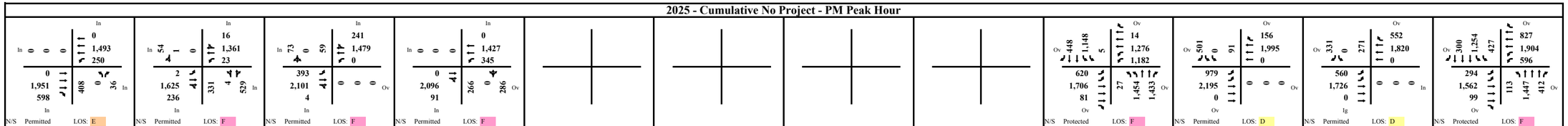
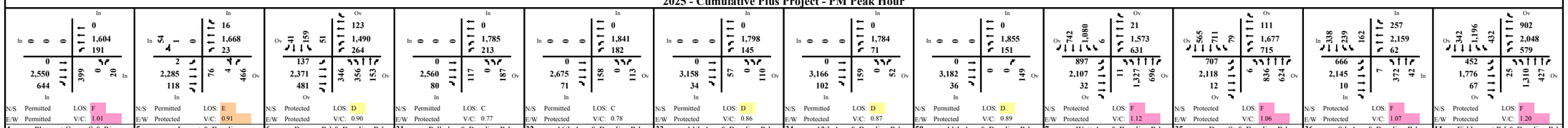
2025 - Cumulative - PM Peak Hour

No Project	Plus Project	Plus Project Mitigated Transportation Network	Plus Project Mitigated Transportation Network Mitigated
Ov: 448, 1,148, 5 / 14, 1,276, 1,182 620, 1,706, 81 / 27, 1,454, 1,433 N/S Protected LOS: F E/W Protected V/C: 1.53	Ov: 742, 1,080, 6 / 21, 1,573, 631 897, 2,107, 32 / 11, 1,327, 696 N/S Protected LOS: F E/W Protected V/C: 1.12	Ov: 896, 1,427, 27 / 8, 1,307, 357 995, 1,812, 28 / 17, 1,694, 314 N/S Protected LOS: F E/W Protected V/C: 1.16	Ov: 896, 1,427, 27 / 8, 1,307, 357 995, 1,812, 28 / 17, 1,694, 314 N/S Protected LOS: F E/W Protected V/C: 1.16
7 Watt Ave & Baseline Rd	7 Watt Ave & Baseline Rd	7 Watt Ave & Baseline Rd	7 Watt Ave & Baseline Rd
F 1.02	Ov: 427, 1,259, 41 / 42, 104, 150 818, 159, 425 / 253, 1,149, 93 N/S Protected LOS: D E/W Protected V/C: 0.81	Ov: 224, 1,508, 64 / 89, 88, 150 455, 114, 454 / 282, 1,459, 87 N/S Protected LOS: C E/W Protected V/C: 0.79	Ov: 224, 1,508, 64 / 89, 88, 150 455, 114, 454 / 282, 1,459, 87 N/S Protected LOS: C E/W Protected V/C: 0.79
	37 Watt Ave & A St	37 Watt Ave & A St	37 Watt Ave & A St
F 1.02	Ov: 259, 1,553, 23 / In: 10, 90, 34 148, 199, 178 / 224, 1,336, 60 N/S Protected LOS: B E/W Protected V/C: 0.66	Ov: 265, 1,813, 34 / In: 13, 38, 28 152, 74, 195 / 169, 1,663, 53 N/S Protected LOS: B E/W Protected V/C: 0.70	Ov: 265, 1,813, 34 / In: 13, 38, 28 152, 74, 195 / 169, 1,663, 53 N/S Protected LOS: B E/W Protected V/C: 0.70
	38 Watt Ave & Town Center	38 Watt Ave & Town Center	38 Watt Ave & Town Center
F 1.02	Ov: 139, 1,609, 16 / In: 8, 13, 31 66, 26, 187 / 196, 1,545, 82 N/S Protected LOS: B E/W Protected V/C: 0.68	Ov: 123, 1,888, 26 / In: 10, 10, 31 59, 11, 78 / 103, 1,817, 84 N/S Protected LOS: B E/W Protected V/C: 0.62	Ov: 123, 1,888, 26 / In: 10, 10, 31 59, 11, 78 / 103, 1,817, 84 N/S Protected LOS: B E/W Protected V/C: 0.62
	112 Watt Ave & Oak Street	112 Watt Ave & Oak Street	112 Watt Ave & Oak Street
F 1.18	Ov: 210, 1,611, 6 / 3, 595, 616 280, 627, 499 / 670, 1,539, 722 N/S Protected LOS: F E/W Protected V/C: 1.06	In: 131, 1,859, 7 / 3, 470, 396 223, 469, 618 / 795, 1,778, 479 N/S Protected LOS: F E/W Protected V/C: 1.10	In: 131, 1,859, 7 / 3, 470, 396 223, 469, 618 / 795, 1,778, 479 N/S Protected LOS: F E/W Protected V/C: 1.10
	39 Watt Ave & Dyer St	39 Watt Ave & Dyer St	39 Watt Ave & Dyer St
In: 11, 1,941, 101 / 74, 4, 270 3, 2, 7 / 16, 1,748, 341 N/S Permitted LOS: E E/W Permitted V/C: 0.92	In: 14, 2,253, 288 / 439, 6, 163 5, 2, 4 / 11, 2,288, 154 N/S Protected LOS: C E/W Permitted V/C: 0.74	In: 14, 2,254, 464 / 548, 6, 165 5, 2, 4 / 11, 2,271, 151 N/S Protected LOS: D E/W Permitted V/C: 0.80	In: 14, 2,254, 464 / 548, 6, 165 5, 2, 4 / 11, 2,271, 151 N/S Protected LOS: D E/W Permitted V/C: 0.80
8 Watt Ave & PFE Rd	8 Watt Ave & PFE Rd	8 Watt Ave & PFE Rd	8 Watt Ave & PFE Rd
Placer County	Placer County	Placer County	Placer County
Sacramento County	Sacramento County	Sacramento County	Sacramento County
In: 703, 1,333, 415 / 235, 845, 453 618, 1,261, 91 / 101, 1,610, 371 N/S Protected LOS: F E/W Protected V/C: 1.12	In: 505, 1,528, 622 / 376, 896, 405 511, 1,394, 98 / 95, 1,924, 241 N/S Protected LOS: F E/W Protected V/C: 1.30		In: 505, 1,528, 622 / 376, 896, 405 511, 1,394, 98 / 95, 1,924, 241 N/S Protected LOS: F E/W Protected V/C: 1.14
21 Watt Ave & Elverta Rd	21 Watt Ave & Elverta Rd		21 Watt Ave & Elverta Rd
Ov: 72, 1,574, 9 / 132, 232, 246 215, 455, 65 / 137, 1,799, 672 N/S Protected LOS: E E/W Protected V/C: 0.98	Ov: 72, 1,623, 12 / 161, 232, 274 215, 455, 65 / 137, 1,895, 747 N/S Protected LOS: F E/W Protected V/C: 1.03		Ov: 72, 1,623, 12 / 161, 232, 274 215, 455, 65 / 137, 1,895, 747 N/S Protected LOS: C E/W Protected V/C: 0.79
23 Watt Ave & Antelope Rd	23 Watt Ave & Antelope Rd		23 Watt Ave & Antelope Rd
In: 261, 1,566, 397 / 382, 1,106, 267 539, 810, 326 / 357, 2,337, 262 N/S Protected LOS: F E/W Protected V/C: 1.26	In: 263, 1,565, 522 / 354, 1,097, 263 580, 758, 345 / 413, 2,410, 240 N/S Protected LOS: F E/W Protected V/C: 1.34		Ov: 263, 1,565, 522 / 354, 1,097, 263 580, 758, 345 / 413, 2,410, 240 N/S Protected LOS: F E/W Protected V/C: 1.19
25 Watt Ave & Elkhorn	25 Watt Ave & Elkhorn		25 Watt Ave & Elkhorn
In: 5, 1,794, 154 / 81, 2, 253 12, 8, 1 / 9, 2,520, 205 N/S Protected LOS: D E/W Permitted V/C: 0.80	In: 5, 1,812, 146 / 81, 2, 267 12, 8, 1 / 9, 2,628, 161 N/S Protected LOS: D E/W Permitted V/C: 0.83		In: 5, 1,812, 146 / 81, 2, 267 12, 8, 1 / 9, 2,628, 161 N/S Protected LOS: D E/W Permitted V/C: 0.83
27 Watt Ave & Don Julio Blvd	27 Watt Ave & Don Julio Blvd		27 Watt Ave & Don Julio Blvd
In: 0, 1,958, 548 / 728, 0, 33 0, 0, 0 / 0, 2,298, 259 N/S Protected LOS: F E/W Permitted V/C: 1.41	In: 0, 1,949, 567 / 867, 0, 31 0, 0, 0 / 0, 2,204, 353 N/S Protected LOS: F E/W Permitted V/C: 1.47		In: 0, 1,949, 567 / 867, 0, 31 0, 0, 0 / 0, 2,204, 353 N/S Protected LOS: F E/W Permitted V/C: 1.22
28 Watt Ave & Air Base Dr	28 Watt Ave & Air Base Dr		28 Watt Ave & Air Base Dr
Ig: 373, 1,682, 154 / 59, 519, 855 905, 606, 41 / 38, 1,689, 1,477 N/S Protected LOS: F E/W Protected V/C: 1.32	Ig: 361, 1,687, 154 / 59, 526, 857 570, 971, 41 / 38, 2,027, 1,141 N/S Protected LOS: F E/W Protected V/C: 1.52		Ig: 361, 1,687, 154 / 59, 526, 857 570, 971, 41 / 38, 2,027, 1,141 N/S Protected LOS: F E/W Protected V/C: 1.22
29 Watt Ave & Roseville Rd	29 Watt Ave & Roseville Rd		29 Watt Ave & Roseville Rd
No Project	Plus Project		Plus Project Mitigated

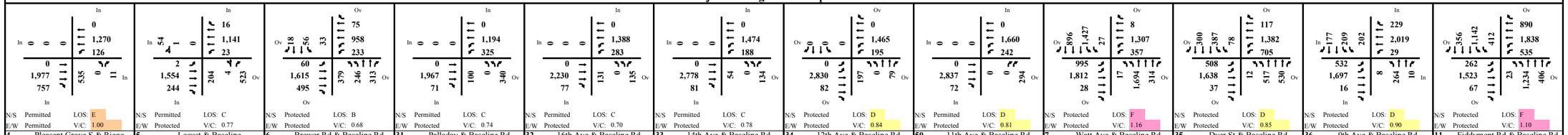
2025 - Cumulative No Project - PM Peak Hour



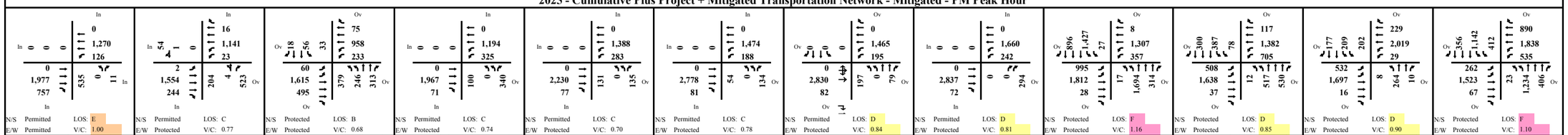
2025 - Cumulative Plus Project - PM Peak Hour



2025 - Cumulative Plus Project + Mitigated Transportation Network - PM Peak Hour

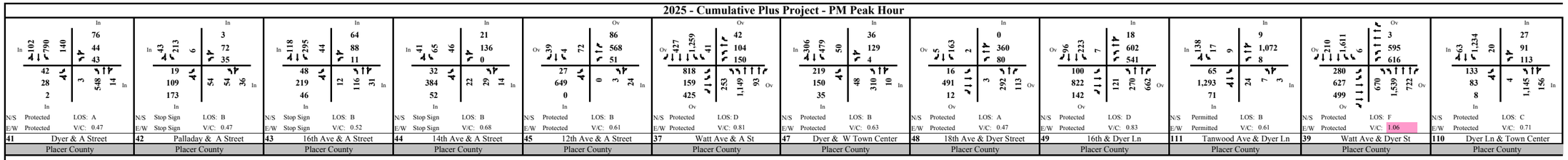


2025 - Cumulative Plus Project + Mitigated Transportation Network - Mitigated - PM Peak Hour

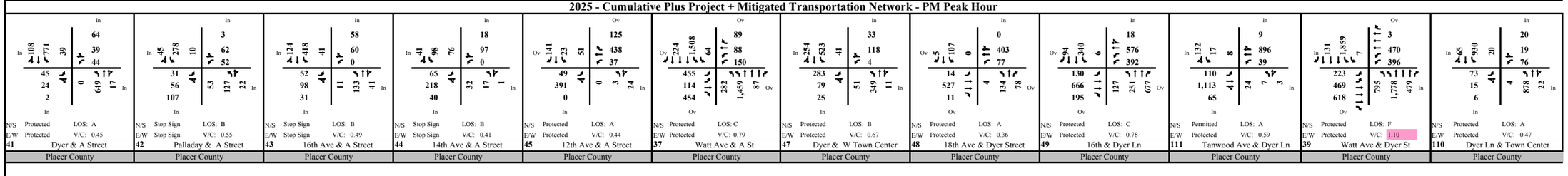


Placer Vineyards - "A" Street and Dyer Lane

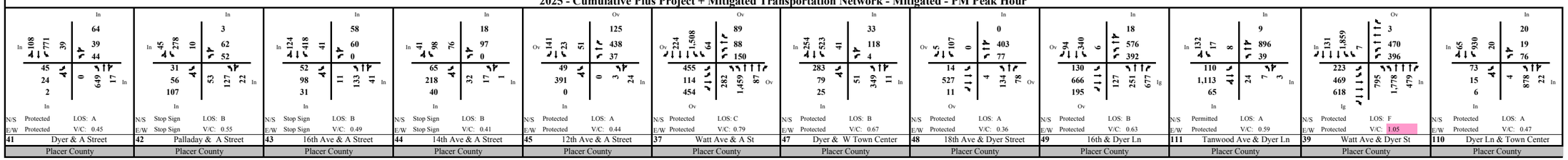
2025 - Cumulative Plus Project - PM Peak Hour



2025 - Cumulative Plus Project + Mitigated Transportation Network - PM Peak Hour

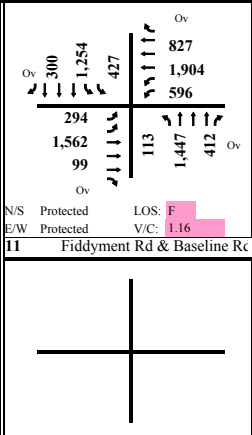


2025 - Cumulative Plus Project + Mitigated Transportation Network - Mitigated - PM Peak Hour

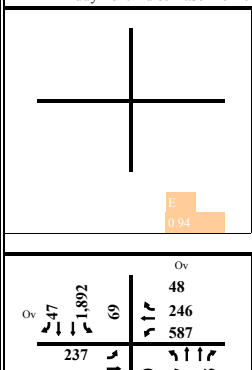


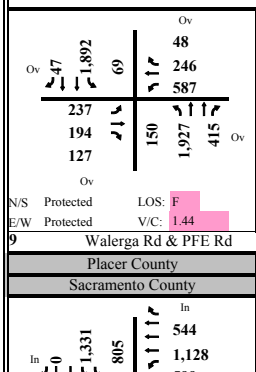
2025 - Cumulative - PM Peak Hour

No Project



11 Fiddyment Rd & Baseline Rc

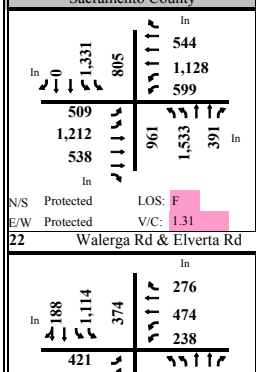




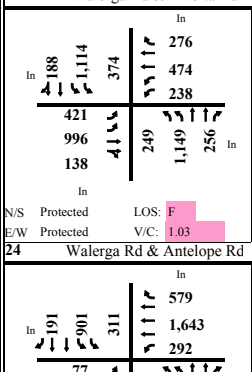
9 Walerga Rd & PFE Rd

Placer County

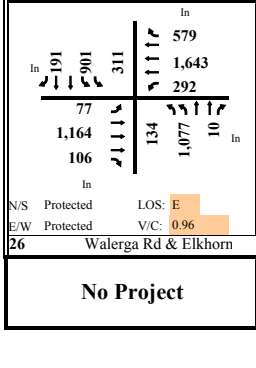
Sacramento County



22 Walerga Rd & Elverta Rd

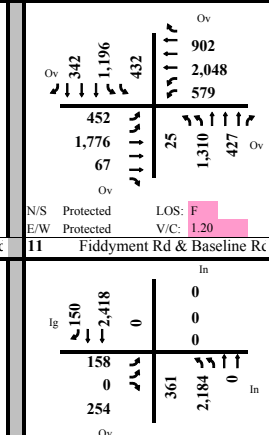


24 Walerga Rd & Antelope Rd

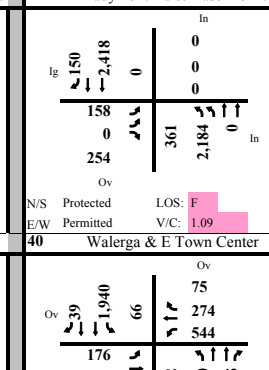


26 Walerga Rd & Elkhorn

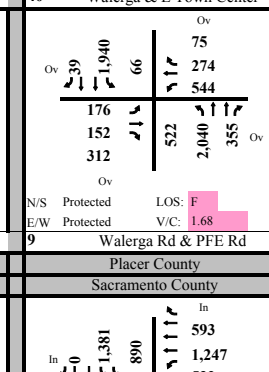
Plus Project



11 Fiddyment Rd & Baseline Rc



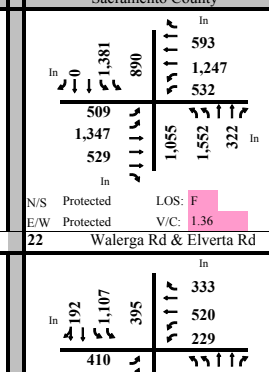
40 Walerga & E Town Center



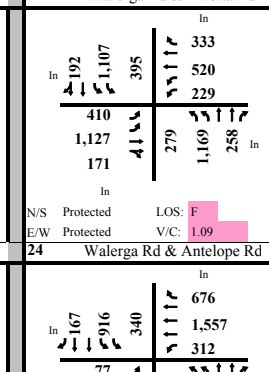
9 Walerga Rd & PFE Rd

Placer County

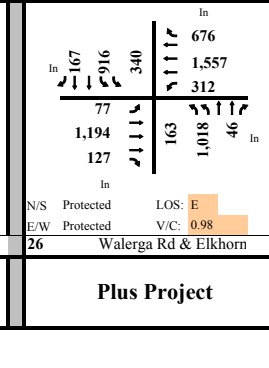
Sacramento County



22 Walerga Rd & Elverta Rd

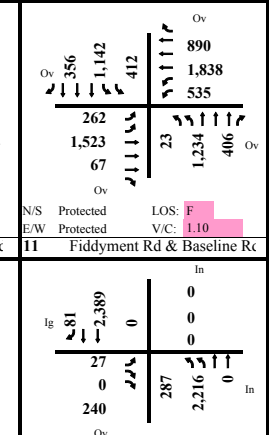


24 Walerga Rd & Antelope Rd

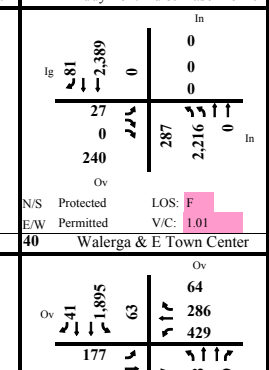


26 Walerga Rd & Elkhorn

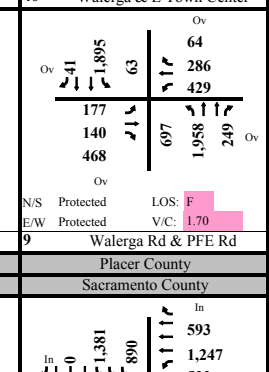
Plus Project Mitigated Transportation Network



11 Fiddyment Rd & Baseline Rc



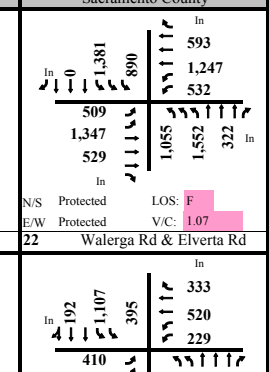
40 Walerga & E Town Center



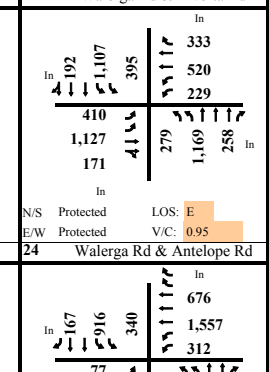
9 Walerga Rd & PFE Rd

Placer County

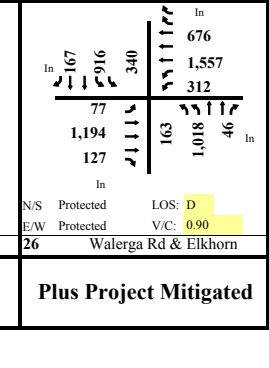
Sacramento County



22 Walerga Rd & Elverta Rd

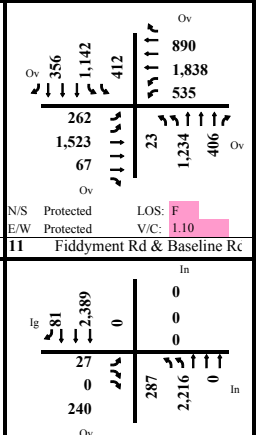


24 Walerga Rd & Antelope Rd

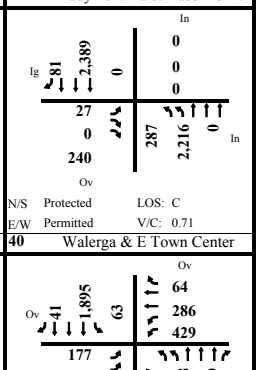


26 Walerga Rd & Elkhorn

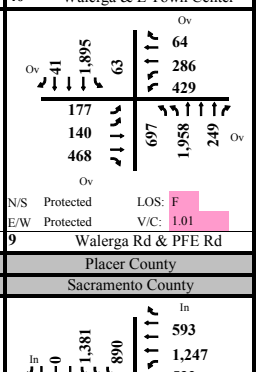
Plus Project Mitigated Transportation Network Mitigated



11 Fiddyment Rd & Baseline Rc



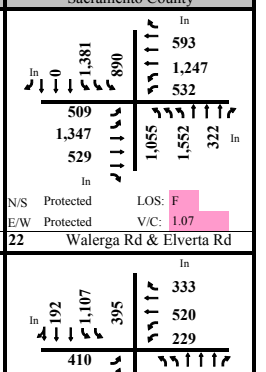
40 Walerga & E Town Center



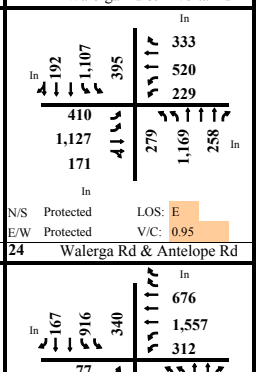
9 Walerga Rd & PFE Rd

Placer County

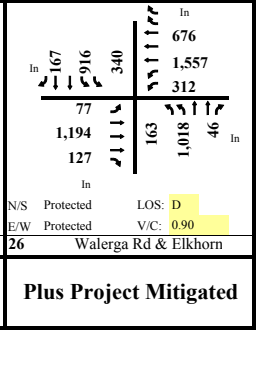
Sacramento County



22 Walerga Rd & Elverta Rd



24 Walerga Rd & Antelope Rd



26 Walerga Rd & Elkhorn

No Project | Plus Project | Plus Project Mitigated | Plus Project Mitigated

2015 Plus Initial Phase of Specific Plan

2015 PLUS INITIAL PHASE OF SPECIFIC PLAN

- **Roadway Improvements Under 2015 No Project Conditions.** In addition to the analysis of Cumulative (2025) conditions, Placer County requested that a transportation analysis of 2015 conditions be conducted that focuses on roadways within the Specific Plan area as well as roadways in unincorporated Placer County near the Specific Plan area. The 2015 No Project analysis assumed that the 2010 improvements described in the *Placer County General Plan EIR* and the Placer County Capital Improvement Program (CIP) would be fully implemented. These improvements include the following:

  - Widening of Baseline Road to 4 lanes from the Sutter County line to Watt Avenue and to 6 lanes from Watt Avenue to the City of Roseville.

  - Widening of Watt Avenue to 4 lanes from the Sacramento County line to Baseline Road.

  - Widening of Walerga Road to 4 lanes from the Sacramento County line to Baseline Road.

  Funding for the CIP improvements will be derived from a number of sources, including the County's traffic impact fee program, developer-funded projects, assessment districts, and State and regional sources. The intent of these improvements is to maintain an acceptable Level of Service through the horizon year of the CIP (2010). A temporary violation of LOS standards may result until adequate funding has been collected for the construction of program improvements.

  The Dry Creek Community Plan calls for the eventual closure of PFE Road west of Cook Riolo Road. However, based on discussions with Placer County, the analysis of 2015 conditions assumed that this roadway would remain open.

  The 2015 No Project scenario also assumes development and new roadways in the following key areas of West Placer County:

  - The proposed Regional University development that is located more than a mile north of Baseline Road and would be accessed by an extension of Watt Avenue north of Baseline Road.

  - The remaining two proposed development areas in the City of Roseville's "MOU Annexation Area" west of Fiddyment Road. The proposed Sierra Vista Specific Plan is located just north of Baseline Road between the proposed Placer Vineyards Specific Plan and the West Roseville Specific Plan area. The Creekside Specific Plan is located jus north of the West Roseville Specific Plan area. The assumed roadway system that would serve these areas was developed through discussions with the City of Roseville and includes a southern extension of Westside Drive from the West Roseville Specific Plan area to connect to the Watt Avenue Extension and two other north-south roadways through the proposed Sierra Vista Specific Plan that would connect to Baseline Road

between Watt Avenue and Fiddyment Road, across from the eastern portion of the proposed Placer Vineyards Specific Plan.

- The proposed Placer Ranch development north of the City of Roseville and the proposed roadway system serving that area.

It should be noted that the assumed roadway network for the 2015 No Project Scenario would create new travel routes between Western Placer County and the City of Roseville through the proposed Sierra Vista Specific Plan area. The new roadways in that area would change travel patterns, such as allowing travelers to avoid Baseline Road east of Watt Avenue.

In addition to the analysis of Cumulative (2025) conditions, Placer County requested that a transportation analysis of the Initial Phase of Specific Plan be conducted under 2015 conditions and focus on roadways within the Specific Plan area as well as roadways in unincorporated Placer County near the project site.

Table A-1 shows the development assumptions for key areas of Placer County and South Sutter County under the 2015 No Project scenario.

Table A-I
Development Assumptions in Key Areas – 2015 No Project Alternative

Area		Dwelling Units	Floor Area (1,000 square feet)			College Enrollment
			Retail	Office	Industrial	
Placer Vineyards Specific Plan Area		261	0	0	0	
Roseville	General Plan Area	54,000	13,200	12,719	14,660	
	MOU Remainder Area	7,560	468	360	0	
Rocklin	General Plan Area	27,000	3,375	2,264	5,338	23,000
Lincoln	General Plan Area	20,000	2,500	2,431	6,792	2,500
	SOI Expansion Area	5,000	625	375	0	
Placer Ranch		4,878	610	561	329	10,000
Remainder Sunset Industrial Area		0	0	529	6,490	
Regional University		4,387	133	0	0	6,000
Riolo Vineyards		828	88	0	0	
South Sutter Specific Plan Area		3,500	438	300	600	
Total		**127,414**	**21,437**	**19,539**	**34,209**	**41,500**

Source: DKS Associates, 2005

Table A-2 summarizes the trip generation of the Initial Phase of Specific Plan. The trip generation rates used in this analysis reflect those contained in the Placer County Travel Demand Model. These trip rates were validated by applying them in the Travel Demand Model using 2004 land use data from throughout Placer County and comparing the model's resulting traffic volumes to extensive 2004 traffic count data from throughout Placer County.

Table A-2 shows that buildout of the Initial Phase of the Specific Plan would generate about 107,000 vehicle trips ends on an average weekday. However, summing up the trips ends

generated by the project's uses will "double-count" those trips that remain within the Specific Plan area. The Placer County Travel Demand Model avoids the double counting of these trips. An estimated 19 percent of the vehicle trips ends shown in Table A-2 would remain within the Specific Plan area (such as travel between the residential development and the retail, office and school uses). When the double-counting of these trips is eliminated, the number of trips generated by the Specific Plan is estimated at about 90,000 daily vehicle trips. Of these, about 17,000 daily vehicle trips would remain within the Specific Plan area and about 73,000 daily vehicle trips would travel to/from external destinations.

Table A-2
Estimated Trip Generation – Buildout of Initial Phase of Specific Plan

Land Use		Units	Daily Vehicle Trips per Unit	Daily Vehicle Trip Ends
Residential	Single-Family	4,500 DU	9.0	40,500
	Multi-Family	2,013 DU	6.5	13,085
	Age-restricted	487 DU	3.3	1,607
	SPA	261 DU	9.0	2,349
	Subtotal	**7,261 DU**		**57,541**
Non-residential	Retail	958.0 KSF	35.0	33,530
	Office	162.4 KSF	17.7	2,874
	Public/Quasi-Public	137.2 KSF	25.0	3,430
	Churches	335.4 KSF	9.3	3,119
	K-12 Schools	6,445 Students	1.0	6,445
	Parks	115 Acres	2.2	253
	Subtotal			**49,651**
Total Trip Ends from Initial Phase of Specific Plan				**107,192**
Percent of Trips Remaining Internal to Specific Plan Area				**19 %**
Total Vehicle Trips Generated by Specific Plan[2]				**90,077**

Notes:
[1] DU = dwelling unit and KSF = 1,000 square feet
[2] Total trips = total trip ends/1.19 (to eliminate the double counting of trips that remain with the Specific Plan area)
Source: DKS Associates, 2005.

Development levels outside of the Specific Plan were based on the best estimates of 2015 "market levels" of development throughout the region. The 2015 No Project Alternative assumes 2015 development levels, but only includes the very limited amount of existing development on the project site. The 2015 No Project analysis assumed that the 2010 improvements described in the *Placer County General Plan EIR* and the Placer County Capital Improvement Program (CIP) would be fully implemented. The traffic impacts of fully developing Initial Phase of the Specific Plan under 2015 conditions were determined by comparing its traffic operations to the 2015 No Project Alternative. The analysis of the 2015 No Project Alternative is described in Chapter 6.0 of this EIR.

Figure A-1 shows the roadway network and lanes in the vicinity of the Initial Phase under the 2015 No Project Alternative. Figure A-2 shows the estimated average daily traffic volumes on the roadways in the vicinity of the Initial Phase under the 2015 No Project Alternative.

The Placer County Travel Demand Model was used to estimate and distribute project-related trips. To provide the best estimate of the impact of development of the Initial Phase on traffic volumes, the model's estimated traffic volume under Existing No Project conditions was subtracted from the model's traffic volume estimate under 2015 Plus Initial Phase of Specific Plan scenario for each roadway segment and each intersection turning movement. These differences were then added to existing traffic count data to provide a refined estimate of traffic volumes under 2015 Plus Initial Phase of Specific Plan scenario.

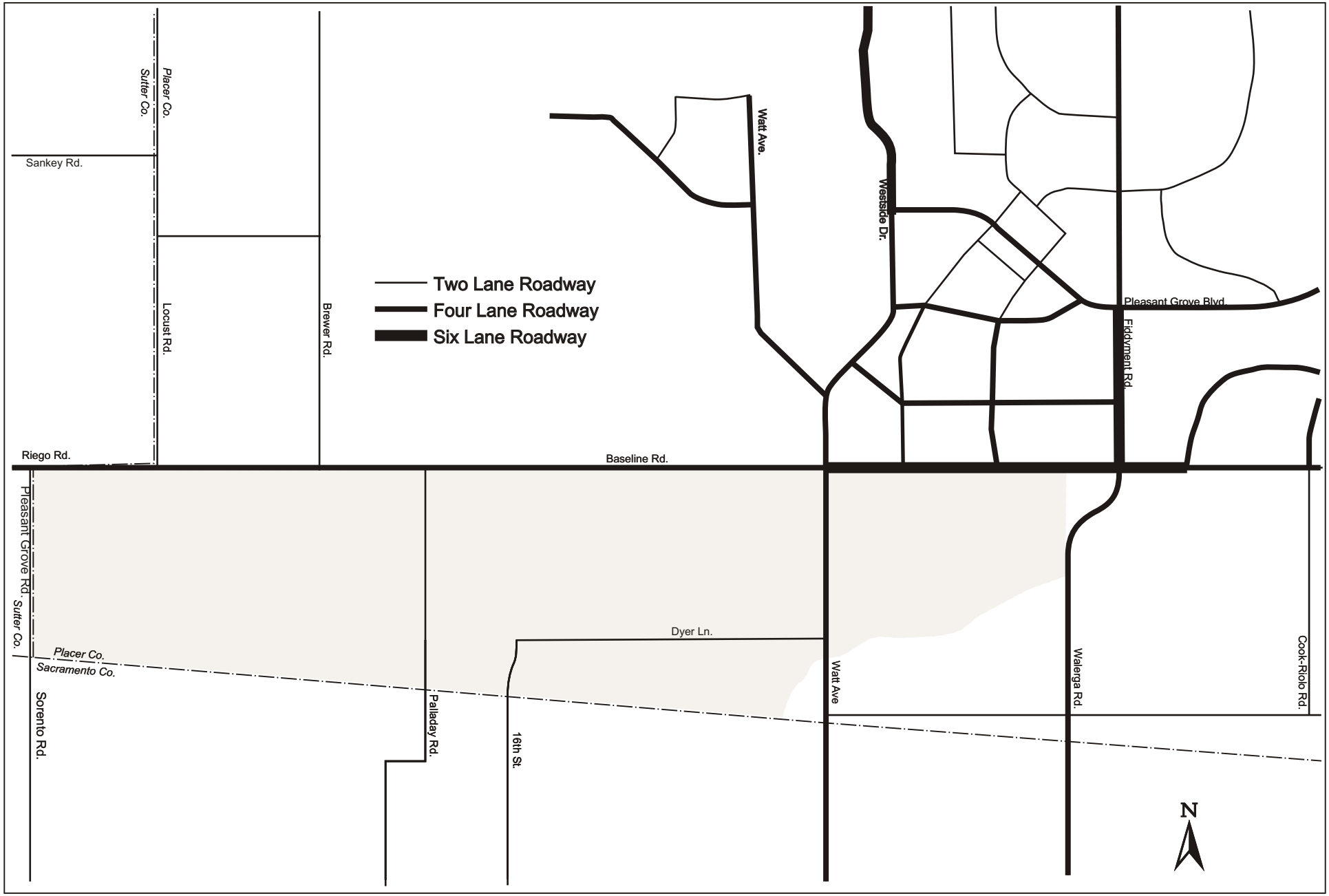
The analysis of the 2015 Plus Initial Phase of Specific Plan scenario assumed that the only improvements beyond the 2015 No Project roadway network (described earlier in this section) would be the internal roadways to the Initial Phase. Under this Initial Phase, Baseline Road would not be widened beyond 2015 No Project scenario and thus would have 4 lanes west of Watt Avenue and 6 lanes east of Watt Avenue. Figure A-3 shows the roadway network and lanes in the vicinity of the Initial Phase that were assumed in the traffic analysis.

Figure A-4 shows the average daily traffic volumes on unincorporated Placer County roadways within the study area under 2015 Plus Initial Phase of the Specific Plan scenario.

It should be noted that the new roadways in the Specific Plan would provide new travel routes for existing traffic and change some travel patterns. For example, the extension of Dyer Street from Watt Avenue to the northeast to connect to Baseline Road would divert some existing traffic from Watt Avenue north of Dyer Street and from Baseline Road east of Watt Avenue. The new roadways in the Specific Plan would also divert some existing traffic from portions of PFE Road and Walerga Road. These traffic diversions would offset some of the increase in traffic from the proposed Specific Plan.

It should be noted that the traffic volume forecasts are not based on a simple layering/adding of assumed project-generated traffic volumes onto existing traffic counts. Rather, the County's Travel Demand Model is used to predict how travel patterns would change if the Specific Plan land uses are added to existing or buildout land uses. The model redistributes trips and can cause traffic on some roadways to decrease and cause changes in "critical" traffic movements at intersections, sometimes at intersections some distance from the Specific Plan area.

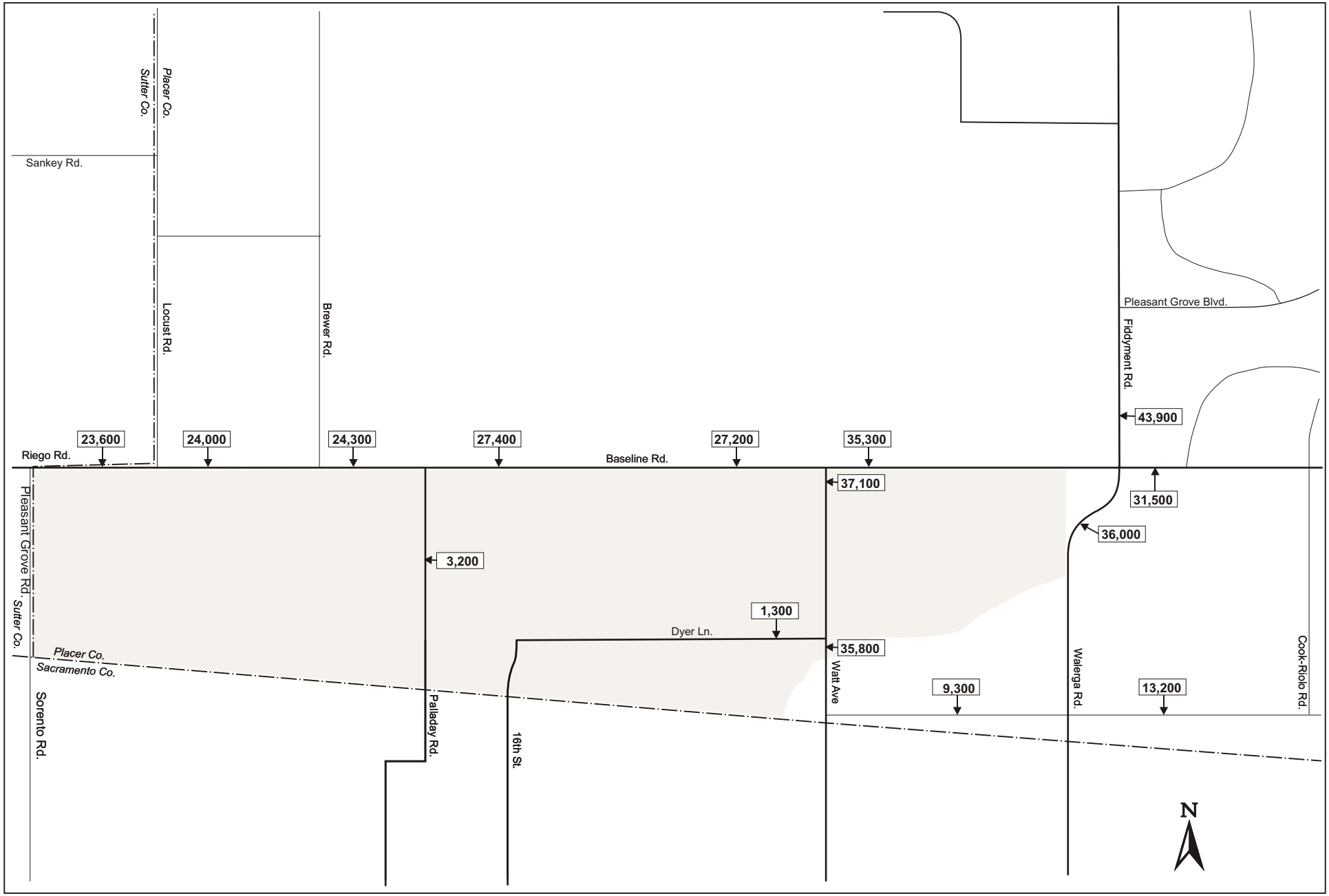
A roadway segment Level of Service analysis for roadways in unincorporated Placer County based on estimated 2015 daily traffic volumes is presented in Table A-3. This analysis indicates that full development of the Initial Phase under 2015 conditions would degrade the level of service on two Placer County roadway segments. Baseline Road from 12th Avenue to Watt Avenue would degrade from LOS "B" to LOS "D." Constructing Baseline Road to six lanes between 12th Avenue and Watt Avenue would provide LOS "B". Walerga Road from East Town Center Drive to PFE Road would continue to operate at LOS "F" and the volume on this segment would increase. There is no feasible measure to improve the level of service on Walerga Road.



P05136

Figure A-1
Project Area Roadway Lanes - 2015 No Project

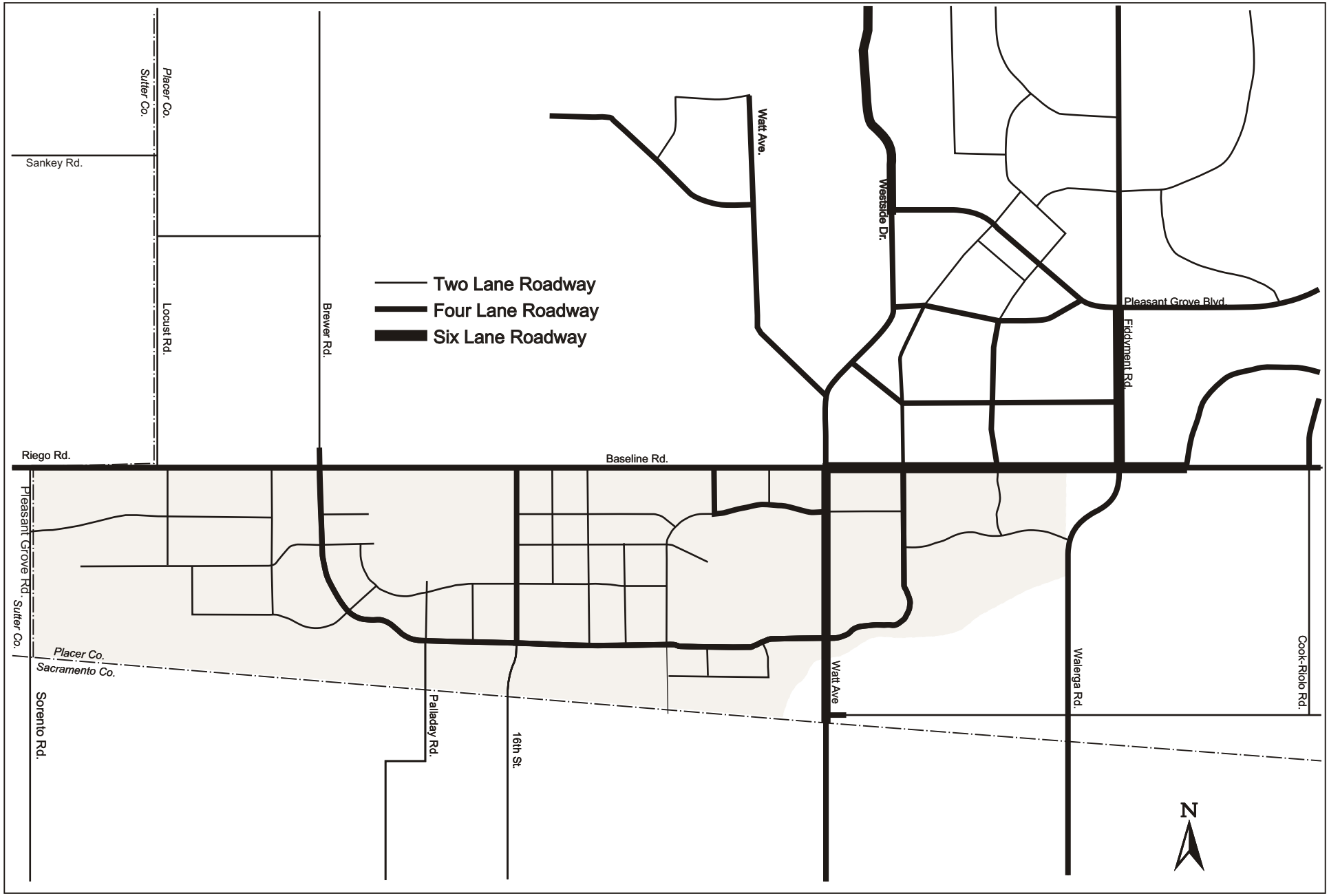
DKS *Associates*



P05136

Figure A-2
Daily Roadway Volumes - Unincorporated Placer County - 2015 No Project

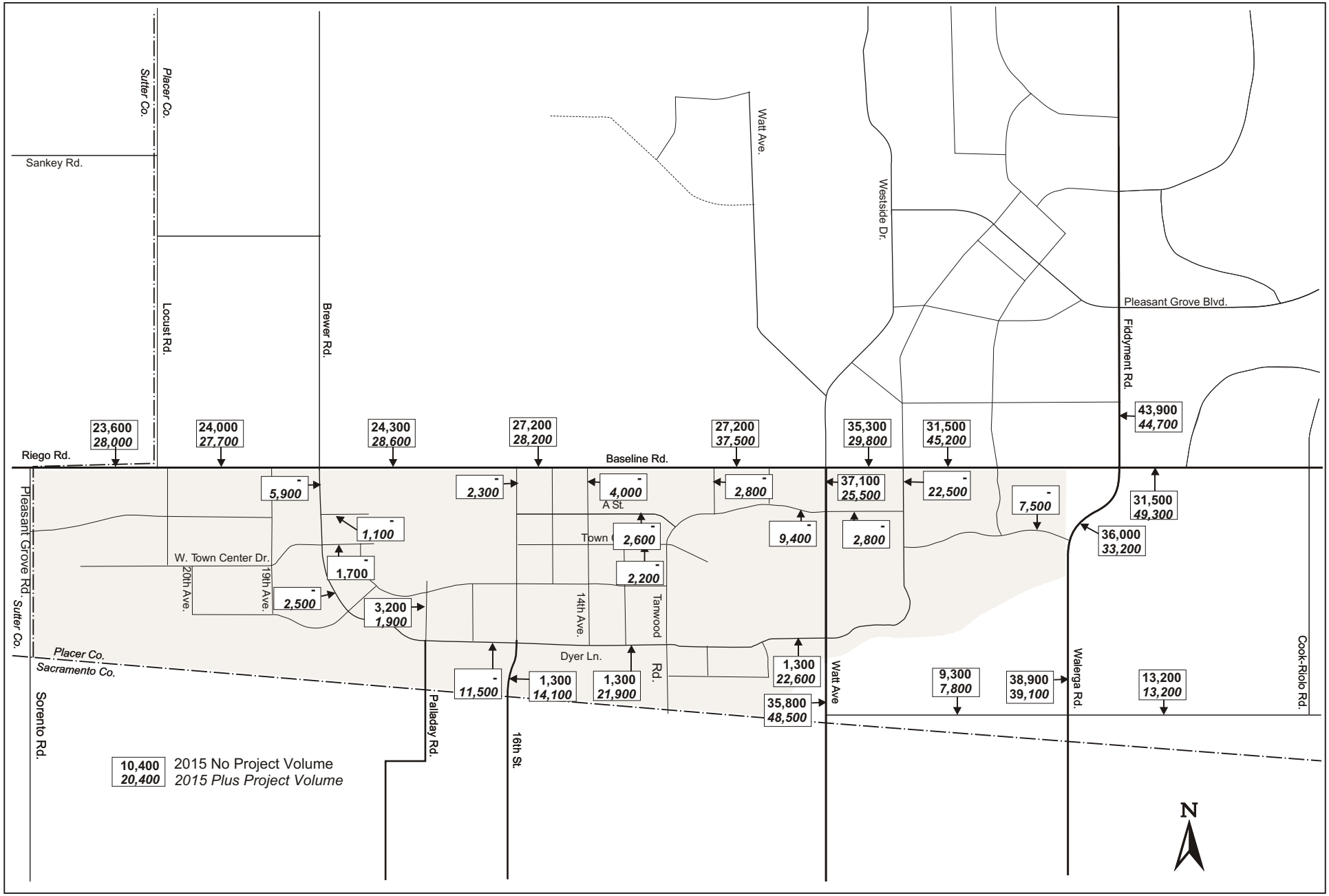
DKS *Associates*



P05136

Figure A-3
Project Area Roadway Lanes - 2015 Plus Initial Phase of Specific Plan

DKS *Associates*



P05136

Figure A-4
Daily Roadway Volumes - Unincorporated Placer County - 2015 Plus Initial Phase of Specific Plan

DKS *Associates*

Table A-3
Roadway Segment Levels of Service – Unincorporated Placer County
2015 Plus Initial Phase of Specific Plan

Roadway	Segment	2015 No Project Conditions			2015 Plus Initial Phase of Specific Plan		
		Lanes	ADT	LOS	Lanes	ADT	LOS
Baseline Road	East of County Line	4	23,600	A	4	28,000	B
Baseline Road	East of Locust Road	4	24,000	A	4	27,700	B
Baseline Road	East of Brewer Road	4	24,300	B	4	28,600	C
Baseline Road	East of Palladay Road	4	27,400	B	4	28,600	C
Baseline Road	East of 16th Avenue	4	27,200	B	4	28,200	C
Baseline Road	East of 12th Avenue	4	27,200	B	4	**37,500**	**E**
Baseline Road	East of Watt Avenue	6	35,300	A	6	29,800	A
Baseline Road	East of Dyer Street	6	31,500	A	6	45,200	C
Walerga Road	South of Baseline Road	4	36,000	E	4	33,200	E
Walerga Road	North of PFE Road	4	38,900	F	4	**39,100**	**F**
Watt Avenue	South of Baseline Road	4	37,100	F	6	25,500	A
Watt Avenue	South of Dyer Street	4	35,800	E	6	48,500	D
PFE Road	East of Watt Avenue	2	9,300	A	2	7,800	A
PFE Road	East of Walerga Road	2	13,200	C	2	13,200	C
Dyer Street (W)	South of Baseline				4	5,900	A
Dyer Street	South of Town Center Dr				4	2,500	A
Dyer Street	West of 16th Avenue				4	11,500	A
Dyer Street	West of Tanwood Road				4	21,900	B
Dyer Street	West of Watt Avenue				4	22,600	B
Dyer Street (E)	South of Baseline Rd				4	22,500	B
Palladay Road	South of Baseline Road						
Palladay Road	North of Dyer Street				2	1,900	A
16th Avenue	South of Baseline Road				4	2,300	A
16th Avenue	North of Dyer Street				4	14,100	A
14th Avenue	South of Baseline Road				2	4,000	A
12th Ave	South of Baseline Road				4	2,800	A
"A" Street	East of Dyer Street				2	1,100	A
"A" Street	West of 16th Avenue						
"A" Street	West of Tanwood Road				2	2,600	A
"A" Street	West of Watt Avenue				2	9,400	A
"A" Street	West of Dyer Street				2	2,800	A
Town Center Dr	East of Dyer (W) Street				2	1,700	A
Town Center Dr	West of 16th Avenue						
Town Center Dr	West of Tanwood Road				2	2,200	A
Town Center Dr	West of Watt Avenue						
Town Center Dr	West of Dyer (E) Street						
Town Center Dr	West of Walerga Road				2	7,500	A

Notes: ADT = average daily traffic. Significant impacts are highlighted in bold letters.
"Blank" = Roadway does not exist under this scenario.
Source: DKS Associates, 2005.

The proposed *Placer Vineyards Specific Plan* provides typical cross-sections for the roadways within the Specific Plan area. Additional right-of-way is typically provided near major intersections on arterial and collector roadways to accommodate additional turn lanes. The proposed Specific Plan does not provide any information concerning right-of-way or turn lanes

at intersections. Therefore, the traffic analysis assumed that no additional right-of-way beyond the typical cross-sections would be available within the Initial Phase. This led to the following assumptions about turn lanes for roadways within the Initial Phase:

- On two-lane roadways, the intersection approaches would generally have one left-turn lane and one shared through/right-turn lane. This assumption differs at approaches to a "T" intersection, but only two total lanes would be provided on an intersection approach.

- On four-lane roadways, the intersection approaches would generally have one left-turn lane, one through-lane and one shared through/right-turn lane. This assumption differs at approaches to a "T" intersection, but only three total lanes would be provided on an intersection approach.

- On six-lane roadways the intersection approaches would generally have two left-turn lanes, three through-lanes and one right-turn lane. When a six lane street intersects a two lane street the double left turn lane requires that the two lane street be widened to provide two receiving lanes. Only single left turn lanes are provided at Locust, 9th Street (westbound to southbound), Oak Street (southbound to eastbound) and PFE Road.

A planning level signal warrant analysis was conducted for the conditions under the 2015 Plus Initial Phase of Specific Plan scenario to define the locations where traffic signals should be assumed. This analysis indicates that the following intersections should be signalized by 2015: under this scenario:

- Locust Road and Baseline Road
- Brewer Road and Baseline Road
- Watt Avenue and Dyer Street
- Watt Avenue and PFE Road
- 16th Avenue and Baseline Road
- 14th Avenue and Baseline Road
- 12th Avenue and Baseline Road
- 11th Avenue and Baseline Road
- Dyer Street and Baseline Road
- 9th Avenue and Baseline Road
- Watt Avenue and Road "A"
- Walerga Road and Town Center Drive

As discussed earlier, traffic signals would be warranted at additional intersections in the Specific Plan area vicinity under 2015 No Project conditions, and thus were assumed to be signalized.

Figure 4.7-4 shows the key study area intersections in unincorporated Placer County. Table A-4 presents the intersection Level of Service analysis at these intersections for the p.m. peak hour under 2015 Plus Initial Phase of Specific Plan scenario. The traffic volumes and lane geometry at each intersection in Table 4.7-4 are shown in Appendix II. This analysis indicates that development of Initial Phase under 2015 conditions would degrade the level of service at seven intersections.

- The intersection of Fiddyment Road and Baseline Road would degrade from LOS "E" to LOS "F". There is no feasible measure to provide a better level of service.

- The intersection of PFE Road and Cook Riolo Road would continue to operate at LOS "F" but the average delay would increase at this stop-controlled intersection. Installation a traffic signal would improve the intersection of PFE Road and Cook Riolo Road to a LOS "E" condition.

- The new intersection of 14th Avenue and Baseline Road would operate at LOS "E" conditions under the assumed intersection geometry. Constructing a second left turn lane on the westbound approach, and a third through lane on the eastbound and westbound approach would improve the intersection of 14th Avenue and Baseline Road to LOS "A".

- The new intersection of 12th Avenue and Baseline Road would operate at LOS "F" conditions under the assumed intersection geometry. Constructing a third through lane on the eastbound and westbound approach would improve the intersection of 12th Avenue and Baseline Road to LOS "B".

- The intersection of Dyer Street and Baseline Road would degrade from LOS "A" to LOS "F". Constructing a third through lane on both the northbound and southbound approaches and a two northbound right turn lanes would improve the intersection of Dyer Street and Baseline Road to LOS "D".

- The new intersection of Walerga Road and East Town Center would operate at LOS "F" conditions under the assumed intersection geometry. Constructing a second left turn lane on the northbound approach, and two eastbound right turn lanes would improve the intersection of Walerga Road and Town Center Drive to LOS "F".

- The new intersection of Watt Avenue and Dyer Street would operate at LOS "E" conditions under the assumed intersection geometry. Constructing a third through lane on both the eastbound and westbound approaches, a third northbound left turn lane, and two eastbound right turn lanes would improve the intersection of Watt Avenue and Dyer Street to LOS "C".

Table A-4
PM Peak Hour Levels of Service at Study Intersections – Unincorporated Placer County
2015 Plus Initial Phase of Specific Plan

Intersection			2015 No Project Conditions			2015 Plus Initial Phase of Specific Plan		
			Level of Service	LOS Criteria		Level of Service	LOS Criteria	
	North-South Roadway	East-West Roadway		Signalized Intersection (V/C Ratio)	Unsignalized Intersection (Delay)[1]		Signalized Intersection (V/C Ratio)	Unsignalized Intersection (Delay)[1]
1	Locust Road	Baseline Road	D	0.84		D	0.83	
2	Brewer Road	Baseline Road	B	0.66		B	0.65	
3	Watt Ave	Baseline Road	F	1.03		E	0.94	
4	Fiddyment Rd	Baseline Rd	E	0.94		**F**	**1.01**	
5	Watt Ave	PFE Rd	C	0.75		D	0.68	

Table A-4
PM Peak Hour Levels of Service at Study Intersections – Unincorporated Placer County
2015 Plus Initial Phase of Specific Plan

Intersection			2015 No Project Conditions			2015 Plus Initial Phase of Specific Plan		
			Level of Service	LOS Criteria		Level of Service	LOS Criteria	
	North-South Roadway	East-West Roadway		Signalized Intersection (V/C Ratio)	Unsignalized Intersection (Delay)[1]		Signalized Intersection (V/C Ratio)	Unsignalized Intersection (Delay)[1]
6	Walerga Rd	PFE Rd	F	1.20		F	1.24	
7	Cook Riolo	PFE Rd	F		113.3	**F**		**113.8**
8	Palladay	Baseline Rd	D	0.81				
9	16th St	Baseline Rd				C	0.79	
10	14th St	Baseline Rd				**E**	**0.92**	
11	12th St	Baseline Rd				**E**	**0.94**	
12	11th St	Baseline Rd				D	0.81	
13	Dyer Street (East)	Baseline Rd	A	0.51		**F**	**1.26**	
14	9th St	Baseline Rd	A	0.60		D	0.87	
15	Dyer Street	A Street				A		4.9
16	Palladay	A Street						
17	16th St	A Street				A		7.8
18	14th St	A Street				A		8.1
19	12th St	A Street				A		4.9
20	Watt Ave	A Street				A	0.51	
21	W Dyer Street	W Town Center				A		4.2
22	Watt Ave	E Town Center						
23	E Dyer Street	E Town Center				A	0.50	
24	Walerga Rd	E Town Center				**F**	**1.16**	
25	Watt Ave	Oak Street						
26	18th St	Dyer Street				A		4.8
27	16th St	Dyer Street				C	0.80	
28	Tanwood Ave	Dyer Street				A		1.1
29	Watt Ave	Dyer Street				**F**	**1.02**	
30	Watt Ave	West Side Drive	B	0.69		C	0.74	

Notes: "Blank" = Intersection does not exist under this scenario
Palladay Road would be closed during construction of Initial Phase of Specific Plan.
Intersection numbers refer to Figure 4.7-4.
Significant impacts are highlighted in bold letters
[1] Average delay for all movements at intersection, including uncontrolled movements. Delay on some stop-signed controlled left-turn movements may be substantial, but typically impacts a limited number of vehicles.
Source: DKS Associates, 2005.

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: November 10, 2005

To: Rick Dondro – Placer County Department of Public Works

From: John Gard & Sarah Brandenberg – Fehr & Peers

Subject: ***Traffic Forecasts in Southwest Placer County***

1042-1992

This memorandum presents the cumulative average daily traffic (ADT) volume forecasts and volume-to-capacity (V/C) ratios for the six roadway alignment alternatives under consideration in southwest Placer County. This memorandum is organized into the following three sections:

- Traffic Forecasting Methodology
- Traffic Forecasts and V/C Ratios
- Next Steps

Traffic Forecasting Methodology

We used the Super Cumulative Placer County Travel Demand Model recently developed by DKS Associates to forecast daily traffic volumes for the six roadway alignment alternatives. This model includes buildout of the West Roseville, Sierra Vista, Creekview, Placer Vineyards, Regional University, and Placer Ranch Specific Plans in Roseville and Placer County. The model also includes significant amounts of development within the Curry Creek Specific Plan (16,000 dwelling units and 4 million square feet of non-residential) and South Sutter Specific Plan. The land use forecasts are identical for all six roadway alignment alternatives.

Figures 1 – 6 display the six roadway alignment alternatives. It should be noted that the segment of Pleasant Grove Boulevard between Foothills Boulevard and Woodcreek Oaks Boulevard is now assumed to be six lanes (versus four) per City of Roseville staff direction. In addition, the segment of Fiddyment Road between Baseline Road and Pleasant Grove Boulevard is now assumed to be six lanes under all alternatives per Roseville and Placer County staff.

We evaluated the reasonableness of the traffic forecasts by comparing the expected daily trip generation of the West Roseville, Sierra Vista, Creekview, Placer Vineyards, Regional University, and Curry Creek projects to the amount of traffic projected at the gateways of all six projects[1]. Based on trip rates from the traffic model, these projects are expected to generate approximately 750,000 gross trips per day. Given the size of these projects and their mix of land uses, a substantial amount of trips are expected to remain internal to the plans. We have estimated that about 40 percent of the trips from these projects (450,000 daily trips) could remain internal to the combined projects and would not cross the gateways. Since the traffic forecasts at the project gateways total approximately 550,000 daily trips, this suggests that about 80 percent of the traffic at the gateways is related to the six plans with the remaining 20 percent being through trips on regional roadways such as Baseline Road, Watt Avenue, and Blue Oaks Boulevard. Thus, the magnitude of traffic assigned by the model to the study area roadways appears reasonable.

Traffic Forecasts and V/C Ratios

We ran the Super Cumulative Placer County Travel Demand Model with each roadway alignment alternative to yield ADT forecasts, which are included in Appendix A. The forecasts were then converted into V/C ratios by dividing the ADT by the capacity of the roadway. The following Placer County General Plan capacities were used.

- Two-Lane Street:: 18,000 ADT
- Four-Lane Arterial: 36,000 ADT
- Six-Lane Arterial: 54,000 ADT
- Six-Lane Freeway: 108,000 ADT

Plot 1A is a regional plot of V/C ratios under Alternative 1. Plot 1B provides a more detailed plot of this alternative for the area generally bounded by Baseline Road, Foothills Boulevard, and Athens Avenue. Plots 2 through 6 display V/C ratios for this same area under Alternatives 2 – 6. The plots utilize the following color-coding scheme:

- Two-Lane Street:: Shown in Yellow
- Four-Lane Arterial: Shown in Green
- Six-Lane Arterial: Shown in Burgundy

Roadways shown with wide bandwidths (i.e., heavier line weighting) have V/C ratios greater than 0.90.

[1] Key project gateways include Baseline Road, Watt Avenue, Blue Oaks Boulevard, Pleasant Grove Boulevard, Fiddyment Road and Walerga Road.

FEHR & PEERS
TRANSPORTATION CONSULTANTS

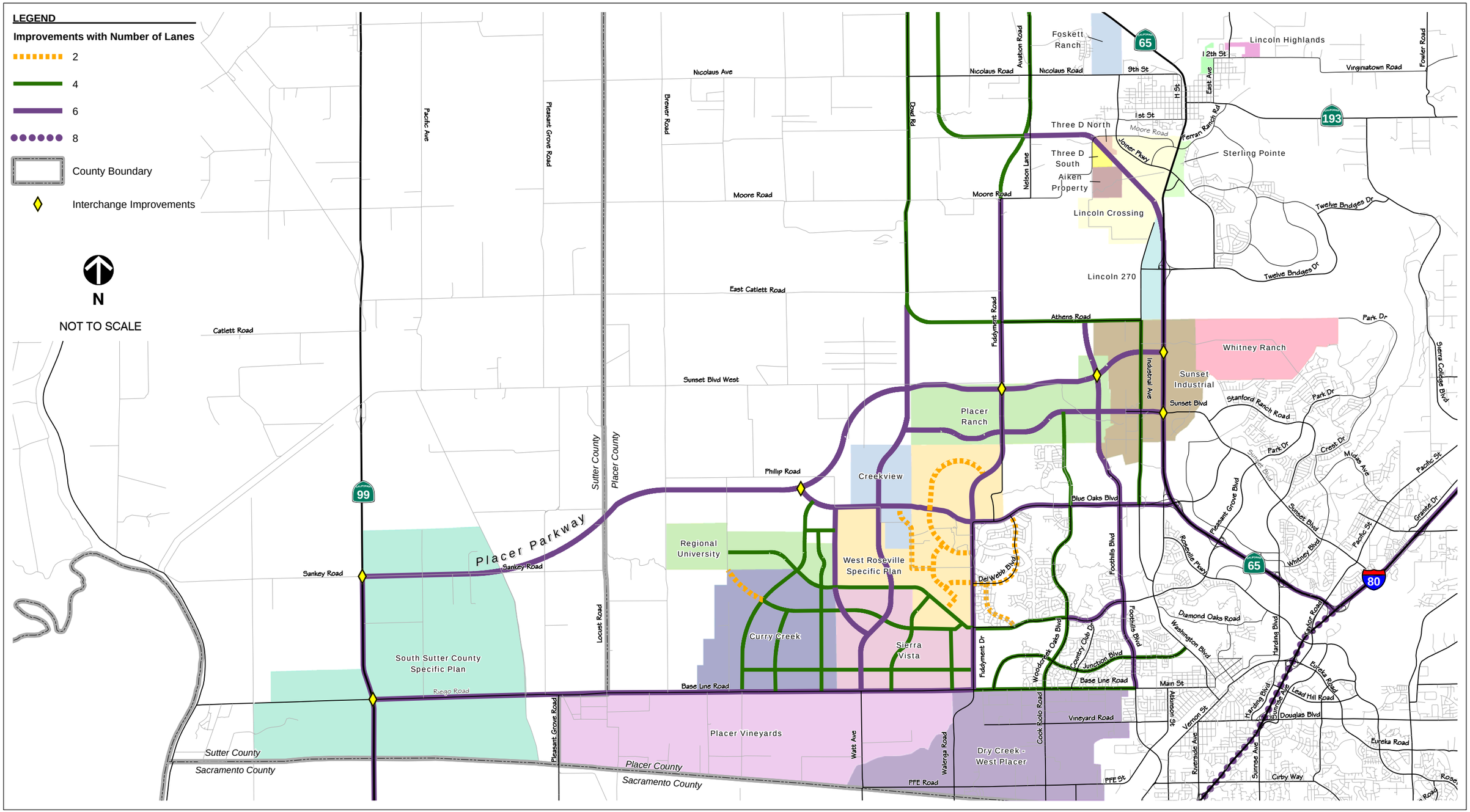
Next Steps

A comparison of Alternatives 1 – 6 yields several important conclusions regarding projected traffic conditions in southwest Placer County. The following lists some of the key issues that we will be prepared to discuss at our upcoming meeting on November 18th:

- Number of north-south streets required between Baseline Road and Pleasant Grove Boulevard;
- Need for Dowd Road extension and Fiddyment Road widening;
- East-West capacity on existing Roseville streets;
- Need for a second parallel east-west street directly south of Pleasant Grove Boulevard through Curry Creek;
- Placer Parkway Interchange with Blue Oaks Boulevard versus Watt Avenue; and
- Ability to deliver traffic to/from the study area given constrained operating conditions on regional routes such as State Route 65, I-80, and Blue Oaks Boulevard.

Please do not hesitate to call us if you have any questions or need additional information.

Attachments

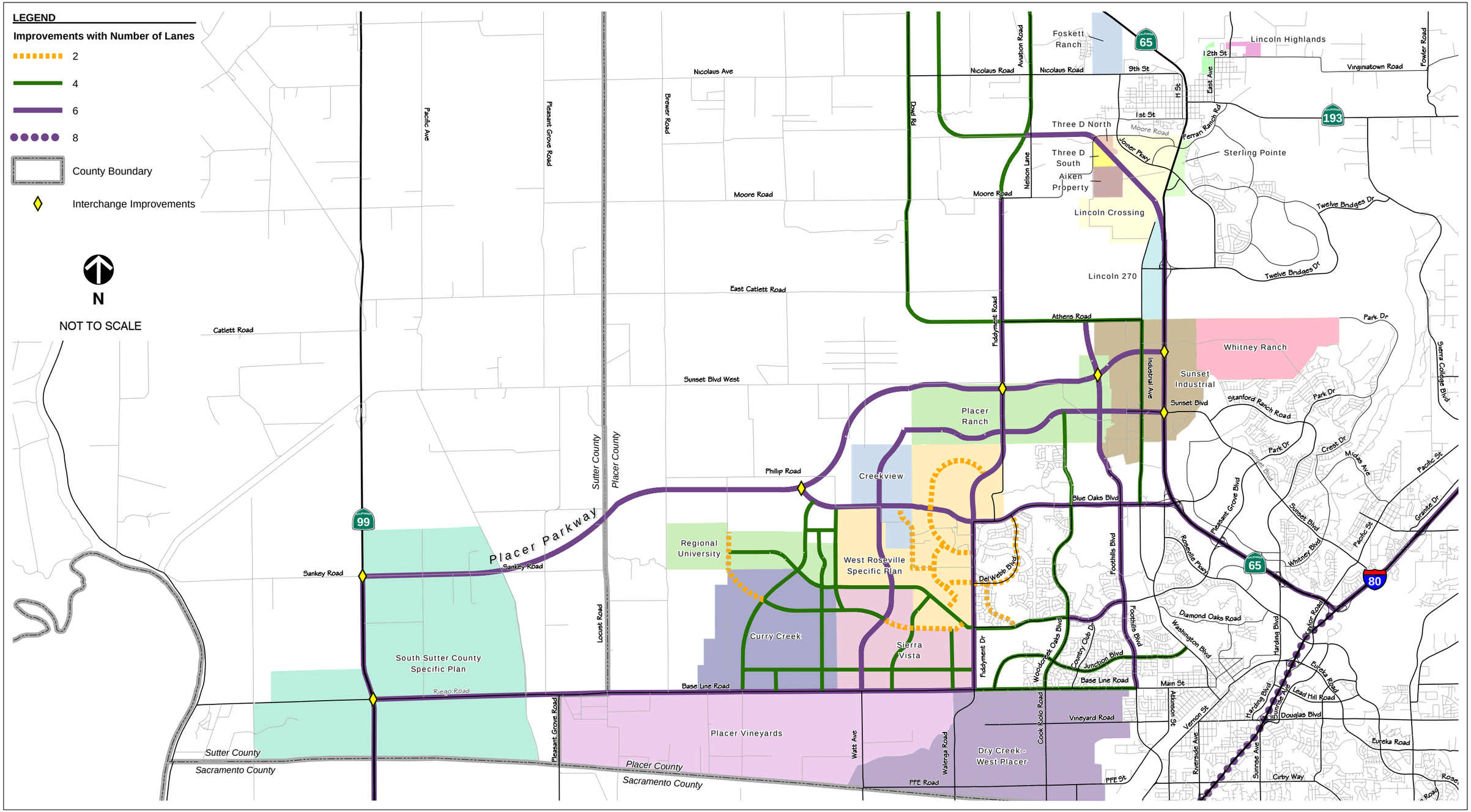


FEHR & PEERS
TRANSPORTATION CONSULTANTS

N:\Projects\1042\1992_Placer_County_On-Call\GIS\Draft\PlacerCo_Alt1.mxd

ROADWAY ALTERNATIVE 1

FIGURE 1

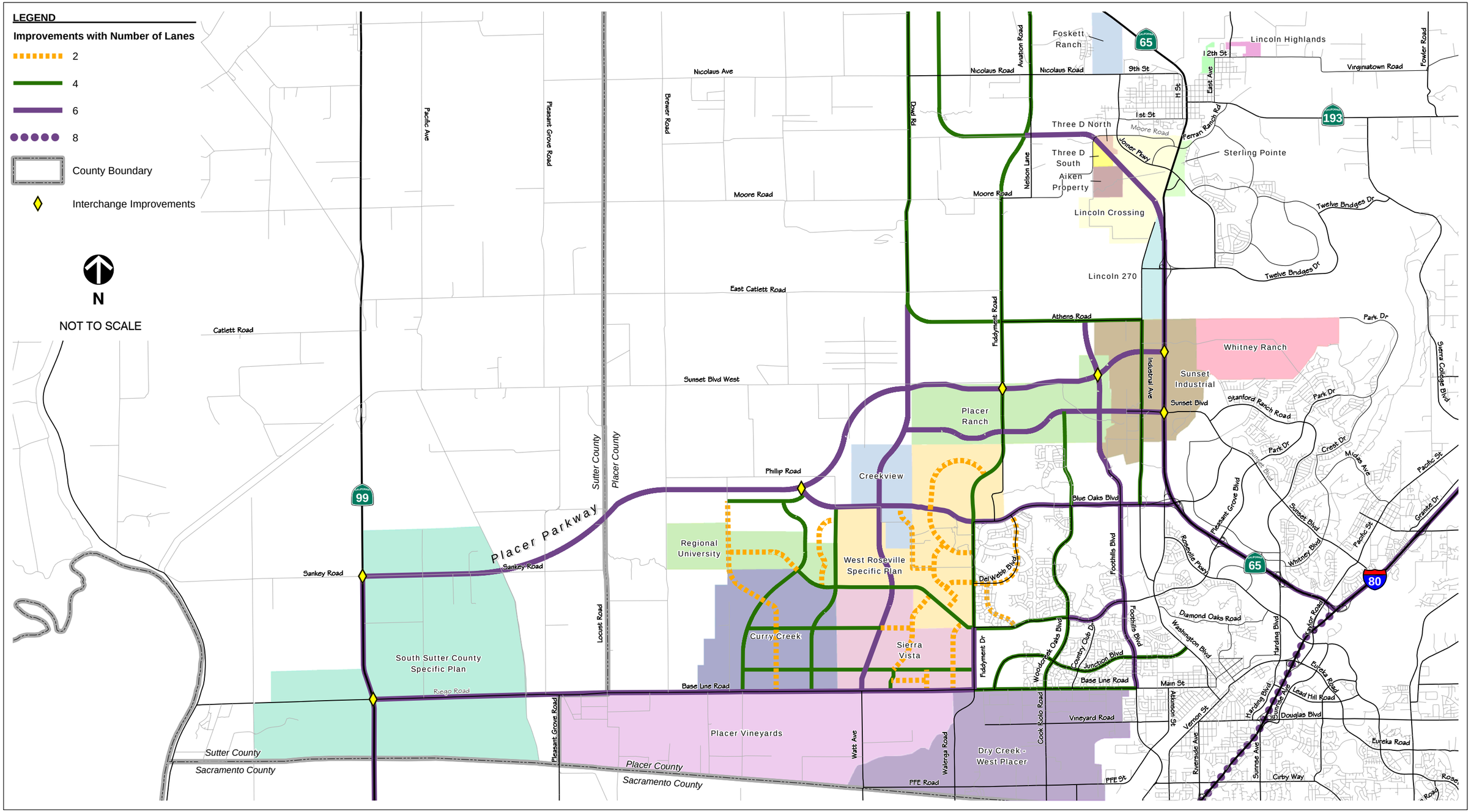


FEHR & PEERS
TRANSPORTATION CONSULTANTS

N:\Projects\1042\1992_Placer_County_On-Call\GIS\Draft\PlacerCo_Alt2.mxd

ROADWAY ALTERNATIVE 2

FIGURE 2

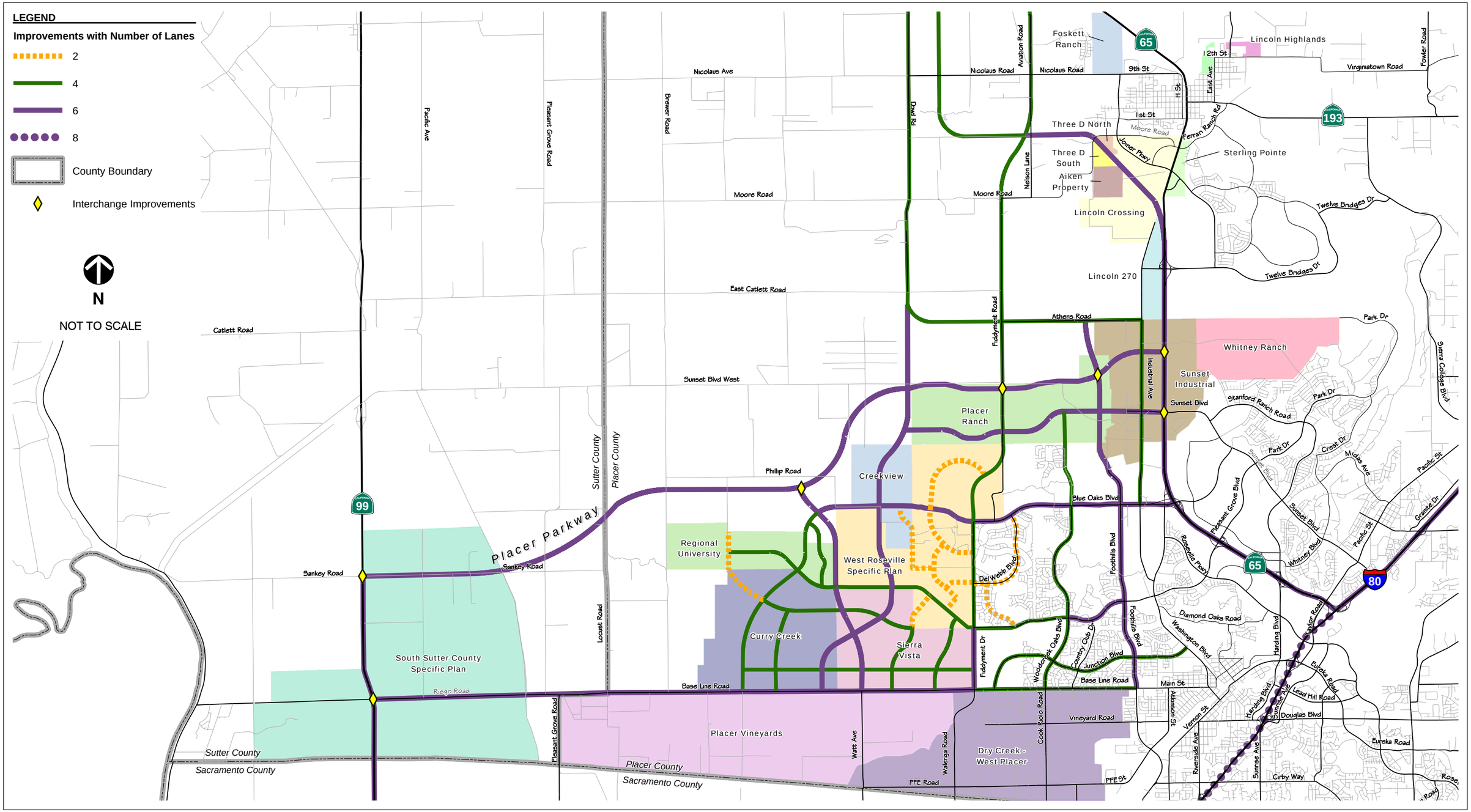


FEHR & PEERS
TRANSPORTATION CONSULTANTS

N:\Projects\1042\1992_Placer_County_On-Call\GIS\Draft\PlacerCo_Alt3.mxd

ROADWAY ALTERNATIVE 3

FIGURE 3

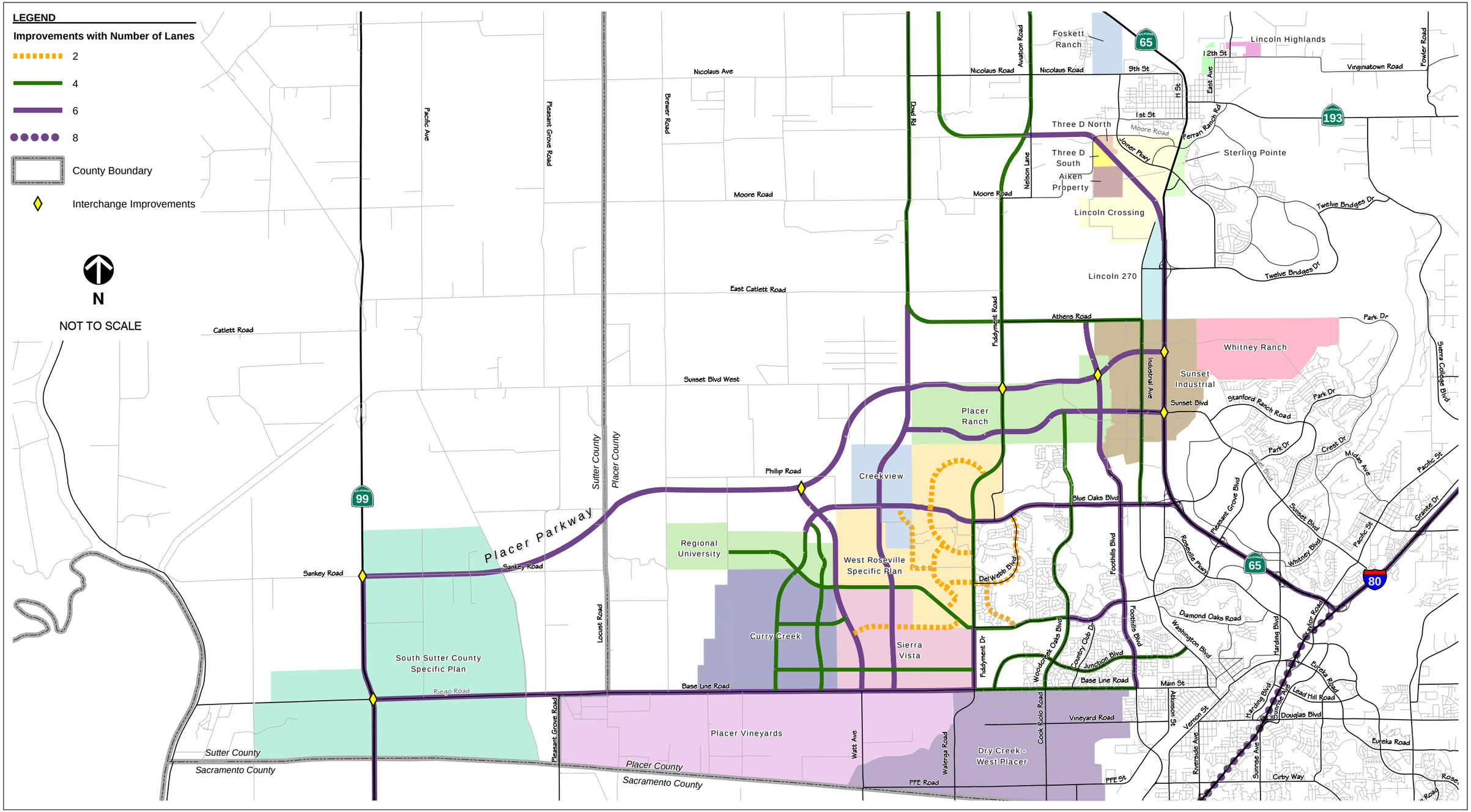


FEHR & PEERS
TRANSPORTATION CONSULTANTS

N:\Projects\1042\1992_Placer_County_On-Call\GIS\Draft\PlacerCo_Alt4.mxd

ROADWAY ALTERNATIVE 4

FIGURE 4

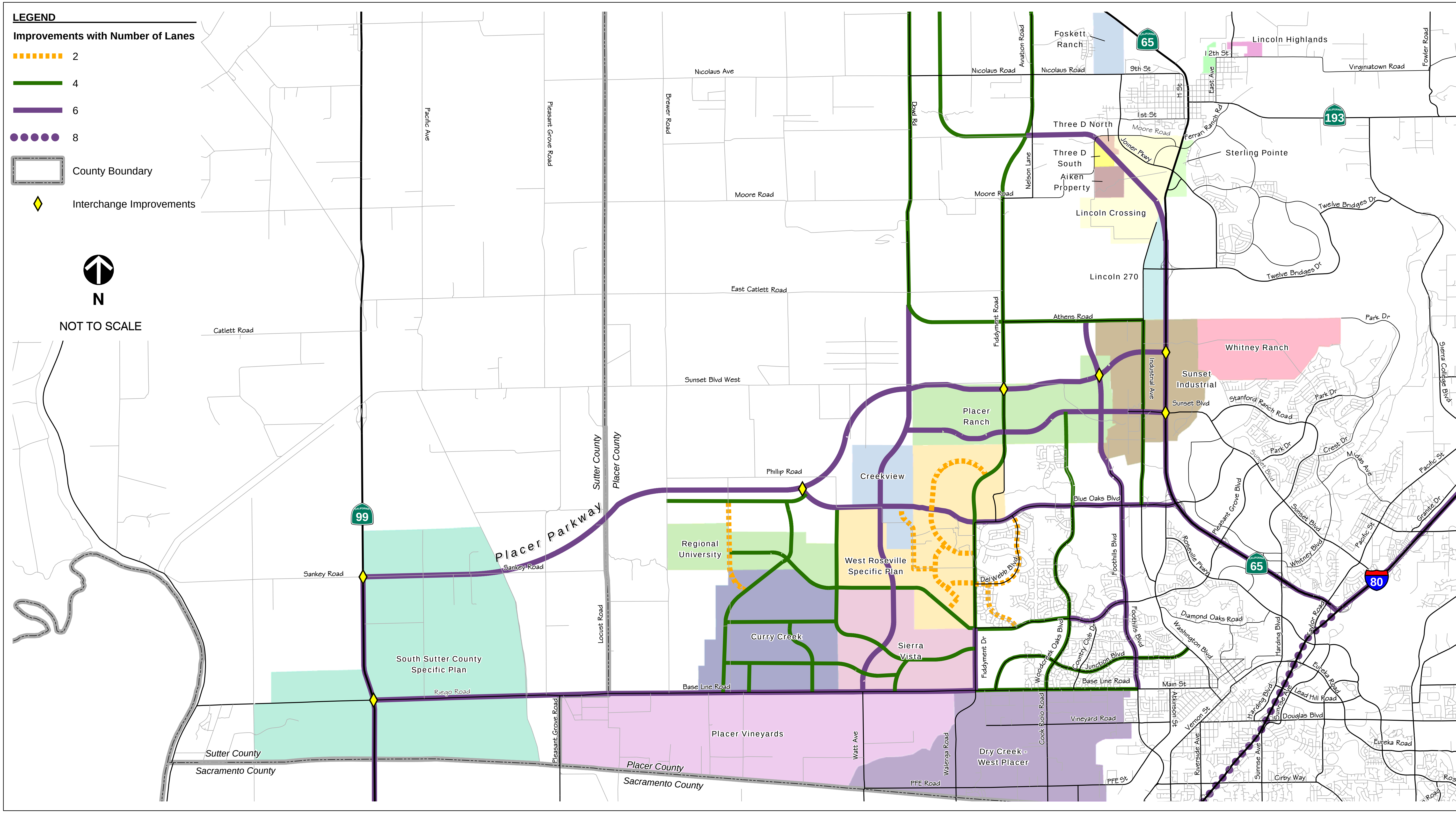


FEHR & PEERS
TRANSPORTATION CONSULTANTS

N:\Projects\1042\1992_Placer_County_On-Call\GIS\Draft\PlacerCo_Alt5.mxd

ROADWAY ALTERNATIVE 5

FIGURE 5



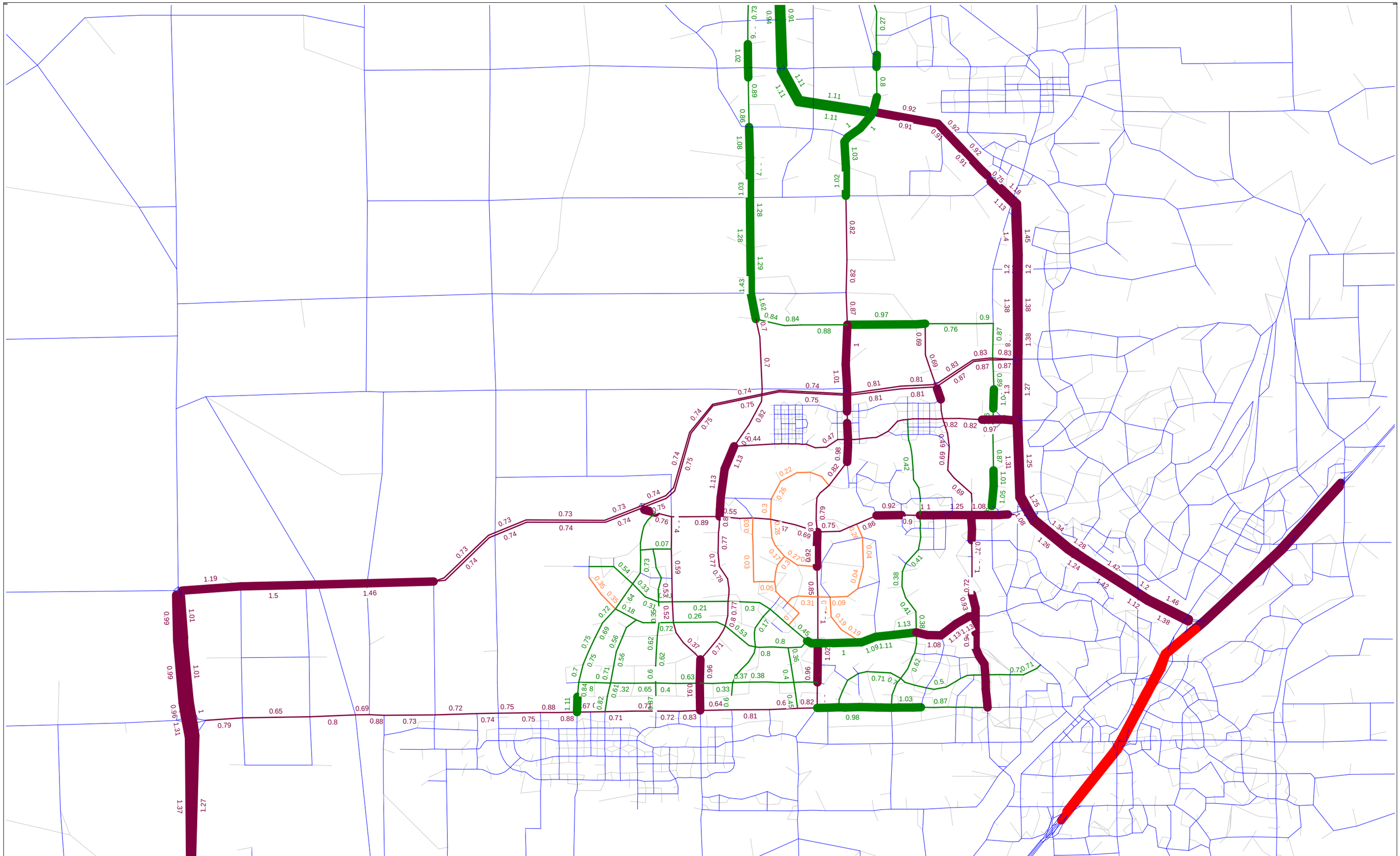
FEHR & PEERS
TRANSPORTATION CONSULTANTS
N:\Projects\1042\1992_Placer_County_On-Call\GIS\Draft\PlacerCo_Alt6.mxd

ROADWAY ALTERNATIVE 6
FIGURE 6

Appendix A

Plots 1 – 6: V/C Ratios for Roadway Alternatives

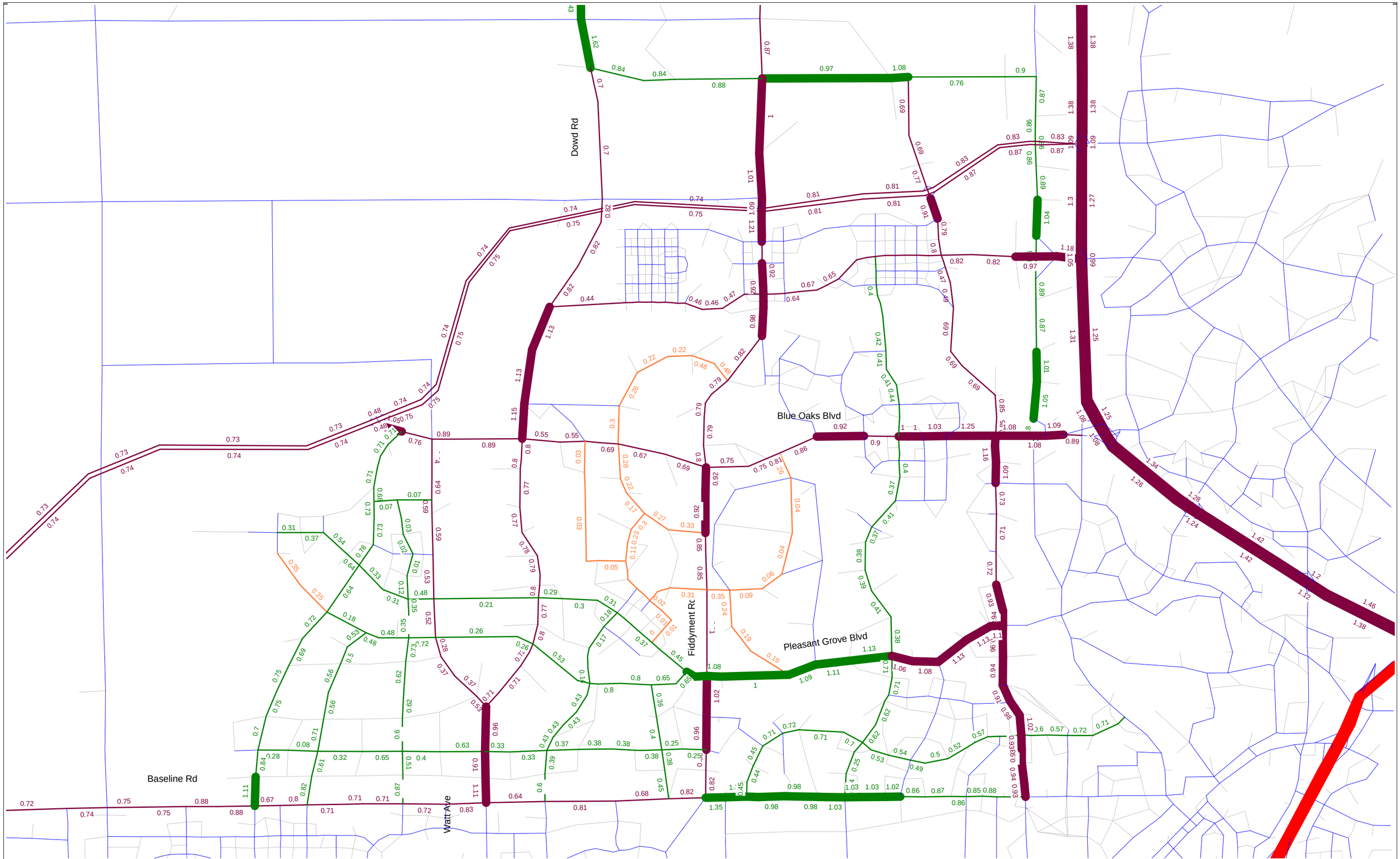
Plots 7 – 12: Daily Volumes for Roadway Alternatives



Plot 1A Regional Plot of V/C Ratios Under Alternative 1

cube

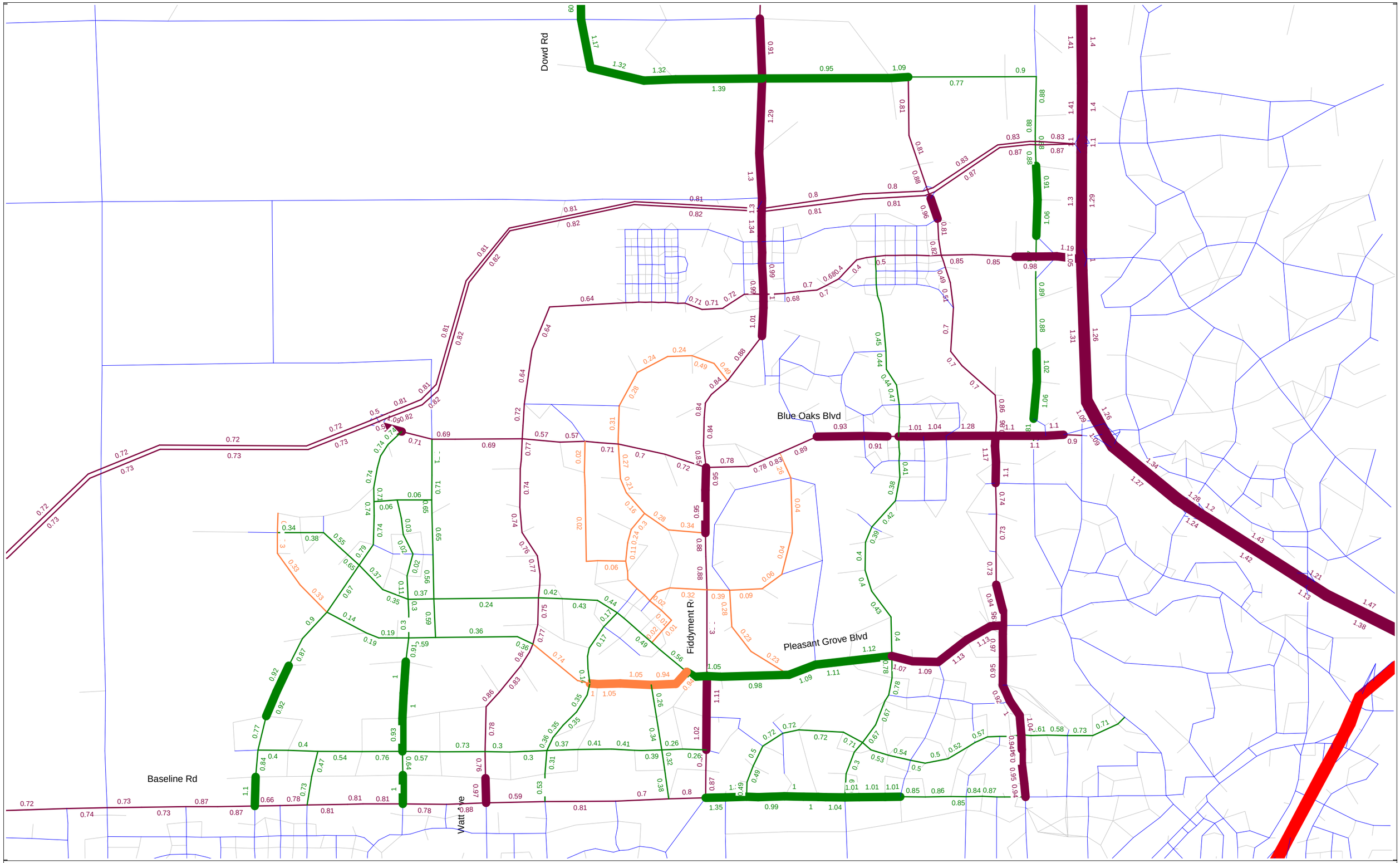
Licensed to Fehr & Peers Associates, Inc.



Plot 1B V/C Ratios Under Alternative 1

cube

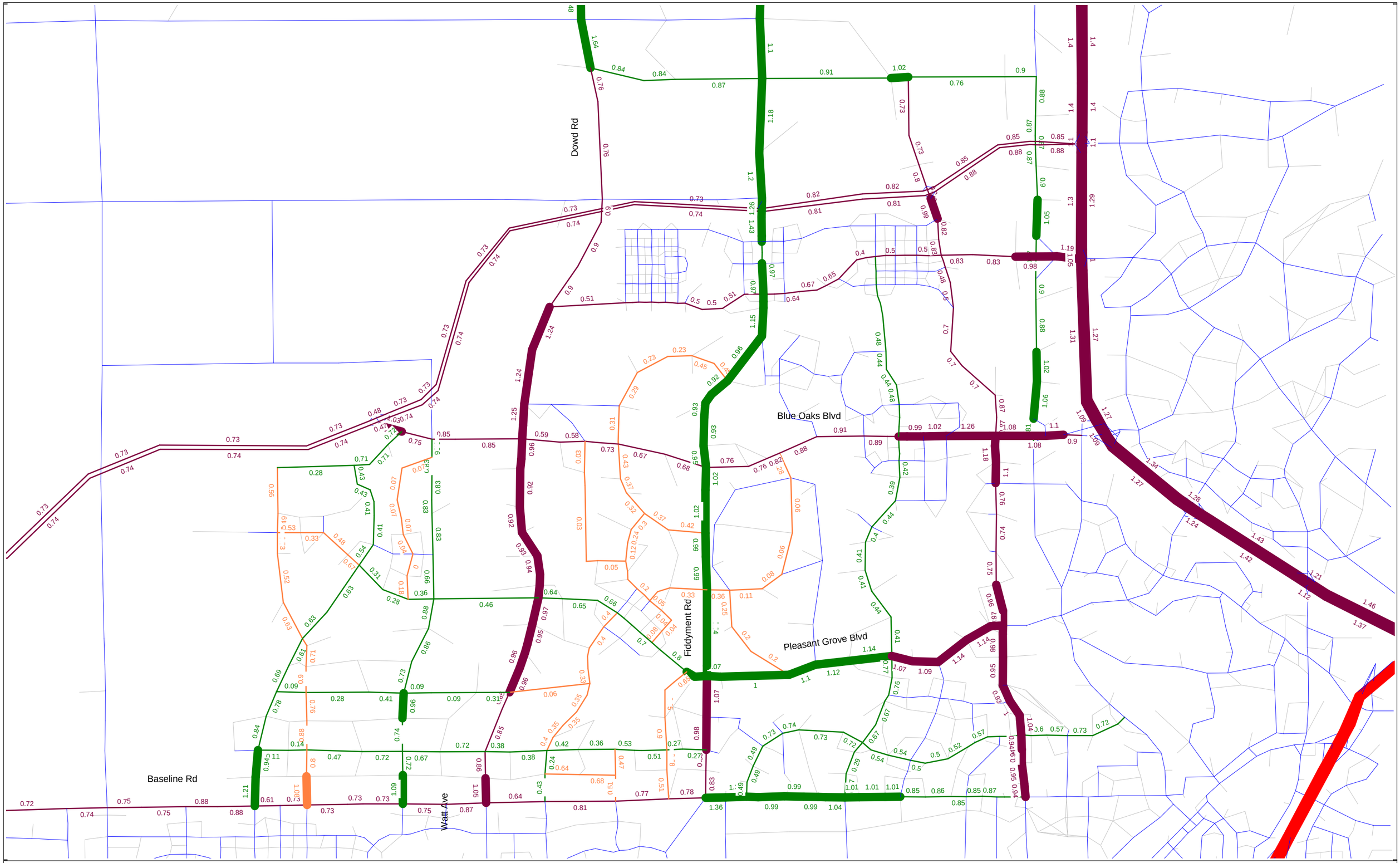
Licensed to Fehr & Peers Associates, Inc.



Plot 2 V/C Ratios Under Alternative 2

cube

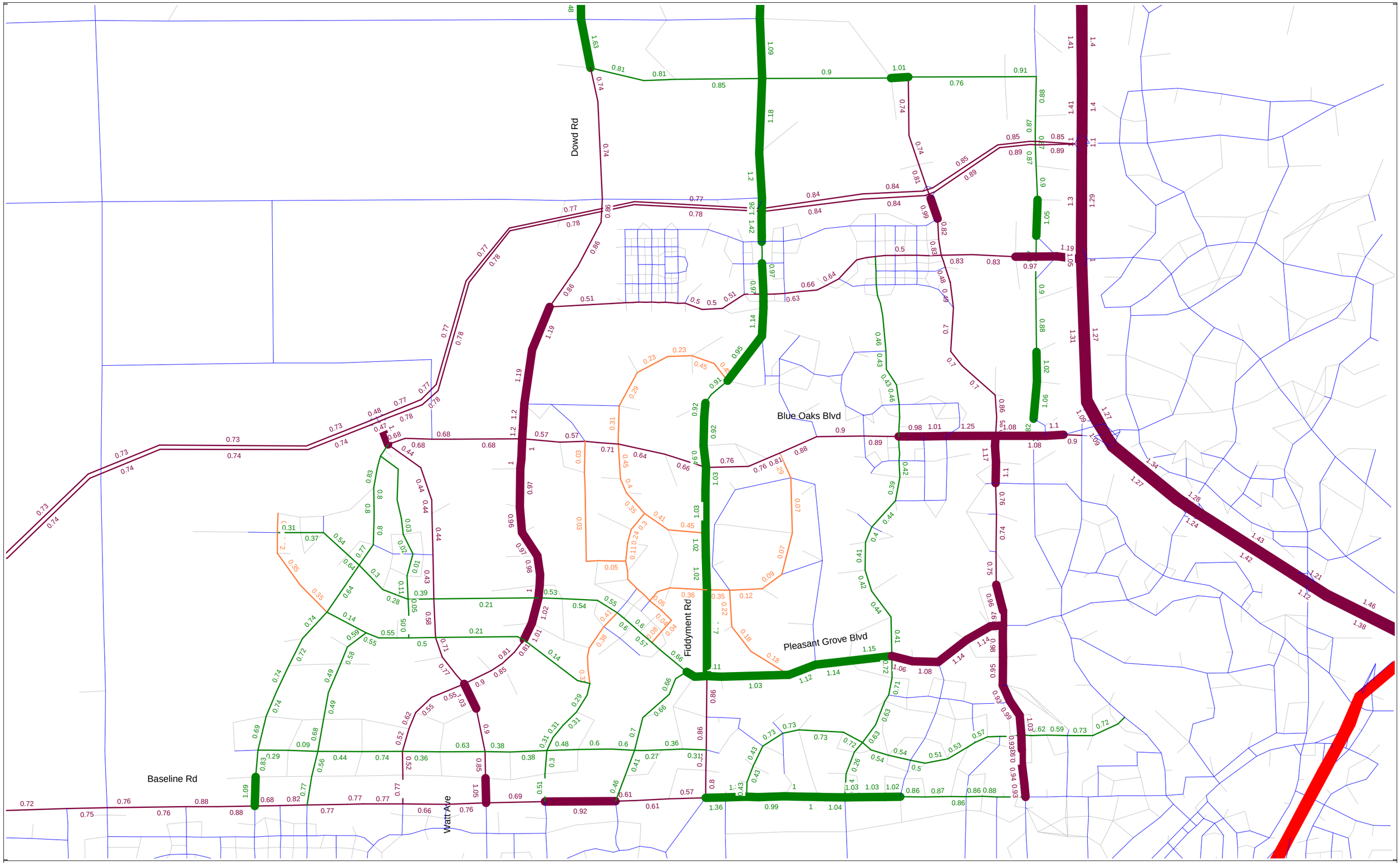
Licensed to Fehr & Peers Associates, Inc.



Plot 3 V/C Ratios Under Alternative 3

cube

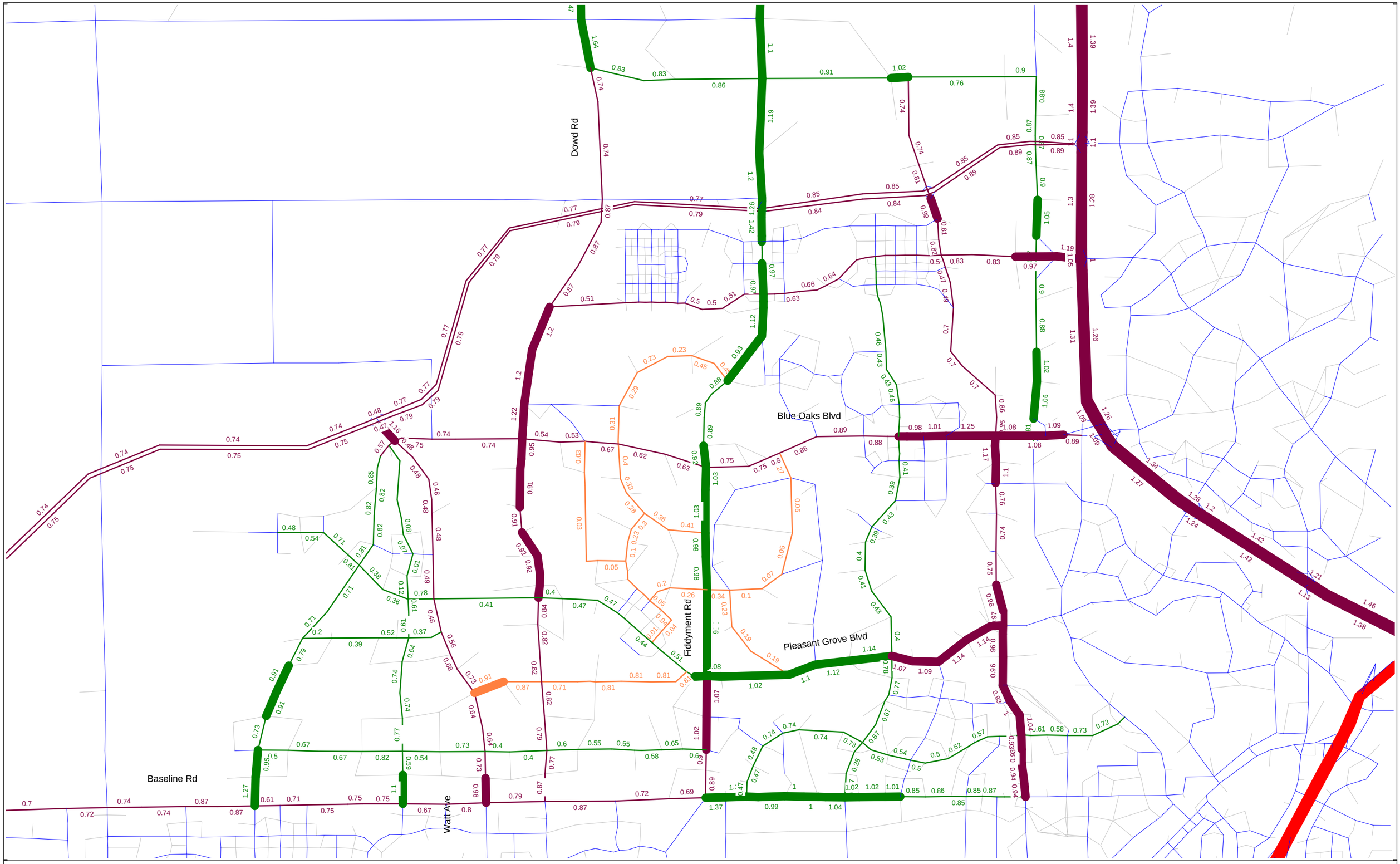
Licensed to Fehr & Peers Associates, Inc.



Plot 4 V/C Ratios Under Alternative 4

cube

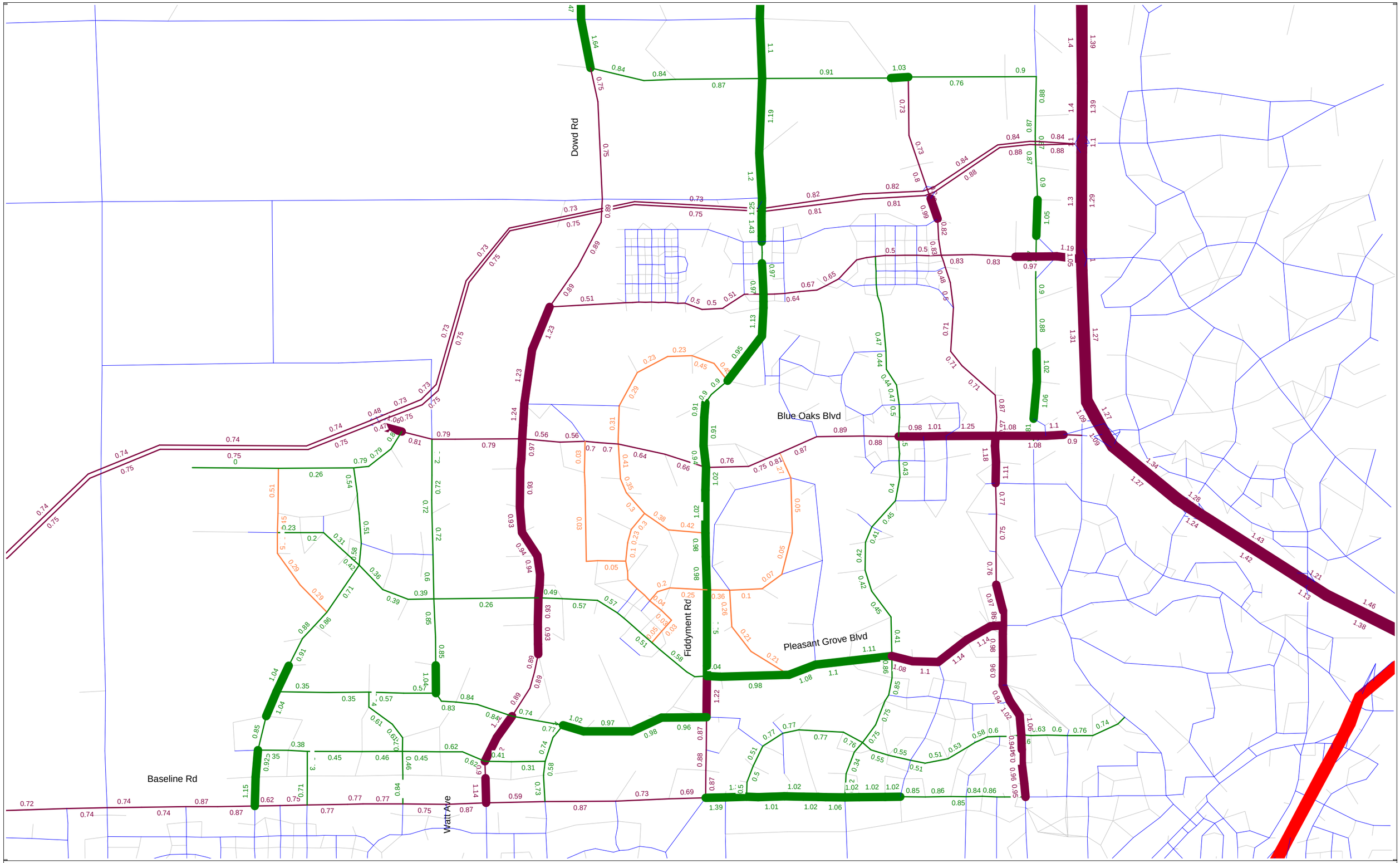
Licensed to Fehr & Peers Associates, Inc.



Plot 5 V/C Ratios Under Alternative 5

cube

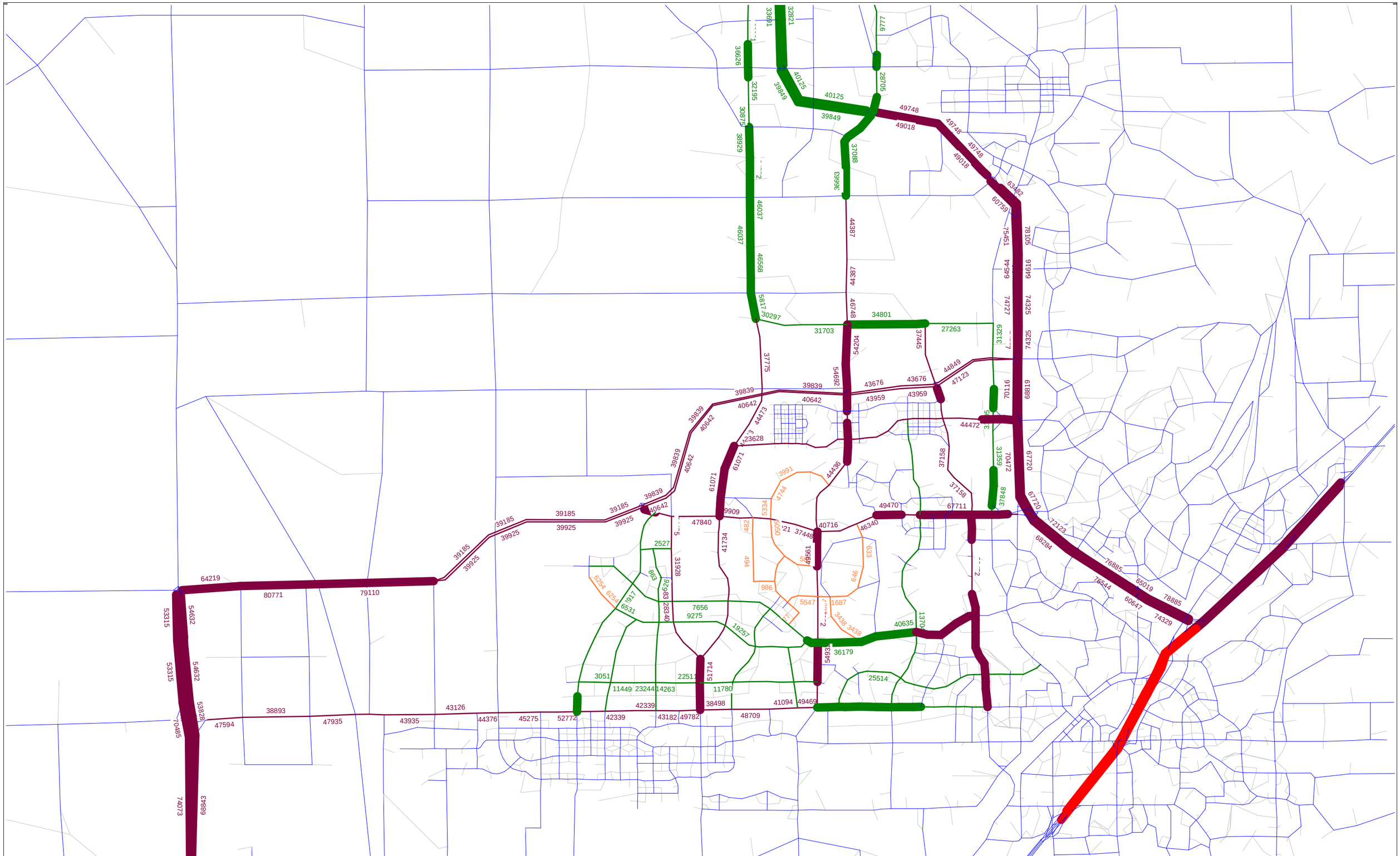
Licensed to Fehr & Peers Associates, Inc.



Plot 6 V/C Ratios Under Alternative 6

cube

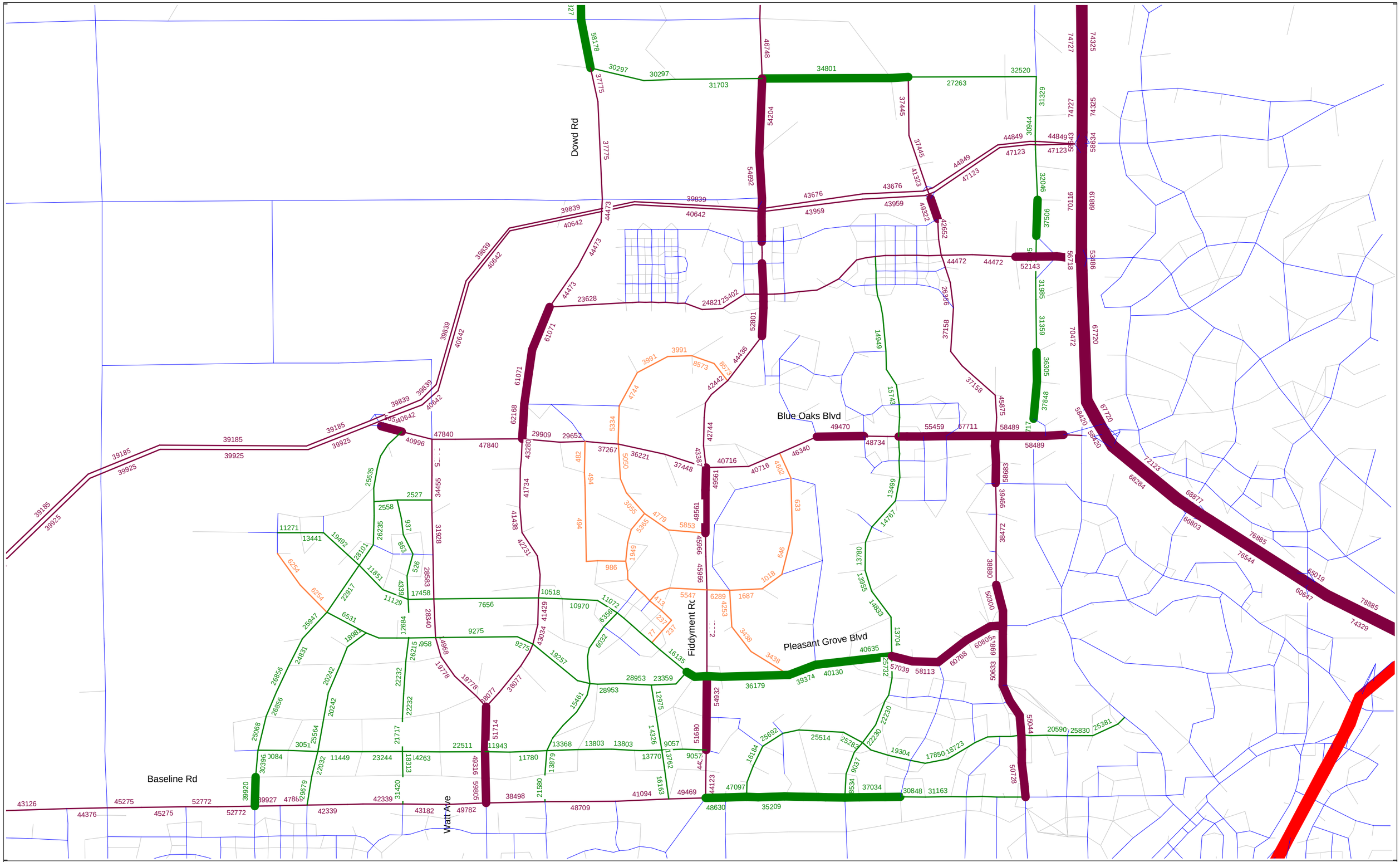
Licensed to Fehr & Peers Associates, Inc.



Plot 7A Regional Plot of Daily Volumes (Two-way Total) Under Alternative 1

cube

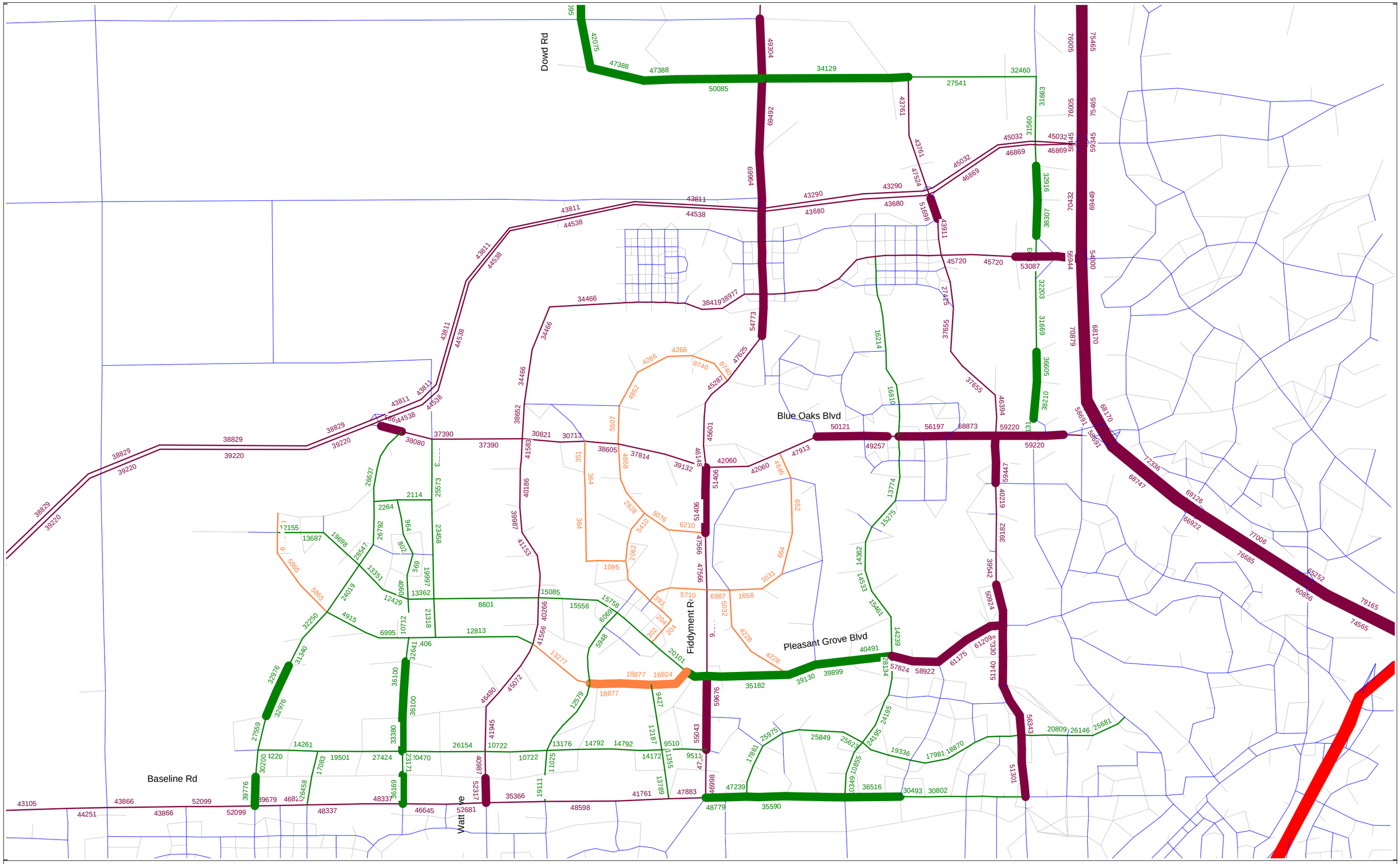
Licensed to Fehr & Peers Associates, Inc.



Plot 7B Daily Volumes (Two-way Total) Under Alternative 1

cube

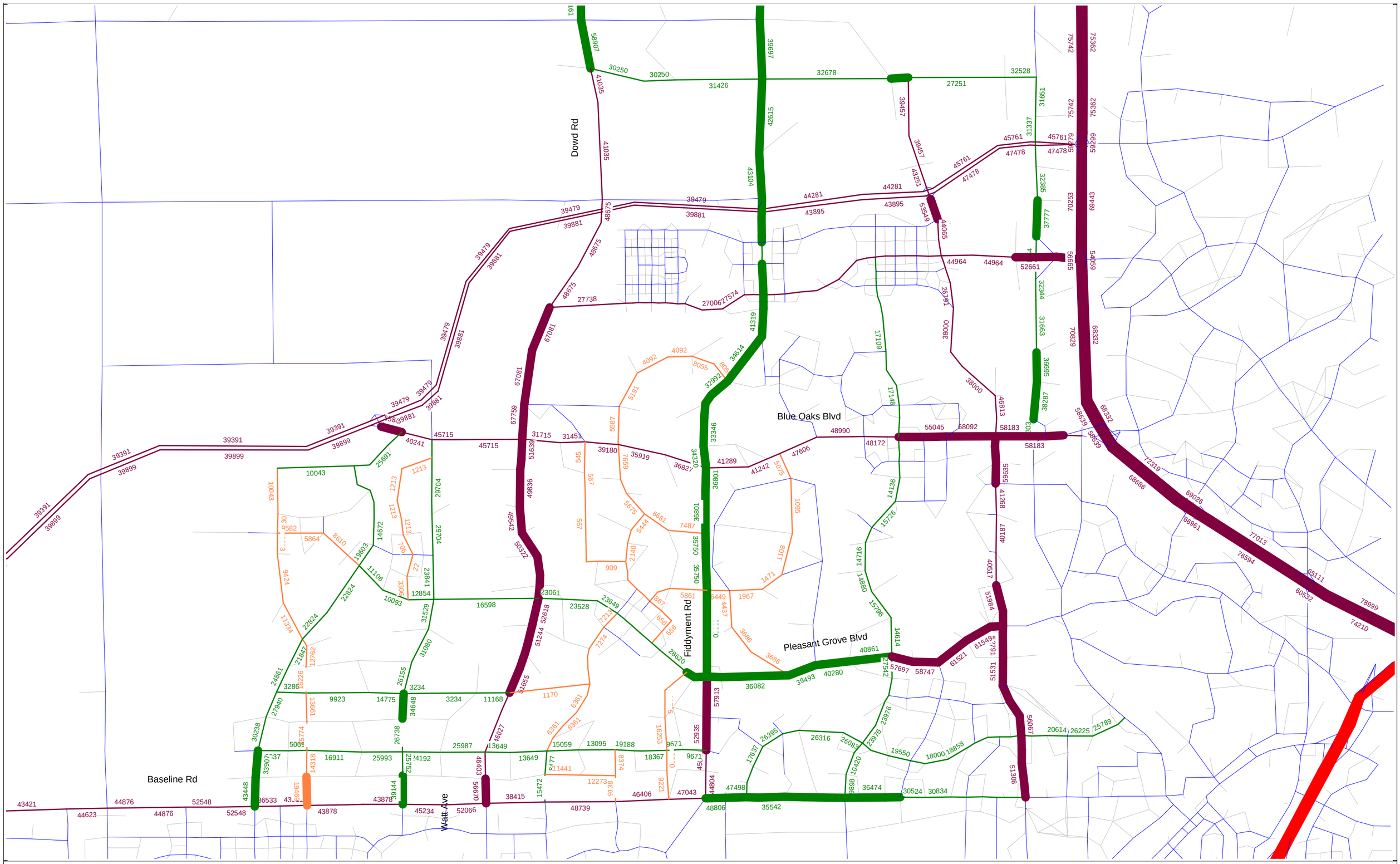
Licensed to Fehr & Peers Associates, Inc.



Plot 8 Daily Volumes (Two-way Total) Under Alternative 2

cube

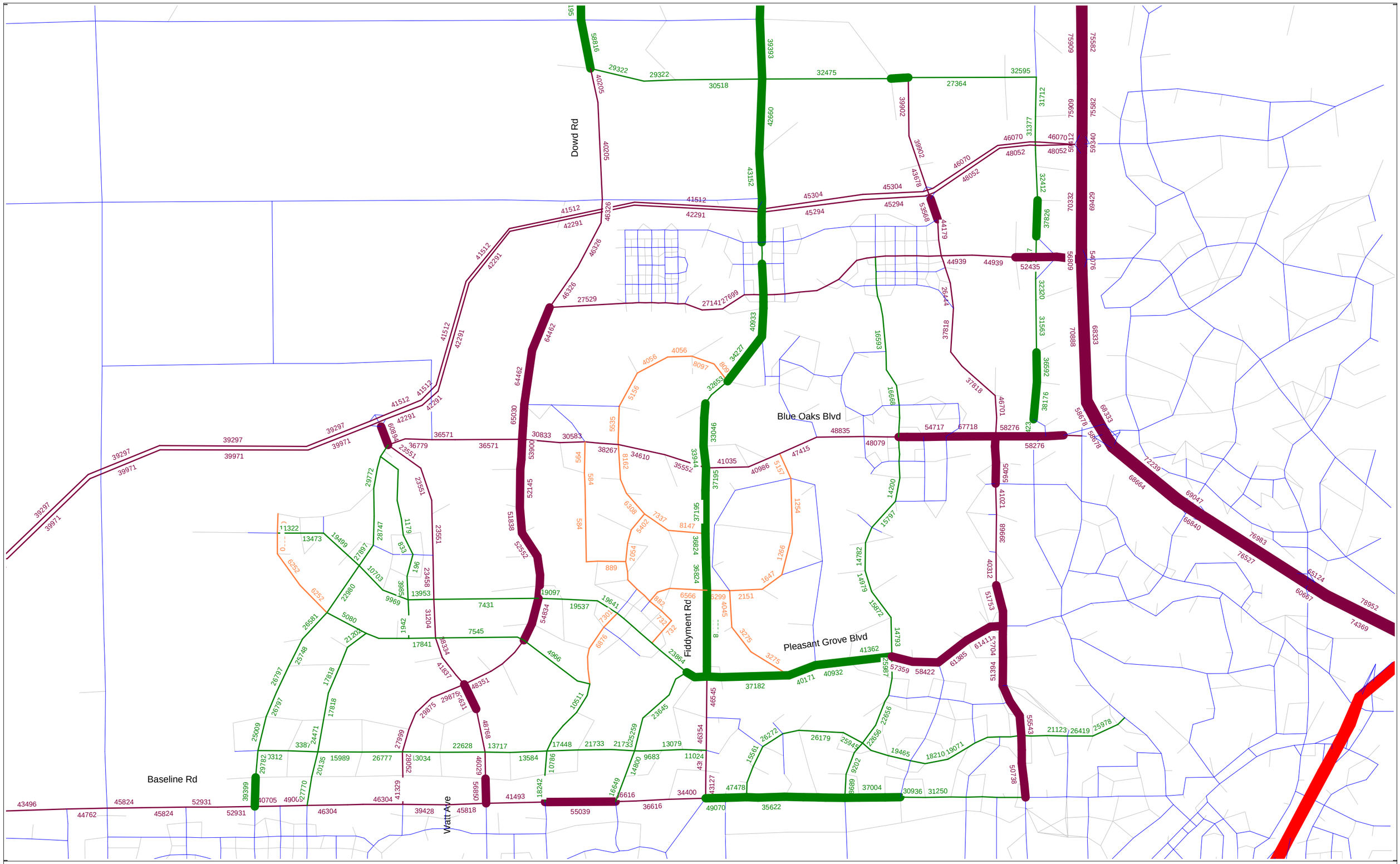
Licensed to Fehr & Peers Associates, Inc.



Plot 9 Daily Volumes (Two-way Total) Under Alternative 3

cube

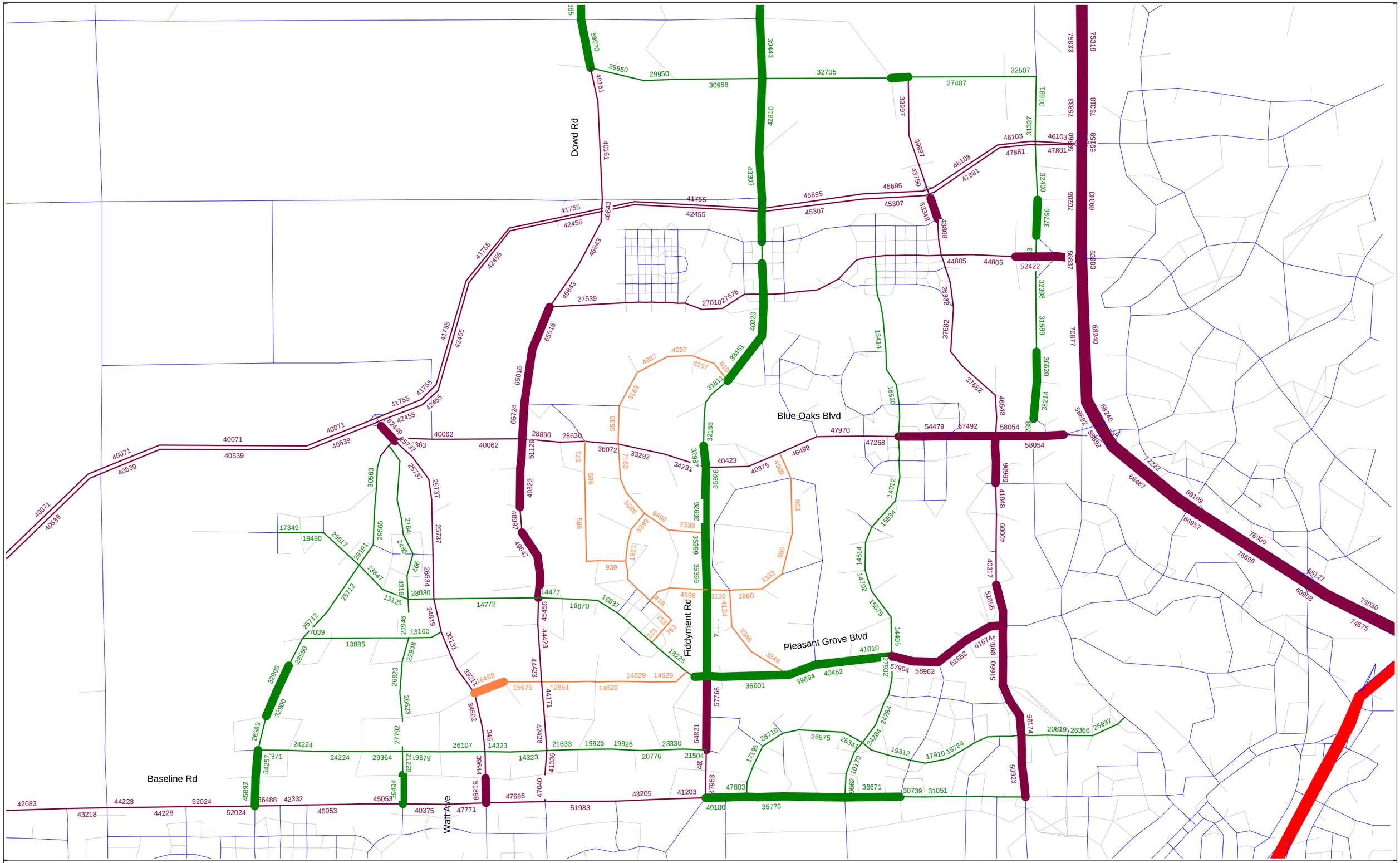
Licensed to Fehr & Peers Associates, Inc.



Plot 10 Daily Volumes (Two-way Total) Under Alternative 4

cube

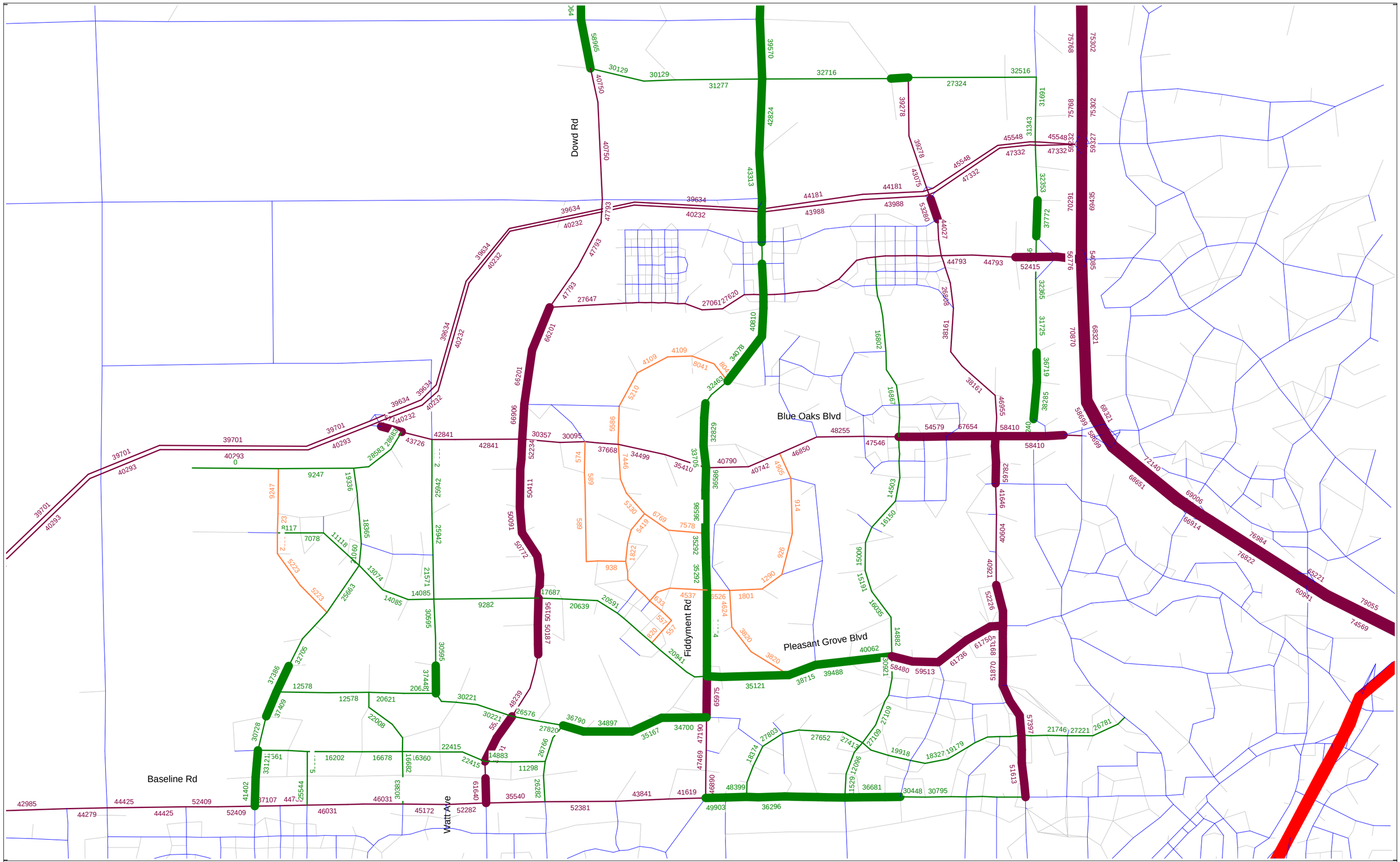
Licensed to Fehr & Peers Associates, Inc.



Plot 11 Daily Volumes (Two-way Total) Under Alternative 5

cube

Licensed to Fehr & Peers Associates, Inc.



Plot 12 Daily Volumes (Two-way Total) Under Alternative 6

cube

Licensed to Fehr & Peers Associates, Inc.