

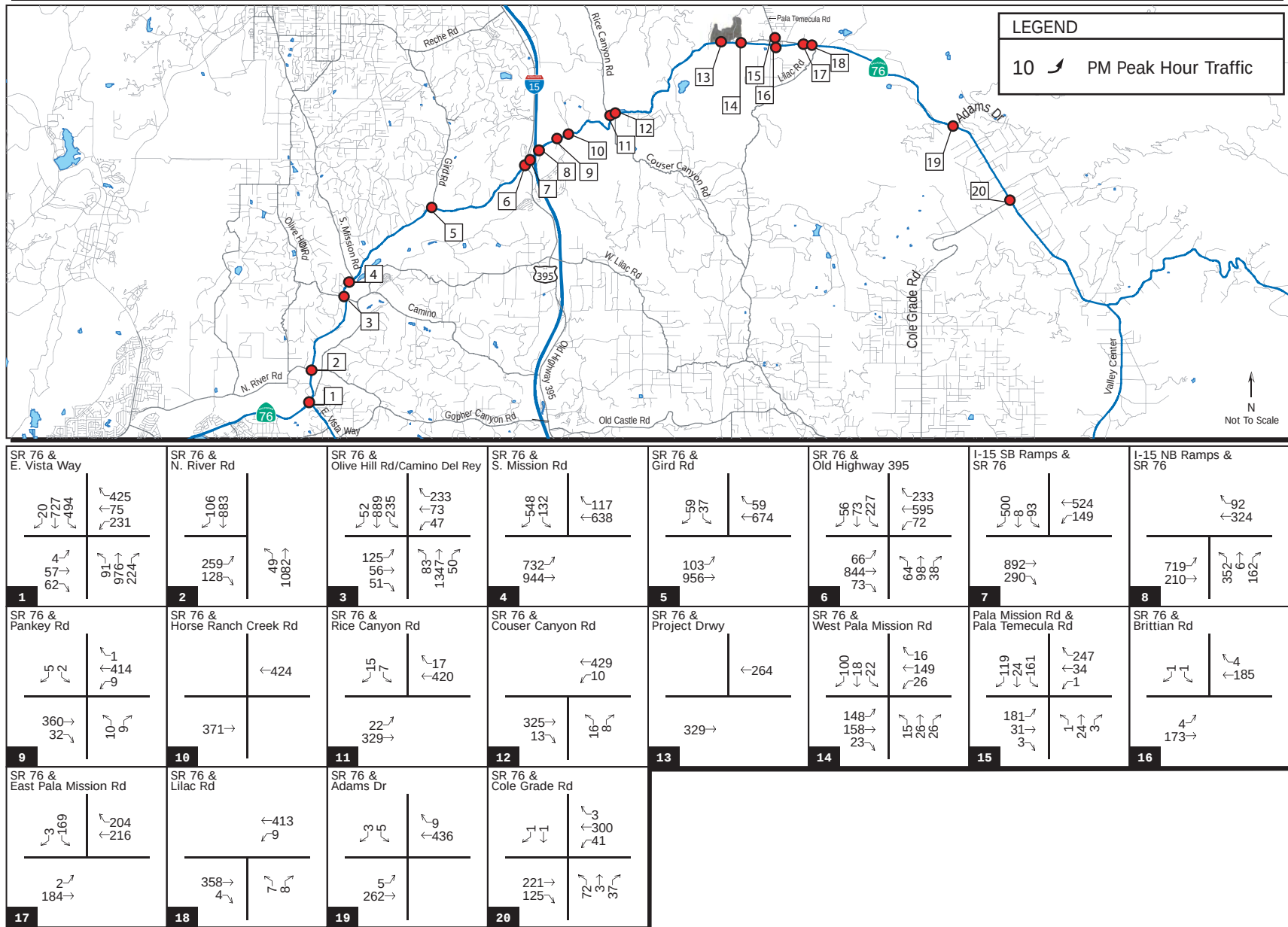
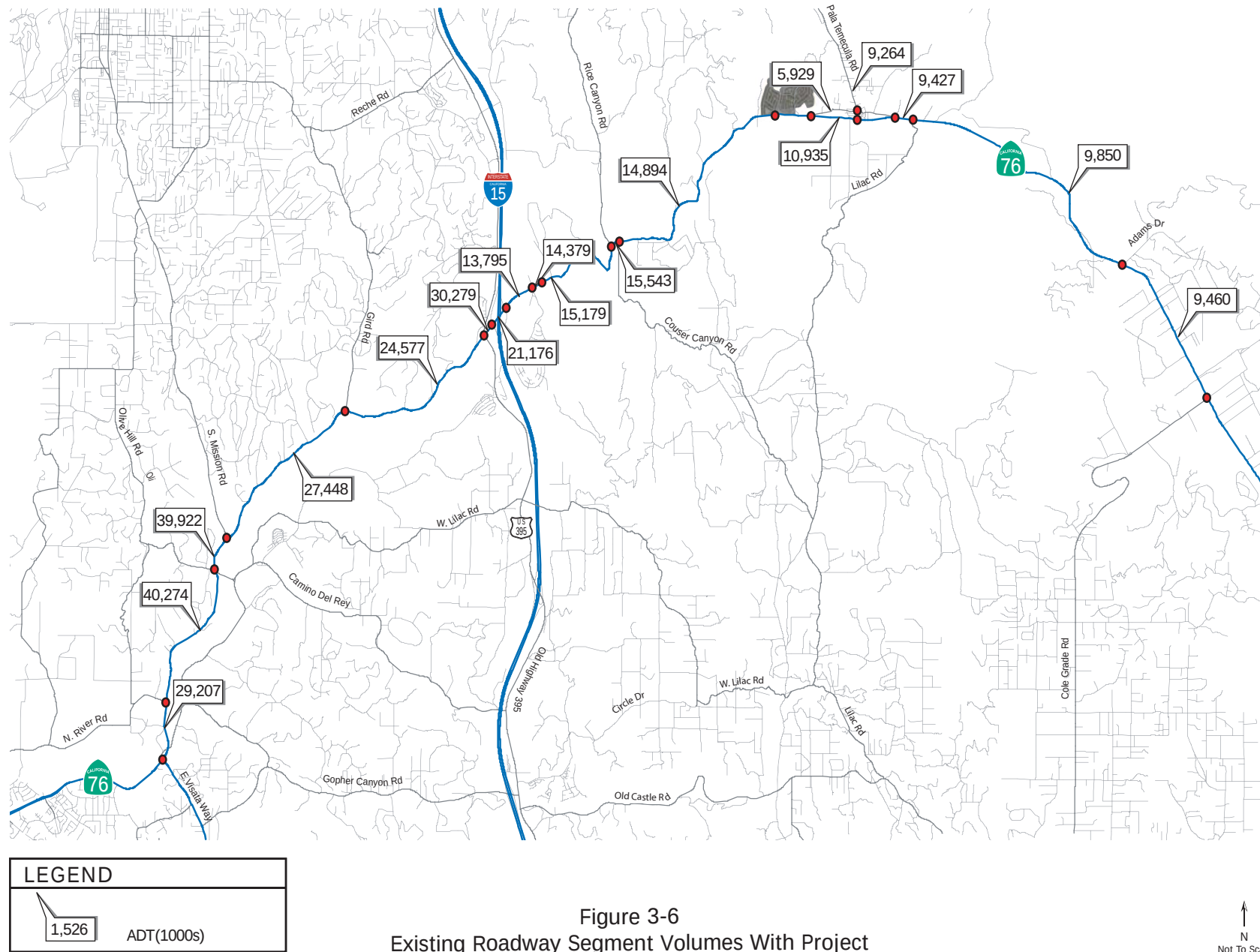


Figure 3-5
Existing PM Peak Hour Intersection Volumes



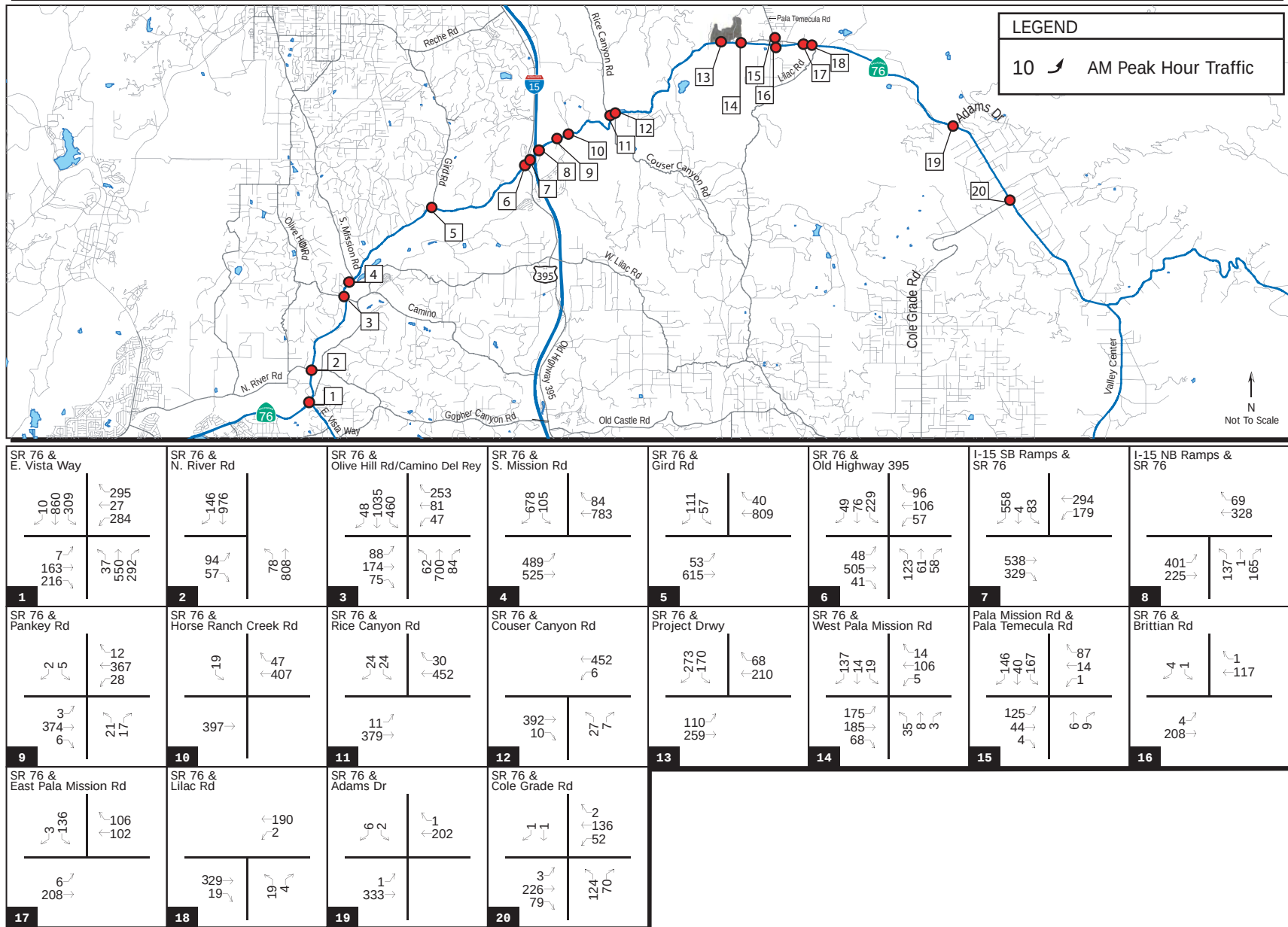


Figure 3-7
Existing AM Peak Hour Intersection Volumes With Project

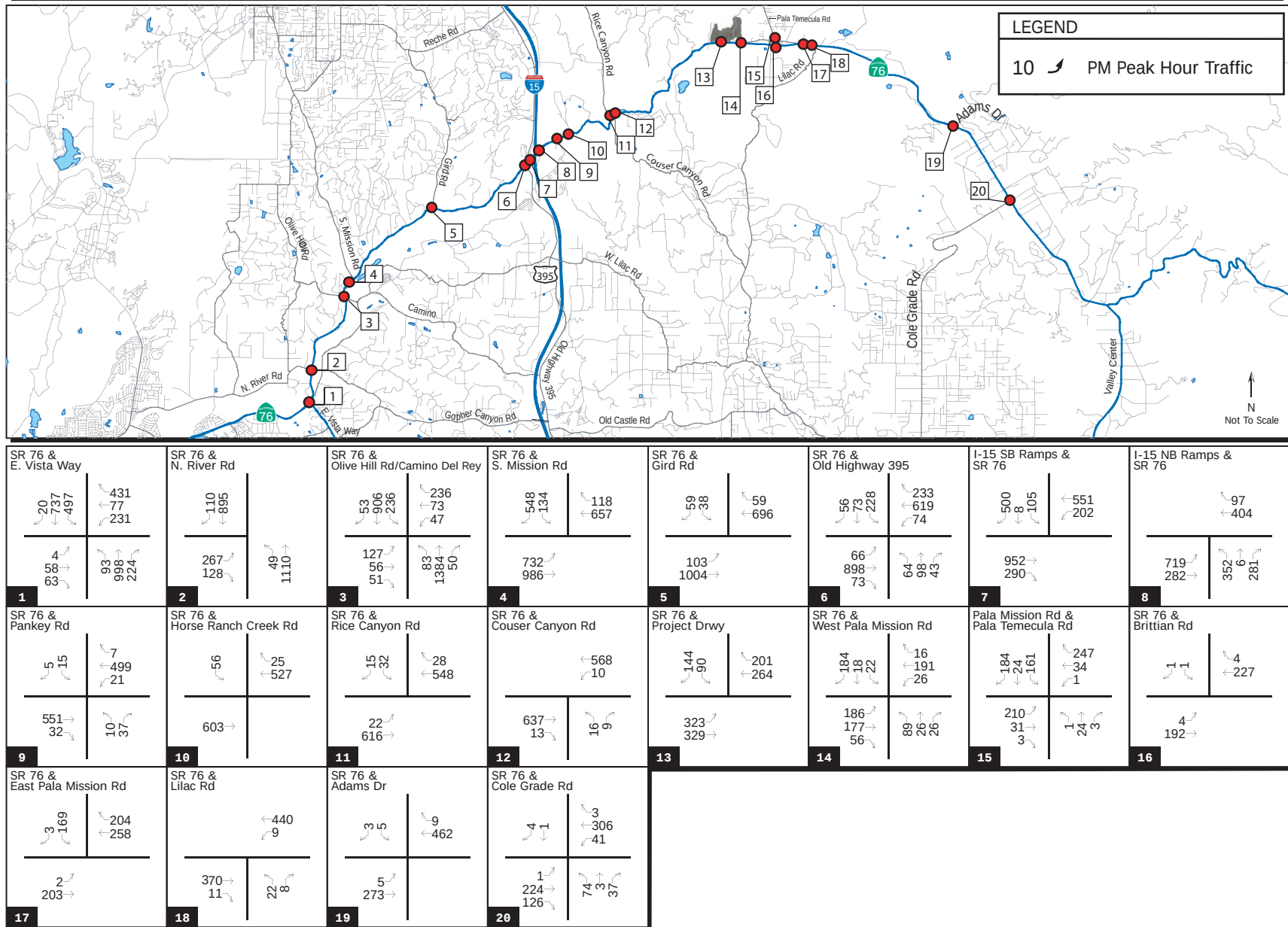


Figure 3-8
Existing PM Peak Hour Intersection Volumes With Project

CHAPTER 4

CUMULATIVE CONDITIONS

Cumulative conditions represent opening day of the proposed project. Project traffic is added to the Cumulative base volumes to create the “with project” scenario.

CUMULATIVE TRAFFIC VOLUMES

Traffic growth on roadways is a function of the expected land development, economic activity, and changes in demographics. Several methods can be used to estimate this growth.

For this analysis we have conservatively assumed that every parcel builds out to the General Plan designation; and that all General Plan Amendments within the study area are approved and implemented; and that the five casinos in the study area are built to their ultimate planned densities.

The SANDAG Series 11 is a Year 2030 development forecast, which assumes development of each parcel consistent to its General Plan land use. This is then applied to the existing counts. Then, any project requiring a General Plan Amendment is added to the model forecast, including the five casinos in the study area. Table 4-1 shows a list of General Plan Amendments and casino cumulative projects. Appendix E contains the exhaustive list of all cumulative projects within the project study area along with additional information on volume development.

Table 4-1
Cumulative Projects - General Plan Amendments and Casinos

Name	Permit #	Description
Campus Park West	TM 5424	Residential, Commercial, Office, and Park
Meadowood	TM 5354	Residential, School, and Park
Olive Hill	TM 4976	Residential
Pala Mesa Highlands	TM 5187	Residential, Community Center, and Park
Pala Mesa Resort	TM 5534	Hotel
Palomar Community College	MUP 87-021	Community College
Passerelle / Campus Park	TM 5338	Residential, Commercial, Office, Park, and Sports Complex
Rancho Lilac	TM 5385	Residential, Commercial, Fire Station, Sheriff Annex, Park, and Agriculture
----	TM 5263	Residential
Spanish Valley Ranch (Loranda)	TM 5173	Residential
Vista Valley Country Club	MUP 77-128	Club House
----	TM 5166	Residential
Hidden Meadows	TM 5175 TM 5176	Residential
San Pasqual Casino	----	Casino, Hotel, and Restaurant
Rincon Casino	----	Casino, Hotel, and Restaurant
Pala Casino	----	Casino and Restaurant
Pauma Casino	----	Casino, Hotel, Restaurant, and Office
Santa Ysabel Casino	----	Casino and Restaurant
La Jolla Casino	----	Casino, Hotel, and Restaurant
Segal Ranch	TM 5173	Residential, Market, and Community Park

Note: This is a partial list of cumulative projects that includes General Plan Amendment projects and casinos. The complete list of cumulative projects can be found in Appendix E.

CUMULATIVE CIRCULATION NETWORK

The following circulation network changes consisting of planned intersections improvements for some of the cumulative projects named are assumed and will apply for this chapter:

- State Route 76 / Pankey Road
- State Route 76 / Horse Ranch Creek Road

The effect of the proposed project on the study area circulation network shown in Figure 4-1 was evaluated. Figures 4-2 through 4-4 show the cumulative roadway segment and intersection conditions with the proposed project. Tables 4-2 through 4-5 show the cumulative segment, intersection and freeway mainline analysis respectively.

Table 4-2
Cumulative With Project Roadway Segment Conditions

Roadway Segment	Lanes/ Class	LOS E Capacity	Existing			Existing + Cumulative			Existing + Cumulative + Project			Δ Traffic	Δ v/c	Cumulative Impact?	CMP Impact?	
			ADT	V/C	LOS	ADT	V/C	LOS	ADT	V/C	LOS					
State Route 76																
E. Vista Way to N. River Road	2SR	22,900	28,805	1.258	F	56,706	2.476	F	57,108	2.494	F	402	0.018	Yes	No	
N. River Road to Camino Del Rey	2SR	22,900	39,736	1.735	F	66,900	2.921	F	67,438	2.945	F	538	0.023	Yes	Yes	
Camino Del Rey to S. Mission Road	2SR	22,900	39,316	1.717	F	72,950	3.186	F	73,556	3.212	F	606	0.026	Yes	Yes	
S. Mission Road to Gird Road	2SR	22,900	26,752	1.168	F	48,854	2.133	F	49,550	2.164	F	696	0.030	Yes	Yes	
Gird Road to Old Hwy 395	2SR	22,900	23,789	1.039	F	42,830	1.870	F	43,618	1.905	F	788	0.034	Yes	Yes	
Old Hwy 395 to I-15 SB Ramp	4C	34,200	29,407	0.860	D	41,913	1.226	F	42,785	1.251	F	872	0.025	Yes	Yes	
I-15 SB Ramp to I-15 NB Ramp	2SR	22,900	19,359	0.845	E	33,810	1.476	F	35,627	1.556	F	1,817	0.079	Yes	Yes	
I-15 NB Ramp to Pankey Road	4MR	37,000	11,031	0.298	A	30,811	0.833	D	33,575	0.907	E	2,764	0.075	Yes	Yes	
Pankey Road to Horse Ranch Creek Road	4MR	37,000	11,031	0.298	A	29,439	0.796	C	32,787	0.886	D	3,348	0.090	No	No	
Horse Ranch Creek Road to Rice Canyon Road	2SR	22,900	11,031	0.482	C	29,361	1.282	F	33,509	1.463	F	4,148	0.181	Yes	Yes	
Rice Canyon Road to Couser Canyon Road	2SR	22,900	11,031	0.482	C	29,308	1.280	F	33,820	1.477	F	4,512	0.197	Yes	Yes	
Couser Canyon Road to W. Pala Mission Road	2SR	22,900	10,224	0.446	C	29,358	1.282	F	34,028	1.486	F	4,670	0.204	Yes	Yes	
W. Pala Mission Road to E. Pala Mission Road	2SR	22,900	10,329	0.451	C	22,976	1.003	F	23,582	1.030	F	606	0.026	Yes	Yes	
E. Pala Mission Road to Lilac Road	2SR	22,900	8,821	0.385	C	25,300	1.105	F	25,906	1.131	F	606	0.026	Yes	Yes	
Lilac Road to Adams Drive	2SR	22,900	9,456	0.413	C	24,998	1.092	F	25,392	1.109	F	394	0.017	Yes	No	
Adams Drive to Cole Grade Road	2SR	22,900	9,090	0.397	C	24,006	1.048	F	24,376	1.064	F	370	0.016	Yes	No	
W. Pala Mission Road																
State Route 76 and Pala Temecula Road	2RC	16,200	4,711	0.291	C	5,992	0.370	C	7,210	0.445	D	1,218	0.075	No	No	
Pala Temecula Road																
Pala Mission Road to Trujillo Road	2RC	16,200	8,318	0.513	D	9,810	0.606	D	10,756	0.664	D	946	0.058	No	No	

Note: 2RC: 2-lane Rural Collector; 2SR: 2-lanes State Route; 4C: 4-lane Collector; 4MR: 4-lane Major

Table 4-3
Cumulative With Project Intersection Conditions AM Peak Hour

Intersection	Existing		Existing + Cumulative		Existing + Cumulative + Project		Δ Trips	Δ Delay	Cumulative Impact?	CMP Impact ?
	Delay	LOS	Delay	LOS	Delay	LOS				
AM Peak Hour										
1. SR 76 / E. Vista Way	84.1	F	252.1	F	256.6	F	NA	4.5	Yes	Yes
2. SR 76/N. River Road	21.1	C	220.3	F	226.7	F	NA	6.4	Yes	Yes
3. SR 76/Olive Hill Road/Camino Del Rey	36.7	D	136.4	F	139.3	F	NA	2.9	Yes	Yes
4. SR 76/ S. Mission Road	28.8	C	184.9	F	188.9	F	NA	4.0	Yes	Yes
5. SR 76/ Gird Road	13.4	B	165.7	F	173.4	F	NA	7.7	Yes	Yes
6. Old Highway 395 / SR 76	31.1	C	160.4	F	162.7	F	NA	2.3	Yes	Yes
7. I-15 / SR 76 SB Ramp	31.1	C	197.6	F	221.1	F	NA	23.5	Yes	Yes
8. I-15 / SR 76 NB Ramp	23.6	C	95.8	F	127.7	F	NA	31.9	Yes	Yes
9. SR 76 / Pankey Road	10.7	B	21.0	C	22.0	C	4	1.0	No	No
10. SR 76 / Horse Ranch Creek Road	N/A	N/A	17.9	B	18.2	B	N/A	0.3	No	No
11. SR 76 / Rice Canyon Road ¹	11.2	B	114.7	F	465.8	F	9	351.1	Yes	Yes
12. SR 76 / Couser Canyon Road ¹	12.3	B	69.3	F	232.7	F	0	163.4	No ²	Yes
13. SR 76/Driveway	0.5	A	1.6	A	17.8	B	NA	16.2	No	No
14. SR 76 / W. Pala Mission Road	26.4	C	23.9	C	25.3	C	NA	1.4	No	No
15. Pala Mission Rd./ Pala Temecula Road ¹	9.7	A	13.3	B	15.2	C	0	1.9	No	No
16. SR 76 / Brittian Road ¹	9.1	A	10.8	B	11.0	B	0	0.2	No	No
17. SR 76/ E. Pala Mission Road ¹	12.5	B	34.0	D	39.5	E	0	5.5	No ²	Yes
18. SR 76/ Lilac Road ¹	11.8	B	25.8	D	28.5	D	5	2.7	No	No
19. SR 76 / Adams Drive ¹	10.1	B	13.9	B	14.2	B	0	0.3	No	No
20. SR 76 / Cole Grade Road ¹	17.0	C	287.0	F	307.2	F	1	20.2	No ²	Yes

¹ Significance of unsignalized intersections is determined by the number of added project trips to the critical movement.

² Intersection is not a direct impact. Significance criteria for unsignalized intersections are based upon a minimum number of trips added to a critical movement at an unsignalized intersection(20 at LOS E and 5 at LOS F), as seen in Table 2 of Chapter 4 in the *County of San Diego Guidelines for Determining Significance*.

Note: The change in trips added to the critical movement are only reported for unsignalized intersections operating at LOS E or F.

Table 4-4
Cumulative With Project Intersection Conditions PM Peak Hour

Intersection	Existing		Existing + Cumulative		Existing + Cumulative + Project		Δ Trips	Δ Delay	Cumulative Impact?	CMP Impact ?
	Delay	LOS	Delay	LOS	Delay	LOS				
PM Peak Hour										
1. SR 76 / E. Vista Way	68.7	E	248.2	F	253.9	F	NA	5.7	Yes	Yes
2. SR 76/N. River Road	34.5	C	310.1	F	318.4	F	NA	8.3	Yes	Yes
3. SR 76/Olive Hill Road/Camino Del Rey	40.7	D	206.5	F	211.1	F	NA	4.6	Yes	Yes
4. SR 76/ S. Mission Road	31.9	C	283.8	F	290.7	F	NA	6.9	Yes	Yes
5. SR 76/ Gird Road	11.6	B	241.7	F	251.7	F	NA	10.0	Yes	Yes
6. Old Highway 395 / SR 76	30.8	C	240.0	F	246.5	F	NA	6.5	Yes	Yes
7. I-15 / SR 76 SB Ramp	58.8	E	335.5	F	357.9	F	NA	22.4	Yes	Yes
8. I-15 / SR 76 NB Ramp	51.1	D	240.0	F	272.9	F	NA	32.9	Yes	Yes
9. SR 76 / Pankey Road	11.1	B	29.1	C	33.2	C	13	4.1	No	No
10. SR 76 / Horse Ranch Creek Road	N/A	N/A	18.7	B	19.7	B	NA	1.0	No	No
11. SR 76 / Rice Canyon Road ¹	13.3	B	531.2	F	Over flow	F	25	N/A	Yes	Yes
12. SR 76 / Couser Canyon Road ¹	14.8	B	297.6	F	933.8	F	0	636.2	No ²	Yes
13. SR 76/Driveway	0.5	A	2.3	A	19.3	B	NA	17.0	No	No
14. SR 76 / W. Pala Mission Road	27.6	C	25.0	C	35.5	D	NA	10.5	No	No
15. Pala Mission Rd./ Pala Temecula Road ¹	11.2	B	17.3	C	22.5	C	0	5.2	No	No
16. SR 76 / Brittian Road ¹	10.1	B	19.3	C	20.5	C	0	1.2	No	No
17. SR 76/ E. Pala Mission Road ¹	16.7	C	512.9	F	600.1	F	0	87.2	No ²	Yes
18. SR 76/ Lilac Road ¹	13.1	B	93.0	F	167.6	F	15	74.6	Yes	Yes
19. SR 76 / Adams Drive ¹	13.4	B	32.3	D	33.9	D	0	1.6	No	No
20. SR 76 / Cole Grade Road ¹	17.9	C	967.0	F	Over flow	F	2	N/A	No ²	Yes

¹ Significance of unsignalized intersections is determined by the number of added project trips to the critical movement.

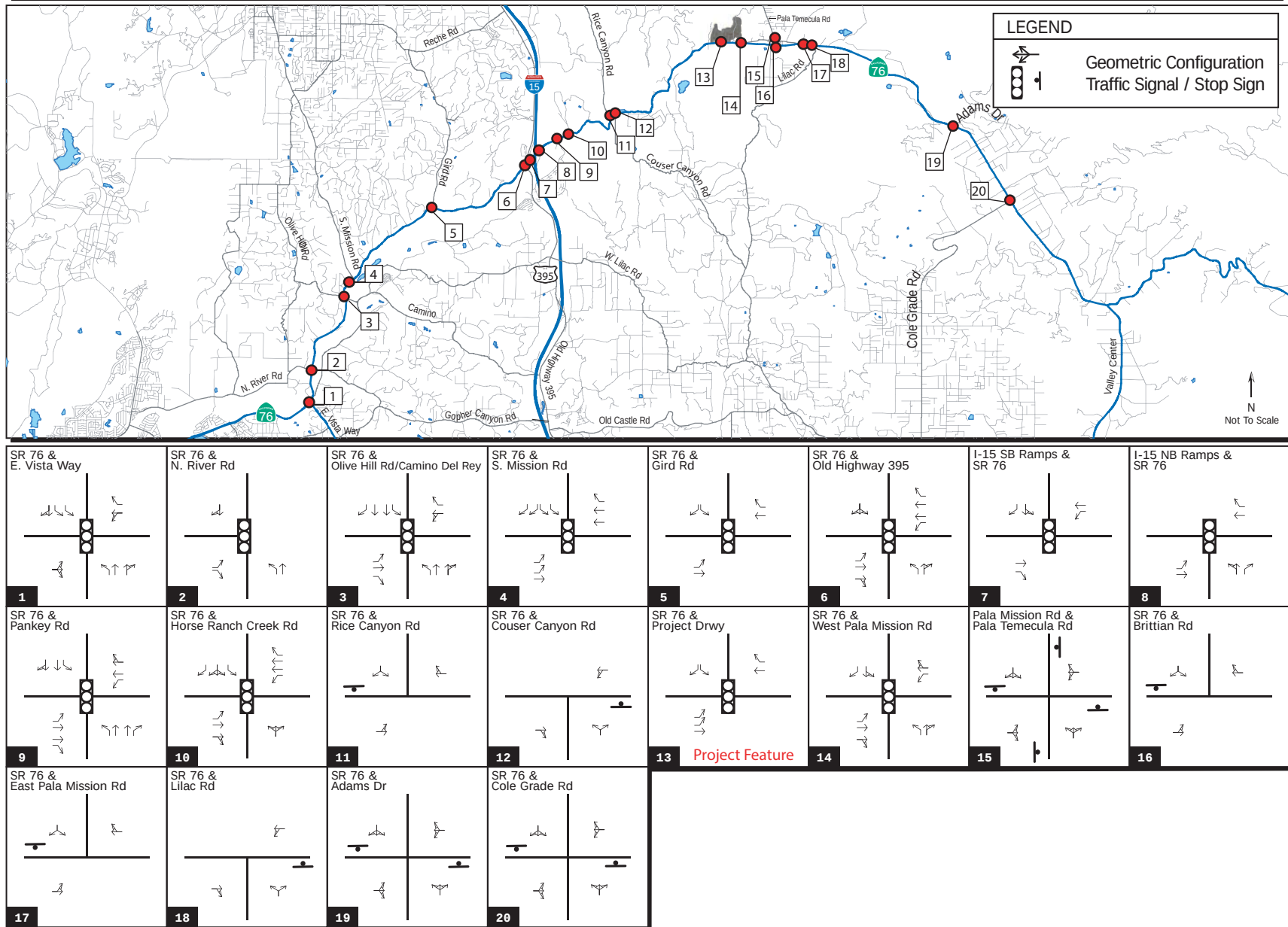
² Intersection is not a direct impact. Significance criteria for unsignalized intersections are based upon a minimum number of trips added to a critical movement at an unsignalized intersection(20 at LOS E and 5 at LOS F), as seen in Table 2 of Chapter 4 in the *County of San Diego Guidelines for Determining Significance*.

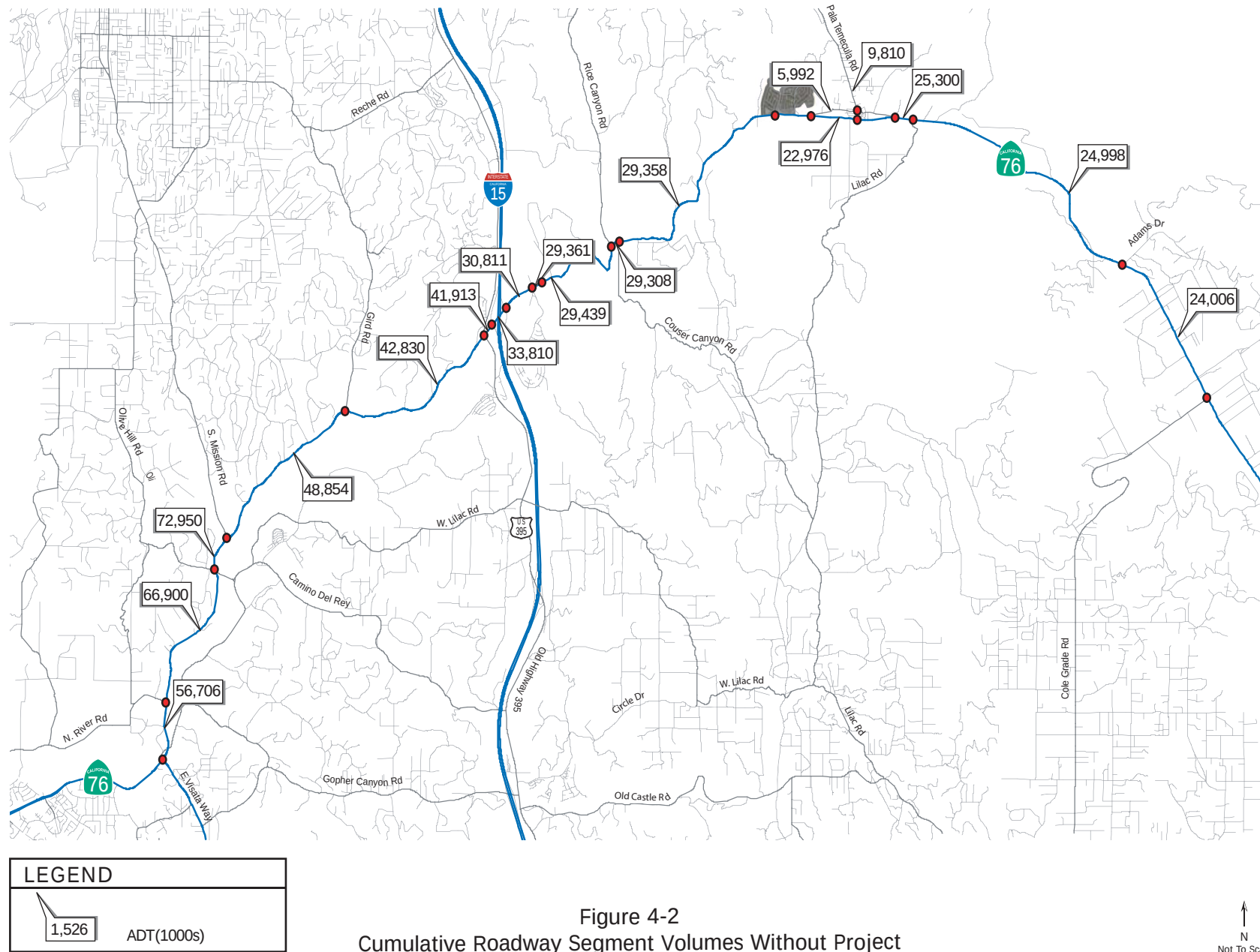
Note: The change in trips added to the critical movement are only reported for unsignalized intersections operating at LOS E or F.

**Table 4-5
Cumulative With Project Freeway Mainline Conditions**

Segment	Direction/ Lanes	Capacity	Grade (%)	Truck Proportion (%)	Truck Factor	Existing			Existing + Cumulative			Existing + Cumulative + Project			Δ V/C	Direct Impact?
						Peak Hour PCE ¹	V/C	LOS	Peak Hour PCE ¹	V/C	LOS	Peak Hour PCE ¹	V/C	LOS		
AM Peak Hour																
Interstate 15 North of SR 76	South/4	9,200	1.00%	2.00%	0.9901	6,569	0.714	C	8,444	0.918	D	8,458	0.919	D	0.002	No
Interstate 15 South of SR 76	South/4	9,200	1.00%	2.00%	0.9901	6,195	0.673	C	7,707	0.838	D	7,849	0.853	D	0.015	No
PM Peak Hour																
Interstate 15 North of SR 76	North/4	9,200	1.00%	2.00%	0.9901	6,283	0.683	C	8,895	0.967	E	8,912	0.969	E	0.002	No
Interstate 15 South of SR 76	North/4	9,200	1.00%	2.00%	0.9901	6,094	0.662	C	7,763	0.844	D	7,936	0.863	D	0.019	No

¹Passenger Car Equivalent





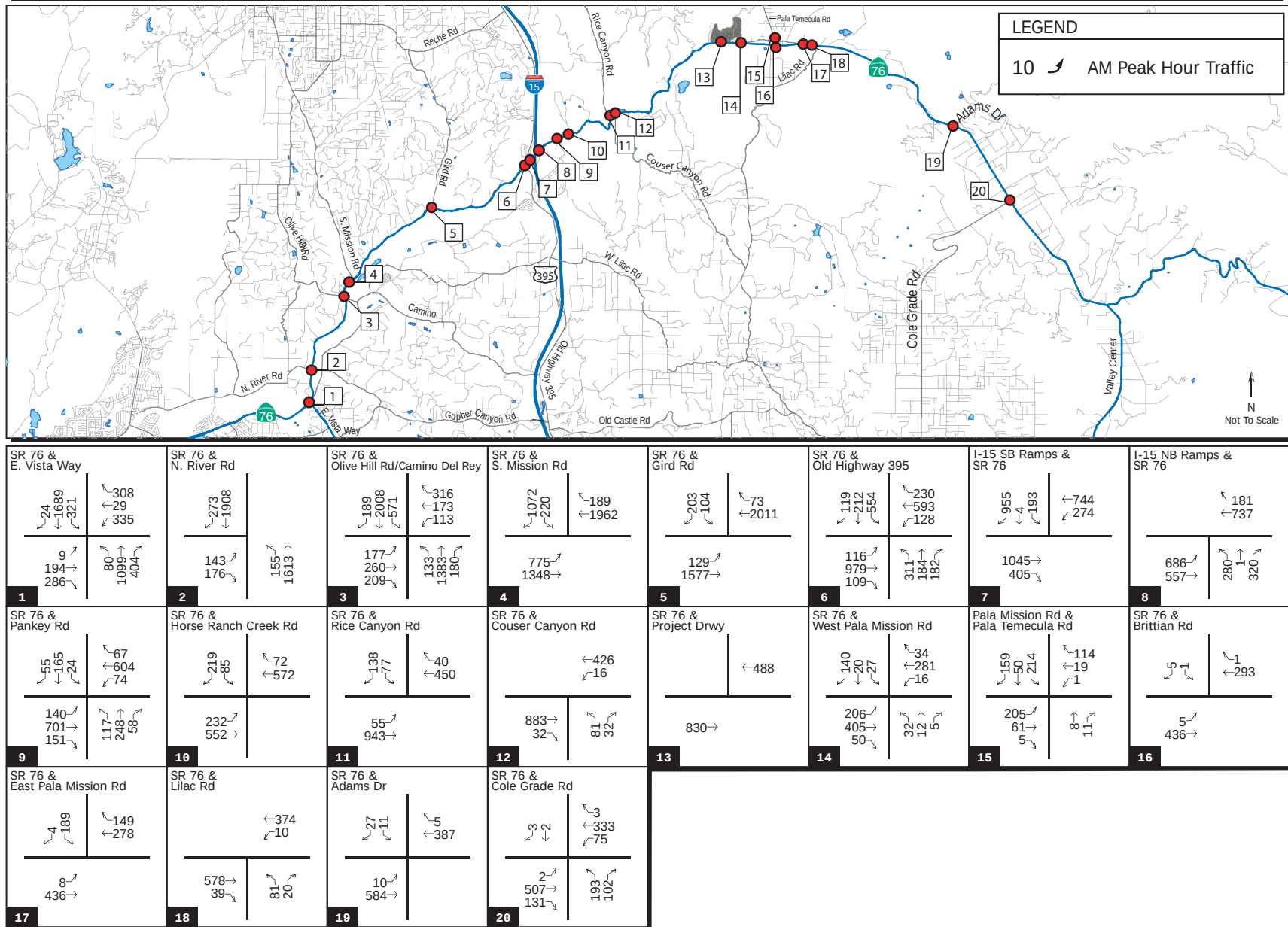


Figure 4-3
Cumulative AM Peak Hour Intersection Volumes Without Project

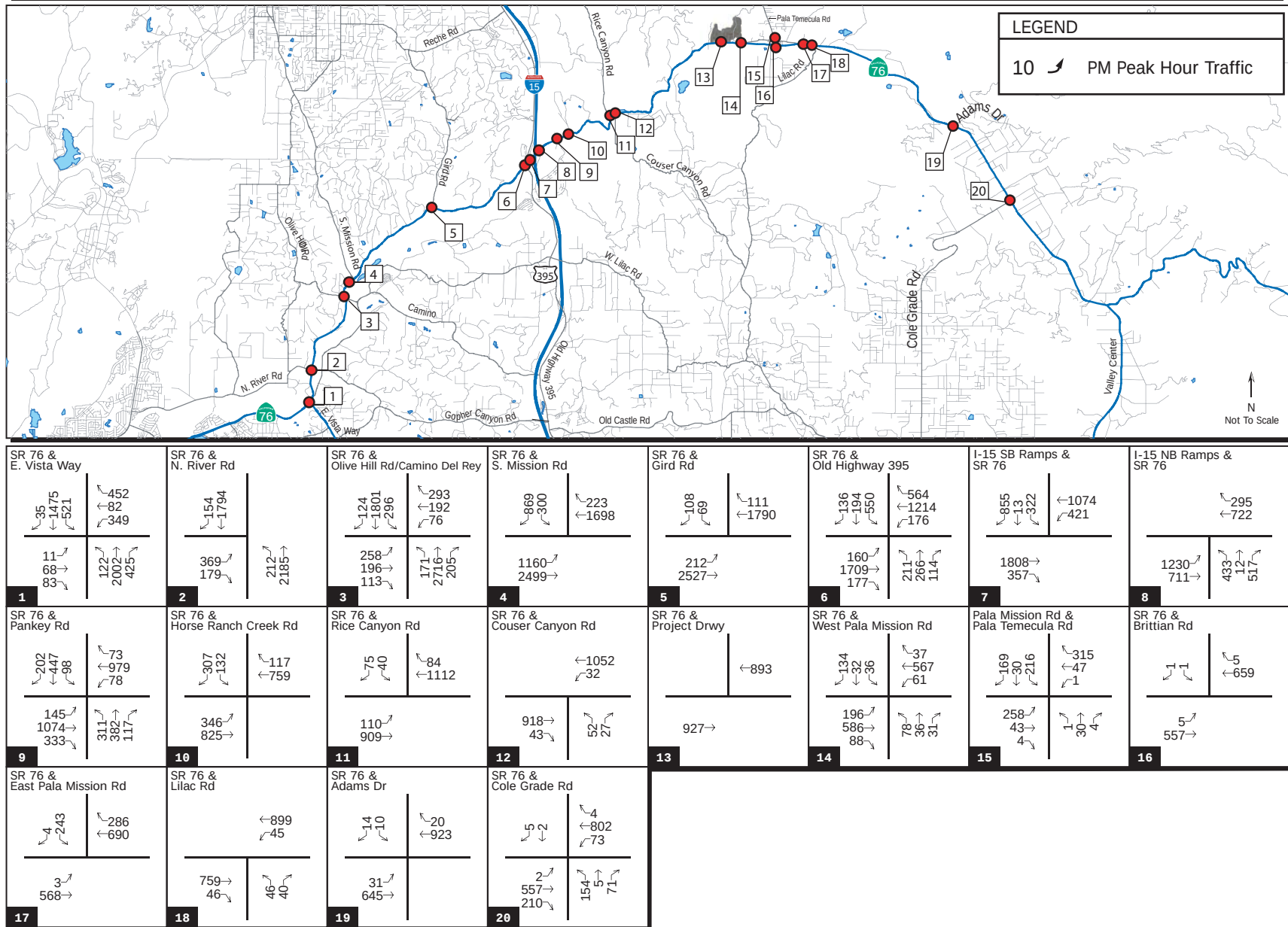


Figure 4-4
Cumulative PM Peak Hour Intersection Volumes Without Project

