

APPENDIX O: SUPPLEMENTAL

***TRAFFIC IMPACT STUDY
SUPPLEMENTAL DATA AND ANALYSIS***

To: Mr. David Zweig, P.E.
Analytical Environmental Services

From: Frank Cai, T.E.
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Re: **Supplemental Roadway Segment Data**
Wilton Rancheria

Date: March 15, 2016

The purpose of this memorandum is to provide supplemental Cumulative (2035) traffic projections, Levels of Service, and fair-share calculations for several roadway segments as requested by Sacramento County. The following roadway segments are included in this evaluation:

1. East Stockton Boulevard, SR 99 NB On-Ramp just north of Twin Cities Road to Mingo Road
2. East Stockton Boulevard, Mingo Road to its northern terminus
3. West Stockton Boulevard, SR 99 SB Ramps to the SR 99 SB ramps at Mingo Road
4. Mingo Road, SR 99 to McKenzie Road
5. McKenzie Road, Arno Road to Mingo Road
6. McKenzie Road, Mingo Road to Twin Cities Road
7. Arno Road, SR 99 to McKenzie Road

Data Collection

Traffic counts for roadway segments #1 and #3 were previously completed in 2014 as part of the Wilton Rancheria Traffic Impact Study (TIS). New counts were gathered for the other five segments in March 2016 for this effort. These five segments were counted for a continuous 72-hour period from Tuesday to Thursday during a normal week, and the three consecutive 24-hour counts were then averaged to obtain a base average daily traffic (ADT) for each segment.

Analysis

Before analysis began, model ADTs for both the base and future years needed to be obtained. The base and future year (2035) travel demand model ADTs were previously provided by the City of Galt and Sacramento County in the form of model plots. Of the seven segments listed above, four (Segments #4 through #7) are represented in the model plots provided by Sacramento County, and two (Segments #1 and #3) are presented in the City of Galt plots. Segments #1 and #3 are also study segments in the previously completed TIS. Therefore, Cumulative ADTs for these two segments (Segments #1 and #3) are taken directly from the TIS. For Segments #4 through #7, the difference method was used to estimate the Cumulative (2035) ADTs (adding the difference between 2035 and 2016 model volumes to the existing counts for each segment) and the corresponding level of service (LOS) was determined for each segment according thresholds presented in the County of Sacramento's *Traffic Analysis Guidelines, July 2004*. This information is presented in **Table 1** below. Segment #2 (East Stockton, north of Mingo Road) is not included in the Sacramento County model plots, therefore its existing and future ADTs are estimated from p.m. peak-hour intersection turning movement volumes contained in the TIS. The 2016 daily count and the difference method were then used to estimate the Cumulative (2035) without project ADT for this segment and subsequently its LOS was determined.

Cumulative (2035) with project ADTs, without the Mingo Road interchange, are also presented in **Table 1**. According to the project's trip generation and distribution (presented in the TIS), of the seven segments, only West Stockton Boulevard between the SR 99 ramps on Mingo Road and Twin Cities Road (Segment #3) is expected to carry project traffic when the Mingo Road interchange is not built. With the Mingo Road interchange, however, this roadway segment would be removed as part of the project. Accordingly, background traffic traversing this segment would instead use East Stockton Boulevard between Mingo Road and Twin Cities Road, and project generated traffic that would use West Stockton Boulevard without the interchange is expected to use the SR 99 ramps and the mainline instead.

In addition, under conditions with the Mingo Road interchange, project traffic on Twin Cities Road, east of McKenzie Road, is assumed to avoid the Twin Cities Road overcrossing and West Stockton Boulevard by using the McKenzie Road-to-Mingo Road route to the project site. The resulting 2035 ADTs are presented in **Table 1** along with the corresponding LOS. The calculated fair share percentages for the project are also provided.

Table 1 – Daily Traffic Conditions with and without Mingo Road Interchange

Seg #	Road Segment	Location	Without Project									With Project					Project Fair Share	
			Existing Daily Count (vpd)	Existing PM Pk Hr	2035 PM Pk Hr	Existing Daily	2035 Daily	2016 Year Model ADT	2035 Model ADT	Diff Adj 2035 ADT	LOS	Without Mingo Rd Interchange	With Mingo Road Interchange					
												Daily	PM Pk Diversion	Daily Diversion	2035 With Proj ADT	LOS		
1	E Stockton Blvd	SR-99 On-Ramps to Mingo Road	472								571	A	571	-	155	726	A	61%
2	E Stockton Blvd	North of Mingo Road	181	23	55	335	786				632	A	632	0	0	632	A	0%
3	W Stockton Blvd	SR-99 SB Ramps to Mingo Road	95								155	A	6528	-	-6528	-	-	-
4	Mingo Road	East of SR 99	187					479	551	259	A	259	24	218	477	A	75%	
5	McKenzie Road	Arno Road to Mingo Road	1154					324	534	1364	A	1364	0	0	1364	A	0%	
6	McKenzie Road	South of Mingo Road	1249					2364	3064	1949	B	1949	24	218	2167	B	24%	
7	Arno Road	SR-99 to McKenzie Road	1732					1255	1349	1826	B	1826	0	0	1826	B	0%	

Notes: Grey shaded segments indicate segments previously counted and the corresponding daily volumes for "without Mingo Road interchange", with and without project are calculated and taken directly from the TIS.
 Based on conversation with the Sacramento County DOT, assumed 1% annual growth from when counts were first taken for the TIS (April 2014) to when new counts are taken for this additional analysis (March 2016).
 Segment 3, W Stockton Blvd, would be closed with the construction of Mingo Road interchange