lawsuit was filed against the U.S. Department of Transportation, the FTA and the Metropolitan Council by a coalition of local businesses, residents and non-profit organizations. One of the claims made in the lawsuit was that the environmental review of the Project violated the National Environmental Policy Act (NEPA) by failing to adequately analyze potential loss of business revenues caused during construction of LRT. In January 2011, the Court held that the 2009 FEIS did not evaluate this issue and that construction-related business revenue loss should have been evaluated during the NEPA process. The Court found that the FEIS was inadequate insofar as it failed to address the loss of business revenues as an adverse impact of the construction of the Central Corridor LRT and ordered the FTA and the Metropolitan Council to supplement the FEIS. In April 2011, pursuant to 23 C.F.R. Section 771.130, the FTA and the Metropolitan Council completed an Environmental Assessment (EA) to address the Court's order. Plaintiffs objected to the use of a supplemental EA in response to the Court's order, and in January 2012 the Court clarified that the consideration of construction impacts on business revenues required by the January 2011 ruling must be completed in the form of a Supplemental EIS. The purpose of this Supplemental Draft EIS is to address the potential loss of business revenue as an adverse impact of construction.

[1] A number of documents have been prepared pursuant to NEPA for this project. A complete listing of these documents is included in Appendix A.

What issues does this Supplemental Draft EIS examine and what is the framework for examination?

This Supplemental Draft EIS examines construction-related impacts on the revenues of businesses along the Central Corridor alignment by drawing on a collection of studies and surveys carried out by local business associations, the Central Corridor Project Office (CCPO), researchers at the University of Minnesota, and researchers at the Wilder Foundation. The studies draw on business owners' and managers' perceptions and reports of construction-related impacts. These studies paint a broad picture of the trends in the corridor during construction. This Supplemental Draft EIS also examines data from the Business Support Fund, a construction mitigation loan program administered by the City of Saint Paul, to provide a quantitative analysis of the effects of construction on a subset of corridor businesses' revenues.

What is the framework for this Supplemental Draft EIS?

The Supplemental Draft EIS used the following process in order to examine construction-related impacts to Central Corridor business revenues:

- CCPO staff conducted an exhaustive literature review in an attempt to identify methodologies related to quantifying business revenue loss as an adverse impact of construction projects and to investigate construction mitigation best management practices.
- The literature revealed that the prevailing methods of analyzing construction-related impacts to businesses primarily rely on qualitative examinations of business owners' and managers' stated perceptions of construction-related impacts.
- The collection of surveys, reports and data documenting the experiences and opinions of Central Corridor business owners and managers were gathered from local business associations, the Central Corridor Project Office (CCPO), researchers at the University of Minnesota, and researchers at the Wilder Foundation for analysis.
- The surveys, reports and data were examined for similarities, differences, and trends that revealed the experiences of Central Corridor businesses during construction.

The findings of the analysis were applied to the alternatives evaluated, which are discussed below.

What are the alternatives covered in this Supplemental Draft EIS?

The FTA and the Metropolitan Council determined that in order to systematically evaluate the impact of construction on business revenues, the Supplemental Draft EIS would need to review the alternatives covered in the previous NEPA documents. Since none of the previous NEPA documents completed for the Central Corridor LRT Project

thoroughly discussed short-term business revenue effects as an adverse impact of construction, this Supplemental Draft EIS describes the potential construction-related effects associated with each alternative considered in the 2006 AA/DEIS. These alternatives are discussed below.

No-Build Alternative	The No-Build Alternative includes Metropolitan Council services and facilities that are programmed to be in operation in fiscal year 2014 (Central Corridor LRT opening year) and the regional roadway/highway facilities that are programmed to be in place by 2030. The No-Build Alternative is defined as existing and committed transportation projects. For the purposes of this analysis, this No-Build Alternative assumes no major transitway investment is included for this alternative.

Baseline Alternative	This alternative serves as a basis for comparison to the alternatives that include large infrastructure upgrades and changes. The Baseline Alternative is designed to do the "best that can be done" to improve transit service in the Central Corridor Study Area without a major capital investment.
LRT on University Avenue Preferred Alternative **LRT Initial Construction Mitigation** **LRT Final Construction Mitigation**	The Central Corridor Preferred Alternative is proposed to be a 10.9-mile double tracked alignment with a total of 23 stations (18 new and 5 existing shared with Hiawatha LRT) between downtown Minneapolis and downtown Saint Paul with intermediate service to the University of Minnesota. The Central Corridor Preferred Alternative would be primarily at-grade and is center-running throughout all segments. This Supplemental Draft EIS includes an evaluation of the impact of LRT construction on business revenues for two LRT alternatives. The first LRT alternative is defined as LRT with an initial construction mitigation package as identified in the FEIS published in 2009. The second LRT alternative is defined as LRT with the final mitigation as identified and assembled by the Metropolitan Council and other project stakeholders. This alternative is currently under construction in accordance with the requirements under the 2009 Record of Decision (ROD), the 2010 Finding of No Significant Impact (FONSI), and the 2011 FONSI. The project stakeholders and the Metropolitan Council also chose to do a total reconstruction of University Avenue, replacing aged

	utilities, streetlights, traffic lights, and sidewalks because the Project was defined to include total street reconstruction upon entry into Preliminary Engineering with FTA.
BRT on University Avenue	The BRT Alternative is proposed to be a high-capacity frequent bus alternative that would operate in both mixed traffic and an exclusive guideway with a total of 22 stations, as defined in the 2006 AA/DEIS. Full street reconstruction would be required to install the exclusive guideway planned for over half of the alignment. Also, the condition of University Avenue prior to construction was very poor; needed improvements were deferred to a later date to coincide with the construction of a future transitway. This Supplemental Draft EIS assumes that University Avenue would have been reconstructed even in the areas that did not include an exclusive guideway.

What are the findings of this Supplemental Draft EIS?

In the No-Build and Baseline Alternatives, construction would not occur or would be minor; therefore, no construction-related impacts on business revenue would be anticipated for either of these two alternatives. However, construction-related impacts would be expected for both BRT on University Avenue and the Preferred Alternative (LRT on University Avenue). This document is focused on the short term impacts businesses experienced during construction. The impacts for each alternative are discussed below.

What might have been the impacts associated with construction of a BRT Alternative on University Avenue?

BRT construction on University Avenue would have been of a similar extent and duration as the construction of Central Corridor LRT. This Supplemental Draft EIS is predicated on the fact that project stakeholders and the Metropolitan Council would have chosen, as they have done with LRT construction, to do a total reconstruction of University Avenue, replacing aged utilities, streetlights, traffic lights, and sidewalks as part of the Project. This is based upon the fact that the Project was defined to include total street reconstruction upon entry into Preliminary Engineering with FTA.

Because BRT construction activities and duration would be similar in nature to LRT construction, this Supplemental DEIS concludes that the impacts experienced by businesses during BRT construction would have been similar to those being experienced during LRT construction both in terms of extent and duration.

What were the impacts associated with construction of the LRT Alternative on University Avenue?

The Supplemental DEIS documents the impacts experienced by businesses during LRT construction. The findings of the report are summarized in the table below.

ISSUE	OVERALL TREND	FINDING
Business trends in the corridor compared to trends in the greater region prior to construction	**NEUTRAL**	Prior to construction, the number of businesses was decreasing slightly in the corridor, but the losses were in line with overall economic regional trends.
Corridor street level business turnover (the rate at which businesses leave the corridor and are replaced by another business) during construction	**POSITIVE**	Out of the 1,243 street-level businesses on the corridor, the area saw a net loss of three businesses during the construction period as of June 2012.

Corridor storefront vacancy rates (percentage of unoccupied storefronts) during construction	**POSITIVE**	Vacancy rates in the corridor generally remained stable from May 2011* to August 2012.
Business revenues of participants in the Business Support Fund, a mitigation program that provided forgivable loans to small retail oriented businesses	**NEGATIVE**	Overall, small retail-oriented businesses that participated in the Business Support Fund saw a range of losses from 2 percent to 84 percent of average monthly revenues with a mean average sales loss of 30 percent and a median of 25 percent. A reasonable hypothesis is that other small and large retail oriented businesses in the corridor may also experience similar losses in the 25 to 30 percent range.
Business owners' opinions of corridor construction impact mitigation programs	**POSITIVE**	Businesses generally had positive opinions of corridor mitigation programs.
Future business outlook	**POSITIVE**	Many businesses reported that they planned to stay in the corridor and expected sales and profits to improve in the future.

*Study tracking corridor vacancy rates began in May 2011. Corridor construction began in late August 2009.

What major impacts of LRT construction were reported by business owners?

The top major construction impacts expected and experienced by local businesses were:

- Ability of customers to navigate streets and sidewalks during construction.
- Reduction in automobile traffic during construction.

What are the impacts to business revenues due to construction?

The Supplemental Draft EIS uses data from the Business Support Fund, a program administered by the City of Saint Paul. The Business Support Fund focuses on retail businesses with revenues of up to $2 million and has estimated business revenue impacts due to LRT construction. Based on data from the Business Support Fund, small

retail businesses experienced between a 25 to 30 percent average monthly loss in revenues.

Construction also impacts larger retail-oriented businesses. Despite their size, large retail-oriented businesses still rely on customers physically accessing their brick-and-mortar locations. Therefore, it is reasonable to assume large businesses may have also experienced a 25 to 30 percent loss in average monthly revenues.

Non-retail businesses may not be as dependent as their retail counterparts on customers accessing their physical location to conduct business and generate revenue. Nonetheless, non-retail revenues could be affected by construction activities due to impacts to deliveries/pick-ups, utility interruptions, noise/vibration, dust as well as other impacts. Impacts to non-retail business revenue could be expected but to a lesser extent than small retail businesses.

It is important to note that there are a multitude of social, economic, local, and national variables that may impact business revenues. It is logical to conclude that businesses that rely on customers physically accessing their locations may experience impacts during a large construction project. The estimated ranges of revenue loss reported above are derivative, yet they should be viewed through a broader lens that includes regional and national economic influences not associated with LRT construction.

How is the Metropolitan Council mitigating short-term impacts to businesses?

The LRT construction mitigation programs being implemented in the Central Corridor are the result of collaboration between many entities. The level of collaboration and amount of mitigation evolved and increased as construction in the Central Corridor progressed. The initial mitigation program outlined in the FEIS and the ROD included a standard construction mitigation package, with provisions for outreach, signage, and maintenance of access. The final mitigation program included targeted assistance to smaller businesses whose revenues may have greater potential for being adversely affected by traffic and pedestrian disruptions during construction.

Multiple government agencies, area non-profits, local businesses, and residents contributed to the mitigation. For example, the Metropolitan Council focused on implementing contractor requirements, city governments focused on administering loan programs, and non-profits focused on helping small businesses chart business plans to help them during and after construction. This collaboration culminated in a final business mitigation program, currently in place and described in the LRT Final Construction Mitigation Alternative. The details of the final mitigation program are outlined in Section 3.7.

What are the strategies being used by the Metropolitan Council to minimize short-term impacts to businesses?

Studies have shown that oftentimes, construction projects have short-term impacts on business revenue. A number of strategies and mitigation measures are often developed to help minimize adverse impacts to business revenue. The Metropolitan Council, along with project partners, has committed to providing construction mitigation strategies that focus on:

(1) Minimizing the impacts of construction activities;

(2) Communications with corridor businesses and the community regarding construction activities;

(3) Promotional and marketing activities to encourage customers to shop at businesses during construction;

(4) Technical assistance to businesses during construction;

(5) Financial assistance to businesses for projects or programs that improve parking access and efficiency, and;

(6) General financial assistance to small businesses affected by construction activities.

A summary of these mitigation strategies is presented below. The funding amount allocated to each mitigation strategy and the amount of funds expended is also shown below in Table ES-1.

Table ES-1. Mitigation Measures: Financial Commitments

Mitigation Measures		Funding Amount (Funds Expended) (8)	Responsible Agency	LRT with Initial Construction Mitigation (9))	LRT with Final Construction Mitigation
Construction Contract	Construction Access Plan	$200,000 ($163,332)	Metropolitan Council/ Contractor	✓	✓
	Contractor Incentive Program	$850,000 ($352,436)	Metropolitan Council		✓
Project Communications	Community Outreach Coordinators (1)	$3,500,000 ($2,750,000)	Metropolitan Council	✓	✓
	Construction Communication Plan (Special Signage) (2)	$200,000 ($128,311)	Metropolitan Council / Contractor	✓	✓
Parking Assistance	Neighborhood Commercial Parking Program	$1,325,000 (1,325,000)	City of Saint Paul		✓
	Alley Improvements Program	$632,000 ($632,000)	City of Saint Paul / Metropolitan Council		✓
Business Assistance Programs	Business Support Fund (3)	$4,000,000 ($2,160,125)	City of Saint Paul		✓
	Business Improvement / Expansion Assistance	$700,000 ($612,497)	Neighborhood Development Center		✓
	Business Resources Collaborative (4)	$305,000 ($305,000)	N/A		✓
	University Avenue Business Preparation Collaborative (5)	$1,075,000 ($1,075,000)	N/A		✓
	Great Streets and Business Association Assistance Program	$210,000 ($192,000)	City of Minneapolis		✓
	Other (6)	$7,670 ($7,670)	N/A		✓

	Business Marketing Program [7]	$1,200,000 ($191,560)	Metropolitan Council		✓
University Avenue / Cedar Riverside Betterments	Improved Street Lighting / Trees / Street Furniture	$1,000,000 ($1,000,000)	Metropolitan Council		✓
	Business Façade Improvement Financing	$150,000 ($69,530)	City of Minneapolis		✓
Promoting Business Access	Additional Business Signage	$50,000 ($50,000)	Metropolitan Council		✓
	Cooperative Advertising and Transit Fare Passes	$250,000 ($164,122)	Metropolitan Council		✓
TOTAL FUNDING AMOUNT		**$15,654,670**			
TOTAL FUNDS SPENT		**$11,178,583**			

(1) Includes salary and benefits for the fully staffed Central Corridor Outreach and Communications Team for the three years of heavy project construction from 2010-2012 and the first six months of 2013.

(2) Includes temporary directional signage, including portable changeable message signs, project identification boards, construction site signage, and other signs.

(3) Includes $2,500,000 from the Metropolitan Council, $1,000,000 from the City of Saint Paul, and $500,000 from the CCFC.

(4) Includes grants from CCFC as well as a matching investment from the City of Saint Paul for marketing during project construction.

(5) Includes $800,000 from CCFC, $150,000 from the F.R. Bigelow Foundation, and $125,000 from the Saint Paul Foundation.

(6) Includes grants from CCFC to Central Corridor Partnership and AEDA to support presentations from business mitigation consultants.

(7) This amount was approved September 28, 2011 by the Metropolitan Council to be used to retain a consultant to provide marketing assistance to Central Corridor businesses.

(8) Funds expended are current as of September 30, 2012.

(9) The LRT with the Initial Construction Mitigation is associated with the 2009 ROD and LRT with Final Construction Mitigation is associated with the current construction mitigation program.

Construction Contract

The contract between the Metropolitan Council and Central Corridor LRT contractors paired measures to minimize construction-related disruptions to businesses with financial incentives to encourage contractor cooperation with implementation of these measures. Some outcomes of this contract included:

- Development of a vehicle and pedestrian access plan
- Award of quarterly monetary incentives to contractors that complied with measures developed by stakeholders
- Coordination with stakeholders involved in special events, so that contractors could plan for construction activities that would minimize event disruptions

Photo 1: Contractors created temporary parking for residents in the construction zone on University Avenue in Minneapolis.

Project Communications

Several communication strategies have been implemented to provide consistent and timely information about Central Corridor LRT construction. For example, Community Outreach Coordinators were hired to act as liaisons between the public, local businesses, and project contractors. Also, each contractor was required to provide a Contractor Community Relations Leader who was responsible for communicating construction activities to businesses and to the public.

Photo 2: Outreach coordinator Shoua Lee discusses the project with a Central Corridor business owner.

Parking Assistance

Several different parking programs and plans were designed to minimize the impact to businesses due to the loss of parking. For example, the Neighborhood Commercial Parking Program offered low-interest loans to businesses that could be used to improve parking access or efficiency.

Photo 3: Under an arrangement with the city, a former restaurant parking lot at the southwest corner of Fry and University offers free two-hour parking for patrons of nearby businesses.

Business Assistance Programs

Business assistance programs were developed to assist businesses impacted by construction activities. These programs offered businesses loans or grants to assist with things like marketing and exterior building improvements. One of the largest programs was the Business Support Fund. This program offered small businesses that experienced construction-related disruptions low- or no-interest forgivable loans. The loans could be used for basic business expenses including taxes, rent/mortgage, utility or personnel payments.

Photo 4: The Republic Café and Pub in Minneapolis' Seven Corners Neighborhood is a recipient of the City's Great Streets façade improvement grant.

University Avenue/ Cedar Riverside Betterments

The City of Minneapolis and the City of Saint Paul both provided funding to add amenities and improve aesthetics in the corridor. This included funds for improved street lighting and street furniture as well as funds for business façade-improvements.

Promoting Business Access

A number of programs were undertaken to encourage patronage of Central Corridor businesses during construction. For example, variable message signs were used to assist travelers with navigating the corridor. The signs also displayed messages encouraging the public to support local businesses. In a separate program, Metropolitan Council provided businesses with transit fare passes for distribution to customers.

Photo 5: Variable message signing used to alert drivers to the traffic switch on University Avenue.

What was the result of the evaluation of alternatives?

The following table summarizes the comparative evaluation of the effects of the alternatives considered in this Supplemental Draft EIS on business revenue due to construction. The main finding through this comparison is that impacts to business revenues are least severe under the LRT Alternative with the final construction mitigation. Although impacts to business revenue due to the construction of LRT are unavoidable, greater adverse effects would have occurred had the final construction mitigation strategies not been employed.

Alternative	Construction Duration	Construction Severity	Mitigation Package	Business Revenue	Meets Purpose and Need (Yes/No)
No-Build	NA	NA	NA	🟢	No
Baseline	NA	NA	NA	🟢	No
LRT (Initial Construction Mitigation)	🟡	🟡	🟡	🟡	Yes
LRT (Final Construction Mitigation)	🟡	🟡	🟢	🟡	Yes
BRT	🟡	🟡	🟡	🟡	No

🟢 Minimal Impact or Positive Benefit

🟢🟡 Moderate to Positive Impact

🟡 Moderate

🟡🔴 Moderate to Negative

🔴 Maximum Impact or Negative Benefit

1 PURPOSE AND NEED FOR THE PROPOSED ACTION

The Federal Transit Administration (FTA), the lead federal agency, and the Metropolitan Council, the lead local agency, have prepared this Supplemental Draft Environmental Impact Statement (EIS) for the Central Corridor light rail transit (LRT) project in the cities of Saint Paul and Minneapolis. The content of this Supplemental Draft EIS includes a discussion of the following elements: purpose and need for the proposed action; alternatives to the proposed action; an assessment of potential revenue losses to businesses as an adverse impact of construction of the Central Corridor LRT; and a description of public involvement/agency coordination activities.

1.1 Purpose and Need for the Proposed Action

The purpose and need for the Central Corridor was presented in the Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS) and approved by the FTA in 2006. A summary of the purpose and need as presented in the AA/DEIS and the 2009 Final Environmental Impact Statement (FEIS) is presented below.

> As growth in the U.S. shifted to the south and west over the past 30 years, the Twin Cities area was one of the few northern metropolitan regions that did not follow this trend. The Twin Cities have continued to grow, and the results of that growth are felt in the Central Corridor. The purpose of the Central Corridor LRT is to meet the future transit needs of the Central Corridor LRT Study Area and the region, and to support the economic development goals for the Central Corridor Study Area. The Metropolitan Council's regional 2030 Transportation Policy Plan identified this corridor as a top priority for early implementation. Due to increasing traffic congestion and major redevelopment in the physically constrained Central Corridor, a need currently exists for a viable alternative to auto travel. The introduction of fixed guideway transit to the Central Corridor Study Area is proposed as a cost-effective measure aimed at improving mobility by offering an alternative to auto travel for commuting and discretionary trips. The Central Corridor LRT would help to minimize congestion increases, offer travel time savings, provide better transit service and capacity to the

diverse population of existing and future riders in the corridor, and optimize significant public investments in the regional transit system.[2]

Goals and objectives were developed as part of the AA/DEIS to serve as the framework for decision making for the Central Corridor. The full text of the goals and objectives is provided in Chapter 1 of the AA/DEIS, and is summarized below.

GOAL 1: ECONOMIC OPPORTUNITY AND INVESTMENT

Objectives:

- Support investments in infrastructure, business, and community that sustain the heart of the region.
- Promote a reliable transit system that allows an efficient, effective land use development pattern in major activity centers that minimizes parking demand, facilitates the highest and best use of adjacent properties, and gives employers confidence that employees can travel to/from work.

GOAL 2: COMMUNITIES AND ENVIRONMENT

Objectives:

- Facilitate the preservation and enhancement of neighborhoods in the Central Corridor Study Area.
- Acknowledge the individual character and aspirations of each place served, and of the region as a whole.
- Support regional goals for cleaner air and water, more efficient energy use, and a safer and healthier environment.

GOAL 3: TRANSPORTATION AND MOBILITY

Objectives:

- Create transportation improvements that add people-carrying capacity, minimize operating costs, improve operating efficiency, provide high-quality modal alternatives, and reinforce the region's transportation system.
- Expand opportunities for all users to move freely to, through, and within the Central Corridor Study Area.
- Enhance the existing transportation infrastructure to serve the high number of transit dependent persons in the Central Corridor Study Area.

[2] Central Corridor FEIS, 2009, Chapter 1, Page 1-5

1.2 Project History and Timeline

This section is intended to give a brief project history and a summary of the previously completed NEPA documents. This will include the purpose of each of the documents and general timeframes of completion.

1.2.1 Alternatives Analysis/Draft Environmental Impact Statement (AA/DEIS), 2006

The Central Corridor AA/DEIS began in 2002 and was released for public and agency comment on April 3, 2006. Public hearings were held at four locations in May, and the comment period closed on June 5, 2006. On June 28, 2006, the Metropolitan Council adopted a Locally Preferred Alternative (LPA) for the Central Corridor, namely LRT operating on Washington and University avenues (Metropolitan Council Resolution No. 2006-15). The AA/DEIS LPA was 11 miles long (9.8 miles of new alignment and 1.2 miles sharing the existing Hiawatha LRT alignment in downtown Minneapolis).

1.2.2 Supplemental Draft Environmental Impact Statement (SDEIS), 2008

Subsequent to the completion of the AA/DEIS, several unresolved policy questions and design options surfaced which required additional study.

A Notice of Intent (NOI) to prepare a Supplemental DEIS (SDEIS) documenting potentially significant effects of implementing proposed changes to the AA/DEIS LPA was published in February 2008. The SDEIS was published in July 2008 and the comment period closed on August 25, 2008. A Preferred Alternative (Metropolitan Council Resolution No. 2008-26) was adopted by the Metropolitan Council on September 3, 2008, subsequent to three SDEIS public hearings and the closure of the SDEIS public comment period on August 25. The Preferred Alternative was 10.9 miles long (9.7 miles of new alignment, 1.2 miles on shared alignment), and had 15 new stations and five stations shared with the Hiawatha LRT for a total of 20 stations.

1.2.3 Final Environmental Impact Statement (FEIS), Record of Decision (ROD), and Adequacy Determination, 2009

The Project's FEIS was published in June 2009, beginning a required minimum 30-day review period. The FEIS was developed to comply with applicable federal regulations and act as the public document that discloses the environmental effects of the Preferred Alternative with possible reasonable and feasible mitigation measures. This document also reflected the comments received during the circulation of the AA/DEIS and the SDEIS.

In August 2009, the FTA issued a Record of Decision (ROD), which concluded the formal federal environmental review process. In addition, the Metropolitan Council issued an Adequacy Determination under the requirements of Minnesota Environmental Policy Act (MEPA), which concluded the state environmental review process. The ROD is the federal action which determines that the requirements of NEPA have been satisfied,

and formally commits the FTA and Metropolitan Council to the mitigation measures required for the impacts identified in the FEIS. The mitigation measures are also conditions for receiving federal funding for the Project.

1.2.4 Infill Stations Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), 2010

After the FTA issued a ROD in August 2009, the project sponsors obtained a commitment for local funding to build one above-grade infill station at Hamline Avenue, Victoria Street, or Western Avenue. Consequently, an evaluation of the social, economic, and environmental impacts for the construction of an above-grade station was required in accordance with NEPA. The Metropolitan Council, on behalf of the FTA, the lead federal agency, prepared the Infill Stations Environmental Assessment (EA) for the Central Corridor LRT Project. The Build Alternative, as defined in the Infill Stations EA, consisted of 10.9 miles of LRT (9.7 miles of new alignment, 1.2 miles on shared alignment) and consisted of the 20 Central Corridor LRT stations – 15 new stations and five shared with the Hiawatha LRT as described in the FEIS, and included all the below-grade and above-grade infrastructure construction of up to three potential infill stations at Western Avenue, Victoria Street, and Hamline Avenue.

Because the project sponsors had not determined which one of the three stations would be constructed, the above-grade construction of all three infill stations was included in the Infill Stations EA. By analyzing the social, economic, and environmental impacts of construction of above-grade elements for all three potential stations, project sponsors could select any of the three infill stations for above-grade construction using locally committed funds. Ultimately, all three infill stations were selected for construction.

A public comment period was established for the Infill Stations EA and two hearings were held on January 27, 2010. Following publication of the EA and the EA public comment period, the above-ground construction of all three infill stations was added to the project scope and budget by resolution of the Metropolitan Council on February 24, 2010 (Metropolitan Council Resolution No. 2010-68).

The FTA issued a Finding of No Significant Impact (FONSI) on February 26, 2010. This FONSI only addressed environmental mitigation measures resulting from construction of above-grade elements of the three infill stations, as identified in the EA.

1.2.5 Construction-Related Potential Impacts on Business Revenue EA and FONSI, 2011

Following the June 2009 FEIS and the August 2009 ROD, a lawsuit was filed against the United States Department of Transportation (US DOT), the FTA, and the Metropolitan Council by a coalition of local businesses, residents, and non-profit organizations. One of the claims made in this lawsuit was that the environmental review of the Project violated NEPA by failing to adequately analyze the impact on business revenues

potentially caused by construction of the Project. The Court directed the FTA and the Metropolitan Council to supplement the FEIS to address the potential loss of business revenues as an adverse impact of the construction of the Central Corridor LRT.

In April 2011, the FTA and the Metropolitan Council prepared a Supplemental EA (Appendix B) to document construction-related impacts on businesses to comply with the January 26, 2011 court ruling and NEPA. The Supplemental EA was prepared pursuant to 23 CFR Section 771.130.

Following the publication of the Supplemental EA, the FTA issued a FONSI which included specific mitigation to minimize impacts to business revenue due to construction of the LRT. Mitigation included a number of measures and financial commitments designed to either avoid impacts during construction or provide mitigation of impacts.

1.3 Basis for this Supplemental Draft EIS

The Court order in *NAACP v. DOT,* Case No. 10-147 (USDC MN), dated January 26, 2011, stated that the "FEIS was deficient in its consideration of lost business revenue as an adverse impact of the construction of the CCLRT" and ordered the defendants to supplement the FEIS on that issue. FTA's regulation 23 CFR Section 771.130, titled "Supplemental environmental impact statements" provides a number of options for supplementing an EIS. Section 771.130(c) states, "Where the Administration is uncertain of the significance of the new impacts, the applicant will develop appropriate environmental studies or, if the Administration deems appropriate, an EA to assess the impacts of the changes, new information, or new circumstances." Because the issue that the FTA was evaluating was discrete and narrow in scope, the FTA chose to conduct a supplemental EA as the appropriate level of environmental review under NEPA. In April 2011, the FTA and the Metropolitan Council completed a Supplemental EA to document construction-related impacts on businesses to comply with the January 2011 court ruling and NEPA. A public comment period for the Supplemental EA was held from March 1 through March 31, 2011, and two public hearings were held on March 16, 2011. Comments received during the public comment period and responses to these comments were included within the Supplemental EA.

In a second order on January 23, 2012, the Court clarified that the consideration of impacts on business revenue loss required by the January 2011 ruling must be completed in the form of a Supplemental EIS. The intent of this Supplemental Draft EIS is to comply with the Court's order. This Supplemental EIS includes a description of LRT construction activities, a summary of economic conditions in the corridor, an assessment of revenue losses to businesses as an adverse impact of construction activities, a description of the final mitigation program, and an evaluation of the alternatives. This Supplemental Draft EIS has been prepared in accordance with 40 C.F.R. Sec. 1502.9(c).

2 ALTERNATIVES CONSIDERED

Chapter 2 presents a brief history of the alternatives previously considered and the alternatives carried forward in this Supplemental Draft EIS.

2.1 Alternatives Previously Considered

This section will describe the alternatives previously considered through the various Central Corridor NEPA documents.

2.1.1 Alternatives Evaluated in the AA/DEIS

The initiation of the AA/DEIS for the Central Corridor began with a formal scoping process, which provided an opportunity for regulatory agencies and the public to respond to the concept of proposed transit in the Central Corridor Study Area and to identify issues of concern. The scoping process was officially initiated on June 5, 2001, with publication in the Federal Register of the NOI to prepare an EIS. The Notice of Availability of the Central Corridor Scoping Booklet was published in the Minnesota EQB Monitor on June 11, 2001. The comment period closed on July 20, 2001. Four scoping meetings were held, consisting of one agency meeting and three public meetings.

The alternatives presented during scoping included LRT and BRT on University Avenue and LRT on Interstate 94 (I-94). A No-Build Alternative and a Baseline Alternative were also included in the scoping process. A more detailed description of the alternatives is described in Chapter 2 of the AA/DEIS.

Alternative alignments for LRT and Busway/Bus Rapid Transit through the University of Minnesota (U of M), State Capitol, and downtown Saint Paul were suggested during scoping. Project partners including the U of M, Saint Paul's Capitol Area Architectural and Planning Board (CAAPB), and the City of Saint Paul advocated minor changes in the alignment or affirmed their preference for specific alignments. Further analysis was undertaken to satisfy concerns and to respond to comments received. Through the scoping process, alignments and alternatives that were not prudent or reasonable and did not satisfy requirements of the purpose and need were not carried forward for additional analysis in the AA/DEIS. Scoping results are included in the Scoping Summary Report (December 7, 2001). Two build alternatives were selected for evaluation in the AA/DEIS in addition to a No-Build and Baseline Alternative. The build alternatives included: University Avenue LRT and University Avenue BRT.

2.1.2 Selection of the Locally Preferred Alternative

After circulation of the AA/DEIS, the Metropolitan Council and project partners reviewed the relative merits and benefits of each of the alternatives. This evaluation of the alternatives is presented in the AA/DEIS and is included in the Evaluation of Central Corridor Alternatives (Technical Memorandum submitted to Central Corridor Coordinating Committee, May 30, 2006). Following the completion of the AA/DEIS public hearings, the Metropolitan Council adopted the AA/DEIS LPA for the Central Corridor (June 28, 2006, Metropolitan Council Resolution No. 2006-15). The University Avenue LRT Alternative was selected as the AA/DEIS LPA. The AA/DEIS LPA was 11 miles in length, of which 9.8 miles consisted of new alignment and 1.2 miles used the existing Hiawatha LRT alignment in downtown Minneapolis.

2.1.3 The Purpose of the 2008 SDEIS

Subsequent to the completion of the AA/DEIS for the Central Corridor LRT Project, several unresolved policy questions and design element options arose which required additional study. These design considerations responded to changed conditions within the corridor, technical, operational, and financial constraints, and major infrastructure requirements that were not fully documented in the AA/DEIS. An NOI to prepare the SDEIS for the Central Corridor LRT Project was published in the *Federal Register* (Federal Register / Vol. 73, No. 37 / Monday, February 25, 2008/ p. 10090-10091) as well as the Minnesota EQB Monitor on February 25, 2008.

The goal of the SDEIS was to assist the Metropolitan Council, resource agencies, and key project partners in understanding and resolving critical project elements within the context of NEPA. It provided an opportunity to document and disclose local decision-making related to project elements as they were refined during the preliminary engineering (PE) effort. The SDEIS was of limited scope and focused on proposed changes to the AA/DEIS LPA and relevant updates to information provided in the AA/DEIS. The proposed changes evaluated in the SDEIS are listed below. A more detailed description of the changes is included in the SDEIS and FEIS.

- Hiawatha/Central Connection
- University of Minnesota Alignment
- Future Infill Stations at Hamline, Victoria, or Western
- Capitol Area Alignment and Stations
- Downtown Saint Paul Alignment/Station Modifications
- Traction Power Substations
- Three-Car Train Requirement
- Vehicle Maintenance and Storage Facility
- Washington Avenue Bridge

2.1.4 Selection of the Preferred Alternative

A Notice of Availability was published in the Federal Register on July 11, 2008, and in the Minnesota EQB Monitor on July 14, 2008, providing notification to the public and resource agencies of publication of the SDEIS. After the closing of the formal comment period (August 25, 2008), the Metropolitan Council adopted the Preferred Alternative for Central Corridor. LRT was reaffirmed as the preferred transit mode for the Central Corridor operating at-grade on Washington and University Avenues, passing north of the Capitol and turning south on Robert Street, turning west at 12th Street to Cedar Street, and then continuing south on Cedar Street into downtown Saint Paul turning diagonally at 4th Street, and continuing east to end at Saint Paul's Union Depot with track leading to an operations and maintenance facility farther east (Metropolitan Council Resolution No. 2008-26). The Preferred Alternative included 20 (15 new and five shared with Hiawatha) stations. This decision, revising the AA/DEIS LPA, formed the basis of the evaluation undertaken and documented in the FEIS.

On August 18, 2009, the FTA issued the Central Corridor LRT ROD. The ROD documents that the FTA and the Metropolitan Council met the requirements of NEPA for the Central Corridor LRT Project. The ROD describes the project, alternatives considered, public comments and responses, and the basis for the decision and mitigation measures required. Mitigation of adverse effects caused by the construction of LRT are described in the FEIS and summarized in the Mitigation Monitoring Program (Attachment B of the ROD).

After the FTA issued a ROD in August 2009, the project sponsors obtained a commitment for local funding to build one above-grade infill station at Hamline Avenue, Victoria Street, or Western Avenue. An EA was completed to document the effects of constructing the infill stations. Following publication of the EA and the EA public comment period, the above-ground construction of all three infill stations was added to the project scope and budget by resolution of the Metropolitan Council on February 24, 2010 (Metropolitan Council Resolution No. 2010-68). The Preferred Alternative was modified to consist of 23 stations (18 new and five shared with Hiawatha).

2.2 Alternatives Evaluated in This Supplemental Draft EIS

This Supplemental Draft EIS documents the potential impacts on the loss of business revenue during construction of the Central Corridor LRT Project. Since none of the previously completed NEPA documents thoroughly discussed business revenue impacts due to construction of a transitway, this Supplemental Draft EIS will describe the potential effects associated with construction of the alternatives considered in the AA/DEIS. These alternatives are being introduced for illustrative purposes only, as a means of providing a basis for understanding the potential severity of LRT construction effects and the appropriate mitigation that may be identified to offset effects. The Central Corridor LRT project (as discussed in Section 2.3.3) is presently under construction. Therefore, there is no opportunity for this Supplemental Draft EIS to influence the "preferred alternative" insofar as the selection of mode (LRT), alignment

(as illustrated in Figure 2-1), or project design features (which are currently under construction).

A description of the alternatives included in this Supplemental Draft EIS follows.

2.2.1 No-Build Alternative

The No-Build Alternative includes Metropolitan Council services and facilities that are programmed to be in operation in fiscal year 2014 (Central Corridor LRT opening year) and the regional roadway/highway facilities that are programmed to be in place by 2030. The No-Build Alternative is defined as existing and committed transportation projects. The 2030 Transportation Policy Plan currently identifies Central Corridor LRT as a committed project. For the purposes of this analysis, this No-Build Alternative will assume no major transitway investment for the Central Corridor.

Under requirements included in 40 CFR Section 1502.14(d), the alternatives analysis in the project development process must include the alternative of no-action or no-build. This analysis provides a benchmark, enabling decision-makers to compare the magnitude of environmental effects of the action alternatives. Inclusion of such an analysis in the process is necessary to inform Congress, the public, and the President as intended by NEPA (Section 1500.1(a)).

2.2.2 Baseline Alternative[3]

This alternative serves as a basis for comparison to the build alternatives as part of the FTA's New Starts Process. The Baseline Alternative is designed to do the "best that can be done" to improve transit service in the Central Corridor Study Area without a major capital investment. Low capital cost infrastructure and bus transit improvements for the Central Corridor include bus operations, Intelligent Transportation System (ITS) techniques, travel demand management (TDM), and other system improvements. ITS techniques use the latest technology to more effectively manage transportation systems. TDM strategies help reduce congestion by encouraging the use of alternative modes of transportation rather than driving alone.

2.2.3 LRT on University Avenue

The Central Corridor Preferred Alternative (Figure 2-1) is a 10.9-mile LRT double tracked alignment with a total of 23 stations (18 new stations and five shared with Hiawatha LRT) between downtown Minneapolis and downtown Saint Paul with intermediate service to the U of M. The Central Corridor Preferred Alternative would be primarily at-grade except for aerial structures over I-35W, Trunk Highway 280 (TH 280), I-94, and the

[3] The AA/DEIS included a combined No-Build and Baseline Alternative. The subsequent FEIS separated them into two distinct alternatives for analysis in the document.

Washington Avenue Bridge facility over the Mississippi River. In downtown Minneapolis, the Preferred Alternative is proposed to share the Hiawatha LRT alignment. The Preferred Alternative uses an exclusive at-grade alignment and is center-running throughout all segments.

This Supplemental Draft EIS includes an evaluation of the impact of LRT construction on business revenues for two LRT alternatives. The first LRT alternative is defined as LRT with the initial construction mitigation package as identified in the FEIS and ROD. The second LRT alternative is defined as LRT with final mitigation as identified and assembled by the Metropolitan Council and other project stakeholders following the publication of the FEIS, the ROD, the Supplemental EA, and the 2011 FONSI. The second LRT alternative is currently being constructed. The following sections briefly describe the LRT alternatives and the mitigation associated with each. Section 3.7 includes a more detailed description of the mitigation strategies.

2.2.3.1 LRT Alternative (Initial Construction Mitigation)

LRT with the initial construction mitigation includes the construction of the Preferred Alternative with the initial mitigation package identified in the FEIS and ROD. The mitigation measures included in the FEIS and ROD included short-term mitigation strategies to help minimize adverse effects to businesses due to LRT construction. These mitigation strategies included:

- Construction Contract Requirements During Construction:
  - Construction Access Plans
  - Special Events Plans
  - Best Management Practices (BMPs) to minimize impacts
- Project Communications
  - Construction Public Information and Communication Plan
  - Community Outreach Coordinators
  - Contractor Community Relations Leader

2.2.3.2 LRT Alternative (Final Construction Mitigation)

The LRT Alternative with the final construction mitigation includes the construction of the Preferred Alternative with the initial mitigation package identified, as well as expanded mitigation strategies focused on financial assistance to businesses. The additional mitigation strategies include:

- Construction Contract Requirements During Construction:
  - Contractor Incentive Program
- Parking Assistance:
  - Neighborhood Commercial Parking Program

  - Alley Improvements Program
- Business Assistance Programs:
  - Business Support Fund
  - Business Improvement/ Expansion Assistance
  - Business Resources Collaborative
  - University Avenue Business Preparation Collaborative
  - Great Streets and Business Association Assistance Program
  - Business Marketing Program
- University Avenue/Cedar Riverside Betterments
  - Improved Street Lighting/Trees/Furniture
  - Business Façade Improvement Financing
- Promoting Business Access
  - Additional Business Signage
  - Cooperative Advertising and Transit Fare Passes

The mitigation assistance in this alternative is being provided by multiple government agencies, as well as area non-profits and local businesses. Some of the mitigation assistance included financial assistance to businesses with demonstrated revenue losses, business marketing programs, parking assistance, and increased signage during construction. However, not all of the mitigation identified as part of the final construction mitigation package was direct financial assistance; rather, many of the non-profit organizations provided technical assistance to businesses. This included assistance with bookkeeping, cash flow projections, and individualized marketing and promotions.

2.2.4 BRT on University Avenue

The BRT Alternative (Figure 2-2) was proposed to be a high-capacity frequent bus alternative that would operate in both mixed traffic and an exclusive guideway with a total of 22 stations. The exclusive guideway would be located in the median of University Avenue between Bedford Avenue and Rice Street (approximately five miles). Buses would operate on a 28-foot pavement that includes a separate bus lane for eastbound and westbound movements. Mountable curbs would separate the guideway from vehicular traffic while allowing emergency vehicles to access the guideway. In downtown Minneapolis, the BRT Alternative would follow existing Routes 16 and 50 on Fourth Street South, with a western terminus at Metropolitan Council's Fifth Street Garage. Eastbound Busway/BRT vehicles would operate in mixed traffic. Westbound vehicles would operate on an existing contraflow bus lane on the north side of Fourth Street South.

Figure 2-1. Preferred Alternative- LRT on University Avenue

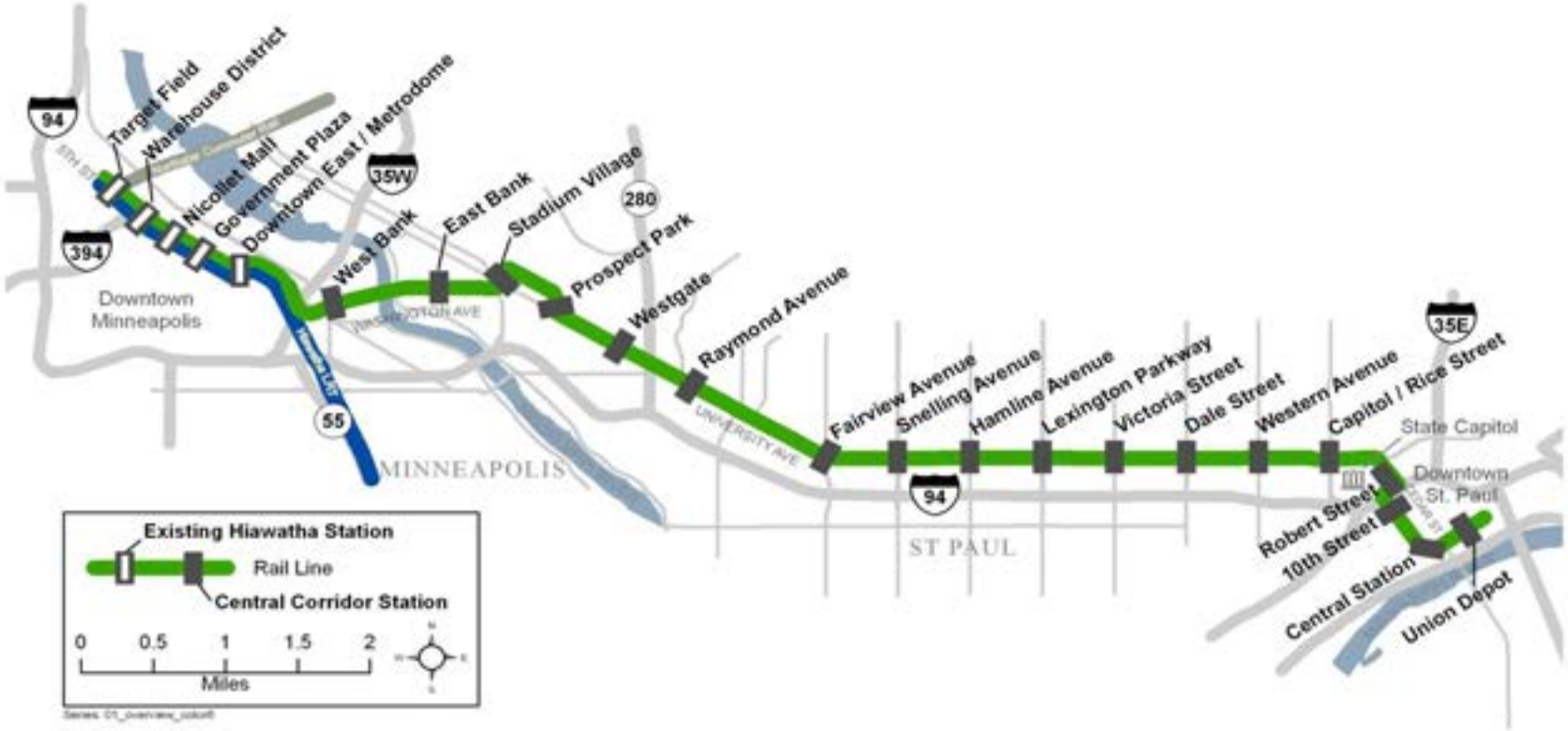
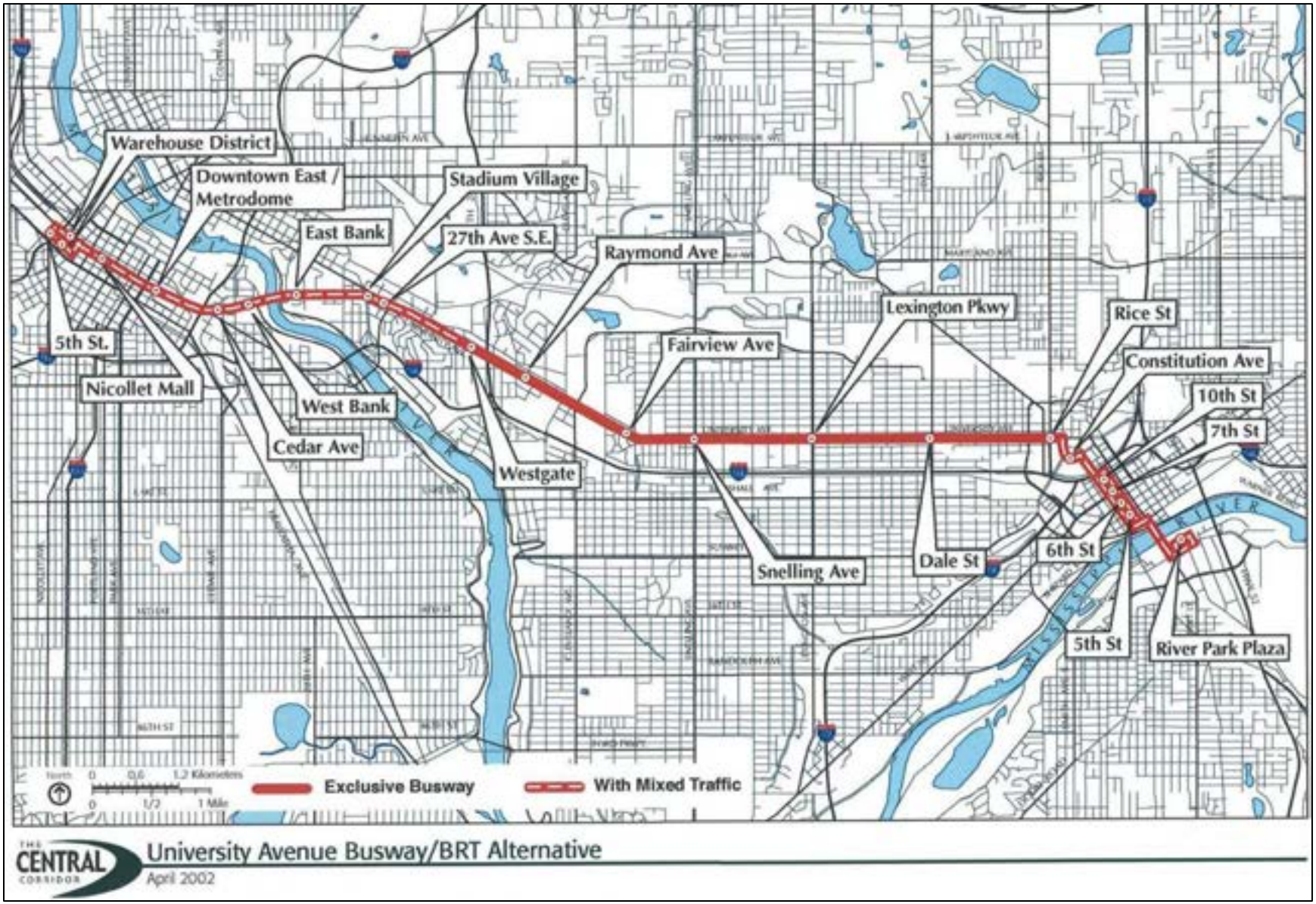


Figure 2-2. BRT Alternative



2.3 Construction Activities

This section describes construction activities associated with the alternatives considered. Each of the alternatives considered will have a description of general construction activities, as well as typical durations.

2.3.1 No-Build Construction Activities

The No-Build Alternative includes roadway and bus system improvements for which funding has been committed along the University Avenue and I-94 corridors as specified in the appropriate agency transportation improvement plans and 2030 Transportation Policy Plan. Minimal modifications or expansions of transportation or transit facilities are expected; thus, for the No-Build Alternative, no construction is anticipated.

2.3.2 Baseline Construction Activities

In addition to the roadway and bus system improvements described in the No-Build Alternative, the Baseline Alternative assumes the implementation of ITS and TDM techniques and improvements. The construction activities required to implement these improvements are expected to be minimal and limited to traffic signal improvements.

2.3.3 LRT Construction Activities

Construction of LRT consists of guideway construction, station construction, structures work, maintenance facility construction, power systems installation and civil work. The following description of LRT construction activities is applicable to both the LRT Alternative with the initial construction mitigation and LRT with the final construction mitigation. For the purposes of this Supplemental Draft EIS, construction of the Project is addressed in two general sections: Civil West and Civil East (Figure 2-3). The Civil West construction comprises the western three miles of the Project within the City of Minneapolis. The Civil East Construction comprises the eastern seven miles of the Project within the City of Saint Paul. The western-most one-mile segment of the Project along the Hiawatha LRT in downtown Minneapolis will not be affected by project construction because the Hiawatha LRT Project is already completed. The boundaries of the Civil West construction and Civil East construction as well as a summary of civil work activities are described below.

2.3.3.1 Civil West Construction

The Civil West segment extends generally from a connection to the existing Hiawatha LRT line near the Hubert H. Humphrey Metrodome, crossing over I-35W, continuing along Washington Avenue across the Mississippi River on the existing Washington Avenue Bridge and through the University of Minnesota campus, along the south side of the University of Minnesota Transitway, along 29th Avenue SE, and along University Avenue to the Saint Paul city limits near Emerald Street SE.

The Civil West construction includes: demolition of existing underground utilities and roadway pavement; environmental remediation; construction of underground public utilities; areaways (underground building spaces); drainage; light rail track and stations; retaining wall structures; underground communication, signal, and traction power ducts; pull boxes; and catenary pole foundations. Construction also includes any work on and to off-site locations such as duct bank, utilities, and traction power substation sites. Associated roadway work includes construction of new roadway pavements, sidewalks, curbs and gutters, street lighting, above and below-grade traffic signal facilities and other related improvements. Associated utility work includes relocation of private utilities by the utility owner and/or its contractor.

Civil West construction activities also include modifications to the Hiawatha LRT bridge over 3rd and 4th Streets (Bridge 27884); construction of a new bridge spanning I-35W (Bridge 27B63); modifications to the Washington Avenue Bridge over the Mississippi River, West River Road, and East River Road (Bridge 9360); and construction of a transit mall through the University of Minnesota campus. Washington Avenue Bridge work includes converting the interior lower deck roadway lanes to a light rail transit track, leaving one outer lane on each side of the bridge for vehicular traffic. Modification work will be performed on the existing Hiawatha LRT bridge (Bridge 27878), the existing Cedar Avenue Bridge (Bridge 27030), and the existing 19th Avenue South bridge (Bridge 27620) to accommodate future LRT operations. Transit mall work includes landscaping, street and sidewalk paving, lighting, signage, and a light rail station.

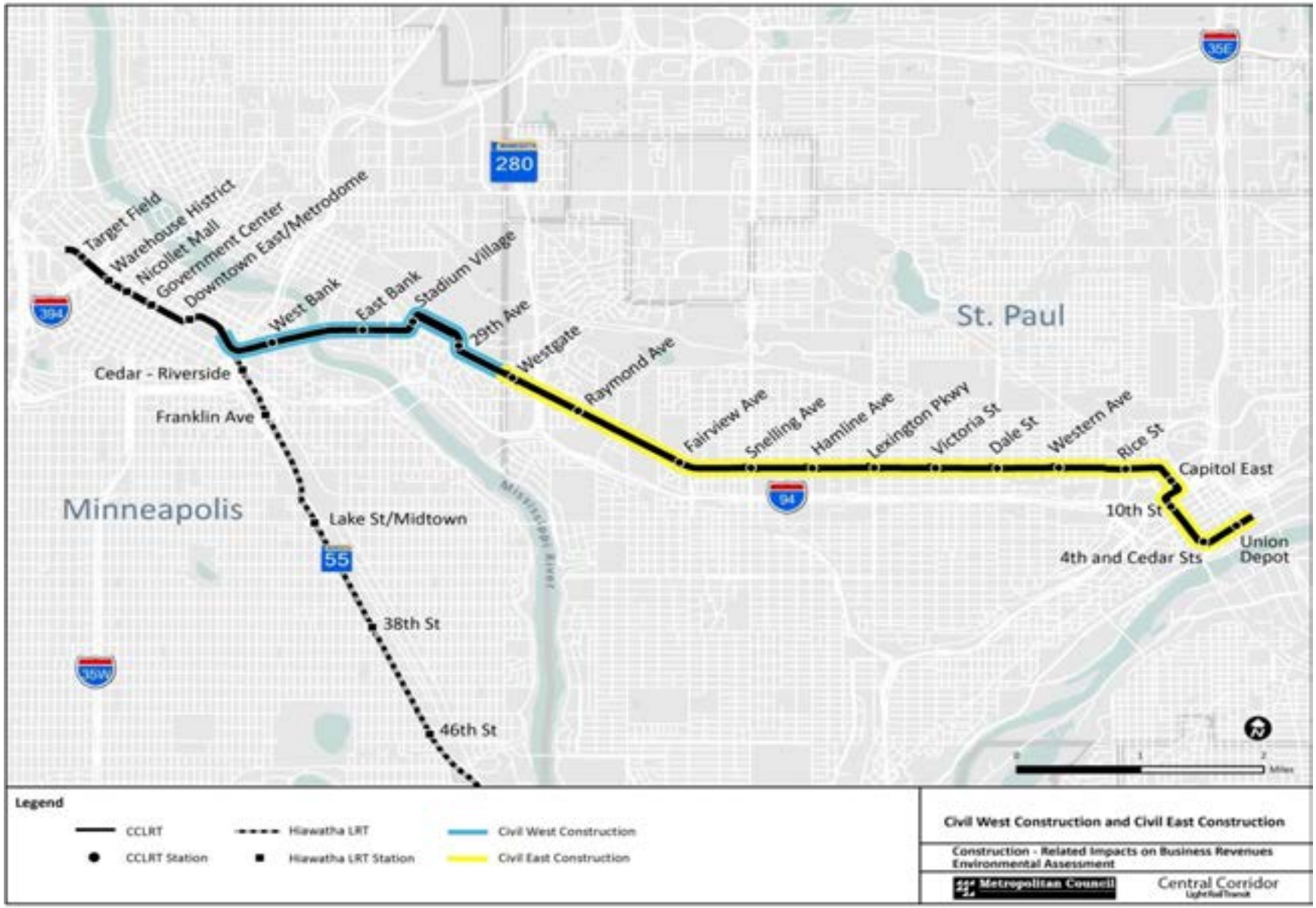
2.3.3.2 Civil East Construction

The Civil East construction segment extends generally from the Minneapolis/Saint Paul border along University Avenue to the State Capitol, Robert Street to 12th Street, 12th Street to Cedar Street, Cedar Street to 4th Street, and then 4th Street to Broadway Street.

The Civil East construction activities include: demolition of existing structures, underground utilities, and roadway pavement; environmental remediation; underground public utilities; drainage; light rail track and stations; retaining wall structures; adjustments to areaways (below ground building spaces); underground communications, signal, and traction power ducts; pull boxes; and catenary pole foundations. Construction also includes any work on and to off-site locations such as duct bank, utilities, and traction power substation sites. Associated roadway work includes construction of new roadway pavements, sidewalks, curbs and gutters, street lighting, above and below-grade traffic signal facilities and other related improvements. Associated utility work includes relocation of private utilities by the utility owner and/or its contractor.

Civil East construction also includes modifications to the University Avenue Bridge over State Highway 280 (Bridge 9472) and modifications to the Cedar Street Bridge over I-94/I-35E (Bridge 62889).

Figure 2-3. Civil West and Civil East Construction Segments



2.3.3.3 Other Construction Activities

Other activities that will occur during project construction are summarized below. These activities will occur concurrently or subsequent to the Civil West and Civil East construction.

- **Operations and Maintenance Facility (OMF):** Construction of the Central Corridor LRT maintenance facility at the eastern end of the Project on the east side of Broadway Street.
- **Systems:** Construction and testing of train control signals, overhead catenary system, traction power system, and communication facilities. Most of this work will not involve any excavation or other activities that would result in vibration, dust, noise or other nuisance impacts. However, short-term access impacts due to temporary lane closures are anticipated to occur.
- **Fare Collection:** Installation of ticket vending machines and related equipment on station platforms.
- **Station Artwork:** Installation of artwork at all station locations.

2.3.3.4 LRT Construction Status

Construction of the Central Corridor LRT began in late 2009 on 4th Street in downtown Saint Paul and in 2010 with advanced traffic improvements on the University of Minnesota campus. Heavy construction began in 2011 with final completion of all Civil West and Civil East construction work anticipated by the end of 2013. Passenger operations are anticipated to begin in 2014. Under this schedule, project construction will take approximately four years, followed by a shorter period of integration, measurements, and system testing. As of September 2012, approximately 80 percent of the Central Corridor LRT construction has been completed. Construction activities that have been completed include:

- **Stations:** Six of the 18 stations (Westgate, Raymond, Fairview, Snelling, Robert, and Union Depot) are structurally complete.
- **4th Street Advanced Utility Construction:** Construction of underground utilities in 4th Street in downtown Saint Paul (Minnesota Street to Broadway Street).
- **Advanced Traffic Improvements:** Street modifications to Pleasant Street, East River Parkway, Arlington Street, and other streets at the University of Minnesota as part of the Central Corridor LRT Project.
- **Operations and Maintenance Facility (OMF) Yard Site Preparation:** Placement of surcharge soils in OMF yard.
- **OMF Construction:** Construction of the storage and maintenance facility is underway. Construction in the building has included pouring floor slabs, building masonry walls, and installation of mechanical and electrical components.

- **Power Systems Installation:** Completed placement of first Traction-Power Substation south of Raymond Avenue Station.

By the end of 2012, much of the infrastructure associated with LRT construction will be completed. This includes all 18 stations, all roadways, sidewalks, curbs and gutters, street lights, and traffic signals. Also by this time four of the LRT vehicles will have been built and shipped from the manufacturer and be in the process of acceptance testing by the Metropolitan Council.

2.3.4 BRT Construction Activities

This Supplemental Draft EIS estimates that construction activities for the BRT Alternative would be similar in scale and scope to the construction activities related to the LRT Alternative (See Appendix C). Full street reconstruction would be required to install the exclusive guideway planned for over half of the alignment. Also, the condition of University Avenue prior to construction was very poor; needed improvements were deferred to a later date to coincide with the construction of a future transitway. This Supplemental Draft EIS assumes that University Avenue would have been reconstructed even in the areas that did not include an exclusive guideway. The construction boundaries of the BRT alignment are also similar to the boundaries of the LRT Alternative, but would extend into downtown Minneapolis to include the construction of BRT stations on 4th Street South.

As shown in Table 2-1, many of the construction elements required for the LRT Alternative would also be required for the BRT Alternative. The BRT Alternative requires civil roadway reconstruction and the construction of exclusive guideway, stations, and structures. A maintenance facility would likely not be required as all BRT buses are assumed to be maintained and stored at existing Metropolitan Council facilities. The BRT Alternative would also have used standard articulated buses and not require the construction of a traction power system.

Table 2-1. LRT and BRT Construction Element Comparison

Construction Element	LRT	BRT
Guideway	X	X
Stations	X	X
Structures	X	X
Maintenance Facility	X	
Power Systems	X	
Civil (Clearing, Grading, Excavation, Utilities, etc.)	X	X

2.3.4.1 BRT Civil Construction

The BRT Alternative construction is estimated to include: demolition of existing underground utilities and roadway pavement; environmental remediation; construction

of underground public utilities; areaways (underground building spaces); drainage; exclusive guideway and stations; retaining wall structures; underground communication and signal ducts; and pull boxes. Associated roadway work would include construction of new roadway pavements, sidewalks, curbs and gutters, street lighting, above and below-grade traffic signal facilities and other related improvements. Associated utility work includes relocation of private utilities by the utility owner and/or its contractor.

The most intrusive elements of construction include the civil work, which entails clearing, grading, excavation, and replacement of underground utilities. This would have mainly occurred in the portion of the alignment that has a dedicated BRT guideway; however, other sections of the alignment that would have operated in mixed-traffic may also have included road reconstruction activities. This is because many needed roadway and utility improvements were deferred until the construction of a transitway in the corridor occurred.

Unlike the LRT Alternative, the BRT Alternative was proposed to operate in mixed traffic through downtown Minneapolis and the University of Minnesota. As such, this alternative would likely not have required modifications to the Washington Avenue Bridge to accommodate BRT. However, it must be noted that, because the Washington Avenue Bridge, prior to its rehabilitation as part of Central Corridor LRT construction, was a fracture critical bridge, its reconstruction would likely have been required under Minnesota law requiring replacement of fracture critical bridges by 2018. Minn. Stat. Section 165.14, subd. 4(c). A BRT alternative may also have not required construction of a new bridge over I-35W or modifications to the existing Hiawatha LRT bridge over I-35W.

2.3.4.2 Other Construction Activities

Other activities that would likely have occurred during BRT project construction are summarized below. These activities would likely have occurred concurrently or subsequent to the primary BRT Alternative construction activities.

- **Fare Collection:** Installation of ticket vending machines and related equipment on station platforms.
- **Station Artwork:** Installation of artwork at all station locations.

2.3.4.3 BRT Construction Schedule

The overall construction timeline of the BRT Alternative can reasonably be expected to be shorter in duration than the LRT Alternative; however, the duration of the civil work activities and station construction is expected to be approximately the same. The construction timeline for the LRT Alternative includes additional time dedicated to construction and testing of the train communication and power systems and the construction of the OMF; these are activities that would not be needed for the BRT Alternative, thus reducing the overall duration of BRT construction.

3 ECONOMIC EFFECTS

Chapter 3 presents a summary of existing economic characteristics of the Minneapolis-Saint Paul-Bloomington 13-county MN/WI (Minnesota-Wisconsin) Metropolitan Statistical Area and general characteristics of existing businesses along the Central Corridor. This chapter also includes a discussion of construction-related impacts on business revenues from the alternatives considered. Following this discussion, a summary of the mitigation program implemented to help reduce short-term impacts to business revenue during project construction is presented.

3.1 Overview of Existing Economic Conditions

This section provides a summary of existing economic characteristics within the Minneapolis-Saint Paul-Bloomington MN-WI Metropolitan Statistical Area and general characteristics of existing businesses along the Central Corridor.

3.1.1 Minneapolis-Saint Paul-Bloomington Metropolitan Statistical Area Economic Indicators

The Central Corridor is located within the Minneapolis-Saint Paul-Bloomington MN-WI Metropolitan Statistical Area (MSA). The Minneapolis-Saint Paul-Bloomington MN-WI MSA is comprised of a total of 13 counties: 11 counties in Minnesota (Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright) and 2 counties in Wisconsin (Pierce and St. Croix). A sample of economic indicators for the Minneapolis-Saint Paul-Bloomington MN-WI MSA region, from years 2001 through 2010, is presented in Table 3-1. Data available regarding MSA Gross Domestic Product (GDP), Per Capita Personal Income and Median Household Income show steady increases in the past decade while unemployment rates have varied within a range between 3.5 percent and 5.1 percent. Indicators for 2009-2010 show a slight decrease in GDP and an increase in the unemployment rate, likely reflecting impacts from current economic conditions. While the MSA is significantly larger than the Central Corridor project area, these indicators suggest that the project area lies within a strong, stable regional economy.

Table 3-1. Minneapolis-Saint Paul-Bloomington Metropolitan Statistical Area Economic Indicators

Economic Indicators	Year									
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP for MSA ($ billion) (1)(2)	$144B	$149B	$156B	$167B	$176B	$182B	$189B	$194B	$191B	$200B
Per Capita Personal Income (2)	$37,901	$38,467	$39,534	$41,613	$42,721	$44,975	$46,870	$47,653	--	--
Median Household Income (3)	--	--	--	--	$65,803	$66,454	$66,352	$65,862	--	--
Unemployment Rate (%) (4)	3.5%	4.4%	4.7%	4.4%	3.9%	3.8%	4.3%	5.1%	7.9%	7.3%

(1) Gross Domestic Product (GDP) for Metropolitan Statistical Area (MSA) in billions of current dollars.

(2) Source: U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Accounts.

(3) Median household income in 2008 dollars. Metropolitan Council. *MetroStats*. October 2009.

(4) Source: U.S. Department of Labor. Bureau of Labor Statistics.

3.1.2 Central Corridor LRT Business Characteristics

The Central Corridor alignment extends between downtown Saint Paul and downtown Minneapolis largely along University Avenue. Both downtown areas can be described as dense, urban commercial environments characterized by multi-story office/retail (3-50 stories) buildings. University Avenue commercial areas are less dense, with buildings typically 1-3 stories tall, and intermixed with residential and institutional uses. Types of businesses in the project corridor range from small service uses, restaurants, and retail storefronts to "big box" stores and large department stores. Business ownership ranges from individually or family-owned single establishments, to local companies with multiple Twin City outlets, to national chains.

The Central Corridor has a diverse economy with nearly all of the North American Industry Classification System (NAICS) sectors represented along it.[4] Approximately 82

[4] The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. See http://www.census.gov/eos/www/naics/ for additional information on how the codes classify businesses.

percent of the businesses along the corridor are small businesses with revenues under $2 million. Table 3-2 shows a breakdown of the businesses in the corridor by NAICS sector.[5]

Table 3-2. Sector Composition of the Central Corridor

Business Type	Percent of Corridor	Number of Businesses	Percent Small Business	Number of Small Businesses
Animal Production	0%	1	100%	1
Construction	2%	23	78%	18
Manufacturing	2%	21	62%	13
Wholesale	4%	37	38%	14
Retail	17%	161	75%	121
Transportation and Warehousing	1%	8	100%	8
Information and Cultural Industries	3%	28	75%	21
Finance and Insurance	5%	51	76%	39
Real Estate, Rental, and Leasing	4%	37	81%	30
Professional Scientific and Technical Services	14%	130	85%	111
Company Management	0%	1	0%	0
Administrative and Support Services	6%	55	82%	45
Education	1%	8	88%	7
Health Care and Social Assistance	20%	185	85%	158
Arts, Entertainment and Recreation	1%	13	92%	12
Accommodation and Food Services	10%	99	97%	96
Other Services	9%	89	96%	85
Total	100%	947	82%	779

[5] The NAICS classifications were taken from the U-Plan dataset, with the exception of three businesses. Episcopal Homes and Second Debut 2 were added to the U-Plan Dataset between August 2010 and December 2010 and did not include a NAICS code in their entry. Macy's in Downtown Saint Paul was added by the project team from information provided by the Metropolitan Council. Episcopal Homes was coded as Health Care and Social Services, Second Debut 2 was coded as Retail-Miscellaneous, and Macy's was coded as Retail-General Merchandise.

3.2 Construction-Related Impacts on Business Revenues and Mitigation

Determining the specific impacts large transportation projects have on businesses is a challenging process. Isolating to what degree construction causes businesses to lose revenue in the face of other confounding variables, such as national economic conditions or individual business practices, is difficult.

Central Corridor Project Office (CCPO) staff, with assistance from the Iowa State University Institute for Transportation, conducted an exhaustive literature review in an attempt to identify methodologies related to quantifying business revenue loss as an adverse impact of construction projects. The CCPO reviewed studies examining construction-related impacts to businesses stemming from large highway and transit projects in multiple states, but they did not find any examples that clearly identified a quantitative methodology to measure project-level revenue related impacts (See Appendix D).

To develop an estimate of project-level construction impacts, it is necessary to have a reliable estimate of current and future revenues for specific businesses. Yet businesses are often hesitant to share this type of data due to privacy concerns. CCPO found that in response to this issue, the majority of studies reviewed investigated the impacts of construction on businesses by using surveys aimed gathering business owners' and managers' perceptions of construction-related impacts. This type of data is gathered through surveys as opposed to through quantitative analysis.

This Supplemental Draft EIS follows a similar process. Data from the Business Support Fund[6], a mitigation program that provided forgivable loans to Central Corridor small retail-oriented businesses that experienced construction impacts, allows for a quantitative analysis on a subset of corridor businesses. In order to examine trends for all the businesses in the corridor, it draws on business owners' and managers' perceptions and reports of construction-related impacts drawn from a collection of studies and surveys performed along the Central Corridor by local business associations, the CCPO, and professional research teams. The analysis uses data from these studies to estimate a range of impacts on businesses along the Central Corridor.

It is important to note that this document is focused on the short term impacts businesses experienced during construction. As time progresses, long term impacts to revenue resulting from operation of LRT may reveal different patterns and trends.

[6] For a full description of the Business Support Fund please see Section 3.7.2.4

3.3 No-Build Alternative

No construction would occur under the No-Build Alternative; thus, no construction-related impacts on business revenue are anticipated.

3.4 Baseline Alternative

Construction activities associated with the Baseline Alternative would be minimal and limited to traffic signal improvements. No impacts to business revenue due to construction of the Baseline Alternative would be expected.

3.5 LRT Alternative

The analysis of construction-related impacts on business revenue due to LRT is grouped into the three following categories:

- General Business Trends (3.5.1)
- Identification of Types/Severity of Impacts (3.5.2)
- Quantitative Assessment of Revenue Loss (3.5.3)

The following sections will summarize and describe main findings from studies that documented impacts on businesses due to LRT construction. The results of this analysis will paint a broad picture of the impacts experienced by businesses during construction of the Central Corridor.

3.5.1 General Business Trends

This section summarizes data collected by the Central Corridor Funder's Collaborative (CCFC), CCPO staff and the University Avenue Betterment Association (UABA), regarding overall general business trends prior to and during Central Corridor construction. The CCFC data discusses overall economic trends prior to construction, and CCPO and UABA data deal with business turnover and vacancy rates within the corridor during construction.

3.5.1.1 Business Sector Trends Prior to Construction

Business sector trends in the Central Corridor prior to construction are discussed in the CCFC's latest April 2012 report, *Central Corridor Key Outcomes: 2012 Indicators* (See Appendix E). The CCFC is a group of 13 grant-making organizations that seeks to make the Central Corridor a place of opportunity for all by creating and implementing Corridor-wide strategies in conjunction with a variety of local organizations. The group is engaged in a multi-year study that tracks social and economic trends in the corridor through a series of indicators, such as the levels of affordable housing in the corridor and the diversity of corridor businesses. To measure these trends, the group tracks yearly

changes within the corridor and then compares them to the trends in the cities of Minneapolis and Saint Paul as a whole.

Since the majority of the data in the group's latest report is dated prior to the beginning of Central Corridor construction, it portrays overall corridor trends before businesses were exposed to construction. Overall, the report shows that the corridor lost businesses across all business sectors between 2009 and 2010, but that the losses largely mirror those of the Twin Cities as a whole and are most likely due to the continued sluggish economy. The CCFC report demonstrates that prior to construction economic trends in the corridor were very comparable to economic trends in the Twin Cities.

3.5.1.2 CCPO Business Openings/Closings/Relocations during Construction

Beginning in February 2011, CCPO staff began to track business openings, closings, and relocations in the corridor on a monthly basis. This data is presented through monthly reports published by the CCPO summarizing how the Metropolitan Council and other partner agencies work to minimize Central Corridor construction impacts on local businesses. These reports are in accordance with the 2011 FONSI, which the FTA issued following publication of the April 2011 Supplemental EA of Construction-Related Potential Impacts on Business Revenues. Trends in the opening, closing and relocation data are summarized in this section.

CCPO Business Inventory

To track openings, closings, and relocations along the corridor, CCPO outreach staff maintains an inventory of street-level business establishments along the Central Corridor alignment from the West Bank area of Minneapolis to downtown Saint Paul. In February 2011, this list included 1,243 businesses. Between February 2011 and June 2012, CCPO staff reported a Corridor-wide net loss of three street-level businesses, as shown in Table 3-3. This demonstrates that over this 16 month time period, business openings, closings and relocations resulted in little net change regarding the number of businesses in the corridor.

Table 3-3. CCPO Street Level Business Change (February 2011 - June 2012)

	Feb-May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	CUMULATIVE
Openings	22	4	4	7	3	4	7	1	5	5	2	1	2	6	**73**
Closings	-14	-5	-4	-2	-1	-8	-9	-6	-2	-4	-4	0	0	-3	**-62**
Relocations Off Corridor	-3	0	-2	0	-1	-1	-1	0	0	0	-1	0	-1	-4	**-14**
Net loss of businesses along the Corridor: Feb. 2011-June 2012															**-3**
Relocations within Corridor	6	2	1	1	0	3	0	2	0	0	0	2	0	0	17

3.5.1.3 UABA Storefront Inventory

UABA, a local business association in the Central Corridor area, tracked vacancy rates in the corridor on a quarterly basis beginning in May 2011[7]. UABA examined vacancy rates among retail storefront spaces along University Avenue in Saint Paul between Emerald Street and Rice Street. The survey recorded if storefronts were occupied or vacant. UABA defined "storefront" as what the "average person would observe to be a University Avenue storefront shop window business space." For a full explanation of survey methodology see Appendix F. UABA data shows that from May 2011 to August 2012, there was little variation in storefront vacancy rates within the study area, as shown in Table 3-4.

Table 3-4. UABA Storefront Vacancy Rates, observed quarterly, May 2011-May 2012

	May-11	Aug-11	Nov-11	Feb-12	May-12	Aug-12
Occupied	312	314	308	314	311	311
Vacant	86	95	98	86	93	96
Total	398	409	406	400	404	407
Vacancy Rate	21.6%	23.2%	24.1%	21.5%	23.0%	23.6%

3.5.1.4 General Business Trends Summary

The three data sources reviewed do not provide a direct link between Central Corridor construction and corridor business trends. Without additional data such as historic revenue trends, customer counts, and other private historical business data, it is impossible to draw a bright line between Central Corridor construction and business turnover and vacancy rates. However, the data does provide an instructional snapshot of overall business trends in the Central Corridor. The CCFC data demonstrates that prior to construction economic trends in the corridor were similar to those in the Twin Cities as a whole. The corridor did lose businesses in 2012, but those losses were in line with losses in the larger region. CCPO data demonstrates that as construction in the corridor progressed, the rate of businesses opening and closing within the corridor began to cancel each other out. The UABA data found similar trends to that tracked by CCPO; namely, that corridor storefront vacancy rates stayed fairly stable as construction progressed.

[7] UABA also conducted an inventory of the storefronts along University Avenue on April 6, 2011 and reported their findings in a report titled Change in the Number of Occupied Storefronts along University Avenue, 1st Quarter 2011, published on April 18, 2011. However, the authors of the report concluded that the methodology used to conduct the survey was not sound; therefore the findings are not documented in this Supplemental DEIS.

3.5.2 Identification of Types/Severity of Impacts to Businesses

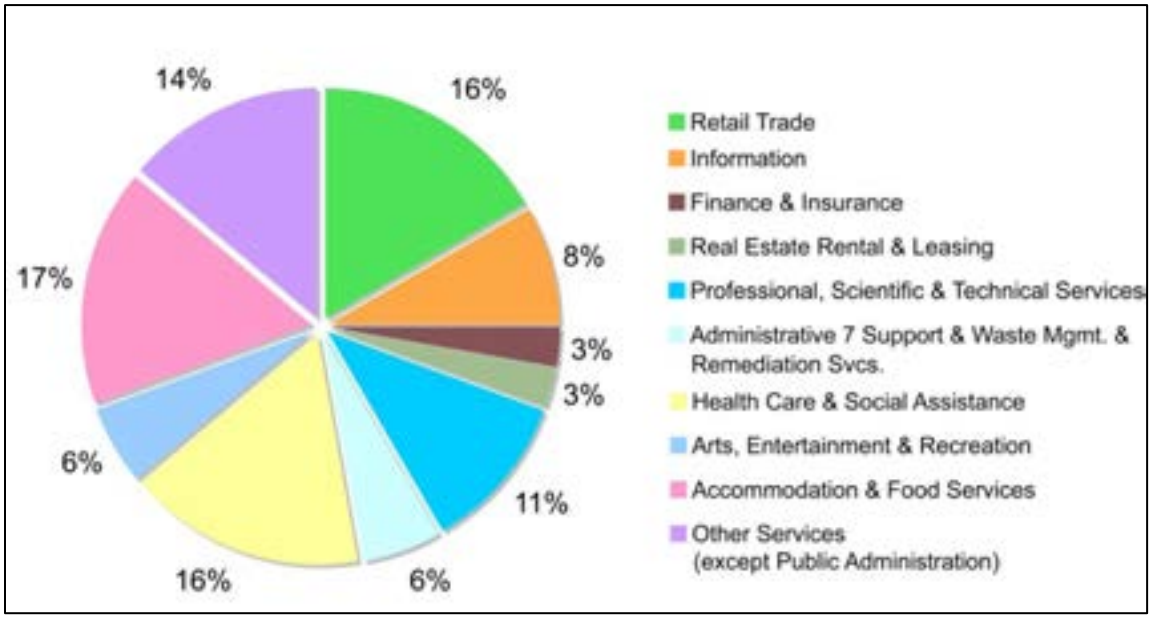
This section relies on multiple data sources to present construction-related impacts anticipated by business owners prior to LRT construction as well as impacts actually reported during LRT construction. A July 2012 study by the University of Minnesota's Humphrey School of Public Affairs, *Assessing Neighborhood and Social Influences of Transit Corridors*, discusses the impacts anticipated by business owners prior to the commencement of construction activities (See Appendix G). A 2012 study by Wilder Research, *Mitigating Businesses Losses: Services, Strategies, and Effectiveness* (See Appendix I), and the *Little Mekong CCLRT Impact Study*, published by the Asian Economic Development Association (AEDA) on August 1, 2012 (See Appendix J), both discuss impacts reported by businesses during construction.

3.5.2.1 Anticipated Impacts Prior to LRT Construction

A research team at the University of Minnesota's Humphrey School of Public Affairs conducted a survey of residents and businesses along four transitways (the existing Hiawatha LRT, the existing Northstar Commuter Line, the future Cedar Avenue BRT, and the future Central Corridor LRT) in the Twin Cities region to better understand individual perceptions of transit-induced neighborhood change. These perceptions are documented in the study titled, *Assessing Neighborhood and Social Influences of Transit Corridors*, and published in July 2012 (See Appendix G). The study documents many issues, including specific construction-related impacts in neighborhoods along the four transitways. The survey took place in the Central Corridor prior to construction, meaning the study only addresses the construction-related impacts anticipated by business owners. The results of the Central Corridor portion of the study are summarized in the following sections. It should be noted that the survey did not address business owners' thoughts on how construction would affect business revenue.

Central Corridor LRT Transitway Survey Participants. The study focused on four neighborhood planning districts along the Central Corridor alignment: Prospect Park, Hamline-Midway, Thomas-Dale, and Summit-University. To identify study participants, the survey employed a simple random sample of businesses drawn at the neighborhood level from a Dun and Bradstreet business database. Forty businesses, ten from each neighborhood, participated in the survey. A fairly diverse mix of industries participated in the survey, as shown in Figure 3-1. The relatively large percentage of "Other Services" includes businesses such as car dealerships and repair shops as well as hair and nail salons which are all numerous along the corridor. The large majority of the survey participants were small businesses with less than ten employees and annual sales of $200,000 – $500,000. Overall, the characteristics of the sample businesses are representative of the businesses in the Central Corridor.

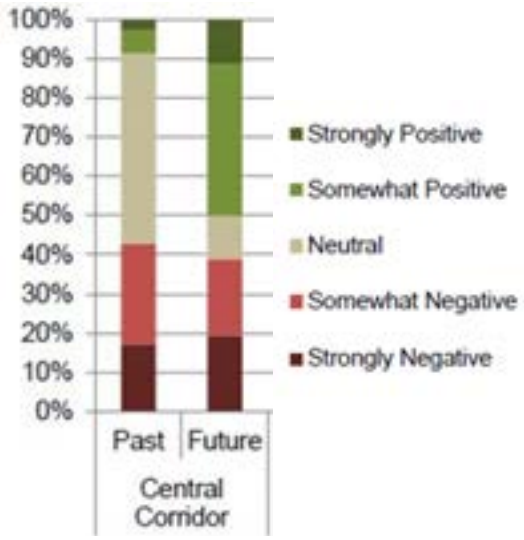
Figure 3-1. Survey Sample Industry Sectors by NAICS Code



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

Perceptions of Central Corridor LRT-Related Impact. The survey asked business owners to gauge how they thought the planned Central Corridor had affected their business over the past five years, and how they thought it would affect their business over the next five years. As shown in Figure 3-2, over the past five years, approximately 40 percent of businesses perceived negative impacts from the Central Corridor transitway and approximately 50 percent of businesses perceived no impacts. Only 10 percent of businesses perceived positive impacts. However, over the next five years, the number of positive responses increases significantly with 50 percent of businesses reporting that they expect positive impacts from the Central Corridor transitway. Furthermore, there was a slight decrease in businesses that perceive negative impacts from the transitway.

Figure 3-2. Perception of Transitway Impacts

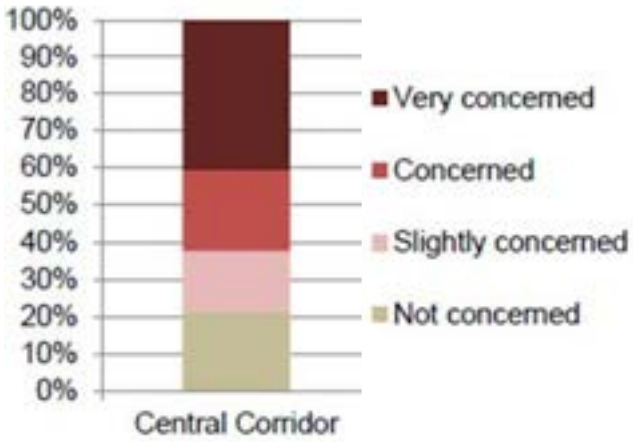


Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

Future Concerns and Anticipated Impacts Due to LRT Construction. Businesses also were asked to rate their level of concern regarding the upcoming Central Corridor construction. Businesses were asked to rate their concern on a scale from "Not concerned at all" to "Very concerned." Figure 3-3 demonstrates that roughly 60 percent of businesses were either concerned or very concerned about transitway construction, indicating that the majority of businesses had concerns about upcoming construction.

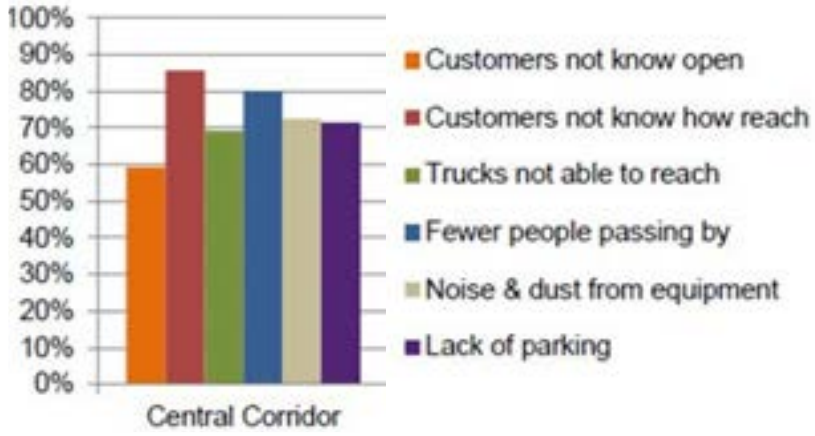
Figure 3-4 shows the percentage of respondents concerned with six specific anticipated construction related impacts. The greatest concerns that survey participants mentioned were that customers would not know how to reach them during construction and that fewer people would be passing by their businesses, indicative of the business' reliance on automobile and pedestrian traffic on University Avenue and Washington Avenue to generate sales revenues.

Figure 3-3. Levels of Concern over Transitway Construction



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

Figure 3-4. Specific Anticipated Construction Concerns



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

3.5.2.2 Reported Impacts During Construction

This section will use two data sources to summarize impacts reported by business owners during Central Corridor LRT construction. These data sources include *Mitigating Business Losses: Services, Strategies, and Effectiveness,* a survey by Wilder Research published in 2012, and the *Little Mekong CCLRT Impact Study* conducted by the Asian Economic Development Association and published in August 1, 2012.

The Central Corridor Light Rail Transit Construction: Impact Study for Pascal Street to Dale Street, Saint Paul, MN, published August 16, 2012 by UABA was submitted to the Metropolitan Council for consideration in this Supplemental Draft EIS. The report provides a summary, as well as detailed notes, of interviews with four University Avenue businesses regarding impacts experienced by these businesses as a result of LRT construction activities (See Appendix H). The report concludes that businesses are suffering substantial impacts as a result of LRT construction, but it also acknowledges that it reports sentiment rather than empirical data. After a review of this study, it was determined it could not be used as an example of larger trends in the Central Corridor, because it was not clear how the report's sample was selected and because the selected sample was extremely small. A memo explaining the review of the study is included in Appendix H.

3.5.2.3 Mitigating Business Losses: Services, Strategies, and Effectiveness, a study by Wilder Research

With support from the Business Resources Collaborative (BRC), a coalition that provides support and technical assistance to businesses affected by Central Corridor construction, the CCFC commissioned the Amherst H. Wilder Research, a non-profit research agency based in Saint Paul, to survey Central Corridor businesses about the multitude of programs and services designed to mitigate business loss during Central Corridor LRT construction. Wilder Research reported their findings in a 2012 report titled *Mitigating Business Losses: Services, Strategies, and Effectiveness*. The study also

documented specific construction-related impacts reported by businesses during construction.

Survey Methodology. Wilder Research defined its study population as all for-profit businesses with street addresses directly along the Central Corridor alignment. For the downtown Saint Paul section of the corridor, this included only businesses on the street level. Businesses fitting these criteria were identified from three lists of businesses kept by organizations working with businesses in the corridor, including the list created by the CCPO. Also, as the central goal of the study was to evaluate the effectiveness of the mitigation programs, businesses that were known to have received services through Central Corridor construction mitigation programs were automatically included in the sample. These businesses were identified through lists of participants provided by the various agencies carrying out mitigation programs.

In total, 1,144 businesses fitting the survey criteria were identified in the corridor. Wilder Research attempted to contact 456 of the businesses and reached 201, for a 60 percent survey response rate. Of those 201, 71 had received some sort of mitigation services and 130 had not received services. The survey took place between March and June 2012, but respondents were asked to only reference events that occurred during the first year of construction, from March to November 2011.

Business Characteristics. As shown in Table 3-5, a diverse representation of businesses participated in this study. The table also identifies the number of employees at the businesses, and it is clear that the majority of the businesses surveyed were small, with 74 percent of surveyed businesses employing fewer than 10 people, and with 10 percent reporting the owner as the only employee. Three-fourths of respondents reported that they rent their business space.

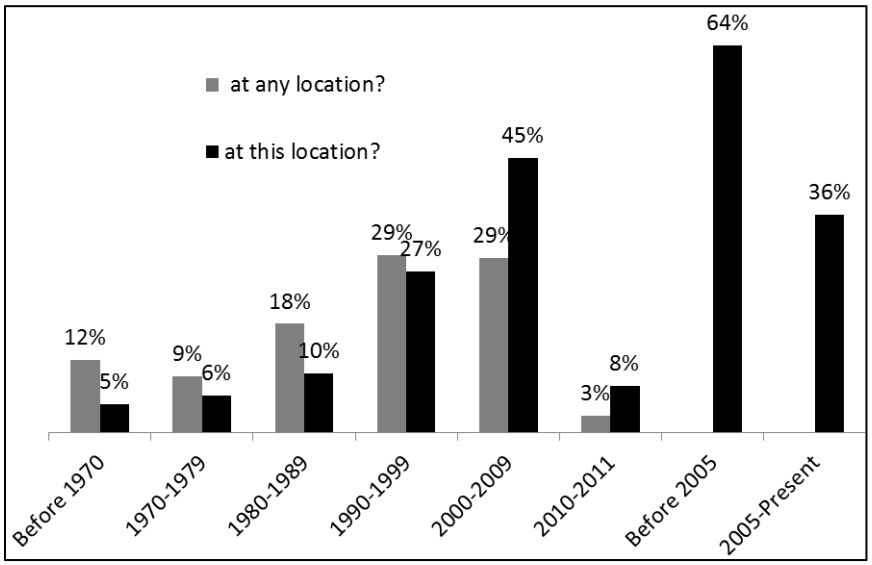
Table 3-5. Central Corridor LRT Business Study: Businesses by Type, Size and Property

Business Type (n=201)[a]	Number	Percent
Retail, grocery, and convenience stores	61	30%
Restaurants, bars, hospitality, and recreation	44	22%
Nonprofessional services (e.g., auto, plumbing, etc.)	43	21%
Property management, professional services, and finance	31	15%
Health and fitness	22	11%
Number of employees (n=199)		
Owner only (no employees)	20	10%
1-9 employees	127	64%
10+ employees	52	26%
Property Tenure		
Rents space	148	75%
Owns Space	50	25%

Note: [a] n refers to the number of businesses

The businesses surveyed were generally established businesses that have been in operation for several years (see Figure 3-5). Of the businesses surveyed, 68 percent have been in operation at any location since before 2000, and 64 percent have been at their current location since before 2005, a full five years before Central Corridor LRT construction began.

Figure 3-5. Length of Time Business Has Been in Operation



Source: *Mitigating Business Losses: Services, Strategies, and Effectiveness*

3.5.2.4 Construction-Related Impacts Reported to Wilder Research

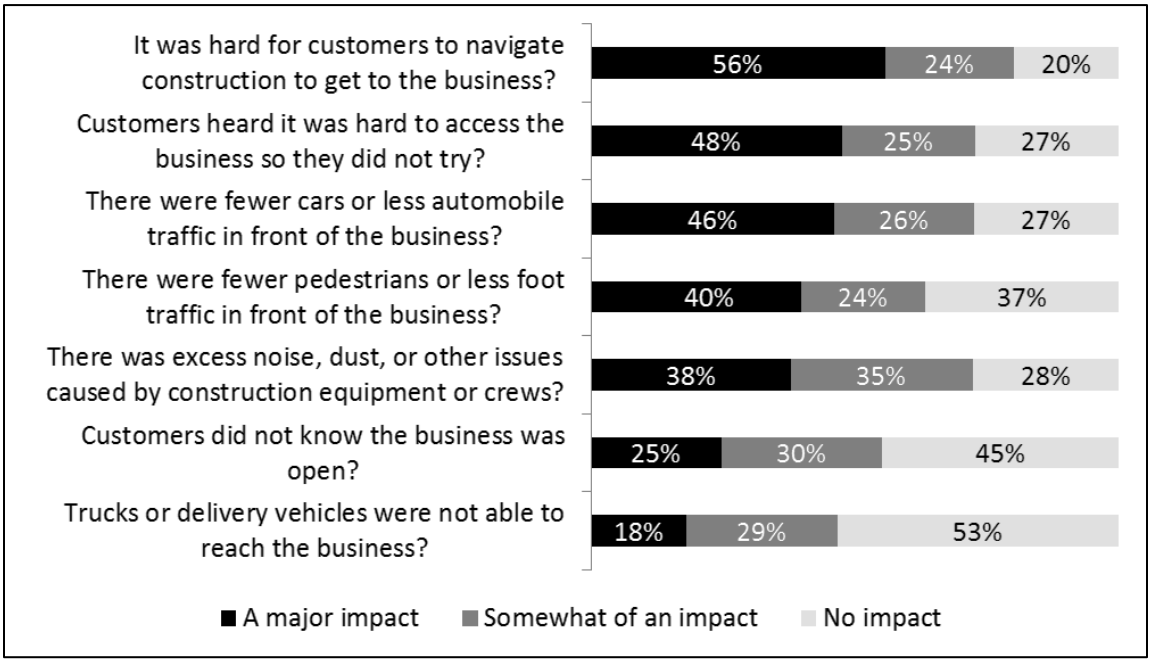
Respondents were asked if there was significant, minor, or no construction near their business during the year before the survey. The majority of survey respondents reported either minor or significant construction, as shown in Table 3-6. Over half of the surveyed businesses reported reduced access to their sidewalk, extended closure of the street in front of their business, and the loss of on-street parking. A large majority of businesses, 68 percent, reported at least one of these disruptions near their business.

Table 3-6. Level of Construction and Construction-Related Disruptions

Overall Experience (N=201)	Number	Percent
There was no construction	41	21%
There was minor construction	33	17%
There was significant construction	126	63%
Types of Disruptions (N=201)		
Sidewalk in front of business had reduced access	107	53%
Business side of street was closed longer than a month	105	52%
Lost on-street parking	102	51%
Lost off-street parking	55	27%
One or more of the above disruptions	137	68%

Respondents were also asked if any of the seven specific construction-related impacts, shown in Figure 3-6, affected their businesses. Overall, the largest percent of business owners, 80 percent, reported difficult navigation for customers as an impact. The largest percentage of business owners, 56 percent, also rated this issue as a "major impact."

Figure 3-6. Construction Impacts Reported by Businesses Owners



Source: *Mitigating Business Losses: Services, Strategies, and Effectiveness*

3.5.2.5 Construction Mitigation Program Participation

More than one-third of respondents reported participating in one or more of the construction mitigation services listed below. However, these programs do not represent the full suite of Central Corridor mitigation programs. For a comprehensive look at the mitigation strategies please see Section 3.7.2. The services discussed in the Wilder Research study include:

- **Business Support Fund:** Administered by the Neighborhood Development Center (NDC) in Saint Paul and the Minneapolis Consortium of Community Developers (MCCD) in Minneapolis, this program provides a modest safety net for businesses that show a loss in sales due to the construction of the Central Corridor LRT construction.
- **Parking Loan Program**. Administered by the City of Saint Paul, this program provides forgivable loans for improvements to off-street parking along University Avenue. The program is only available to businesses in Saint Paul.
- **Services provided by the University Avenue Business Preparation Collaborative (U7).** The U7 collaborative provides a wide range of services including marketing and business planning assistance, façade improvement, and technical assistance for technology and other business services.
- **The "Buy Local" coupon book.** Organized by the Midway Chamber of Commerce, the "Buy Local" coupon book was a component of the Chamber's Discover Central Corridor initiative to market local businesses.

- **Progressive Dinner.**[8] Organized by the Midway Chamber of Commerce, the progressive dinner took place in December 2011 and provided transportation to different restaurants on the corridor over the course of a single night.

In addition to the services described above, respondents were asked about their awareness and perceived effectiveness of the CCPO communications efforts to highlight local businesses in their weekly newsletter. However, these communications efforts are not a program or service in which the businesses would actively participate, so respondents were not asked if their business had participated.

Participants in Mitigation Programs. The number of respondents that participated in each program and the rates of participation are shown in Table 3-7. Wilder Research listed businesses as "potentially eligible" due to their classification as a small business and geographic location; however they did not determine which businesses were officially eligible based on mitigation program standards. For details on mitigation program eligibility requirements please see Section 3.7.2.

Table 3-7. Respondent Participation in Construction Mitigation Services

	Number potentially eligible	Number participating	Percent of eligible participating
Business Support Fund	201	42	21%
Parking Loan Program[a]	158	9	6%
U7 Services[b]	201	22	11%
"Buy Local" coupon book	201	27	13%
Progressive Dinner (Dec 11)[c]	43	10	23%
Any of the above	**201**	**72**	**36%**

Notes: *[a] Only Saint Paul businesses were eligible. [b]Respondent businesses participated in the following U7 services: technical support (8), printing of flyers, banners, etc. (7), advertising and marketing support (6), information sessions (6), business planning (3), and financial support (3).Because some participated in multiple services, individual service participation counts do not total the number of U7 Services participants. [c]Only restaurants were eligible to participate.*

[8] Progressive Dinner is not a formal mitigation strategy identified as part of the LRT Alternatives. No financial commitments are associated with this strategy.

Non-Participants in Mitigation Programs. Wilder Research asked the 130 businesses that did not report participating in any mitigation programs if they were aware of the mitigation programs in the corridor. The Business Support Fund was the only program where a majority of randomly selected participants were aware of the program, as shown in Table 3-8.

Table 3-8. Awareness of Services and Communication Efforts

	Number Potentially Eligible	Number Aware	Percent Aware
Business Support Fund	130	83	66%
Parking Loan Program [a]	107	32	30%
"Buy Local" coupon book	130	47	37%
Progressive Dinner (Dec 11)[b]	21	0	0%
Project Office communication efforts	130	55	42%

Note: *This table includes only the 130 those not selected for their participation in services; see Section 3.5.2. for more information. Respondents were not asked about awareness of U7 services.* [a] *Only Saint Paul businesses were eligible.* [b]*Only restaurants were eligible.*

Respondents who were aware of the mitigation programs but had not participated in one were asked why they chose not to participate. Their responses are shown in Table 3-9. Ineligibility was a primary reason why businesses had not participated in the Small Business Loan and Parking Loan programs. For the "Buy Local" coupon book, a majority of respondents said they did not need this type of assistance.

Table 3-9. Primary Reasons for Not Participating in Services

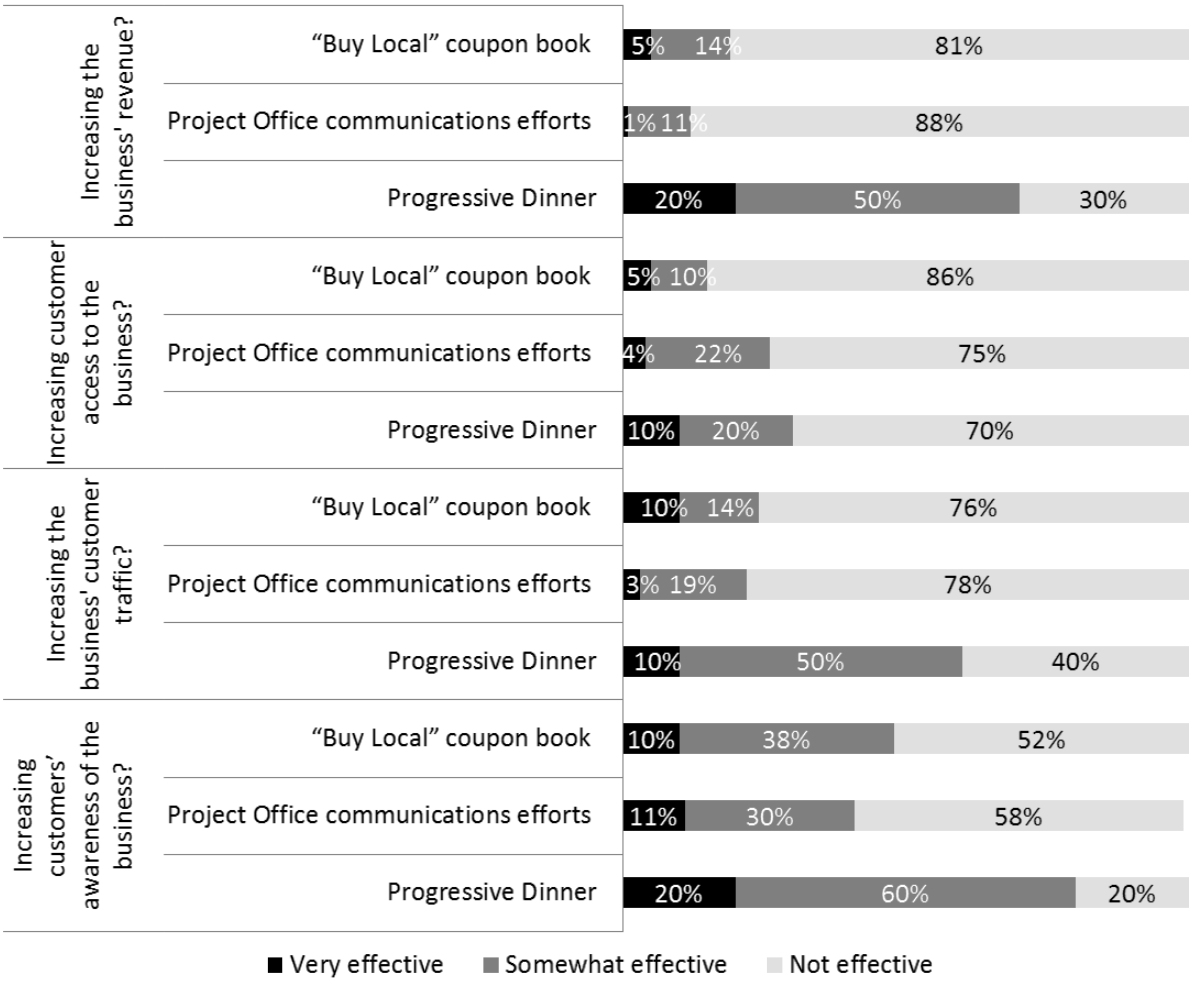
	Business Support Fund (N=77)	Parking Loan Program (N=33)	"Buy Local" coupon book (N=52)
Was not eligible[a]	49%	64%	19%
Did not need this type of assistance	19%	27%	44%
Did not have time to apply or found out too late	5%	0%	8%
Did not know how or where to apply	3%	3%	10%
There was no space left in the program	N/A	0%	0%
Application process too much work	9%	0%	2%
Requirements of program were too restrictive	13%	0%	10%
Level of support did not match level of need	8%	3%	15%

Note: *[a] In this table "eligibility" refers to the respondents' perception of whether or not their business was eligible for the program. It does not mean they were officially identified as ineligible for the mitigation program. For a full description of mitigation program eligibility requirements, please see Section 3.7.2.*

3.5.2.6 Effectiveness of Mitigation Strategies

In general, program participants rated the mitigation programs favorably, with the majority of respondents describing each service as at least somewhat effective overall in mitigating the effects of construction. In fact, as shown in Figure 3-7 and Figure 3-8, overall effectiveness ratings frequently exceeded ratings on specific effectiveness measures (e.g. increasing customer traffic or business revenue), indicating that respondents saw some important overarching quality in these programs despite perceiving most of them to be only minimally effective in their specific goals. The services thus appear to be effectively accomplishing something, if only primarily the generation of good will among recipients. This was especially true of the CCPO communication efforts, which at a minimal cost, received relatively high ratings of overall effectiveness.

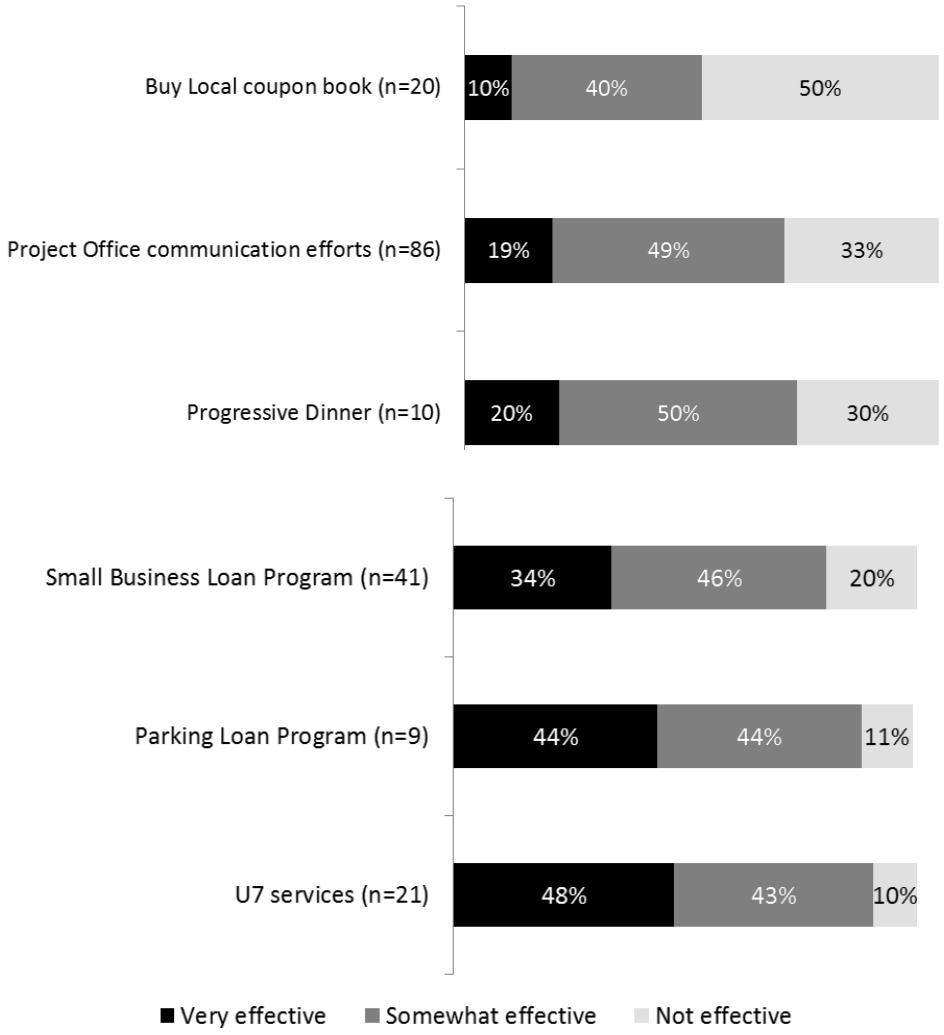
Figure 3-7. Specific Effectiveness of Programs



Source: *Mitigating Business Losses: Services, Strategies, and Effectiveness*

Notes: *Progressive Dinner (n=10) and "Buy Local" coupon book (n=21) ratings are from program participants only. Project Office communication efforts ratings are from respondents who were aware of these efforts (n=80). This question was not asked about the U7 Services, the Business Support Fund, or the Parking Loan program.*

Figure 3-8. Overall Effectiveness of Programs



Source: *Mitigating Business Losses: Services, Strategies, and Effectiveness*

3.5.2.7 Future Business Outlook

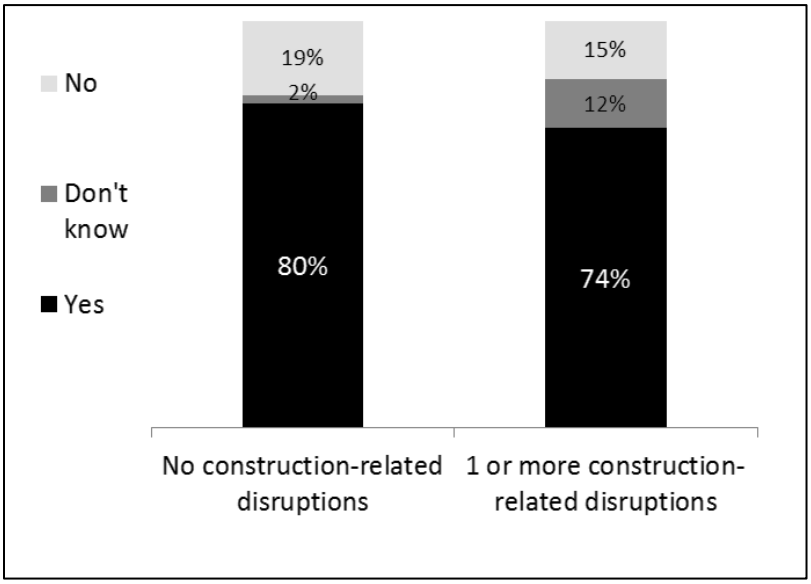
Finally, respondents were asked if they expected their business to still be located in the Central Corridor in the next five years: 76 percent of businesses reported that they did expect their business to be operating in its current location within five years, 16 percent did not expect their business to be in operation at its current location, and 9 percent said they did not know. The reasons for the 16 percent of businesses expressing uncertainty about their future location are shown in Table 3-10.

Table 3-10. Reasons for Uncertainty

Reason	Number of Businesses Citing this Reason
Uncertain future	19
Severe financial losses	9
The business does not want to stay in the area	8
Pending or future building eviction (e.g., demolition, sale, new lease)	4
TOTAL	32

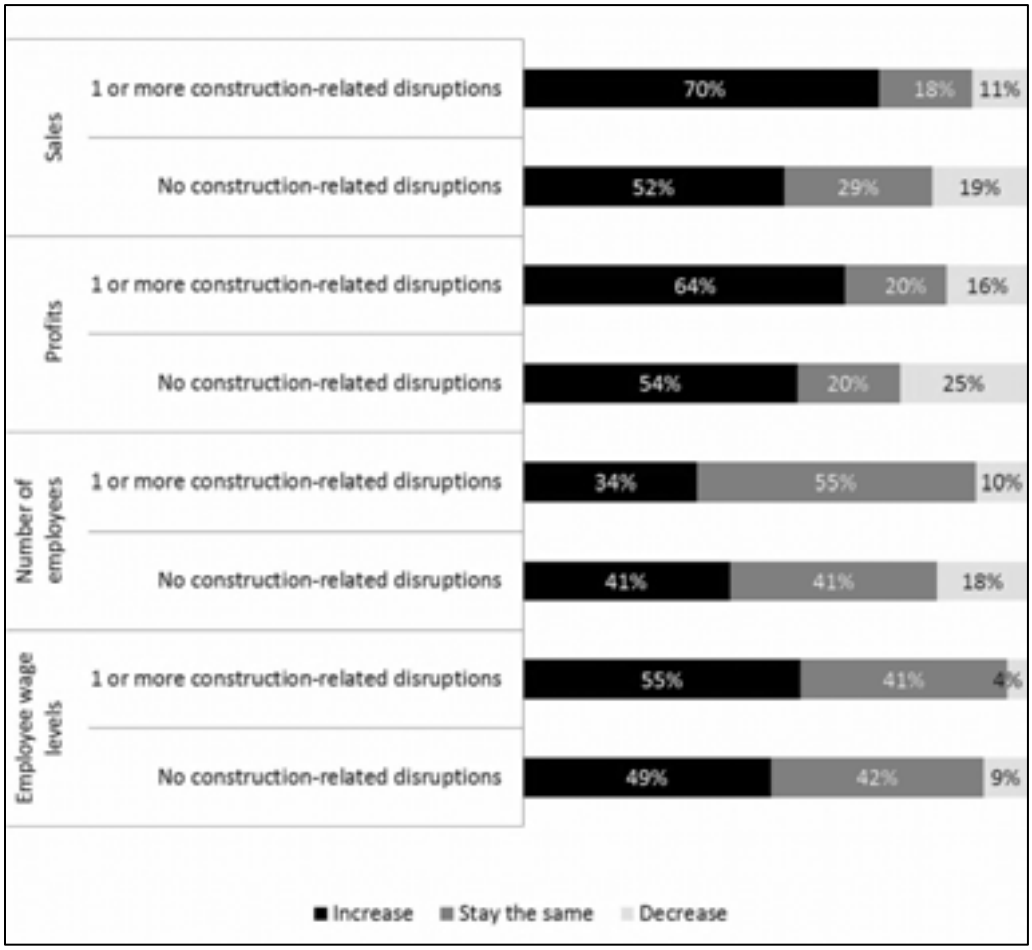
The businesses that experienced no construction-related disruptions were slightly more likely than those who experienced one or more disruptions to report that their business would still be in operation in five years, as shown in Figure 3-9. As shown in Figure 3-10, overall, businesses expected that their sales, profits, number of employees, and employee wage levels would at a minimum stay the same or increase. Very few expected decreases in these areas.

Figure 3-9. "Do You Expect This Business Will Be Operating in its Current Location in 5 Years?"



Source: *Mitigating Business Losses: Services, Strategies, and Effectiveness*

Figure 3-10. Expectations Over the Next Five Years



Source: *Mitigating Business Losses: Services, Strategies, and Effectiveness*

3.5.2.8 Mitigation Business Losses Report Summary

Many of the findings in the *Mitigating Business Losses: Services, Strategies, and Effectiveness Study* are encouraging. In particular, respondents report strong satisfaction and general effectiveness of the services as well as well-designed programs. Also, although many of the businesses surveyed were affected by construction, the majority of respondents report that they intend to stay in business along the Central Corridor.

3.5.2.9 Little Mekong CCLRT Impact Study

In their August 1, 2012, report, *The Little Mekong CCLRT Impact Study,* AEDA documented construction-related impacts reported by businesses located in the Little Mekong business district (See Appendix J). AEDA is a community-driven nonprofit organization that works with Asian small businesses. The group was founded by a group of Asian small business owners concerned with the development of the Central Corridor. The Little Mekong district encompasses a five-block strip of University Avenue

from Mackubin Street to Galtier Street in Saint Paul and is located directly on the Central Corridor alignment and will be served by the Dale, Western, and Rice/Capitol stations.

Little Mekong CCLRT Impact Study Methodology. Data for the study was collected through semi-structured interviews with business owners from March 30, 2012 through July 25, 2012. AEDA staff made contact with 64 of the 80 businesses within the Little Mekong District, for a study response rate of 80 percent.

Business Characteristics. A majority of the businesses in the study sample were restaurants, and beauty and health services, as shown in Table 3-11. The table also shows that the distribution of businesses in the sample was fairly representative of the types of businesses in the area as a whole.

Table 3-11. Types of Participating Businesses Compared to All Businesses in Little Mekong

	Study Sample		All Businesses in Little Mekong	
Business Type	n=64	Percent of Business	N=80	Percent of Business
Arts/Culture	2	3.1%	2	2.5%
Beauty Service	9	14.1%	11	13.8%
Grocer	4	6.3%	4	5.0%
Health-related service	12	18.8%	12	15.0%
Non-grocery retail	7	10.9%	9	11.3%
Religious place of worship	1	1.6%	1	1.3%
Restaurant	11	17.2%	13	16.3%
Social services/nonprofit	7	10.9%	9	11.3%
Other	11	17.2%	16	20.0%
Don't Know	n/a	n/a	3	3.8%

Results. During the interviews, AEDA staff collected specific numbers of complaints in relation to the following six categories of complaints: utilities, construction activities, access, signage, safety and communication. Respondents could report more than one issue per category, meaning the total number of reports per category is sometimes larger than the study sample size. The study makes a distinction between "reports" and "impacts." Interviewees could report an occurrence of an issue, but then also report that the issue had no impact on their business.

Reports of Trouble with Utilities. During the interviews, there were 47 reports of some type of trouble with a utility. Table 3-12 shows that water shut-offs was by far the most common utility issue. Interviewees reported shut-offs ranging from 10 minutes to 8.5 hours and many different impacts were reported. Impacts included loss of customers, inability of customers to use the bathroom, and needing to spend money on bottled water. Of the four reports of electricity issues, one business reported losing one full day of business due to an electricity issue. Four businesses had their internet, phone and/or fax interrupted during construction. No significant impacts were reported as a result of the six gas shut-offs.

Table 3-12. Reported Utility Trouble

Utility/Service disrupted	# of reports
Water	33
Gas	6
Electricity	4
Internet/phone/fax	4
Total Reports	**47**

Reports of Trouble with Construction Activities. There were 77 reports of some form of trouble from construction activities among the 64 businesses and 17 reports of having no trouble. As seen in Table 3-13, noise/vibration was the most common complaint. Businesses cited items falling off shelves, disturbed customers, and cracked walls all as impacts of noise/vibration.

Table 3-13. Reported Trouble with Construction Activities

Trouble reported	# of reports
Dust/air	19
Noise/vibration	52
Other	6
Total Reports	**77**

Reports of Trouble with Access. There were 79 reports of trouble with access among the interviewees and 22 reports of "no trouble." The large majority of impacts involved parking and parking lot access, as seen in Table 3-14.

Table 3-14. Reported Trouble with Access

Access Issues Reported	# of reports
Parking/parking lot access	44
Traffic	10
Sidewalk/handicap access	14
Truck access	11
Total Reports	**79**

Reports of Trouble with Signage. Little Mekong businesses were almost evenly split on their opinions of signage, with 33 businesses reporting that construction way-finding signage was sufficient and 24 businesses reporting that it was not sufficient, or had no opinion about its sufficiency. Many businesses also reported that it was challenging to communicate to customers that their business was still open despite construction. Nineteen businesses reported spending between $20 and $300 on making their own signs.

Reports of Trouble with Safety. The number of reported safety concerns was much lower than the number of respondents that reported no construction-related safety concerns. There were 46 reports of no safety concerns and only 19 reported safety concerns. The safety concerns that were reported included hazards to pedestrians such as rocks on sidewalks and uneven surfaces, as well as dangerous pedestrian crossings.

Other safety concerns included crime, air quality, poor lighting, cars parking on sidewalks, and access to bus stops.

3.5.3 Assessment of Revenue Loss due to Construction

This section discusses data collected from the Business Support Fund, a construction impact mitigation program administered by the City of Saint Paul. While this data is focused on small businesses, it provides valuable insights for any businesses (non-retail and/or larger businesses) which may be most vulnerable to challenges of customer access created by construction activities.

The Business Support Fund

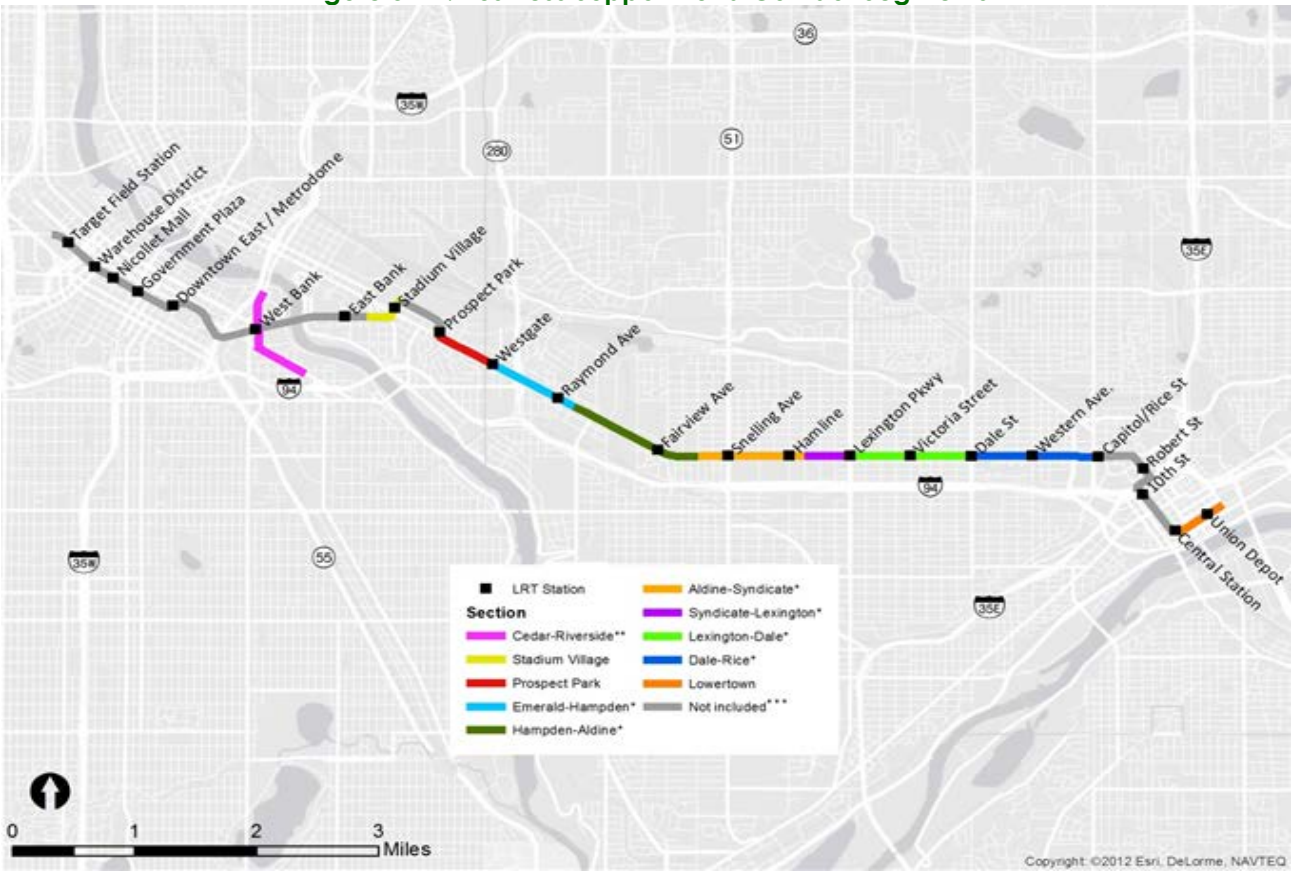
The purpose of the Business Support Fund is to provide a modest safety net for corridor businesses that can demonstrate a loss in sales due to the construction of the Central Corridor LRT. The program, administered by the City of Saint Paul, provides no-interest forgivable loans in amounts up to $20,000 to for-profit retail-oriented small businesses with up to $2 million in annual gross sales that:

- Are independently owned (with four or fewer locations).
- Are located on the Central Corridor LRT (or within one block of the construction zone).
- Have been at their current Central Corridor location for one year or more
- Are focused on retail services (selling products or services directly to the consumer, including restaurants).
- Have experienced a decline in revenue due to the construction of the Central Corridor LRT. Loan recipients were required to submit three years of tax returns and an accounting of current-year sales demonstrating a decline in sales from pre-construction levels.
- Prequalify by successfully participating in appropriate training with a small business loan consultant or by attending a "Ready4Rail" Forgivable Loan Workshop.

The loan may be used for basic business expenses, including payroll, inventory, rent, mortgage payments, utilities, taxes, marketing, and insurance.

Business Support Fund Data Characteristics. Between July 2011 and the end of June 2012, the program awarded loans to 98 small businesses. For each loan recipient, City of Saint Paul staff tracked the business's geographic location and type of business. Saint Paul staff split the corridor into ten segments as shown in Figure 3-11 and the number of program participants per segment is shown in Table 3-15. The greater number of program participants in the western section of the corridor is due to the fact that construction activities during this time period largely took place along the western half of the corridor.

Figure 3-11. Business Support Fund Corridor Segments



Notes: ** These segments contain both a north and south segment. The Central Corridor alignment is the dividing line between north and south segments. **The Cedar-Riverside segment does not run parallel to the alignment, because the small businesses in this area are also not parallel to the alignment.***The gray sections of the alignment were not included because of a lack of for profit retail-oriented businesses in the nearby area. Downtown Minneapolis was not included, because this section of alignment was already constructed as part of the Hiawatha Line.*

Table 3-15. Business Support Fund Participants by Geographic Location

Geographic Location	Number of Businesses
Cedar-Riverside	19
Stadium Village	10
Prospect Park	1
Emerald to Hampden	13
Hampden to Aldine	19
Aldine to Syndicate	19
Syndicate to Lexington	1
Lexington to Dale	7
Dale to Rice	1
Lowertown	6
Total	96*

*A total of 98 loans were disbursed, however two entries did not have geographic or business type data; therefore only 96 loan recipients are included in the analysis.

Participating businesses were sorted into seven main categories by Saint Paul staff: retail, restaurants, salons, professional businesses, entertainment businesses, printing, and automobile repair businesses. However, some of the categories contained only one or two businesses. To protect the privacy of these businesses they were collapsed into two new categories, as shown in Figure 3-12.

Figure 3-12: Collapsed Categories

	Entertainment Businesses Restaurants
New Category:	**Restaurants/Entertainment**
	Professional Businesses Printing Businesses Automobile Repair Businesses
New Category:	**Professional/Services**

Businesses in the Professional/Services category were combined in a larger aggregate group due to the distinct trips made to these establishments to serve a purpose (i.e., a customer would likely make a planned trip to visit an automobile repair or professional service business). Restaurants and Entertainment businesses were combined, because customers visit these types of establishments more spontaneously.

The number of businesses per category is shown in Table 3-16.

Table 3-16. Business Support Fund Participants by Type of Business

Type of Business	Number of Businesses
Retail	45
Restaurant/Entertainment	34
Salon	8
Professional/Services	9
Total	96*

*A total of 98 loans were disbursed, however two entries did not have geographic or business type data; therefore only 96 loan recipients are included in this discussion.

Loan recipients were required to submit three years of tax returns and an accounting of current-year sales demonstrating a decline in sales from pre-construction levels. Businesses operating for less than three years were required to submit tax returns from the time they had been in business. The program did not require any specific set of accounting metrics, but instead relied on self-reports from business owners to demonstrate a loss in revenue. From this data, Saint Paul staff derived pre-construction average monthly sales, as well as the average monthly reported sales loss during construction for each business (See Appendix K).

3.5.3.1 Business Support Fund Data Trends

Overall, businesses reported a large range of pre-construction monthly sales as well as a large variation in percent loss of monthly sales (see Table 3-17). Businesses reported losses in average monthly sales anywhere from 2 percent to 84 percent, with a mean average monthly sales loss of 30 percent and a median of 25 percent. The reports of average monthly sales loss had a standard deviation of 19 percentage points, meaning that within the range of reported losses the data were highly variable.

Table 3-17. Business Support Fund Overall Trends

Number of Businesses	Pre-construction Monthly Sales				Percent loss of monthly sales			
	Range (Minimum/Maximum)		Mean	Median	Range (Minimum/Maximum)		Mean	Median
96	$705	$141,280	$30,670	$18,644	2%	84%	30%	25%

When the loan recipients are broken into categories by business type, the wide ranges in both measurements persists. This demonstrates that there is not one category of businesses that is pushing the ranges in one direction or another, but instead that the large differences persist within the categories. Overall by category, businesses have a range of mean average monthly sales loss from 20 to 35 percent and a range of median average monthly sales loss from 18 to 35 percent. Retail businesses, the

category with the largest sample size, reported the largest mean and median monthly percent loss at 35 percent. Restaurant/Entertainment businesses reported the lowest mean and median monthly percent loss at 20 percent and 18 percent respectively.

Table 3-18. Business Support Fund Data by Business Type

Type of Business	Number of Businesses	Pre-construction Monthly Sales Range (Minimum/Maximum)		Mean	Median	Percent loss of monthly sales Range (Minimum/Maximum		Mean	Median
Retail	45	$705	$108,757	$26,450	$15,956	4%	84%	35%	35%
Restaurant/Entertainment	34	$4,281	$141,280	$46,634	$40,451	2%	65%	20%	18%
Salon	8	$2,672	$16,873	$6,953	$5,482	7%	68%	35%	31%
Professional/Services	9	$1,164	$28,530	$12,549	$10,472	12%	58%	33%	33%
Total	**96**	**$705**	**$141,280**	**$30,670**	**$18,644**	**2%**	**84%**	**30%**	**25%**

As shown in Table 3-19, the ranges of reported monthly percent loss in sales by location are also large. By location, businesses report a range of mean average monthly sales loss from 11 to 35 percent and a range of median average monthly sales loss from 9 to 39 percent. The high ends of both these ranges occurs in the segment from Lexington to Dale as businesses located there reported the highest mean and median month monthly percent sales loss at 35 and 39 percent. Conversely, the low ends of the overall ranges both occur in the Lowertown segment. Businesses in Lowertown reported the lowest mean and median monthly percent sales loss at 11 and 9 percent.

Table 3-19. Business Support Fund by Geographic Location

Geographic Location	Number of Businesses	Pre-construction Monthly Sales Range (Minimum/Maximum)		Mean	Median	Percent loss of monthly sales Range (Minimum/Maximum)		Mean	Median
Cedar-Riverside	19	$2,199	$87,906	$20,520	$14,717	11%	65%	33%	34%
Stadium Village	10	$16,873	$108,356	$50,639	$46,533	8%	43%	22%	19%
Prospect Park	1	-	-	$32,442	$32,442	-	-	21%	21%
Emerald to Hampden	13	$705	$107,375	$29,044	$23,343	2%	66%	28%	24%
Hampden to Aldine	19	$2,306	$108,757	$28,816	$12,854	5%	68%	31%	28%
Aldine to Syndicate	19	$1,417	$141,280	$28,769	$17,660	4%	84%	34%	30%
Syndicate to Lexington	1	-	-	$95,947	$95,947	-	-	33%	33%
Lexington to Dale	7	$3,913	$46,121	$15,746	$10,362	18%	49%	35%	39%
Dale to Rice	1	-	-	$89,189	$89,189	-	-	23%	23%
Lowertown	6	$17,134	$89,300	$41,429	$34,639	4%	19%	11%	9%
Total	**96**	**$705**	**$141,280**	**$30,670**	**$18,644**	**2%**	**84%**	**30%**	**25%**

Estimating Impacts to Small Retail-Oriented Businesses. As stated above, the Business Support Fund program was geared toward supporting retail businesses – those that, according to the program's website, sold "products or services directly to the consumer, including restaurants." Using the data from Table 3-2. Sector Composition of the Central Corridor, of the estimated 1,000 corridor businesses, approximately 25 percent (or 250), are small businesses that sell products or services directly to customers. The 96 small businesses that participated in the Business Support Fund program represent a significant portion of that 25 percent. A reasonable hypothesis is that the 30 percent mean and 25 percent median monthly revenue losses experienced by Business

Support Fund participants was most likely also experienced by the other small retail-oriented businesses in the corridor during construction.

Estimating Impacts to Large Retail-Oriented Businesses. Despite their size, large retail-oriented businesses still rely on customers being able to physically access their brick-and-mortar locations. As shown in Table 3-2. Sector Composition of the Central Corridor large retail-oriented businesses comprise approximately 5 percent of businesses on the corridor. A reasonable hypothesis is that these large businesses may also experience a 25 percent to 30 percent loss in monthly revenues.

Estimating Revenue Impacts to Non-Retail Businesses. Many non-retail businesses may not be as dependent on customers accessing their physical location to conduct business and generate revenue as their retail counterparts. Nonetheless, non-retail revenues could be affected by construction activities due to impacts to deliveries/pick-ups, utility interruptions, noise/vibration, dust and other impacts as described in the *Mitigating Business Losses: Services, Strategies, and Effectiveness,* a survey by Wilder Research published in 2012, and the *Little Mekong CCLRT Impact Study* conducted by the Asian Economic Development Association and published in August 1, 2012.

As revenue data is not available for non-retail businesses, specific information about revenue losses due to construction to these businesses cannot be definitively identified. However, impacts to non-retail businesses' revenue could be expected but to a lesser extent than small retail businesses.

A multitude of variables affect business trends. It is important to note that there are always a multitude of social, economic, local and national variables that may have an impact on business revenues. It is logical to conclude that businesses which rely on customers physically accessing their locations may experience impacts during a large construction project. The estimated ranges of revenue loss reported above are derivative, yet they should be viewed through a broader lens that includes regional and national economic influences not associated with LRT construction.

3.5.4 Impacts due to LRT Construction

The information contained in each study reviewed in this chapter helps create a picture of the impacts experienced by businesses during the construction of the Central Corridor LRT. The CCFC's study established that prior to construction business trends in the corridor were sluggish, reflecting the trends in the greater regional and national economy. During construction, data collected by the CCPO and UABA demonstrated that overall business turnover and vacancy rates in the corridor generally remained neutral. Wilder Research and AEDA documented construction-related impacts reported by business owners during construction. Those impacts included:

- Customer Navigation Issues
- Less Automobile Traffic
- Less Pedestrian Traffic
- Noise/Dust/Vibration

The Business Support Fund provides the best data set for use in determining the potential loss of business revenue due to LRT construction. Of the small retail-oriented businesses that did apply for assistance through loan program, when categorized by business type, businesses saw a median average monthly sale loss from 18% to 35%, with retail businesses at the high end of the range and restaurants and entertainment businesses at the low end of the range. Therefore, a reasonable inference is that other small and large retail-oriented businesses in the corridor may have experienced similar losses during construction. Unfortunately it was not possible to provide a confident measure quantifying the impact of construction on corridor-wide business revenues, because there is not a clear methodology for obtaining an estimate that is not theoretical.

However, despite the impacts felt by corridor businesses, outlooks remain positive. Wilder Research reported that of the businesses that participated in corridor mitigation programs those businesses viewed the programs as at least somewhat effective in mitigating construction-related impacts. Even more positive, a large percentage of businesses reported to Wilder Research that they expected to be operating at their current location on Central Corridor within the next five years, and many businesses expected sales and profits to increase.

3.5.4.1 LRT Alternative (Initial Construction Mitigation)

LRT with the initial construction mitigation includes the mitigation package that was identified in the FEIS and ROD as described in Chapter 2. The mitigation strategies identified under this alternative are standard approaches that are typical of transportation construction projects. As described in earlier sections of this Supplemental Draft EIS, Central Corridor businesses experienced a variety and range of construction-related impacts. This Supplemental Draft EIS assumes that under this alternative the variety and range of construction-related impacts would have been more severe.

3.5.4.2 LRT Alternative (Final Construction Mitigation)

The LRT Alternative with the final construction mitigation includes the construction of the Preferred Alternative with the initial mitigation package identified, as well as the expanded mitigation strategies focused on financial and technical assistance to businesses.

The quantitative analysis completed in this Supplemental Draft EIS shows that even with the final construction mitigation, some businesses still experienced adverse effects on business revenue. However, this Supplemental Draft EIS concludes that the LRT Final Construction Mitigation Alternative helped alleviate the severity of the variety and range of construction-related impacts experienced by Central Corridor businesses

3.6 BRT Alternative

The BRT Alternative would have included the construction of an exclusive guideway as well as the reconstruction of the roadway surface. The construction patterns required to construct the BRT Alternative, had it been selected as the preferred alternative by the Metropolitan Council, would have closely followed the construction patterns for the LRT Alternative.

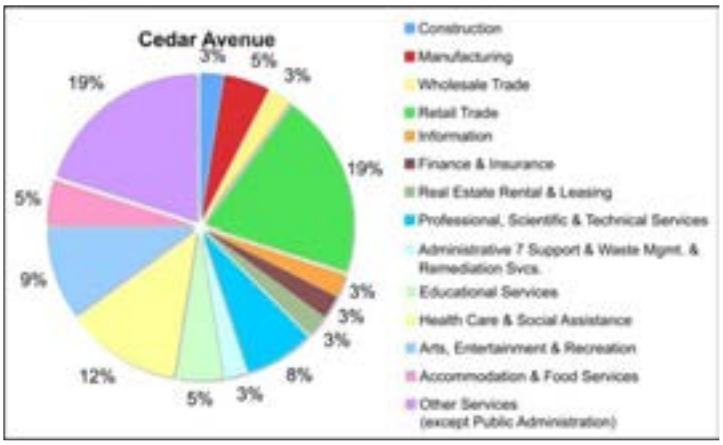
3.6.1 Anticipated Impacts Prior to BRT Construction

The University of Minnesota's Humphrey School of Public Affairs study, *Assessing Neighborhood and Social Influences of Transit Corridors* was used in the LRT Alternative section to discuss impacts anticipated by business owners prior to Central Corridor LRT construction. The report also recorded construction-related impacts anticipated by business owners along the Cedar Avenue BRT line. While the Cedar Avenue corridor has a much more suburban character than the Central Corridor, the attitudes of Cedar Avenue business owners regarding BRT construction provide an instructive comparison indicating how BRT may have been perceived by Central Corridor business owners.

3.6.1.1 Cedar Avenue BRT Survey Participants

The planned Cedar Avenue BRT route runs south from Mall of America to the outer suburbs and is scheduled to open in 2015. The study focused on four neighborhood areas along the Cedar Avenue alignment: Cedar Grove, Apple Valley Walk & Ride, Apple Valley Park & Ride, and Lakeville-Cedar. To identify study participants, the survey employed a simple random sample of businesses drawn at the neighborhood level from a Dun and Bradstreet business database. 40 businesses, ten from each neighborhood, participated in the survey. A fairly diverse mix of industries participated in the survey, as shown in Figure 3-13. The relatively large percentage of "Other Services" includes businesses such as hair and nail salons which are numerous along the corridor. The large majority of the survey participants were small businesses with fewer than ten employees and annual sales of $100,000 – $250,000.

Figure 3-13. Cedar Avenue - Survey Sample Industry Sectors by NAICS Code

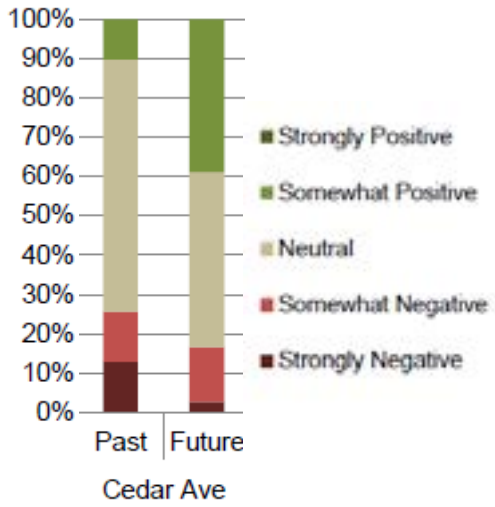


Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

3.6.1.2 Perceptions of Cedar Avenue BRT Related Impacts on Businesses

The survey asked business owners to gauge how they thought the planned Cedar Avenue BRT had impacted their business over the past five years, and how they thought it would impact their business over the next five years. The large number of neutral responses in both time frames, shown in Figure 3-14, demonstrates that Cedar Avenue businesses generally have not felt and do not anticipate many impacts, positive or negative, from the construction of BRT. However, a fairly sizeable portion of respondents see BRT as somewhat positively impacting the corridor in the future.

Figure 3-14. Cedar Avenue - Perception of Transitway Impacts

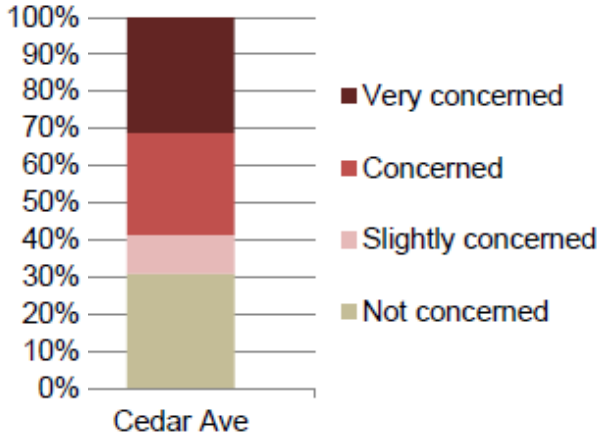


Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

3.6.1.3 Future Concerns and Anticipated Impacts due to BRT Construction

Businesses were also asked to rate their level of concern regarding the upcoming Cedar Avenue BRT construction on a scale from "Not concerned at all" to "Very concerned". Respondents who did not answer "Not concerned at all" were then asked a follow-up question about their specific concerns. Figure 3-15 demonstrates that roughly 60 percent of businesses had "moderate to serious concerns about transitway construction," according to the study.

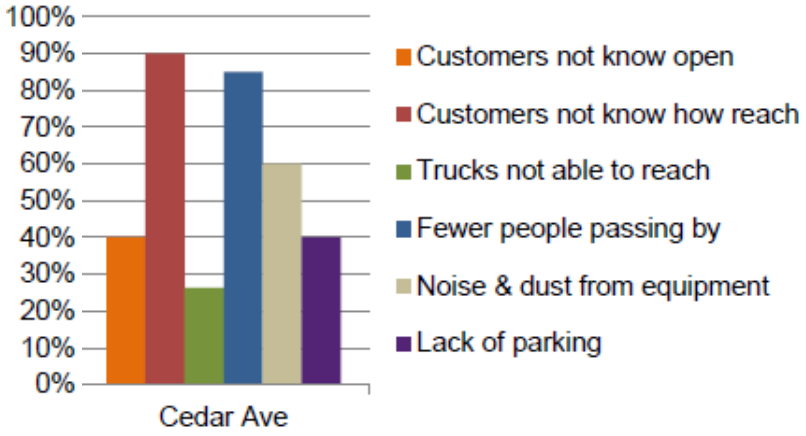
Figure 3-15. Cedar Avenue - Levels of Concern over Transitway Construction



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

Figure 3-16 shows the percentage of respondents concerned with six specific anticipated construction-related impacts. Cedar Avenue respondents were by far most concerned that customers would not know if their businesses were open during construction and that fewer people may be passing by. Respondents were least concerned by truck access issues.

Figure 3-16. Cedar Avenue - Specific Anticipated Construction Concerns



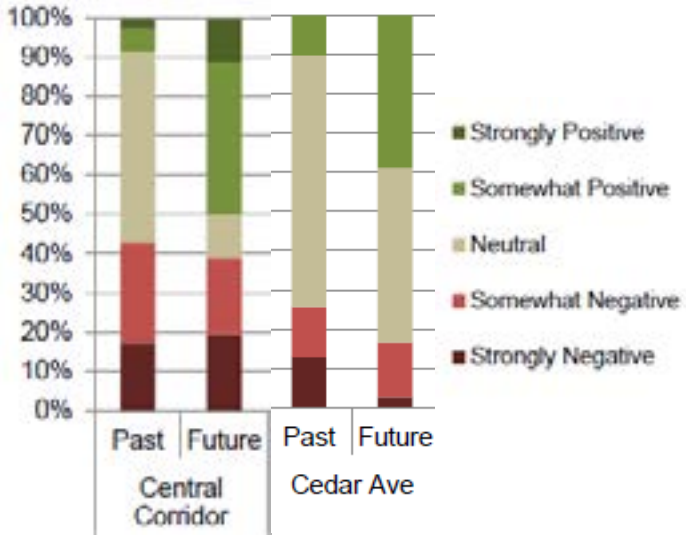
Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

3.6.2 Comparison of LRT and BRT Future Concerns and Anticipated Impacts

This section provides a comparison of impacts anticipated by survey respondents in the Central Corridor LRT study area and the Cedar Avenue BRT study area.

Respondents in the Central Corridor were far more polarized in their perceptions of past and future transitway impacts than their Cedar Avenue counterparts, as shown in Figure 3-17. Yet both corridors did see a decrease in neutral responses and an increase in positive responses across time frames.

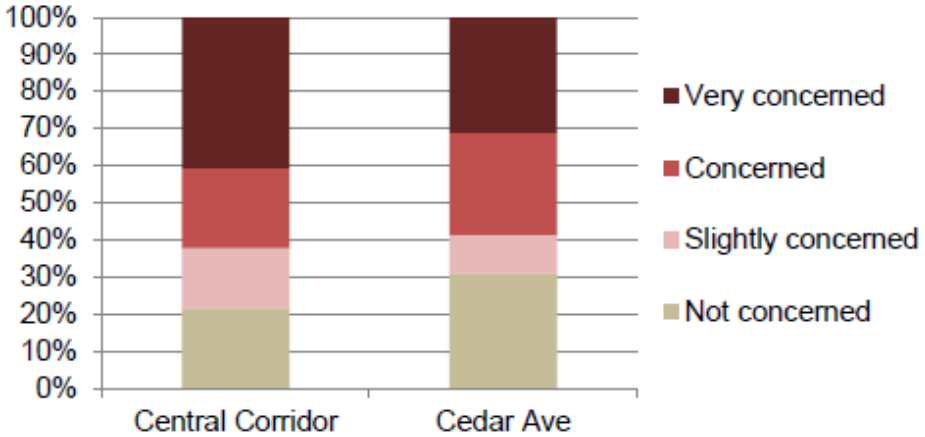
Figure 3-17: BRT vs. LRT - Perception of Transitway Impacts



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

The levels of concern regarding transitway construction are extremely similar, with slightly more "not concerned" respondents and slightly more "concerned" respondents in the Cedar Avenue Corridor, as shown in Figure 3-18.

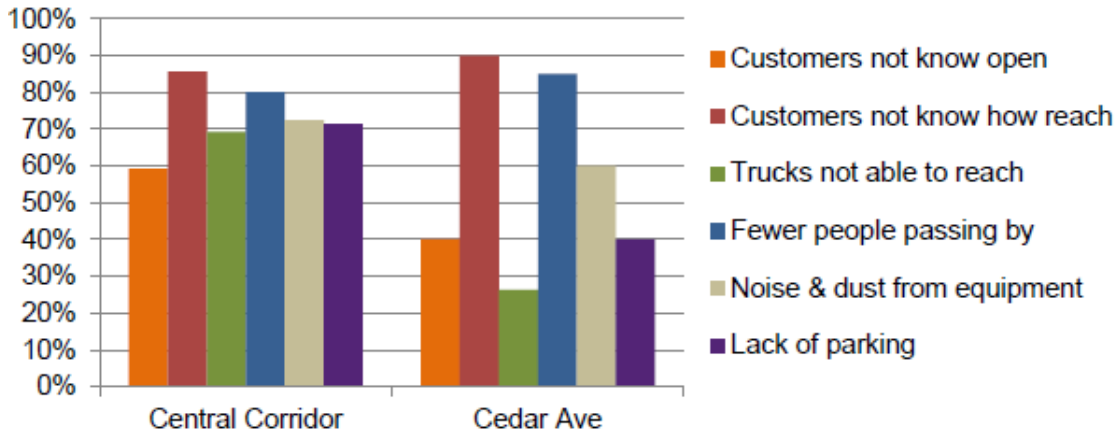
Figure 3-18: BRT vs. LRT - Levels of Concern over Transitway Construction



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

Concerns regarding customers not knowing if businesses were open and regarding fewer people passing by during construction were anticipated by the greatest number of respondents and at similar percentages across both corridors, as shown in Figure 3-19. However, while these impacts were the greatest concerns along Central Corridor, the other impacts were also anticipated at almost the same rate. In contrast, customers not knowing if businesses were open and fewer people passing by dominated Cedar Avenue respondents' concerns.

Figure 3-19: BRT vs. LRT - Specific Anticipated Construction Concerns



Source: *Assessing Neighborhood and Social Influences of Transit Corridors*

Overall, when these transitway corridors are compared, construction-related impacts anticipated by business owners are fairly similar.

3.6.3 Impacts due to BRT Construction

Given that the intensity and duration of construction activities for the BRT Alternative would be very similar to those of the LRT alternatives, this Supplemental Draft EIS concludes that the impacts experienced from LRT construction would also be experienced from BRT construction. The overall construction schedule for a BRT transitway would be shorter than an LRT construction schedule, as power and electrification systems as well as operations and maintenance facility would not be part of the BRT Alternative construction. The duration and intensity of the civil work activities and station construction are very similar for both modes. It is during these phases that the most intense construction occurs, and therefore it is during these phases that businesses in the project area experience construction-related impacts. Since these phases are similar in duration for both modes, this Supplemental Draft EIS concludes that the effects of construction of either type of transitway on business revenue would be similar.

3.7 Mitigation Program Overview

This section discusses the mitigation approach and describes mitigation measures to help reduce short-term impacts to business revenues during LRT project construction.

3.7.1 Mitigation Approach

Studies of construction-related impacts on business revenues have identified a number of factors that may contribute to loss of business revenue during project construction including loss of access, loss of parking, and reduced traffic flow. These studies also

recognize that there are many factors unrelated to construction activity that may also impact business revenues, including local and global economic factors, unemployment rates, seasonal businesses, etc. Indirectly, potential customers also may be discouraged from patronizing businesses due to both real and perceived inconvenience factors including congestion, confusion, safety concerns, noise, and dust.

While many of these factors cannot be completely avoided during construction activity, studies referenced in the CCPO literature review (Appendix D) identify a number of best practices to minimize impacts to businesses. These include:

- **Access:** Using signage and creating alternate routes to direct people to businesses
- **Communications/Outreach:** Maintaining strong communication between agencies and businesses
- **Marketing:** Using various marketing techniques to promote businesses
- **Construction Practices:** Using best management practices to minimize impacts due to construction
- **Technical and Financial Resources:** Providing technical and financial resources such as small business loans during construction

In addition, the Minnesota Department of Transportation (MnDOT) recommends mitigation measures as best practices for transportation projects.[9] The following is a list of the relevant mitigation strategies identified by MnDOT that are applicable to construction of an LRT project and how the Central Corridor Project sponsors propose to address that mitigation strategy.

1. Small business outreach must be emphasized as an integral part of a broader public participation process.

Central Corridor Project Response:

- During the early phases of Central Corridor LRT project development, a Business Advisory Committee (BAC) was formed to provide input into the project, including the siting of traction power substations, reconstruction of the road from building face to building face (including sidewalk reconstruction), design of streetscaping (planting trees, street furniture, lighting, etc.) and other design elements.
- Business outreach was part of a broader program of public involvement aimed at engaging all project stakeholders. This program of outreach substantially influenced the project and was successful at reaching a broad

[9] CH2MHill for the MnDOT, "Report on Mitigation of Transportation Construction Impacts". Final Report. February 2009.

group of people. A significant component of that outreach has been working with the business and property owners along the alignment to discuss issues related to design, access during construction, parking, and construction-related concerns. A summary of how outreach influenced the project can be found at: http://www.metrocouncil.org/transportation/ccorridor/PublicInfluence.htm

- Since December 2006, the Metropolitan Council has had a number of Outreach Coordinators, including staff fluent in languages commonly spoken along the corridor, such as Hmong, French, and Spanish. The Outreach Coordinators are full-time staff and are available to work with businesses, including minority-owned businesses, interest groups and the public along the corridor to provide information and assistance regarding the construction of the project.

2. Important business issues need to be identified early in project development.

a. Consultation with local units of government and business community representatives to identify businesses surrounding the project, potential impacts to small businesses (e.g., parking, traffic, and access), and to discuss potential mitigation measures;

b. Development of a packet for businesses that will include project information (e.g., nature, extent, and timing of construction and anticipated changes in parking, traffic, and public access), a transportation agency project contact; and

c. Determine a list of project-specific area business development organizations that may offer support and resources to affected businesses.

Central Corridor Project Response:

- The Metropolitan Council has been in close consultation with all local units of government along the Central Corridor LRT alignment. In December 2006, the Metropolitan Council formed a Project Advisory Committee (PAC), including representatives from the cities of Minneapolis and Saint Paul, Hennepin and Ramsey Counties, MnDOT, and the University of Minnesota. The PAC has been meeting regularly since December 2006 and will continue to meet through the duration of Central Corridor construction.

- The Metropolitan Council partnered with the City of Saint Paul to investigate options for mitigating the loss of on-street parking along the corridor during construction.

- As referenced above, the Metropolitan Council has engaged in a rigorous program of outreach targeted at reaching all Corridor stakeholders since taking over as the lead planning agency in June 2006. Some of the outreach strategies are listed below.

- The project web site (*www.centralcorridor.org*) contains a wealth of information on the project, with a focus on construction information and advisories. Information includes maps and text describing the location and impacts of expected construction activities, including road and sidewalk closures, bus stop and route changes, and other changes in access that may affect workers and patrons of businesses. This information is updated regularly to reflect progress of construction activities.
- Prior to construction, the Metropolitan Council mailed a "What to Expect from Construction" to all businesses and properties directly on the alignment. The document included a description of construction activities, a general timeline, and contact information.
- The Metropolitan Council partnered with the Business Resources Collaborative with funding provided by the CCFC to prepare the "Ready for Rail" initiative, which includes information available online and printed packets of material. The "Ready for Rail" program includes information on the Business Resources Collaborative, which is a partnership of business coalitions, nonprofit community developers, and local governments that bridges various community-led planning efforts addressing business and economic development in the Central Corridor. The packet was distributed to all businesses along the alignment in 2010 and also posted online at www.readyforrail.net. This packet was also made available in Somali, Vietnamese, Hmong, and Spanish.

3. **Identify opportunities for partnership with a greater depth of resources, including economic development offices, dynamic local business leaders, or local government agencies.** Every project has unique technical issues but also unique human resources, personalities, and organizations. Taking advantage of the ideas, services, and relationships that these resources can offer will help businesses manage the challenges of construction. Besides offering greater knowledge of site-specific issues, their presence often serves as a moderating force in public outreach that enables a shared understanding of project impacts.

   Central Corridor Project Response:

   - See the above discussion regarding the "Ready for Rail" program and Business Resources Collaborative.
   - The Metropolitan Council, the City of Saint Paul, and the Central Corridor Funders Collaborative have all contributed funding to the City of Saint Paul's Business Support Fund. The purpose of the Business Support Fund, as described in the Joint Powers Agreement between the Metropolitan Council and the City of Saint Paul, is identified below.

The purpose of this Agreement is to help implement a support program ("Program") for small businesses located along the Central Corridor LRT that may experience disruptions from construction activities associated with the Central Corridor LRT project. The program is intended to help provide a modest "safety net" for small businesses that undertake business planning and prepare in advance for the Central Corridor LRT but still may be adversely affected by construction activities, and to provide some incentives for those businesses to continue operating at their existing locations after construction is completed and the Central Corridor LRT is operating.

- Metropolitan Council's Outreach Coordinators work closely with business organizations and chambers of commerce in the corridor to share information and coordinate activities in support of corridor businesses.

4. **Enhance engagement of the construction contractor as an important resource for business communication and relationships.** The construction contractor offers a tremendous resource that can positively or adversely affect the effectiveness of business outreach. As a result of their visibility in the construction area, contractors oftentimes become the face of a project in the eyes of the public. Transportation agency staff may consider including contract provisions related to contractor participation or communication in projects where small businesses will be impacted. This may include a requirement that the contractor provide a business liaison to communicate with business operators and resolve issues on a regular basis (e.g. weekly) or as need may arise.

   Central Corridor Project Response:

   - Construction contract bid documents for construction of the Civil East (all LRT trackway and station construction in Saint Paul) and the Civil West (all LRT trackway and station construction in Minneapolis) segments included measures to either require or to encourage the contractor to take measures to avoid business impacts during construction.
   - A section of the construction bid documents was solely devoted to Public Involvement (Section 01 31 20 – Public Involvement). This included requirements to submit a Public Involvement Plan, a monthly Community Involvement Report (submitted with Application for Payment), and an employee parking plan minimizing use of existing parking currently needed by local residents and businesses. The contract also requires the designation of a Contractor Community Relations Leader who is required to attend meetings with the public, as specified, and to provide support to the Metropolitan Council's Community Outreach Staff. Under Community Impact Mitigation, the Contractor is required to maintain access (parking, deliveries, and pedestrian) and participate in meetings with affected property owners. The Contractor is also required (under

Community Impact Mitigation) to develop access plans for business and residents on each block and to provide maps showing existing and planned patron, delivery, and resident access during any construction period. The access plans are to include times of business operation and deliveries.

- Contract bid documents for Civil East and Civil West also provide for a Contractor Incentive Allowance (Section 01 21 50 – Incentive Allowance). This document describes the Construction Communication Committees (CCCs) established for the contract and the ways in which their input will be used to evaluate Contractor responsiveness to public and business concerns and to award the incentive allowance based on Contractor performance, as ranked and evaluated by the CCC's.
- Contract Special Procedures include a comprehensive listing of community and other special events and require that the Contractor meet with event coordinators and other officials to submit plans and procedures associated with the protection of the public and the work during the events.

5. **Review policies for signing in construction zones.** Appropriate signing can benefit businesses but, at the same time, good signing practices must be maintained (for example, drivers can be overwhelmed with information from too many signs, spaced frequently). Signing practices that can be considered should be documented as well as those that should not be used.

   Central Corridor Project Response:

   - The Civil West and Civil East construction packages include allowances for signage and requirements for signage of alternative access to businesses and traffic detours. The Council created a working group to provide guidance on the types of signage needed by businesses as well as to provide advice on the language and general placement of the signs. The working group started meeting in November 2010 and includes business owners, business organizations, Metropolitan Council Outreach Coordinators and construction staff, contractor's traffic and outreach staff, and city economic development and public works representatives.

6. **Evaluate the effectiveness of small business outreach activities.** Regularly review business outreach efforts on a project-by-project basis and apply lessons learned to future projects.

Central Corridor Project Response:

- The Metropolitan Council encourages people to provide feedback on communication and outreach efforts and frequently makes changes and additions based on input received. For example, early versions of the construction update newsletters included photos of construction. Community representatives suggested using the space in the construction updates to feature businesses or community events. This has been a key part of the construction updates.
- The Metropolitan Council is aware that the CCFC with the assistance of Wilder Research has prepared baseline indicators to measure progress toward key outcomes of the Central Corridor project. These indicators include several measures of a "Strong Local Economy" including number of businesses, share of business establishments by industry and number of employees by establishment. The Metropolitan Council endorses the efforts of the CCFC in this work and will review the annual indicator updates.
- The Metropolitan Council conducted a Lessons Learned exercise at the end of the 2011 construction season and sought feedback from project partners as well as the business community. The lessons learned through this process resulted in changes during the 2012 construction season, such as fully closing intersections to expedite work in four weeks instead of trying to keep some lanes open through the intersection, which resulted in closures of up to three months in 2011.

In addition to the key recommendations noted above, other Central Corridor LRT project efforts of note include the disadvantaged business enterprise (DBE) goals for contracting established by the Metropolitan Council; the LRT Works program, which seeks to pair tradespeople seeking employment with the Central Corridor LRT Contractors working on the Project; and the Ride-to-Rewards program, a business marketing/loyalty program which allows its members to accumulate points by riding buses and trains and by shopping at participating merchants, including Central Corridor businesses.

Based on these recommendations, proposed mitigation for the Central Corridor LRT Project focuses on: (1) minimizing the unavoidable impacts of construction activities; (2) proactive communications with both corridor businesses and the community to minimize confusion and uncertainty regarding the timing and duration of construction activities; (3) promotional and marketing activities to encourage patronage of businesses during construction; (4) technical assistance to business during the construction period to improve business management and customer communication skills; (5) financial assistance to businesses losing nearby on-street parking, and; (6) general financial assistance to small businesses affected by construction activities.

3.7.2 Mitigation Commitments

The following mitigation activities are currently being implemented through commitments in contracts or agreements entered into by the Metropolitan Council for the Central Corridor LRT Project. The mitigation commitments represent a substantial investment of financial resources as well as staffing commitments to communications activities and inspection activities to assure contractor compliance. Table 3-20 summarizes direct financial commitments to date totaling nearly $16 million and Table 3-22 summarizes staffing/contractual commitments. Table 3-20 also identifies the mitigation strategies that were initially identified with the LRT Alternative with the initial construction mitigation, and the LRT Alternative with the final construction mitigation. A more detailed description of each of the mitigation measures is also included in this section.

Table 3-20. Mitigation Measures: Financial Commitments

Mitigation Measures		Funding Amount (Funds Expended) [8]	Responsible Agency	LRT with Initial Construction Mitigation [9]	LRT with Final Construction Mitigation
Construction Contract	Construction Access Plan	$200,000 ($163,332)	Metropolitan Council/ Contractor	✓	✓
	Contractor Incentive Program	$850,000 ($352,436)	Metropolitan Council		✓
Project Communications	Community Outreach Coordinators [1]	$3,500,000 ($2,750,000)	Metropolitan Council	✓	✓
	Construction Communication Plan (Special Signage) [2]	$200,000 ($128,311)	Metropolitan Council / Contractor	✓	✓
Parking Assistance	Neighborhood Commercial Parking Program	$1,325,000 (1,325,000)	City of Saint Paul		✓
	Alley Improvements Program	$632,000 ($632,000)	City of Saint Paul / Metropolitan Council		✓
Business Assistance Programs	Business Support Fund [3]	$4,000,000 ($2,160,125)	City of Saint Paul		✓
	Business Improvement / Expansion Assistance	$700,000 ($612,497)	Neighborhood Development Center		✓
	Business Resources Collaborative [4]	$305,000 ($305,000)	N/A		✓
	University Avenue Business Preparation Collaborative [5]	$1,075,000 ($1,075,000)	N/A		✓
	Great Streets and Business Association Assistance Program	$210,000 ($192,000)	City of Minneapolis		✓
	Other [6]	$7,670 ($7,670)	N/A		✓

	Business Marketing Program [7]	$1,200,000 ($191,560)	Metropolitan Council		✓
University Avenue / Cedar Riverside Betterments	Improved Street Lighting / Trees / Street Furniture	$1,000,000 ($1,000,000)	Metropolitan Council		✓
	Business "Façade Improvement Financing	$150,000 ($69,530)	City of Minneapolis		✓
Promoting Business Access	Additional Business Signage	$50,000 ($50,000)	Metropolitan Council		✓
	Cooperative Advertising and Transit Fare Passes	$250,000 ($164,122)	Metropolitan Council		✓
TOTAL FUNDING AMOUNT		**$15,654,670**			
TOTAL FUNDS SPENT		**$11,178,583**			

(1) Includes salary and benefits for the fully staffed Central Corridor Outreach and Communications Team for the three years of heavy project construction from 2010-2012 and the first six months of 2013.

(2) Includes temporary directional signage, including portable changeable message signs, project identification boards, construction site signage, and other signs.

(3) Includes $2,500,000 from the Metropolitan Council, $1,000,000 from the City of Saint Paul, and $500,000 from the CCFC.

(4) Includes grants from CCFC as well as a matching investment from the City of Saint Paul for marketing during project construction.

(5) Includes $800,000 from CCFC, $150,000 from the F.R. Bigelow Foundation, and $125,000 from the Saint Paul Foundation.

(6) Includes grants from CCFC to Central Corridor Partnership and AEDA to support presentations from business mitigation consultants.

(7) This amount was approved September 28, 2011 by the Metropolitan Council to be used to retain a consultant to provide marketing assistance to Central Corridor businesses.

(8) Funds expended are current as of September 30, 2012.

(9) The LRT with Initial Construction Mitigation is associated with the 2009 ROD and LRT with Final Construction Mitigation is associated with the current construction mitigation program.

Table 3-21. Mitigation Measures: Staffing and Contract Commitments (Non-Direct Financial Commitments)

Mitigation Measures		Responsible Agency
Construction Contract	Special Events Plans	Metropolitan Council/ Contractor
	Best Management Practices (BMPs)	Metropolitan Council/ Contractor
Project Communications	Contractor Community Relations Leader	Contractor
	Construction Communication Plan	Metropolitan Council
	Construction Information Packet	Metropolitan Council
	Construction Signage	Metropolitan Council/ Contractor
Parking Assistance	Construction Employee Parking Plan	Metropolitan Council/ Contractor

3.7.2.1 Construction Contract

Construction contract specifications included measures to minimize construction-related disruptions to businesses, and included incentives to encourage contractor cooperation with implementation of these measures. Construction contract specifications also included measures to minimize construction-related noise, vibration, and dust impacts through construction practices.

- **Construction Access Plans:** A construction access plan was developed for all Civil West and Civil East project segments to identify construction-related access concerns for each corridor business with a driveway or parking lot and document how business access would be maintained during construction. The construction contracts included $200,000 for implementation of construction access plans. Access plans contained maps showing existing and planned patron, delivery, and resident access during construction periods. Maps also showed times of business operations and deliveries. Businesses are notified of any changes to access at least two weeks prior to the start of construction.

- **Contractor Incentive Program:** A contractor incentive program was provided to encourage effective communication and cooperation between the contractor, businesses and residents. A Construction Communication Committee ("CCC") comprised of business owners, residents, and other stakeholders was created for each outreach sector identified in contract documents. The CCC meets every two weeks to vote on identified evaluation criteria measuring contractor efforts

to minimize construction-related impacts and award quarterly incentives to contractors demonstrating compliance with these measures. The construction contracts included an $850,000 allowance (project-wide total) for the contractor incentive program.

- **Special Events Plans:** Special events anticipated in the corridor during the construction period were identified in the construction documents. Contractors will work with cities and community groups to coordinate construction activities with these events to protect both the work site and the public, and minimize construction-related disruptions during scheduled special events.
- **Construction Best Management Practices (BMPs):** Contract documents required best management practices (BMPs) to help minimize construction-related noise, vibration and dust impacts to businesses throughout construction.

3.7.2.2 Project Communications

Several communication strategies have been implemented to provide consistent and timely information about construction. These strategies are described below.

- **Community Outreach Coordinators:** The Metropolitan Council is providing Community Outreach Coordinators throughout project construction. The Community Outreach Coordinators act as a liaison between the public and local businesses, including minority-owned businesses, and project contractors. Community Outreach Coordinators are available to answer questions and direct specific construction-related concerns back to project contractors and the Metropolitan Council. The Metropolitan Council has dedicated $3,500,000 to this effort, which includes salary and benefits for a fully staffed Central Corridor Outreach and Communications Team for the three years of heavy project construction from 2010 through 2012 and for the first six months of 2013.
- **Construction Public Information and Communication Plan:** A Construction Communication Plan was developed for all Civil West and Civil East project segments. The Construction Communication Plan contains the following elements:
    - Provide a 30-day notice of construction (includes private utility relocations and LRT construction).
    - Provide a 72-hour advance notice to businesses for utility shut-offs.
    - Provide a 24-hour construction hotline and project information line.
    - Communication with businesses through weekly meetings with Community Outreach Coordinators and the contractor's community relations leader as well as monthly public informational meetings.
    - Provide clear directional signage, variable message signs, and construction site information such as contact information and anticipated

completion dates. The construction contracts will include a $200,000 allowance (project-wide total) to accommodate special signage.

Photo 6: Special signage shows parking locations on the corridor.

- Produce communication materials such as weekly construction updates, construction update posters, and monthly newsletters ("Making Tracks" newsletter). Weekly construction updates will be distributed by email, news release and posted to the Central Corridor Project Website. Work with affected business owners to include information regarding their businesses in these construction update materials. (See also Construction Information Packet.)
    - Construction Information Packet: Construction information packets were developed for all Civil West and Civil East project segments. Construction information packets included a description of upcoming construction activities, construction schedule, and construction staging. Construction information packets also included contact information for Community Outreach Coordinators, business assistance, and local City contacts for non-construction related questions.

- **Contractor Community Relations Leader:** Construction contract specifications included public outreach measures to assure that impacted businesses are fully informed about potential construction-related disruptions, which are also included in the contractor incentive program described previously. Each contractor is required to provide a Contractor Community Relations Leader to establish and maintain communication between Community Outreach Coordinators, businesses and the public. Contractor Community Relations Leaders communicate construction activities to the public and businesses, and respond to concerns from business owners during project construction. Contractor Community Relations Leaders also attend weekly Construction Communication Committee meetings and monthly public involvement meetings.

3.7.2.3 Parking Assistance

Several parking programs were identified to help minimize the impact to businesses due to the loss of parking.

- **Neighborhood Commercial Parking Program:** The City of Saint Paul funds and administers a program to address the loss of parking during and after project construction by providing financial assistance to improving off-street parking. The program provides low-interest loans of up to $25,000 to individual businesses that can be used for facilitating agreements with other businesses for shared parking or limited construction improvements to improve the access or parking efficiency (e.g., driveway grades, more efficient uses/physical reconfiguration of existing parking). As of October 2012, the Neighborhood Commercial Parking Program included $1,325,000 in loan funds.
- **Alley Improvements Program:** The City of Saint Paul prioritized a list of alleys to be re-paved and refurbished providing enhanced access to off-street parking to mitigate parking loss during Central Corridor LRT construction. Many alleys behind Central Corridor businesses were in extremely poor condition (large potholes, broken pavement, etc.). Improving these alleys made the off-street parking behind Central Corridor businesses more easily accessible for customers and was intended to mitigate some effects of loss of on-street parking during construction. A total of $632,000 has been dedicated to this effort, comprising $350,000 in the City of Saint Paul's 2011 Capital Improvement Budget and $282,000 contributed from Central Corridor LRT contingency funds in 2012.
- **Construction Employee Parking Plan:** Construction contracts require contractors to minimize use of available parking by developing an employee parking plan to direct employee and construction vehicle parking away from business and residential areas. Contractors are responsible for identifying parking off-site and transporting workers to the work site if necessary. Construction vehicles will be parked within delineated construction zones and work material will be kept out of existing parking areas.

3.7.2.4 Business Assistance Programs

Business programs have been developed to provide measures to assist businesses impacted by construction of the Project. These programs have been identified to specifically assist small businesses that may be impacted by temporary vehicular and pedestrian access changes, traffic detours, or other construction-related impacts (e.g., noise, dust). The business assistance programs include the following measures.

Photo 7: Lunch on the Avenue events support local restaurateurs during construction.

- **Business Support Fund:** The Business Support Fund program provides low- or no-interest forgivable loans and grants with no obligation to repay to small businesses (gross annual sales less than $2 million) that may experience construction-related disruptions. The Business Support Fund includes $4.0 million in loan funds ($2.5 million from the Metropolitan Council; $1.0 million from the City of Saint Paul and $0.5 million from the Central Corridor Funders Collaborative). Individual small businesses whose business focuses on retail sales would be eligible for loans of up to $20,000. Loans could be used for basic business expenses including taxes, rent/mortgage, utility or personnel payments. The Business Support Fund is being administered by the City of Saint Paul Housing and Redevelopment Authority ("HRA").

  To be eligible for the Business Support Fund, small retail focused businesses must also fulfill the following requirements:

  - Are independently owned (with four or fewer locations).
  - Are located on the Central Corridor LRT (or within one block of the construction zone).
  - Have been at their current Central Corridor location for one year or more.
  - Are focused on retail services (selling products or services directly to the consumer, including restaurants).
  - Have experienced a decline in revenue due to the construction of the Central Corridor LRT.
  - Prequalify by successfully participating in appropriate training with a small business loan consultant or by attending a "Ready4Rail" Forgivable Loan Workshop.

- **Business Improvement / Expansion Assistance:** The Business Improvement/ Expansion Assistance program included $700,000 available in loan, grant and Program Related Investment (PRI) funds to assist targeted businesses with significant growth opportunities and/or that are in a position to buy or improve

their own buildings with the goal of reinforcing the importance of locally- and minority-owned businesses to the Central Corridor. This program is administered by the Neighborhood Development Center.

- **Business Resources Collaborative (BRC):** The Business Resources Collaborative (BRC) is an informal coalition that provides support and technical assistance to businesses affected by the Project. The BRC has received $305,000 in grants in support of its operations. The BRC provides the following services to businesses along the Central Corridor:
    - Provide business consulting and technical assistance (e.g., business and real estate development loan assistance; parking; energy efficiency programs; advocacy, information and referrals).
    - Provide and maintain a business resource/information clearinghouse (http://www.readyforrail.net).
    - Provide a grassroots "buy local" marketing campaign to help provide customers to Central Corridor businesses during project construction.
- **University Avenue Business Preparation Collaborative (U7):** The University Avenue Business Preparation Collaborative (U7) was created by community development organizations to provide marketing support, on-site business consulting, resource center and planning center, small business workshops, grants for marketing and façade improvements, micro-lending and financing support to small businesses along the Central Corridor. U7 has received a total of $1,075,000 in grants in support of its operations ($800,000 from Central Corridor Funders Collaborative, $150,000 from the F.R. Bigelow Foundation, and $125,000 from the Saint Paul Foundation).
- **Great Streets and Business Association Assistance Program:** The City of Minneapolis will contribute a total of $210,000 for business technical and marketing support.

Photo 8: The Republic Café and Pub in Minneapolis' Seven Corners Neighborhood is a recipient of the City's Great Streets façade improvement grant.

- **Other Business Assistance:** Other Business Assistance includes a $3,000 funding commitment from the CCFC and $4,670 from AEDA to support public presentations from business mitigation consultants.
- **Business Marketing Program:** On September 28, 2011, the Metropolitan Council approved the use of $1.2 Million in Central Corridor LRT project contingency funding for use to market businesses in the Central Corridor area of Saint Paul and Minneapolis, increase customer traffic, and minimize lost business revenues. MOD and Co., an advertising and marketing firm located in Saint Paul, has been contracted to conduct the marketing program on behalf of the Metropolitan Council. During June 2012, MOD and Co. developed targeted marketing campaigns for nine different business districts along the Central Corridor LRT alignment based on business outreach and research efforts. The marketing campaign incorporates many types of advertising platforms such as billboards, a website (www.onthegreenline.com), and social media.

3.7.2.5 University Avenue/Cedar Riverside Betterments

Adding amenities and improving the aesthetics of commercial areas will attract customers to the Central Corridor project area. The following activities have been funded and may occur both during and after the construction period.

- **Improved Street Lighting / Trees / Street Furniture:** A total of $1,000,000 in CCLRT project contingency funds has been committed for aesthetic improvements and amenities, including street lighting, trees, and street furniture within the public right of way, to enhance the pedestrian character of University Avenue and downtown business districts.
- **Business Façade Improvement Financing:** The City of Minneapolis has committed $150,000 for business façade-improvement matching grants to businesses along the project corridor.

Photo 9: Reconstructed sidewalks and street lamps along University Avenue.

3.7.2.6 Promoting Business Access

Additional measures have been undertaken to encourage patronage of Central Corridor businesses.

- **Additional Business Signage:** The Metropolitan Council has employed movable variable message signs during construction to assist travelers in accessing businesses in response to day to day changes in construction activities. A total of $50,000 will be allocated by the Metropolitan Council for this additional business signage.
- **Cooperative Advertising and Transit Fare Passes:** Metropolitan Council is providing $250,000 in marketing support in the form of cooperative advertising and fare passes to businesses for distribution to customers.

4 EVALUATION OF ALTERNATIVES

The potential impact of construction on business revenues in the Central Corridor was not used as a measure in the AA/DEIS evaluation of alternatives. This chapter provides a brief summary of the results of the evaluation of alternatives from the AA/DEIS and also expands the discussion to include the effects of construction on business revenue from the various alternatives.

4.1 Purpose and Need

The purpose and need for the Central Corridor was presented in the AA/DEIS and approved by FTA in 2006. Goals and objectives were developed as part of the AA/DEIS to serve as the framework for decision making for the Central Corridor. The full text of the goals and objectives is provided in the AA/DEIS, and is summarized in Chapter 1 of this document.

4.2 Evaluation Relative to Project Goals and Objectives

After circulation of the AA/DEIS, the Metropolitan Council and project partners reviewed the relative merits and benefits of each of the alternatives. LRT was selected as the alternative that best met the purpose and need of the Central Corridor. Table 4-1 from the AA/DEIS, summarizes the evaluation of the Baseline, LRT and BRT alternatives against the goals and measures identified for the Central Corridor Project.

Subsequent to the completion of the AA/DEIS for the Central Corridor LRT Project, several unresolved policy questions and design element options arose which required additional study. The SDEIS and FEIS reconfirmed LRT as the Preferred Alternative. As described in Chapter 1, an EA was completed in 2010 to evaluate the effects of adding three infill stations to the scope of the project. Following publication of the EA and the EA public comment period, the above-ground construction of all three infill stations was added to the project scope and budget by resolution of the Metropolitan Council on February 24, 2010 (Metropolitan Council Resolution No. 2010-68). Based on this, the Preferred Alternative is defined as LRT on University Avenue with 23 stations (18 new and five shared Hiawatha stations).

Table 4-1. Alternative Performance Against Goals and Measures

Goals and Measures	Baseline	LRT	BRT
Goal 1: Economic Opportunity and Investment			
Previous Investment – Transportation	X	●	●
Previous Investment – Development	X	●	●
Proximity to Developable and Redevelopable Land	X	●	●
Proven Technology	●	●	●
Consistency with Land Use Patterns	X	●	●
Service to Major Travel Markets	X	●	◓
Proximity to Planned Development	X	●	◓
Parking	X	◓	◓
Major Employment Centers Served	◓	●	◓
Business Community Sentiment	◓	◓	◓
Goal 2: Communities and Environment			
Residential Population Served	◓	●	◓
Consistency with Local Plans	X	●	◓
Community Sentiment	X	●	◓
Noise and Vibration	N/A	◓	◓
Compatibility with Community Character	X	●	◓
Potential to Support Smart Growth and Livable Communities	X	●	●
Environmental Impacts (Air Quality, Water Quality and Flood Plains, Energy)	◓	●	◓
Existing Right-of-Way Utilization	X	●	◓
Goal 3: Transportation and Mobility			
Capacity	○	●	○
Operating Costs	◓	◓	○
Efficiency	X	●	◓
Consistency with Regional Plans	X	●	◓
Intermodal Connectivity	○	●	○
Regional Connectivity	X	●	◓
Diversity of Population Served	X	●	◓
Travel Time Savings	X	●	◓

X - The Alternative "does not support the objective"

○ - The Alternative "somewhat supports the objective"

◓ - The Alternative "supports the objective"

● - The Alternative "strongly supports the objective"

The following sections evaluate each alternative considered in this Supplemental Draft EIS regarding the effect of the alternative on business revenue. The sections also describe how each of the alternatives meet the purpose and need of the Central Corridor Project.

4.2.1 No-Build Alternative

The No-Build Alternative would not involve any construction; thus, this alternative would avoid potential disruption to neighborhoods, commercial districts, and historic areas in the corridor. Because no construction would be associated with the No-Build Alternative, no impacts to business revenue would be expected.

The No-Build Alternative, however, would not meet the purpose and need for the Central Corridor Project. The No-Build Alternative does not support the goal of supporting economic opportunities and development in the Central Corridor Study Area. It would be inconsistent with local and regional comprehensive plans, which specifically identify LRT as a critical element in shaping development in the Central Corridor Study Area and supporting regional economic development goals. The No-Build Alternative would not include potential improvements to community character or improved transit service with connections to major destinations. The No-Build Alternative would not meet the goal of improving and increasing transportation and mobility in the Central Corridor Study Area. It would not improve regional transit system connectivity, nor would it increase transit ridership.

4.2.2 Baseline Alternative

The Baseline Alternative assumes the implementation of ITS and TDM techniques and improvements. The construction activities required to implement these improvements are expected to be minimal and limited to traffic signal improvements. No impacts to business revenue due to construction of the Baseline Alternative would be expected.

The Baseline Alternative does not meet the purpose and need for the Central Corridor Project. Similar to the No-Build Alternative, the Baseline Alternative would not meet the goal of supporting economic opportunities and development in the Central Corridor Study Area. It would not include potential improvements to community character. The Baseline Alternative would not meet the goal of improving and increasing transportation and mobility in the Central Corridor Study Area. It would not improve regional transit system connectivity, nor would it increase transit ridership.

4.2.3 LRT Alternative

Construction of the LRT Alternative involves guideway construction, station construction, structural work, maintenance facility construction, installation of power stations, and street reconstruction including clearing, grading, excavation, and utility work. These types of construction activities will temporarily impede access by pedestrians and vehicles; temporarily consume space for parking; lead to temporary utility shutoffs; result in nuisance impacts such as noise, vibration, and dust; and temporarily impede

business visibility. Over the course of the project, most businesses along the corridor are likely to experience potential impacts from project construction, including issues associated with those factors identified above. These impacts may directly impact business revenue.

As noted in Chapter 3 (Economic Effects), the top major construction impacts expected and experienced by local businesses were:

- Customer Navigation Issues
- Less Automobile Traffic

These impacts are typically the result of roadway reconstruction activity that require the closure of one side of the street, significantly impacting the levels of traffic congestion and often making access to businesses more difficult. More than half of all businesses in the corridor experienced having the business side of their street closed for longer than a month, reduced access from the sidewalk in front of their business, or a loss of on-street parking. The nature of the Central Corridor construction required these closures to complete construction of the LRT guideway in the center of the roadway and the reconstruction of the street surface on each side of the guideway.

4.2.3.1 LRT Alternative (Initial Construction Mitigation)

LRT with the initial construction mitigation includes the construction of the Preferred Alternative with the initial mitigation package identified in the FEIS and ROD. The mitigation measures included in the FEIS and ROD included short-term mitigation strategies to help minimize adverse effects to businesses due to LRT construction.

The initial construction mitigation package defined in the FEIS and ROD is one that is typically implemented with transportation construction projects. The Central Corridor is a unique corridor with a large number of businesses directly fronting the LRT alignment. Many of the businesses along the alignment rely on pedestrian and vehicular traffic access. Because construction is unavoidable, impacts to business revenue due to LRT construction are expected.

4.2.3.2 LRT Alternative (Final Construction Mitigation)

Mitigation strategies were expanded and designed to help small businesses during construction. Some of the mitigation assistance included financial assistance to businesses with demonstrated revenue losses, business marketing programs, parking assistance, and increased signage during construction. However, not all of the mitigation identified as part of the final package was only direct financial assistance; rather, many of the non-profit organizations provided technical assistance to businesses. This included assistance with bookkeeping, cash flow projections, and individualized marketing and promotions.

The LRT Alternative with the final construction mitigation includes the construction of the Preferred Alternative with the initial mitigation package identified, as well as expanded

mitigation strategies focused on financial assistance to businesses. This is the alternative that is currently being constructed.

The introduction and expansion of additional mitigation identified in the LRT Alternative (Final Construction Mitigation) helps minimize adverse effects to business revenue. Although business revenue loss is not completely mitigated, the LRT Alternative with the final construction mitigation was designed in a manner to help provide assistance to businesses during construction and avoid as many impacts as possible.

The LRT Alternative is identified as the alternative that best meets the purpose and need of the project. Although the LRT Alternative does have short-term construction impacts on businesses, for every measure of evaluation, the LRT Alternative received a score equal to or exceeding the BRT and Baseline Alternatives in terms of supporting the project objectives. The AA/DEIS identified LRT as a permanent investment in the Central Corridor Study Area that could act as a catalyst in furthering community development. The subsequent NEPA documents also made the same conclusion. LRT provides improvements to community character including superior transit service and connections to major destinations and new transit-oriented development.

4.2.3.2.1 BRT Alternative

As discussed in the Construction Activities section in Chapter 2, the overall impact of BRT Alternative construction activities on the surrounding areas would have been very similar to those produced by LRT Alternative construction activities. As proposed, the BRT Alternative would have also included the construction of an exclusive guideway as well as the reconstruction of the roadway surface. The construction patterns required to construct the BRT Alternative would therefore have closely followed the construction patterns for the LRT Alternative.

The overall construction duration of the BRT Alternative would likely be shorter than the construction duration of the LRT Alternative due to the absence of elements such as a traction power system. However, the duration of the roadway reconstruction phase—the primary cause of business revenue loss—would have been approximately the same for both alternatives due to the similar roadway and transit guideway design requirements.

Because the most intrusive construction activities are estimated to be similar in scope and duration for each build alternative, this Supplemental Draft EIS estimated that the impacts on local businesses due to construction of the BRT Alternative would have been similar to the impacts due to construction of the LRT Alternative.

If the BRT Alternative had been selected as the LPA, mitigation measures associated with the alternative would have been identified. This Supplemental Draft EIS assumes that mitigation associated with the BRT Alternative would have been similar to the mitigation associated with the LRT Alternative with the initial construction mitigation. The mitigation would include construction contract requirements to help minimize adverse effects during construction, and a project communications program. Similar to the LRT

Alternative with the initial construction mitigation, impacts to business revenue due to construction of BRT would be expected.

The AA/DEIS concluded that the BRT Alternative had substantially lower performance on measures of effectiveness including ridership, travel time savings, cost per rider, and other project objectives. Additionally, the BRT Alternative did not fully satisfy a principal element of project purpose and need — to adequately meet forecast demand for Central Corridor transit ridership by providing sufficient capacity to meet forecast need. The BRT Alternative did not provide the required capacity to meet year 2030 transit demand. 2030 ridership forecasts for the Corridor showed that loading volumes at specific BRT station areas would exceed the capacity of the BRT alternative. The corridor was already congested and experiences platooning of buses at critical areas along the alignment. An increase of this phenomenon in the future, as was forecast for the BRT Alternative in the AA/DEIS, would compromise the ability for BRT to provide the increased frequencies required to meet travel demand. Therefore, it was determined that the BRT Alternative was not a reasonable alternative in meeting the project purpose and need and was not brought forward for further evaluation in the FEIS.

4.3 Comparative Evaluation of Alternatives

A comparative analysis of the effects of the alternatives considered in this Supplemental Draft EIS on business revenue due to construction is shown in Table 4-2 and summarized in Table 4-3. The main finding through this comparison is that impacts to business revenues are least severe under the LRT Alternative with the final construction mitigation. Although impacts to business revenue due to the construction of LRT are unavoidable, greater adverse effects would have occurred had the final construction mitigation strategies not been employed.

Table 4-2: Comparative Analysis of Build Alternatives

Alternative	Construction Duration	Construction Severity	Mitigation Package	Business Revenue	Meets Purpose and Need
No-Build	No construction.	No construction.	No construction associated with No-Build; therefore, no mitigation is required.	No construction associated with No-Build; therefore, no impacts to business revenue are expected.	No-Build does not meet purpose and need for the project.

Baseline	Minimal construction	Minimal construction	Minimal construction associated with Baseline; therefore, no mitigation is identified.	Minimal construction associated with Baseline; therefore, no impacts to business revenue are expected.	Baseline does not meet purpose and need for the project.
LRT (Initial Construction Mitigation)	Construction duration of civil work is estimated to take 2 years.	Most intrusive construction element is the required civil work along the alignment.	Initial construction mitigation package focused on construction contract strategies and project communications.	Construction of this alternative is expected to have an adverse effect on business revenue.	LRT was identified as the alternative that best meets the purpose and need for the project.
LRT (Final Construction Mitigation	Construction duration of civil work is estimated to take 2 years.	Most intrusive construction element is the required civil work along the alignment.	Final construction mitigation package includes additional strategies and resources to better mitigate impacts to businesses.	Construction of this alter-native is expected to have an adverse effect on business revenue; however, to a much less extent than what would be anticipated with the initial construction mitigation package.	LRT was identified as the alternative that best meets the purpose and need for the project.

BRT	Similar to LRT, construction duration of civil work is estimated to take 2 years.	Similar to LRT, the most intrusive construction element is the required civil work along the alignment.	Initial construction mitigation package focused on construction contract strategies and project communications.	Construction of this alternative is expected to have an adverse effect on business revenue.	BRT does not meet purpose and need for the project.

Table 4-3: Summary of Comparative Analysis

Alternative	Construction Duration	Construction Severity	Mitigation Package	Business Revenue	Meets Purpose and Need (Yes/No)
No-Build	NA	NA	NA	🟢	No
Baseline	NA	NA	NA	🟢	No
LRT (Initial Construction Mitigation)	🟠	🟠	🟠	🟠	Yes
LRT (Final Construction Mitigation)	🟠	🟠	🟢	🟡	Yes
BRT	🟠	🟠	🟠	🟠	No

🟢 Minimal Impact or Positive Benefit

🟢 Moderate to Positive Impact

🟡 Moderate

🟠 Moderate to Negative

🔴 Maximum Impact or Negative Benefit

5 PUBLIC AND AGENCY COORDINATION

Chapter 5 summarizes public outreach activities related to this Supplemental Draft EIS.

5.1 Outreach Completed During Supplemental EA

In April 2011, the FTA and the Metropolitan Council completed a Supplemental EA to document construction-related impacts on businesses to comply with the January 2011 court ruling and NEPA, as discussed in Chapter 1.

Two town hall meetings were held on February 17, 2011, to consider the views of the general public and local merchants and to gather information in anticipation of the Supplemental EA. The town hall meetings were held in an open house format. Representatives of the FTA, the Metropolitan Council, City of Saint Paul and BRC members were available at the meetings to discuss the Project and the supplemental environmental review process. Business owners, employees and citizens were provided the opportunity to discuss specific issues and provide written and verbal comments. A meeting notice announcing the town hall meetings was published in local newspapers (Pioneer Press, Star Tribune and Finance and Commerce). News advisories were distributed by the Metropolitan Council to area media outlets, community groups, stakeholders and project partners. This news advisory was also distributed by the Metropolitan Council to community leaders, business owners and other area organizations, and was posted on the Project Website.

The Draft Supplemental EA was made available for public review on March 1, 2011. The public had an opportunity to review and comment on the Draft Supplemental EA from March 1 through March 31, 2011. Two public hearings were held on March 16, 2011. Notifications of the Draft Supplemental EA and the public hearings appeared in area newspapers and were sent to stakeholders in the project corridor including local, regional and state agencies. The Draft Supplemental EA was made available for viewing online and at area libraries prior to the public hearings. Public comments were received from 73 individuals or groups/organizations. These comments and their corresponding responses are included in the Supplemental EA (Appendix B).

5.2 Outreach After Supplemental EA

Following the publication of the Final Supplemental EA for Construction-Related Potential Impacts on Business Revenues, outreach to businesses in the corridor continued. The Metropolitan Council prepares monthly Business Mitigation Status Reports describing how the Metropolitan Council and other partner agencies have

worked to minimize construction impacts to local businesses. These reports include the following information:

- Construction-related complaints and responses
- Public outreach and communication activities
- Funds spent to assist businesses during construction
- Requests for business assistance and responses
- Number of business openings / closings/ relocations

Between May 2011 and June 2012, 835 meetings took place on the corridor. The meeting topics varied, but mostly focused on construction activity communication. Appendix L includes a list of formal meetings that have taken place since May 2011. Several informal meetings occurred along the corridor that are not captured in this summary. For example, CCPO staff makes door-to-door visits to notify businesses about upcoming work adjacent to their businesses.

5.3 Outreach During this Supplemental Draft EIS

On May 14, 2012, the FTA and the Metropolitan Council issued a Notice of Intent (NOI) to prepare a supplement to the FEIS to evaluate the potential impacts of lost revenue on area businesses during the construction of the Central Corridor LRT. In the early development stages of this Supplemental Draft EIS, the Metropolitan Council worked with the BRC to solicit input and data from local groups pertaining to impacts on business revenue due to LRT construction. This outreach was an important part of this Supplemental Draft EIS. Most of the studies summarized in this analysis relied on information submitted by local groups.

A Notice of Availability (NOA) was published in the Federal Register on December 14, 2012, signaling the start of the 45-day comment period. Once the 45-day comment period is completed on January 30, 2013, the FTA and the Metropolitan Council will summarize and respond to all comments received on the Supplemental Draft EIS. This information will be included in the Final Supplemental EIS.

APPENDIX A:
Central Corridor LRT National Environmental Policy Act Document List

APPENDIX B:
Supplemental EA

APPENDIX C:
Central Corridor BRT Alternative Construction Duration

APPENDIX D:
Literature Review for the Central Corridor Supplemental EIS

APPENDIX E:
Central Corridor Key Outcomes:
2012 Indicators

APPENDIX F:
Change in the Number of Occupied Storefronts Along University Avenue, 1st Quarter 2011 And UABA Vacancy Report Correspondence

APPENDIX G:
Assessing Neighborhood and Social Influences of Transit Corridors

APPENDIX H:
Central Corridor Light Rail Transit Construction: Impact Study for Pascal Street to Dale Street Sample, Saint Paul, Minnesota

APPENDIX I:
Mitigating Business Losses: Services, Strategies, and Effectiveness

APPENDIX J:
Little Mekong CCLRT Impact Study

APPENDIX K:
Business Support Fund

APPENDIX L:
List of Meetings