

**Figure 4.7d Industrial Auto Trip Driveway Outbound Trip Distribution**



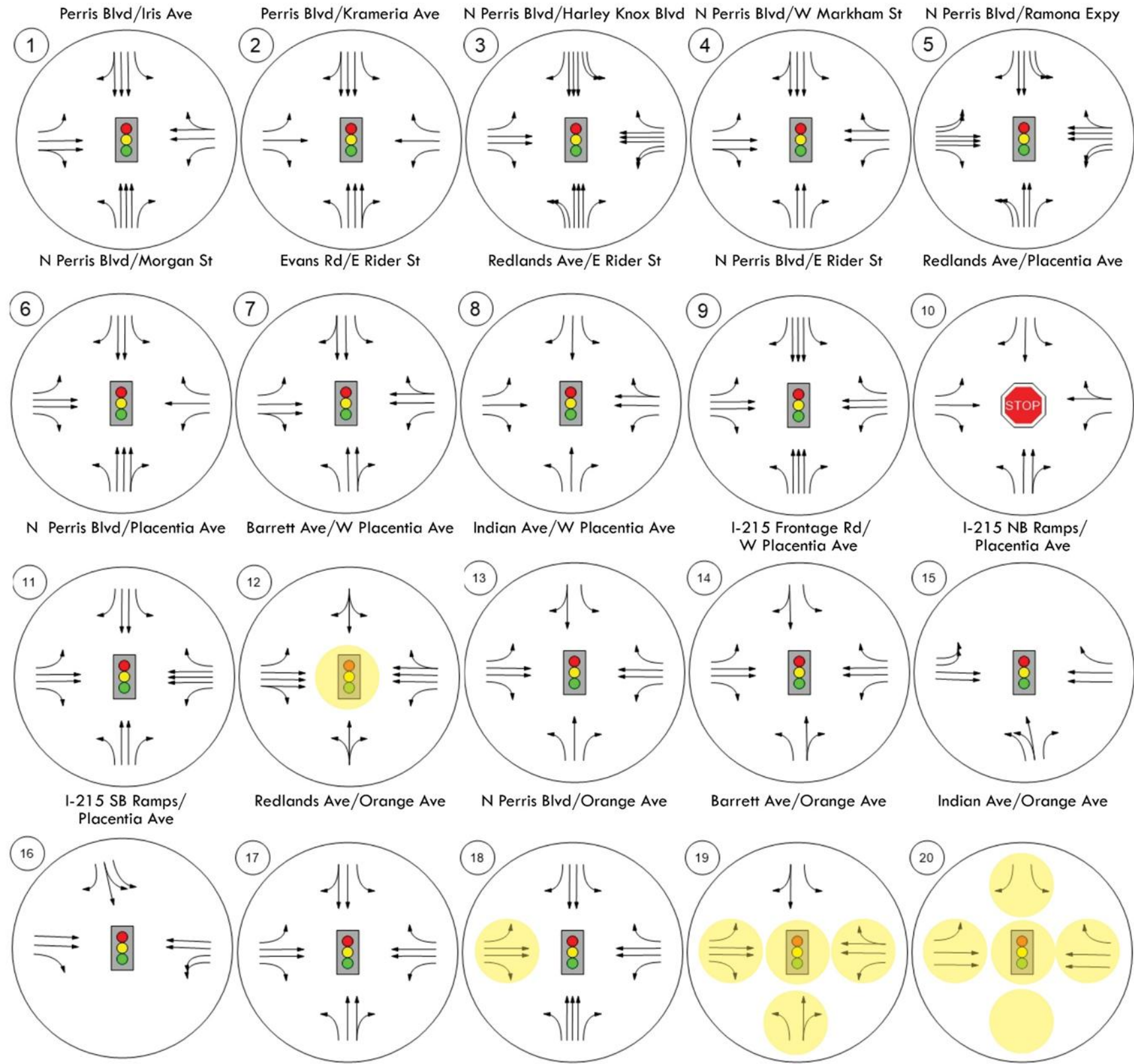
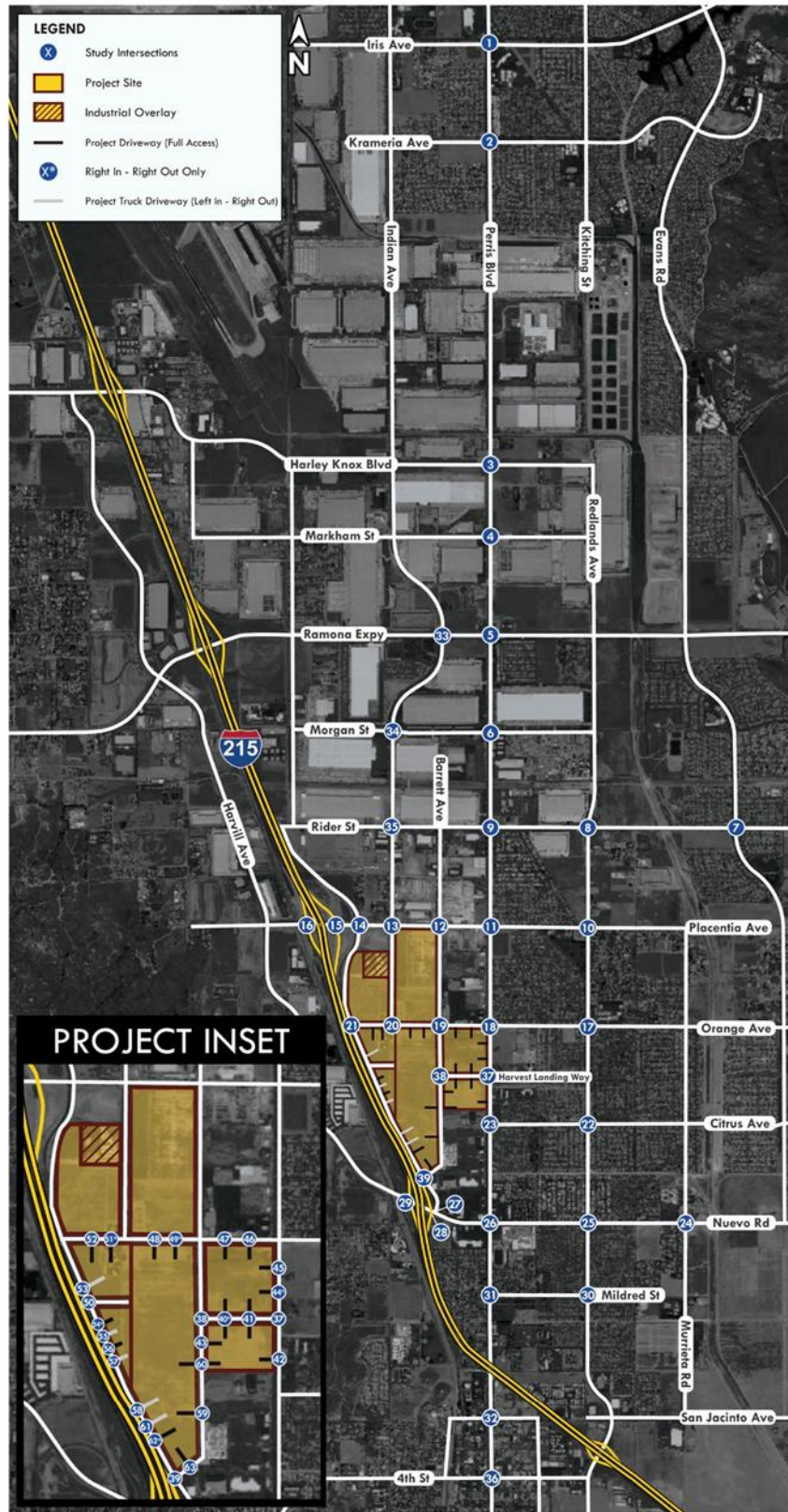
**Figure 4.7e Commercial Auto Trip Driveway Inbound Distribution**



**Figure 4.7f Commercial Auto Trip Driveway Outbound Trip Distribution**



Figure 4.8a: Post-Project Completion Intersection Lane Configuration and Traffic Control



Yellow circle icon: Lane Configuration Changes

Figure 4.8b: Post-Project Completion Intersection Lane Configuration and Traffic Control (Continued)



● Lane Configuration Changes

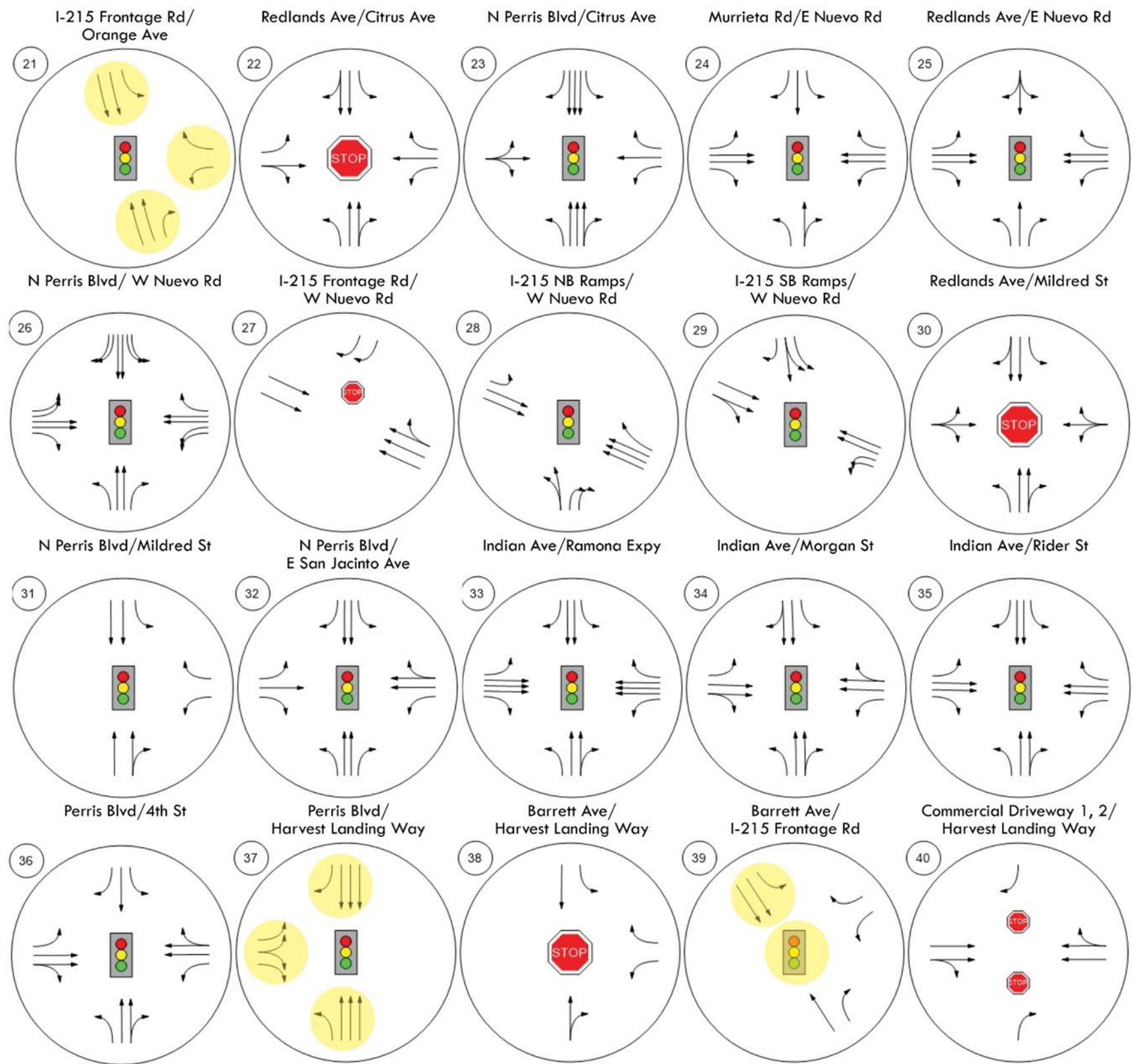


Figure 4.8c: Post-Project Completion Intersection Lane Configuration and Traffic Control (Continued)

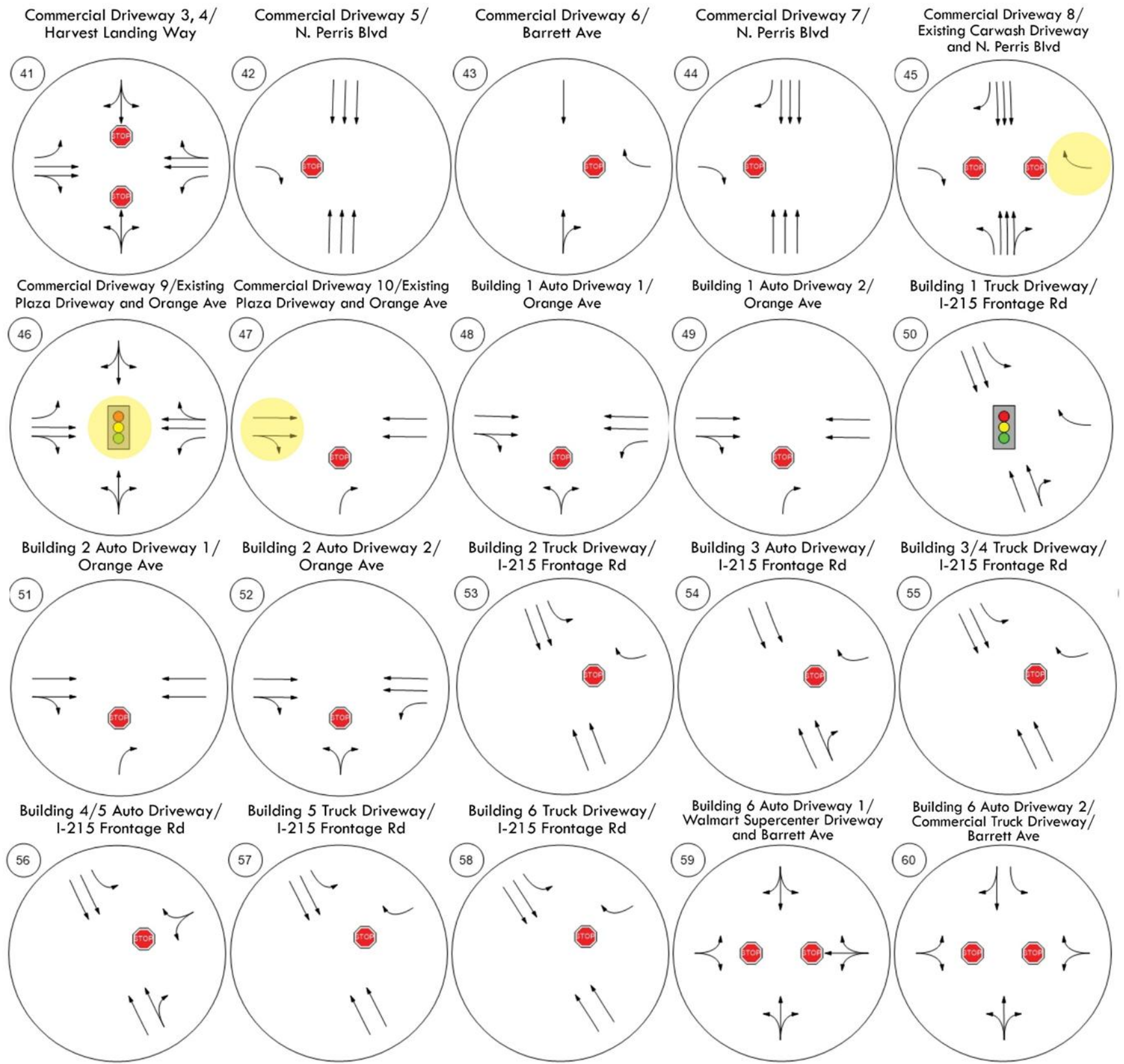
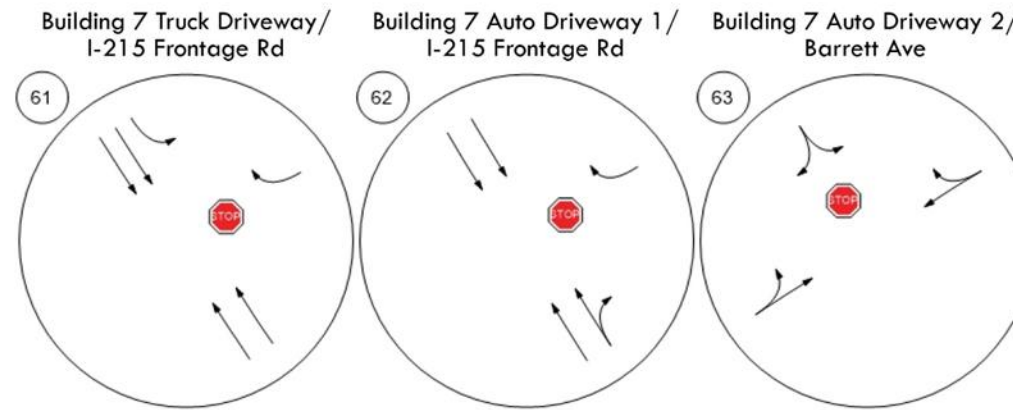
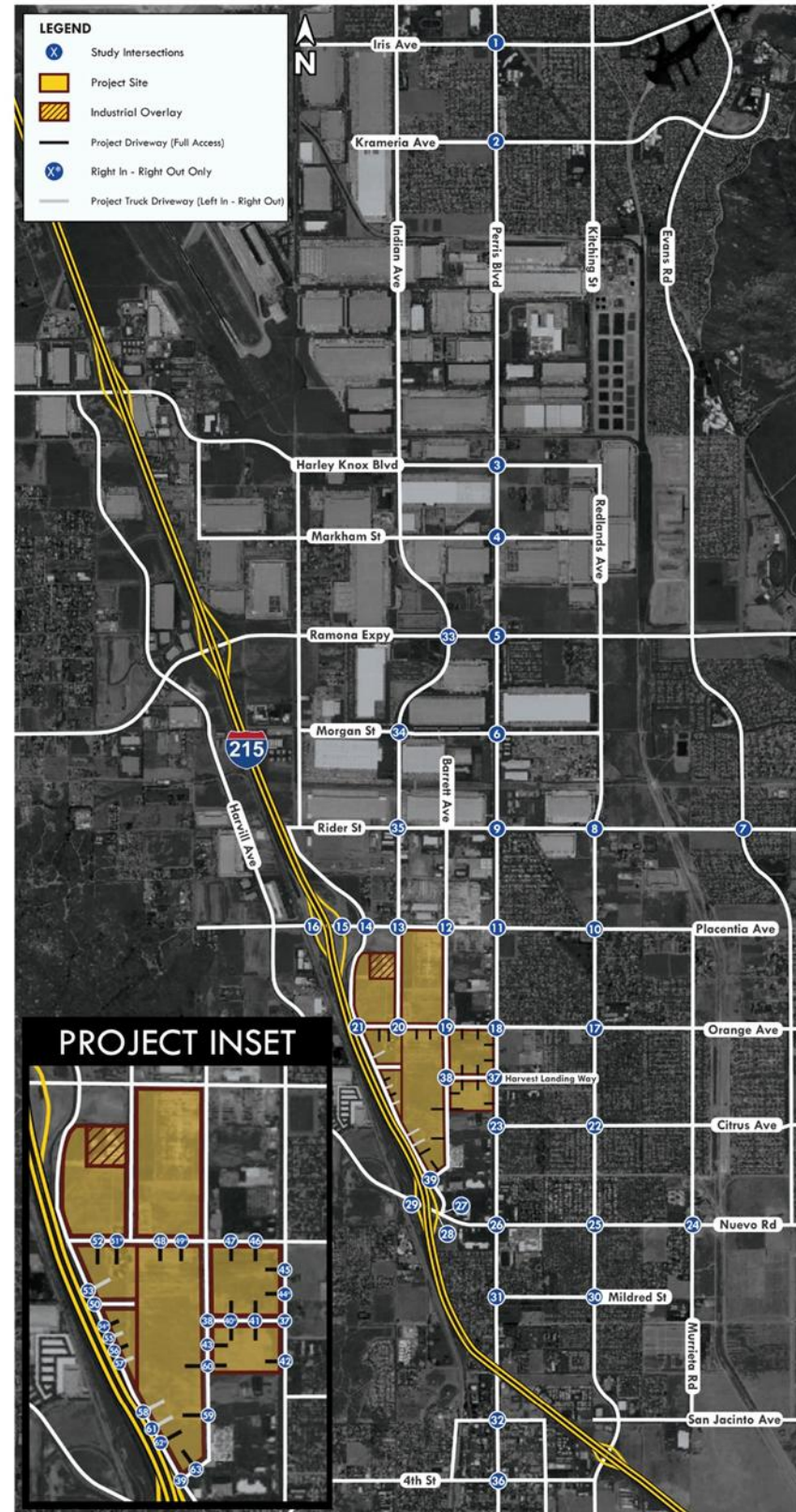


Figure 4.8d: Post-Project Completion Intersection Lane Configuration and Traffic Control (Continued)



## 5 WITH PROJECT CONDITIONS

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### 5.1 Opening Year I 2026 With Project Traffic Conditions

Opening Year I 2026 With Project Traffic were determined by adding the Project trips to the Opening Year 2026 I Without Project traffic volumes. The Opening Year I 2026 With Project AM and PM peak hour traffic volumes at the study area intersections are shown in Figure 5.1 and Figure 5.2 respectively. The Opening Year I 2026 Project trip assignments for the AM and PM peak hours are shown in Figure 5-3 and Figure 5-4, respectively.

The Project proposes to remove 2,700 feet of Indian Avenue between Orange Avenue and I-215 Frontage Road South. The Project would also construct the planned segment of Barrett Ave south of Orange Avenue from Orange Avenue to the existing southern portion of Barrett Avenue that connects to I-215 Frontage Road. As part of the analysis for this scenario, the inbound trips to Indian Avenue at intersection #20 (Indian Avenue/Orange Avenue) were redirected to intersection #21 (I-215 Frontage Rd/Orange Ave) and ultimately to intersection #39 (Barrett Ave/I-215 Frontage Road). Additionally, the outbound trips originating from Indian Avenue were rerouted from intersection #39 (Barrett Ave/I-215 Frontage Road) to intersection #19 (Barrett Ave/Orange Ave), and finally to intersection #20 (Indian Avenue/Orange Ave) as a westbound right-turn.

An intersection operations analysis was conducted for the study area to evaluate the Opening Year I 2026 With Project AM and PM peak hour conditions. Intersection operations were calculated using the LOS methodology described previously in Section 2.3 - Methodology. Table 5.1 provides a comparison between the Opening Year I 2026 Without and With-Project scenarios.

As shown in Table 5.1, the following four (4) intersections would operate at an unsatisfactory LOS under the Opening Year I 2026 With Project conditions:

- #1. Perris Blvd/Iris Ave (LOS E during AM peak hour)
- #18. N Perris Blvd/Orange Ave (LOS E during AM peak hour)
- #26. N Perris Blvd/ W Nuevo Rd (LOS E during AM and PM peak hour)
- #27. I-215 Frontage Rd/W Nuevo Rd (LOS F during PM peak hour)

Recommended improvements for intersections with an unsatisfactory LOS can be found in Section 6.

**Table 5.1: Opening Year I 2026 With Project AM and PM Peak Hour LOS**

Intersection	Jurisdiction	Control Type	Opening Year I 2026 Conditions		Opening Year I 2026 Plus Project Conditions				Difference		LOS Standard	Satisfactory?		
			AM Peak		PM Peak		AM Peak		PM Peak					
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS				
1. Perris Blvd/Iris Ave	City of Moreno Valley	Signalized	63.1	E	51.3	D	65.0	E	53.5	D	1.9	2.2	D	No
2. Perris Blvd/Krameria Ave	City of Moreno Valley	Signalized	44	D	39.5	D	48.2	D	44.3	D	4.2	4.8	D	Yes
3. N Perris Blvd/Harley Knox Blvd	City of Perris	Signalized	32.6	C	32.1	C	32.7	C	32.3	C	0.1	0.2	D	Yes
4. N Perris Blvd/W Markham St	City of Perris	Signalized	14.1	B	15.2	B	14.6	B	15.7	B	-0.5	0.5	D	Yes
5. N Perris Blvd/Ramona Expy	City of Perris	Signalized	74.3	E	48.2	D	78.1	E	52.4	D	3.8	4.2	E	Yes
6. N Perris Blvd/Morgan St	City of Perris	Signalized	11.7	B	10.7	B	11.9	B	10.8	B	0.2	0.1	D	Yes
7. Evans Rd/E Rider St	City of Perris	Signalized	30.4	C	28.7	C	31.0	C	29.9	C	0.6	1.2	D	Yes
8. Redlands Ave/E Rider St	City of Perris	Signalized	30.2	C	37.0	D	30.4	C	37.2	D	0.2	0.2	D	Yes
9. N Perris Blvd/E Rider St	City of Perris	Signalized	25.9	C	28.3	C	27.5	C	29.3	C	1.6	1	D	Yes
10. Redlands Ave/Placentia Ave	City of Perris	All-way stop	17.7	C	19.0	C	18.6	C	20.7	C	0.9	1.7	D	Yes
11. N Perris Blvd/Placentia Ave	City of Perris	Signalized	37.8	D	32.0	C	41.0	D	35.8	D	3.2	3.8	D	Yes
12. Barrett Ave/W Placentia Ave	City of Perris	Signalized	25	D	17.4	C	26.9	C	24.8	C	1.9	7.4	D	Yes
13. Indian Ave/W Placentia Ave	City of Perris	Signalized	36.7	D	34.8	C	50.3	D	38.5	D	13.6	3.7	D	Yes
14. I-215 Frontage Rd/W Placentia Ave	City of Perris	Signalized	29.1	C	21.1	C	28.7	C	23.1	C	-0.4	2	D	Yes
15. I-215 NB Ramps/Placentia Ave	Caltrans/City of Perris	Signalized	15.3	B	13.9	B	14.9	B	13.1	B	-0.4	-0.8	E	Yes
16. I-215 SB Ramps/Placentia Ave	Caltrans/City of Perris	Signalized	16.8	B	20.0	B	16.9	B	23.3	C	0.1	3.3	E	Yes
17. Redlands Ave/Orange Ave	City of Perris	Signalized	25.9	C	28.6	C	26.7	C	30.3	C	0.8	1.7	D	Yes
18. N Perris Blvd/Orange Ave	City of Perris	Signalized	24.2	C	32.2	C	45.9	D	57.7	E	22.7	25.5	D	No
19. Barrett Ave/Orange Ave	City of Perris	Signalized	19.4	C	15.2	C	9.9	A	11.6	B	-9.5	-3.6	D	Yes
20. Indian Ave/Orange Ave	City of Perris	Signalized	14.0	B	11.8	B	14.6	B	13.2	B	0.6	1.4	D	Yes
21. I-215 Frontage Rd/Orange Ave	City of Perris	Signalized	14.4	B	14.8	B	9.5	A	9.1	A	-4.9	-5.7	D	Yes
22. Redlands Ave/Citrus Ave	City of Perris	All-way stop	12.3	B	13.7	B	12.9	B	14.8	B	0.6	1.1	D	Yes
23. N Perris Blvd/Citrus Ave	City of Perris	Signalized	14.7	B	19.8	B	15.2	B	23.5	C	0.5	3.7	D	Yes
24. Murrieta Rd/E Nuevo Rd	City of Perris	Signalized	39.3	D	31.6	C	40.2	D	32.1	C	0.9	0.5	D	Yes
25. Redlands Ave/E Nuevo Rd	City of Perris	Signalized	23.6	C	22.7	C	23.7	C	22.9	C	0.1	0.2	D	Yes
26. N Perris Blvd/W Nuevo Rd	City of Perris	Signalized	43.4	D	40.9	D	70.6	E	66.9	E	27.2	26	D	No
27. I-215 Frontage Rd/W Nuevo Rd	City of Perris	Two-way stop	21.1	C	30.3	D	27.5	D	62.1	F	6.4	31.8	D	No
28. I-215 NB Ramps/W Nuevo Rd	Caltrans/City of Perris	Signalized	18.4	B	21.3	C	18.8	B	22.1	C	0.4	0.8	E	Yes
29. I-215 SB Ramps/W Nuevo Rd	Caltrans/City of Perris	Signalized	18.4	B	29.0	C	20.3	C	33.8	C	1.9	4.8	E	Yes
30. Redlands Ave/Midred St	City of Perris	All-way stop	21.6	C	13.7	B	23.0	C	14.4	B	1.4	0.7	D	Yes
31. N Perris Blvd/Midred St	City of Perris	Signalized	14.3	B	7.6	A	15.8	B	8.3	A	1.5	0.7	D	Yes
32. N Perris Blvd/E San Jacinto Ave	City of Perris	Signalized	26.9	C	20.7	C	28.8	C	21.9	C	1.9	1.2	D	Yes
33. Indian Ave/Ramona Expy	City of Perris	Signalized	32.5	C	36.6	D	32.8	C	37.3	D	0.3	0.7	E	Yes
34. Indian Ave/Morgan St	City of Perris	Signalized	20.1	C	16.6	B	19.6	B	16.0	B	-0.5	-0.6	D	Yes
35. Indian Ave/Rider St	City of Perris	Signalized	22.0	C	31.3	C	21.5	C	30.6	C	-0.5	-0.7	D	Yes
36. Perris Blvd/4th St	Caltrans/City of Perris	Signalized	57.9	E	50.5	D	69.7	E	64.7	E	11.8	14.2	E	Yes
37. Perris Blvd/Harvest Landing Way	City of Perris	Signalized	-	-	-	-	10.6	B	13.3	B	-	-	D	Yes
38. Barrett Ave/Harvest Landing Way	City of Perris	All-way stop	-	-	-	-	7.9	A	8.1	A	-	-	D	Yes
39. Barrett Ave/I-215 Frontage Road	City of Perris	Signalized	12.6	B	14.3	B	16.7	B	15.3	B	4.1	1	D	Yes
40. Commercial Driveway 1, 2 and Harvest Landing Way	City of Perris	Two-way stop	-	-	-	-	8.5	A	8.6	A	-	-	D	Yes
41. Commercial Driveway 3, 4 and Harvest Landing Way	City of Perris	Two-way stop	-	-	-	-	12.7	B	15.1	C	-	-	D	Yes
42. Commercial Driveway 5 and N. Perris Blvd	City of Perris	Two-way stop	-	-	-	-	11.9	B	12.6	B	-	-	D	Yes
43. Commercial Driveway 6 and Barrett Ave	City of Perris	Two-way stop	-	-	-	-	8.5	A	8.6	A	-	-	D	Yes
44. Commercial Driveway 7 and N. Perris Blvd	City of Perris	Two-way stop	-	-	-	-	11.3	B	11.6	B	-	-	D	Yes
45. Commercial Driveway 8 and N. Perris Blvd	City of Perris	Two-way stop	15.2	C	10.6	B	11.6	B	11.9	B	-	-	D	Yes
46. Commercial Driveway 9/Existing Plaza Driveway and Orange Ave	City of Perris	Signalized	21.2	C	32.3	D	8.7	A	11.3	B	-12.5	-21	D	Yes
47. Commercial Driveway 10/Orange Ave	City of Perris	Two-way stop	-	-	-	-	9.9	A	9.9	A	-	-	D	Yes
48. Building 1 Auto Driveway 1 and Orange Ave	City of Perris	Two-way stop	-	-	-	-	10.5	B	10.0	B	-	-	D	Yes
49. Building 1 Auto Driveway 2 and Orange Ave	City of Perris	Two-way stop	-	-	-	-	8.7	A	8.7	A	-	-	D	Yes
50. Building 1 Truck Driveway and I-215 Frontage Rd	City of Perris	Signalized	-	-	-	-	5.5	A	5.1	A	-	-	D	Yes
51. Building 2 Auto Driveway 1 and Orange Ave	City of Perris	Two-way stop	-	-	-	-	8.5	A	8.5	A	-	-	D	Yes
52. Building 2 Auto Driveway 2 and Orange Ave	City of Perris	Two-way stop	-	-	-	-	9.2	A	9.1	A	-	-	D	Yes
53. Building 2 Truck Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	8.6	A	8.7	A	-	-	D	Yes
54. Building 3 Auto Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	8.5	A	8.7	A	-	-	D	Yes
55. Building 3 Auto Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	8.4	A	8.5	A	-	-	D	Yes
56. Building 3/4 Truck Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	9.0	A	9.0	A	-	-	D	Yes
57. Building 5 Truck Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	7.3	A	7.3	A	-	-	D	Yes
58. Building 6 Truck Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	8.4	A	8.4	A	-	-	D	Yes
59. Building 6 Auto Driveway 1/Walmart Supercenter Driveway and Barrett Ave	City of Perris	Two-way stop	-	-	-	-	9.6	A	10.2	B	-	-	D	Yes
60. Building 6 Auto Driveway 2 and Barrett Ave	City of Perris	Two-way stop	-	-	-	-	9.9	A	10.3	B	-	-	D	Yes
61. Building 7 Truck Driveway and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	8.4	A	8.4	A	-	-	D	Yes
62. Building 7 Auto Driveway 1 and I-215 Frontage Rd	City of Perris	Two-way stop	-	-	-	-	8.4	A	8.4	A	-	-	D	Yes
63. Building 7 Auto Driveway 2 and Barrett Ave	City of Perris	Two-way stop	-	-	-	-	9.1	A	9.2	A	-	-	D	Yes

Notes: Delay Reported in Seconds per Vehicle  
LOS = Level of Service

**Unsatisfactory Level of Service**

### 5.1.1 Opening Year I 2026 With Project Intersection Queueing Analysis

A queueing analysis was conducted at four study intersections during AM and PM peak hour involving ramps along the I-215. These intersections include Intersection #15 at I-215 Northbound Ramps and Placentia Avenue, Intersection #16 at I-215 Southbound Ramps and Placentia Avenue, Intersection #28 at I-215 Northbound Ramps and West Nuevo Road, and Intersection #29 at I-215 Southbound Ramps and West Nuevo Road. The required queueing length at the study area intersections were determined using 95-percentile queue length analysis. *Table 5.2* shows the queue lengths at each intersection approach. As shown in *Table 5.2*, queueing deficiencies were observed under Opening Year I 2026 With Project Conditions, for the following approaches:

- #28. I-215 Northbound Ramps/West Nuevo Road – eastbound left-turn lane (PM peak hour)
- #28. I-215 Northbound Ramps/West Nuevo Road – westbound right-turn lane (AM and PM peak hour)
- #29. I-215 Southbound Ramps/West Nuevo Road – westbound left-turn lane (PM peak hour)

Even though the queue length for the NBR and NBL at intersection #28 exceeds the available storage length, it can still be safely accommodated. This is due to the fact that the queue falls within the additional 260 feet of storage provided beyond the back of the striping storage pocket that extends past the NBR and NBL lanes. Similarly, an additional 360 feet of storage is provided for the SBL at intersection #29, ensuring that the queue can also be safely accommodated there.

**Table 5.2: Opening Year I 2026 With Project AM and PM Peak Hour Queuing Analysis**

	Opening Year I 2026 Conditions								Opening Year I 2026 Plus Project								Difference							
	Northbound		Southbound		Eastbound		Westbound		Northbound		Southbound		Eastbound		Westbound		Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT
<b>15. I-215 NB Ramps/Placentia Ave</b>																								
Storage Length Per Lane	570	570	-	-	280	-	-	390	570	570	-	-	280	-	-	390	570	570	-	-	280	-	-	390
AM Queue Length Per Lane	55	245	-	-	35	-	-	195	65	305	-	-	35	-	-	240	10	60	-	-	0	-	-	45
PM Queue Length Per Lane	45	260	-	-	125	-	-	270	55	320	-	-	125	-	-	360	10	60	-	-	0	-	-	90
<b>16. I-215 SB Ramps/Placentia Ave</b>																								
Storage Length Per Lane	-	-	340	340	-	320	315	-	-	-	340	340	-	320	315	-	-	-	340	340	-	320	315	-
AM Queue Length Per Lane	-	-	90	35	-	40	90	-	-	-	145	40	-	40	100	-	-	-	55	5	-	0	10	-
PM Queue Length Per Lane	-	-	190	40	-	90	205	-	-	-	290	40	-	90	215	-	-	-	100	0	-	0	10	-
<b>28. I-215 NB Ramps/W Nuevo Rd</b>																								
Storage Length Per Lane	170*	170*	-	-	135	-	-	200	170*	170*	-	-	135	-	-	200	170*	170*	-	-	135	-	-	200
AM Queue Length Per Lane	185	140	-	-	120	-	-	275	190	195	-	-	120	-	-	280	5	55	-	-	0	-	-	5
PM Queue Length Per Lane	90	190	-	-	200	-	-	365	95	265	-	-	200	-	-	375	5	75	-	-	0	-	-	10
<b>29. I-215 SB Ramps/W Nuevo Rd</b>																								
Storage Length Per Lane	-	-	185**	185	-	N/A	315	-	-	-	185**	185	-	N/A	315	-	-	-	185*	185	-	N/A	315	-
AM Queue Length Per Lane	-	-	170	85	-	245	155	-	-	-	220	100	-	245	195	-	-	-	50	15	-	0	40	-
PM Queue Length Per Lane	-	-	310	75	-	235	255	-	-	-	435	105	-	300	400	-	-	-	125	30	-	65	145	-

Notes:

**Queueing Impacts**

LT = Left-turn Lane, RT = Right-turn Lane

Queue length reported in feet for the AM(PM) peak periods and are rounded up to the nearest increment of 5 feet.

\*Even though the queue length exceeds the available storage length, it can still be safely accommodated. This is due to the fact that the queue falls within the additional 260 feet of storage provided beyond the back of the striping storage pocket that extends past the NBR and NBL lanes.

\*\*Even though the queue length exceeds the available storage length, it can still be safely accommodated. This is due to the fact that the queue falls within the additional 360 feet of storage provided beyond the back of the striping storage pocket that extends past the SBL lanes.

### 5.1.2 Opening Year I 2026 With Project Driveways Queueing Analysis

A full queueing analysis was conducted at all the Project driveways under the Opening Year I 2026 With Project Conditions to ensure that queueing remains within acceptable storage limits. Driveway access spacing is in accordance with Riverside County Standard Plan No. 114, and the driveway spacing measurements have been provided in Appendix F.

The required queueing length at the study area intersections were determined using 95-percentile queue length analysis. *Table 5.3a* shows the queue lengths at each Project driveway approach. *Table 5.3b* assess whether queues from these adjacent intersections would potentially block any project access points based on the followings:

- Queue length at adjacent study intersections compared to the distance to the closest project driveway, in order to assess whether queues from these adjacent intersections would potentially block any project access points.
- Queue length for through movements along Orange Avenue (from Barrett Avenue to Perris Boulevard) compared to the distance to the closest project driveway, in order to assess whether queues from through movements will stack back and block driveways.

As shown in *Table 5.3a* and *Table 5.3b*, queueing deficiencies were not observed under Opening Year I 2026 With Project Conditions. Therefore, no alternative access configurations are needed, as the driveway queueing analysis indicates no queueing deficiencies or safety concerns at any Project driveways.

**Table 5.3a: Opening Year I 2026 With Project AM and PM Peak Hour Project Driveways Queuing Analysis**

	Opening Year I 2026 Plus Project Conditions																							
	Northbound		Southbound		Eastbound		Westbound		Northbound		Southbound		Eastbound		Westbound		Northbound		Southbound		Eastbound		Westbound	
	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT	LT	RT
	<b>40. Commercial Driveway 1, 2 and Harvest Landing Way</b>								<b>50. Building 1 Truck Driveway and I-215 Frontage Rd</b>								<b>58. Building 6 Truck Driveway and I-215 Frontage Rd</b>							
Storage Length Per Lane (ft)	N/A	226	N/A	46	N/A	424	N/A	224	N/A	165	200	N/A	N/A	N/A	N/A	300+	N/A	328	200	N/A	N/A	N/A	N/A	840
AM Queue Length Per Lane (ft)	N/A	25	N/A	25	N/A	0	N/A	0	N/A	0	25	N/A	N/A	N/A	N/A	25	N/A	0	25	N/A	N/A	N/A	N/A	0
PM Queue Length Per Lane (ft)	N/A	25	N/A	25	N/A	0	N/A	0	N/A	0	25	N/A	N/A	N/A	N/A	25	N/A	0	25	N/A	N/A	N/A	N/A	25
	<b>41. Commercial Driveway 3, 4 and Harvest Landing Way</b>								<b>51. Building 2 Auto Driveway 1 and Orange Ave</b>								<b>59. Building 6 Auto Driveway 1 and Barrett Ave</b>							
Storage Length Per Lane (ft)	226	226	40	40	160	245	160	343	N/A	39	N/A	N/A	N/A	213	N/A	N/A	N/A	707	200	692	40	40	100	100
AM Queue Length Per Lane (ft)	25	25	25	25	25	0	25	0	N/A	25	N/A	N/A	N/A	0	N/A	N/A	25	25	0	0	25	25	25	0
PM Queue Length Per Lane (ft)	25	25	25	25	25	0	25	0	N/A	25	N/A	N/A	N/A	0	N/A	N/A	25	25	0	0	25	25	25	0
	<b>42. Commercial Driveway 5 and N. Perris Blvd</b>								<b>52. Building 2 Auto Driveway 2 and Orange Ave</b>								<b>60. Building 6 Auto Driveway 2 and Barrett Ave</b>							
Storage Length Per Lane (ft)	N/A	N/A	N/A	507	N/A	41	N/A	N/A	38	38	N/A	N/A	N/A	203	100	N/A	N/A	692	160	782	39	39	134	134
AM Queue Length Per Lane (ft)	N/A	N/A	N/A	N/A	N/A	25	N/A	N/A	25	25	N/A	N/A	N/A	0	25	N/A	25	0	25	0	25	25	25	25
PM Queue Length Per Lane (ft)	N/A	N/A	N/A	N/A	N/A	25	N/A	N/A	25	25	N/A	N/A	N/A	0	25	N/A	25	0	25	0	25	25	25	25
	<b>43. Commercial Driveway 6 and Barrett Ave</b>								<b>53. Building 2 Truck Driveway and I-215 Frontage Rd</b>								<b>61. Building 7 Truck Driveway and I-215 Frontage Rd</b>							
Storage Length Per Lane (ft)	N/A	526	N/A	N/A	N/A	N/A	N/A	74	N/A	531	200	N/A	N/A	N/A	N/A	410	N/A	493	200	N/A	N/A	N/A	N/A	255
AM Queue Length Per Lane (ft)	N/A	0	N/A	N/A	N/A	N/A	N/A	25	N/A	0	25	N/A	N/A	N/A	N/A	25	N/A	0	25	N/A	N/A	N/A	N/A	25
PM Queue Length Per Lane (ft)	N/A	0	N/A	N/A	N/A	N/A	N/A	25	N/A	0	25	N/A	N/A	N/A	N/A	25	N/A	0	25	N/A	N/A	N/A	N/A	25
	<b>44. Commercial Driveway 7 and N. Perris Blvd</b>								<b>54. Building 3 Auto Driveway and I-215 Frontage Rd</b>								<b>62. Building 7 Auto Driveway 1 and I-215 Frontage Rd</b>							
Storage Length Per Lane (ft)	N/A	N/A	N/A	100	N/A	137	N/A	N/A	N/A	253	N/A	N/A	N/A	N/A	N/A	48	N/A	354	N/A	N/A	N/A	N/A	N/A	44
AM Queue Length Per Lane (ft)	N/A	N/A	N/A	0	N/A	25	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	25	N/A	0	N/A	N/A	N/A	N/A	N/A	25
PM Queue Length Per Lane (ft)	N/A	N/A	N/A	0	N/A	25	N/A	N/A	N/A	0	N/A	N/A	N/A	N/A	N/A	25	N/A	0	N/A	N/A	N/A	N/A	N/A	25
	<b>45. Commercial Driveway 8 and N. Perris Blvd</b>								<b>55. Building 3/4 Truck Driveway and I-215 Frontage Rd</b>								<b>63. Building 7 Auto Driveway 2 and Barrett Ave</b>							
Storage Length Per Lane (ft)	160	N/A	N/A	100	N/A	144	N/A	N/A	N/A	204	200	N/A	N/A	N/A	N/A	176	N/A	N/A	44	44	N/A	N/A	N/A	244
AM Queue Length Per Lane (ft)	25	N/A	N/A	0	N/A	25	N/A	N/A	N/A	0	25	N/A	N/A	N/A	N/A	25	N/A	N/A	25	25	25	N/A	N/A	0
PM Queue Length Per Lane (ft)	25	N/A	N/A	0	N/A	25	N/A	N/A	N/A	0	25	N/A	N/A	N/A	N/A	25	N/A	N/A	25	25	25	N/A	N/A	0
	<b>48. Building 1 Auto Driveway 1 and Orange Ave</b>								<b>56. Building 4/5 Auto Driveway and I-215 Frontage Rd</b>															
Storage Length Per Lane (ft)	240	240	N/A	N/A	N/A	470	160	N/A	N/A	219	120	N/A	N/A	N/A	35	35								
AM Queue Length Per Lane (ft)	25	25	N/A	N/A	N/A	0	25	N/A	N/A	0	25	N/A	N/A	N/A	25	25								
PM Queue Length Per Lane (ft)	25	25	N/A	N/A	N/A	0	25	N/A	N/A	0	25	N/A	N/A	N/A	25	25								
	<b>49. Building 1 Auto Driveway 2 and Orange Ave</b>								<b>57. Building 5 Truck Driveway and I-215 Frontage Rd</b>															
Storage Length Per Lane (ft)	N/A	236	N/A	N/A	N/A	468	N/A	N/A	N/A	379	120	N/A	N/A	N/A	N/A	25								
AM Queue Length Per Lane (ft)	N/A	25	N/A	N/A	N/A	0	N/A	N/A	N/A	0	25	N/A	N/A	N/A	N/A	0								
PM Queue Length Per Lane (ft)	N/A	25	N/A	N/A	N/A	0	N/A	N/A	N/A	0	25	N/A	N/A	N/A	N/A	0								

Notes:

Queuing Impacts

LT = Left-turn Lane, RT = Right-turn Lane

Queue length reported in feet for the AM(PM) peak periods and are rounded up to the nearest increment of 5 feet.

**Table 5.3b: Opening Year I 2026 With Project AM and PM Peak Hour Project Driveways Queueing Analysis - Expanded**

	Opening Year I 2026 Plus Project Conditions																																			
	Northbound			Southbound			Eastbound			Westbound			Northbound			Southbound			Eastbound			Westbound			Northbound			Southbound			Eastbound			Westbound		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
	46. Commercial Driveway 9 and Orange Ave												20. Orange Ave and Indian Ave						38. Barrett Ave and Harvest Landing Way																	
Distance to Closest Project Access Point (ft)	41	N/A	41				206	206	206	383	383	383	N/A	N/A	N/A				160	160	N/A	N/A	470	470	N/A	174	174	1,253	1,253	N/A	N/A	N/A	N/A	391	N/A	391
AM Queue Length Per Lane (ft)	25	N/A	25				25	35	35	35	35	35	N/A	N/A	N/A				25	25	N/A	N/A	25	65	N/A	25	25	25	25	N/A	N/A	N/A	N/A	25	N/A	25
PM Queue Length Per Lane (ft)	25	N/A	25				25	65	65	50	50	50	N/A	N/A	N/A				25	25	N/A	N/A	25	25	N/A	25	25	25	25	N/A	N/A	N/A	N/A	25	N/A	25
	47. Commercial Driveway 10 and Orange Ave												21. Orange Ave and Frontage Rd						39. Barrett Ave and I-215 Frontage Road																	
Distance to Closest Project Access Point (ft)	N/A	N/A	32	N/A	N/A	N/A	N/A	413	413	N/A	N/A	N/A	N/A	334	334				N/A	N/A	N/A	642	642	642				990	990	N/A	N/A	N/A	N/A	225	N/A	225
AM Queue Length Per Lane (ft)	N/A	N/A	25	N/A	N/A	N/A	N/A	0	0	N/A	N/A	N/A	N/A	30	25				N/A	N/A	N/A	25	N/A	45				90	25	N/A	N/A	N/A	N/A	100	N/A	35
PM Queue Length Per Lane (ft)	N/A	N/A	25	N/A	N/A	N/A	N/A	0	0	N/A	N/A	N/A	N/A	25	25				N/A	N/A	N/A	25	N/A	30				105	25	N/A	N/A	N/A	N/A	100	N/A	45
	18. Orange Ave and Perris Blvd												23. Citrus Ave and Perris Blvd																							
Distance to Closest Project Access Point (ft)	730	730	730					383	383							625						625	625	N/A												
AM Queue Length Per Lane (ft)	675	240	25					240	160	130						30	225	N/A																		
PM Queue Length Per Lane (ft)	625	295	75					175	185	250						140	415	N/A																		
	19. Orange Ave and Barrett Ave												37. Perris Blvd and Harvest Landing Way																							
Distance to Closest Project Access Point (ft)	200	1,253	N/A				160	160	160	714	714	714	518	518	N/A	N/A	242	242	342	342	342	N/A	N/A	N/A												
AM Queue Length Per Lane (ft)	0	35	N/A				30	45	0	0	70	70	160	25	N/A	N/A	40	25	35	N/A	35	N/A	N/A	N/A												
PM Queue Length Per Lane (ft)	0	50	N/A				40	40	0	0	50	50	215	25	N/A	N/A	55	25	55	N/A	65	N/A	N/A	N/A												

Notes:

Queueing Impacts

LT = Left-turn Lane, TH = Thru Lane, RT = Right-turn Lane

Queue length reported in feet for the AM(PM) peak periods and are rounded up to the nearest increment of 5 feet.

### 5.1.3 Opening Year I 2026 With Project Roadway Segment Analysis

With the addition of the Project, segment of Indian Avenue between Orange Ave and I-215 Frontage Road South would not be utilized and would be removed. As part of the analysis for this scenario, which considers the removal of this street, the Without Project roadway segments volumes on northbound Indian Avenue between Orange Ave and I-215 Frontage Road<sup>1</sup> are added to Barrett Ave, which includes the following segments:

- #16. Barrett Ave between Orange Ave and Harvest Landing Way
- #17. Barrett Ave between Harvest Landing Way and I-215 Frontage Rd

The southbound Without Project roadway segments volumes on Indian Avenue between Orange Ave and I-215 Frontage Road are already accounted for on segment #9. I-215 Frontage Rd between Orange Ave and Nuevo Rd and would not require any volume adjustment.

Opening Year I 2026 With Project roadway segments volumes were developed by adding the Project trips to the Opening Year 2026 I Without Project roadway segments volumes, with the adjustments noted above.

The LOS at the Opening Year I 2026 With Project study roadway segments were determined using the methodology described previously in *Section 2.3 Methodology*. The Opening Year I 2026 With Project LOS at the study roadway segments are shown in *Table 5.4*. As shown in *Table 5.4*, the following seven (7) roadway segments would operate at an unsatisfactory LOS in the Opening Year I 2026 With Project condition:

- #3. Perris Blvd between Orange Ave and Citrus Ave
- #6. Perris Blvd between Rider St and Placentia Ave
- #7. Nuevo Rd between Perris Blvd and I-215 NB Ramps
- #11. Nuevo Rd between I-215 NB Ramps and I-215 SB Ramps
- #12. Perris Blvd between Citrus Ave and Nuevo Rd
- #13. Placentia Ave between I-215 NB Ramps and I-215 SB Ramps
- #14. Placentia Ave between I-215 NB Ramps and Indian Ave

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<sup>1</sup> Counts were not taken for roadway segments volumes on Indian Avenue between Orange Ave and I-215 Frontage Road. Only peak hour turning movement counts are available for the intersection of Indian Ave/Orange Ave (Int #20). The northbound ADT volume is estimated as 10\*PM peak hour northbound volume at the intersection of Indian Ave/Orange Ave. Traffic counts are provided in *Appendix B*.

**Table 5.4: Opening Year I 2026 With Project Roadway Segment Level of Service**

Segment	Classification <sup>2</sup>	# of Lanes Without Project	Roadway Capacity Without Project <sup>2</sup>	Opening Year I 2026 ADT <sup>1</sup>	V/C Ratio	LOS	# of Lanes Plus Project	Roadway Capacity Plus Project <sup>2</sup>	Opening Year I 2026 Plus Project ADT <sup>1</sup>	V/C Ratio	LOS	LOS Standard <sup>2</sup>	Unsatisfactory ?
1. Indian Ave between Water Ave and Orange Ave	Collector	2	13,000	5,427	0.417	A	2	13,000	6,166	0.474	A	D	No
2. Orange Ave between Indian Ave and Perris Blvd	Arterial	4	35,900	9,576	0.267	A	4	35,900	16,427	0.458	A	D	No
3. Perris Blvd between Orange Ave and Citrus Ave	Arterial	4	35,900	39,830	1.109	F	6	53,900	52,439	0.973	E	D	Yes
4. Barrett Ave between Placentia Ave and Orange Ave	Collector	2	13,000	1,510	0.116	A	2	13,000	6,804	0.523	A	D	No
5. Perris Blvd between Placentia Ave and Orange Ave	Arterial	4	35,900	38,198	1.064	F	6	53,900	41,532	0.771	C	D	No
6. Perris Blvd between Rider St and Placentia Ave	Arterial	4	35,900	40,500	1.128	F	4	35,900	43,460	1.211	F	D	Yes
7. Nuevo Rd between Perris Blvd and I-215 NB Ramps	Arterial	6	53,900	45,744	0.849	D	6	53,900	54,139	1.004	F	D	Yes
8. I-215 Frontage Rd between Placentia Ave and Orange Ave	Arterial	2	18,000	6,564	0.365	A	4	35,900	9,351	0.260	A	D	No
9. I-215 Frontage Rd between Orange Ave and Nuevo Rd	Arterial	2	18,000	3,301	0.183	A	4	35,900	5,843	0.163	A	D	No
10. Orange Ave between I-215 Frontage Rd and Indian Ave	Arterial	4	35,900	3,482	0.097	A	4	35,900	4,304	0.120	A	D	No
11. Nuevo Rd between I-215 NB Ramps and I-215 SB Ramps	Arterial	4	35,900	32,415	0.903	E	4	35,900	36,693	1.022	F	D	Yes
12. Perris Blvd between Citrus Ave and Nuevo Rd	Arterial	6	53,900	41,341	0.767	C	6	53,900	52,866	0.981	E	D	Yes
13. Placentia Ave between I-215 NB Ramps and I-215 SB Ramps	Arterial	4	35,900	33,931	0.945	E	4	35,900	38,497	1.072	F	D	Yes
14. Placentia Ave between I-215 NB Ramps and Indian Ave	Arterial	4	35,900	48,150	1.341	F	4	35,900	56,007	1.560	F	D	Yes
15. Placentia Ave between Indian Ave and Perris Blvd	Arterial	6	53,900	26,457	0.491	A	6	53,900	31,574	0.586	A	D	No
16. Barrett Ave between Orange Ave and Harvest Landing Wy	Collector	2	13,000	-	-	-	2	13,000	5,639	0.434	A	D	No
17. Barrett Ave between Harvest Landing Wy and I-215 Frontage Rd	Collector	2	13,000	-	-	-	2	13,000	7,940	0.611	B	D	No
18. Harvest Landing Wy between Barrett Ave and Perris Blvd	Collector	4	25,900	-	-	-	4	25,900	7,855	0.303	A	D	No
19. Indian Ave between Placentia Ave and Water Ave	Collector	2	13,000	5,427	0.417	A	2	13,000	6,166	0.474	A	D	No

Notes:

LOS = Level of Service

1 Opening year ADT is calculated based on an ambient growth rate of 3% per year. All volumes are presented in PCE.

2 Classification, Roadway Capacity and LOS Standard from City of Perris General Plan Circulation Element.

**Unsatisfactory Level of Service**

Figure 5.1a: Opening Year I 2026 Project AM Peak Hour PCE Trip Assignment

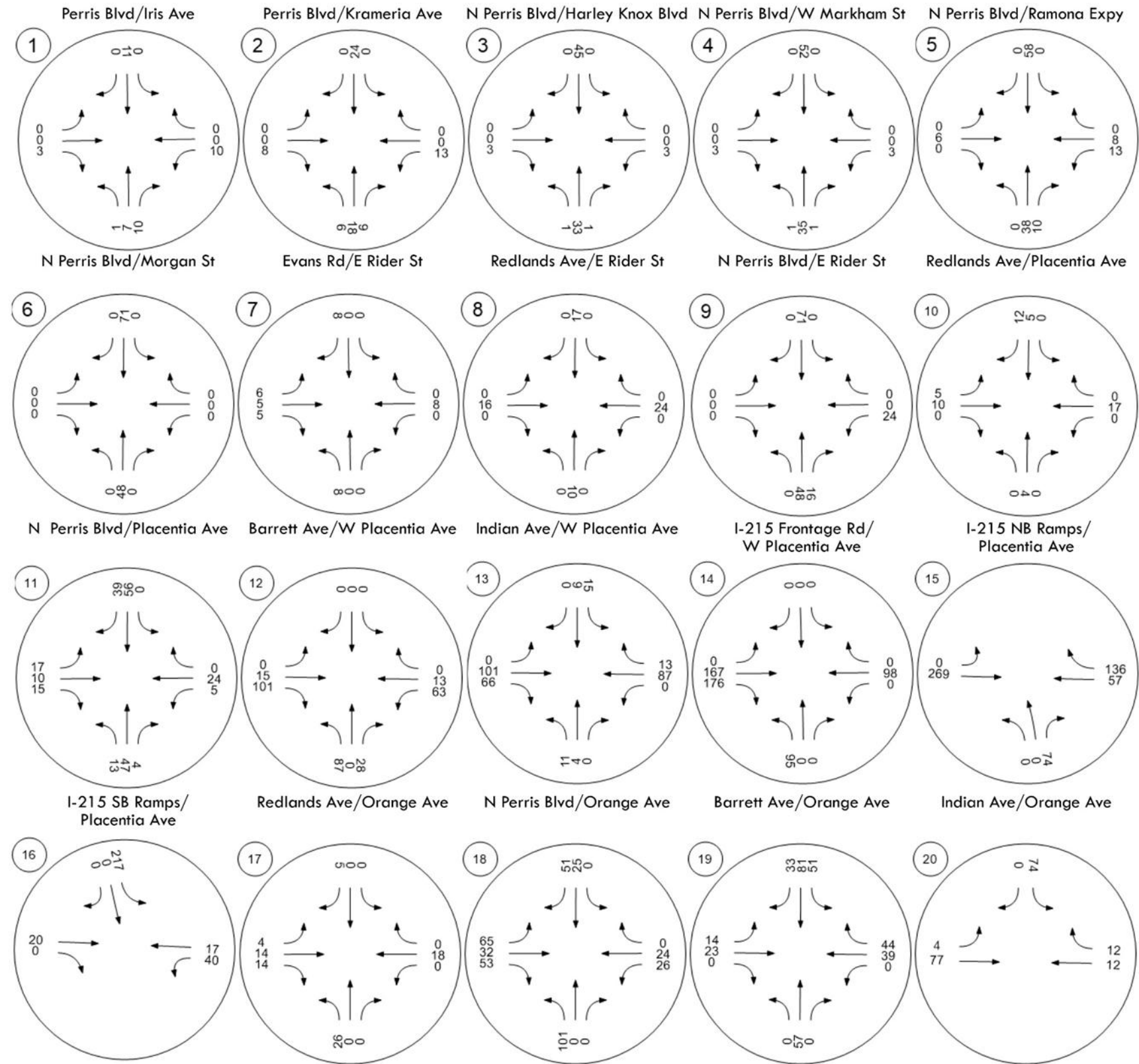
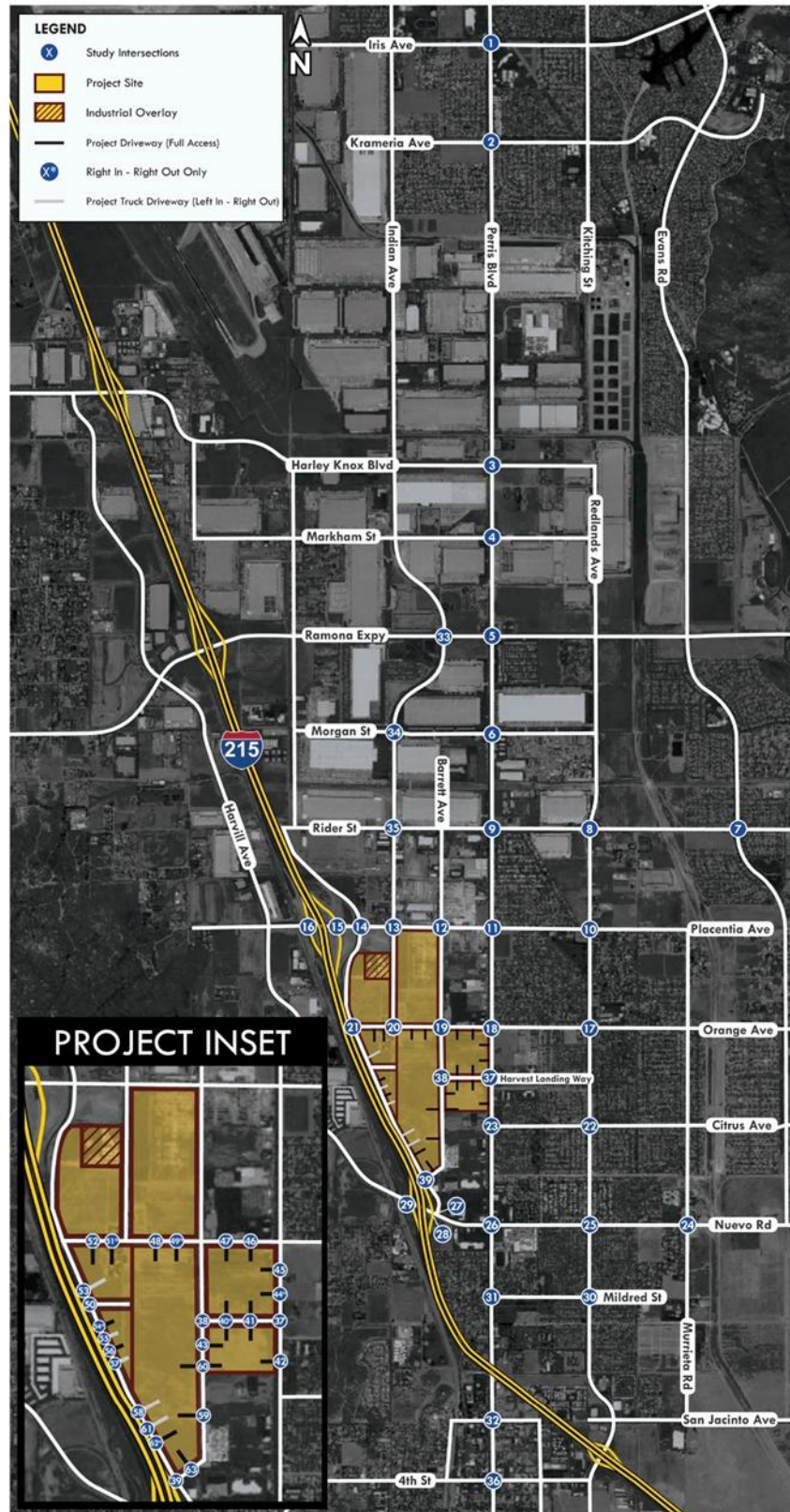


Figure 5.1b: Opening Year I 2026 Project AM Peak Hour PCE Trip Assignment (Continued)

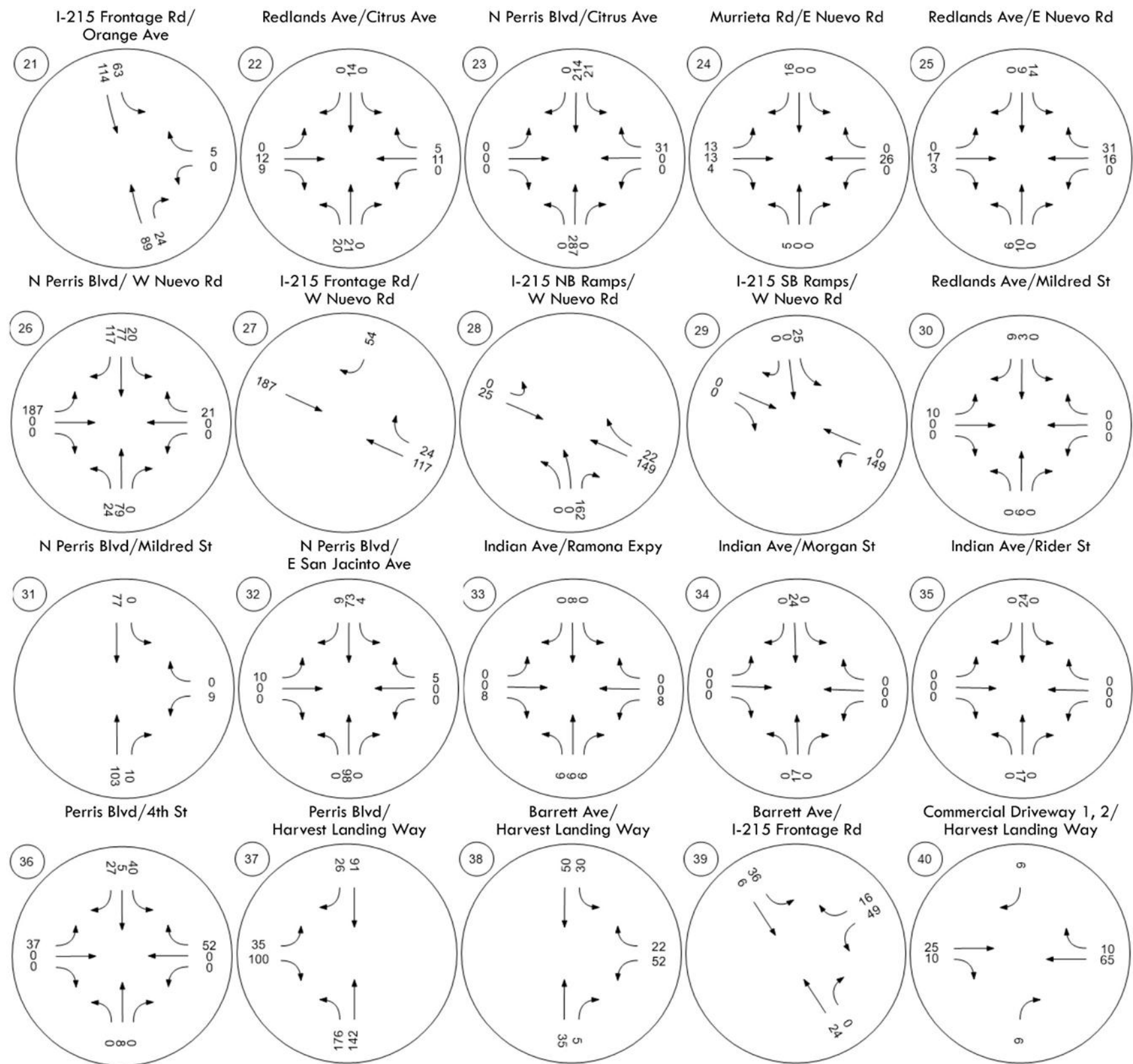
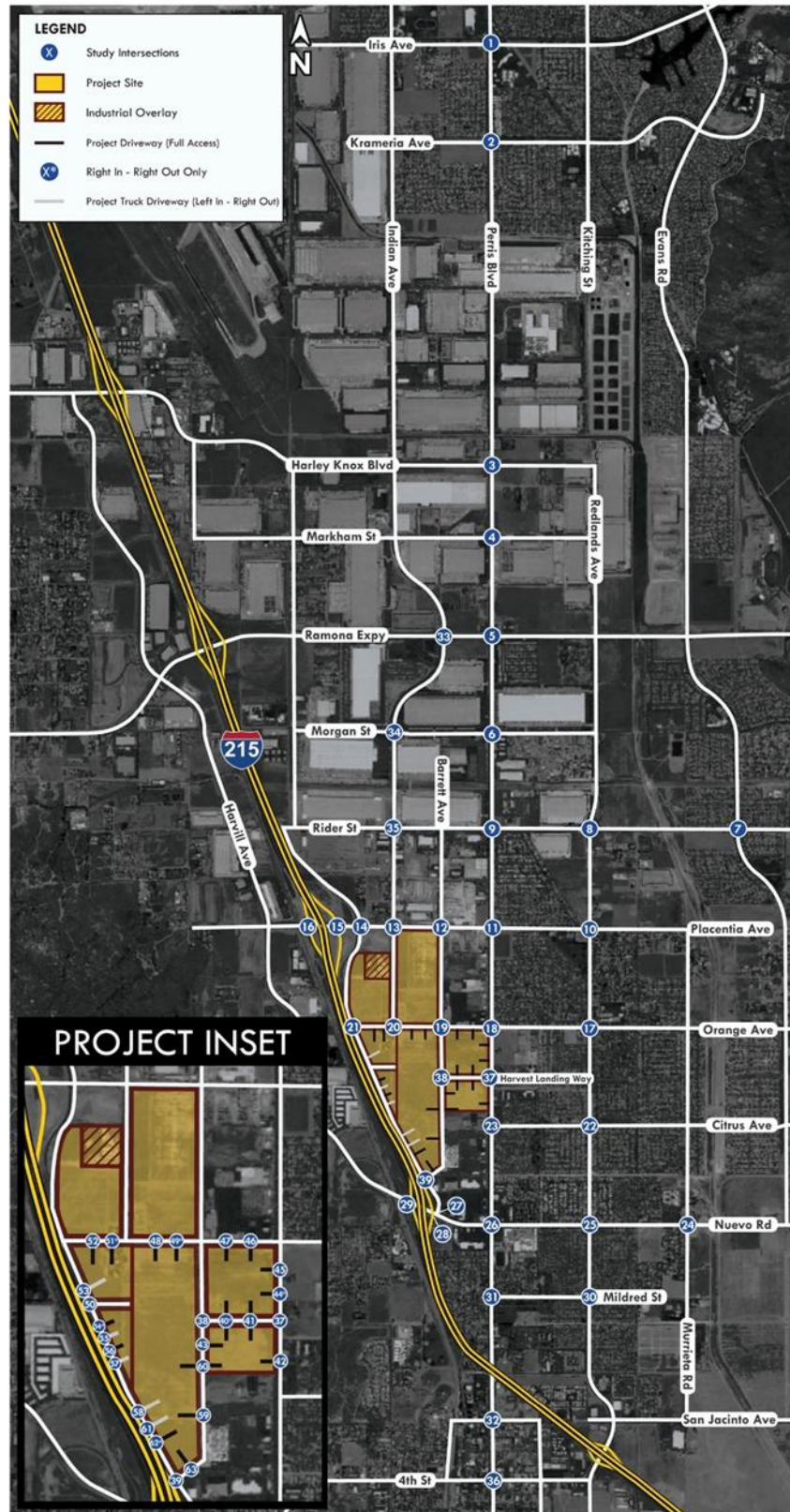




Figure 5.1d: Opening Year I 2026 Project AM Peak Hour PCE Trip Assignment (Continued)

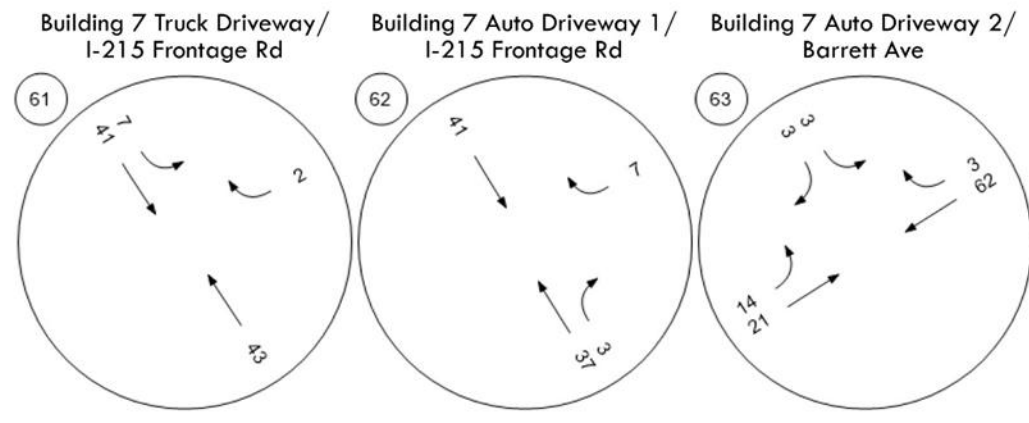
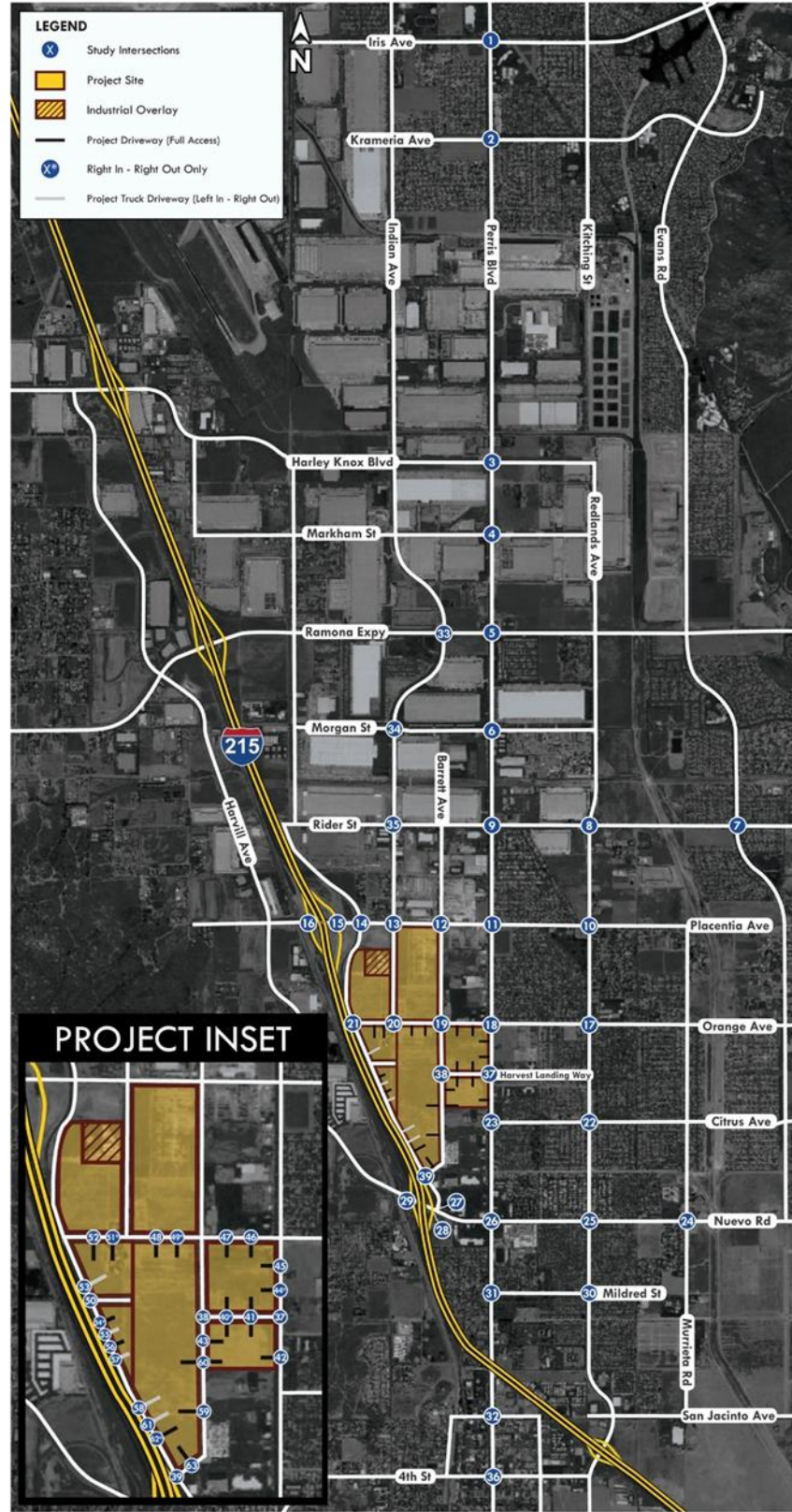


Figure 5.2a: Opening Year I 2026 PM Peak Hour PCE Project Trip Assignment

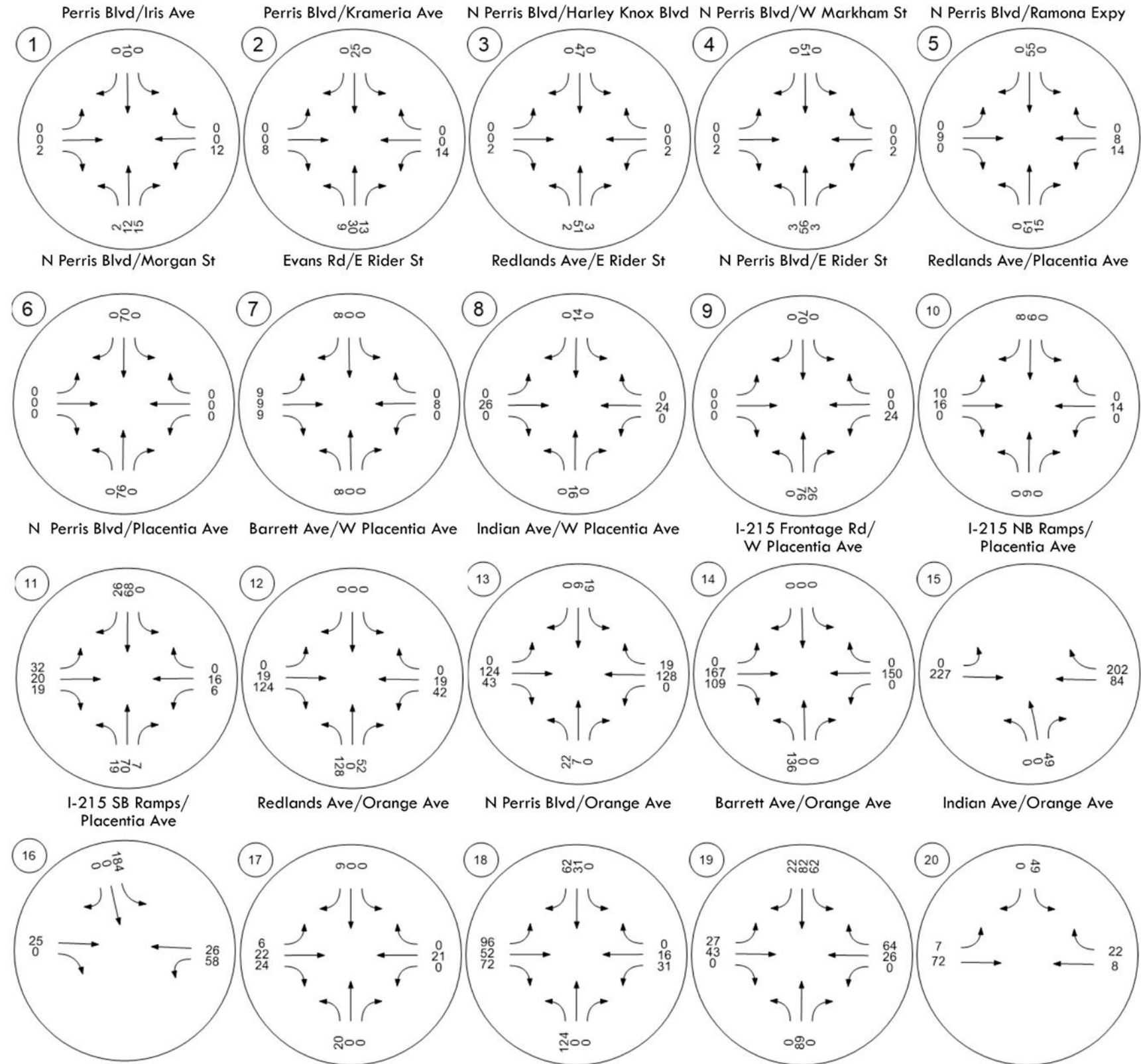


Figure 5.2b: Opening Year I 2026 PM Peak Hour PCE Project Trip Assignment (Continued)

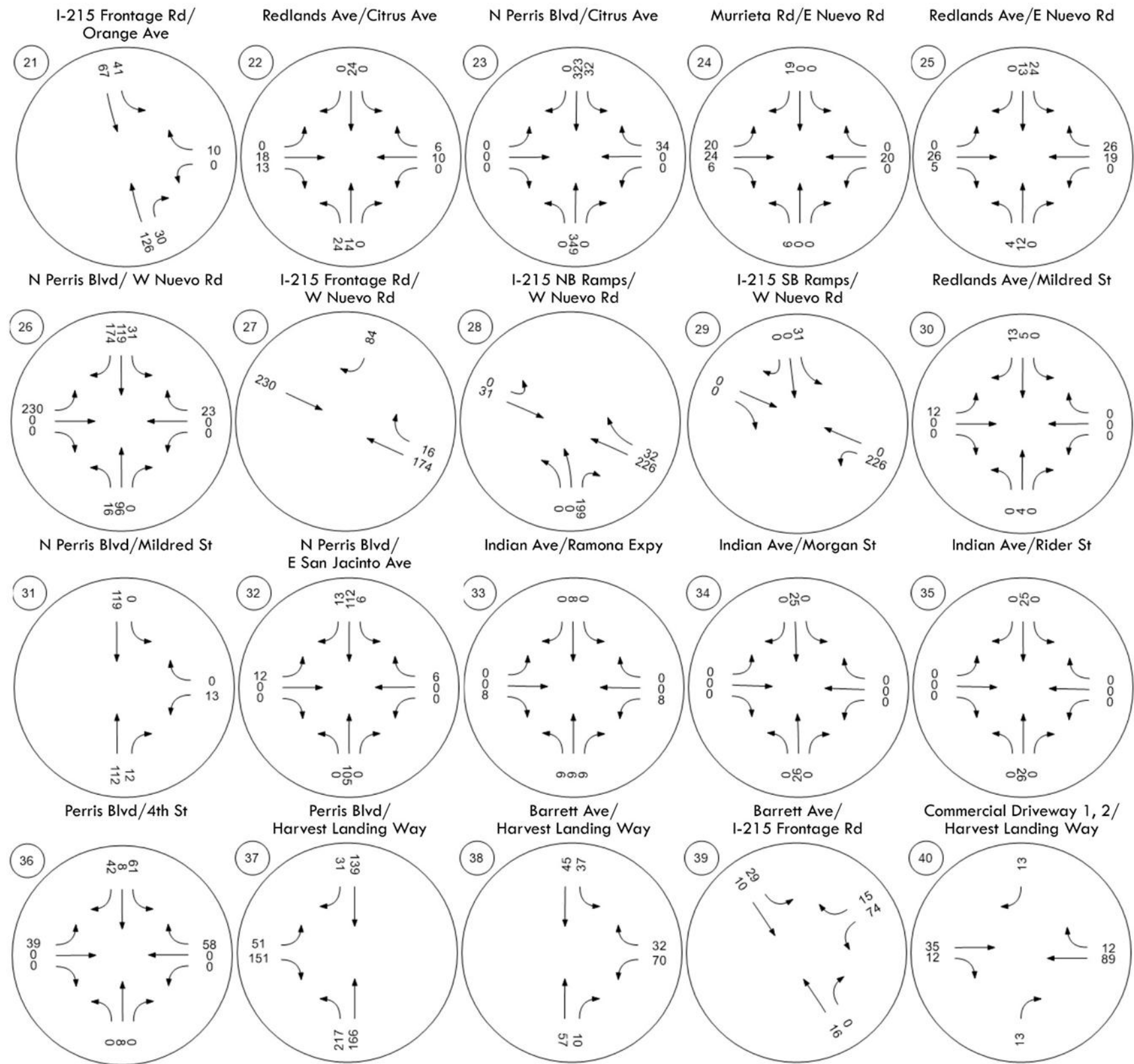
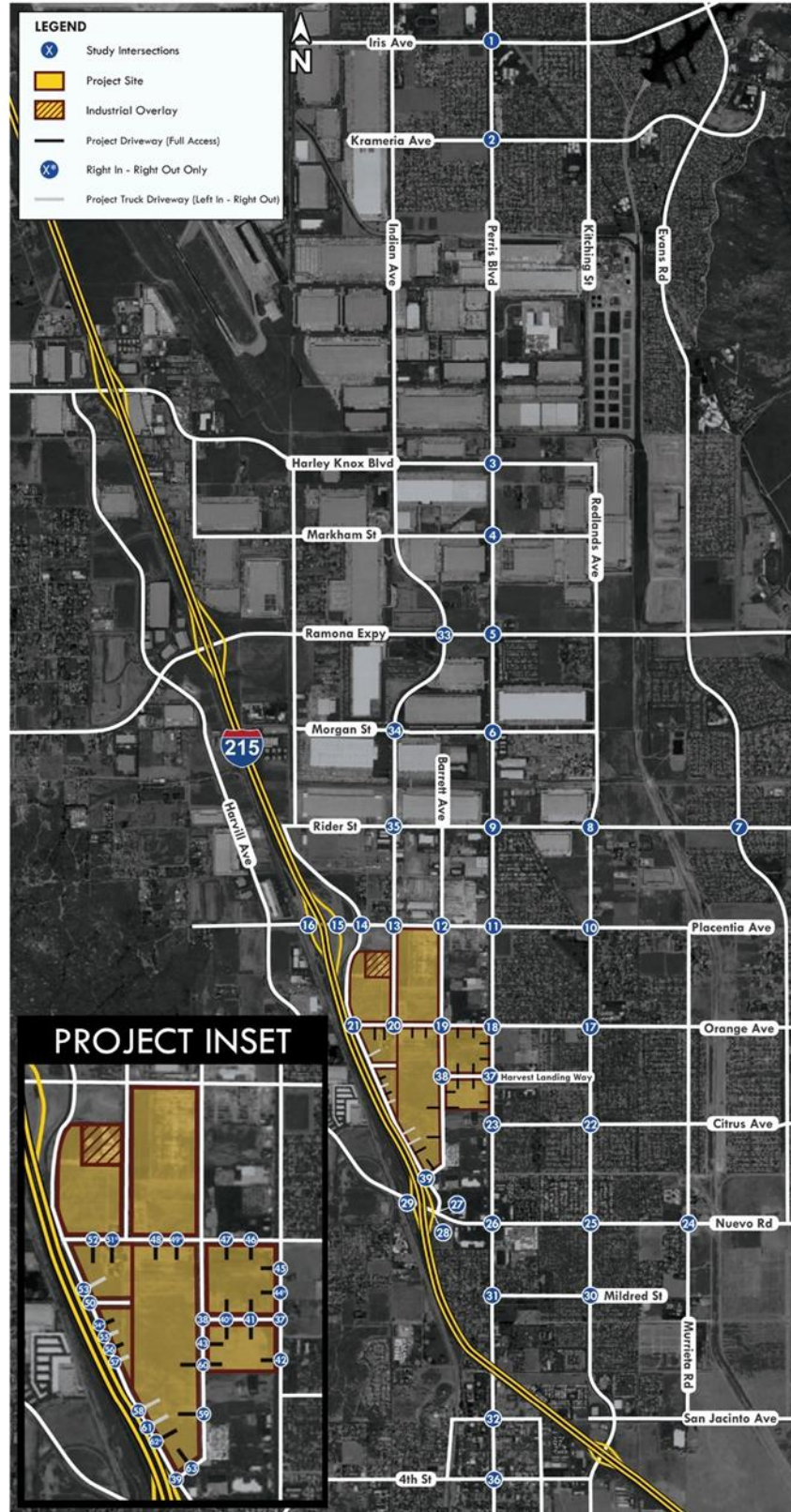


Figure 5.2c: Opening Year I 2026 PM Peak Hour PCE Project Trip Assignment (Continued)

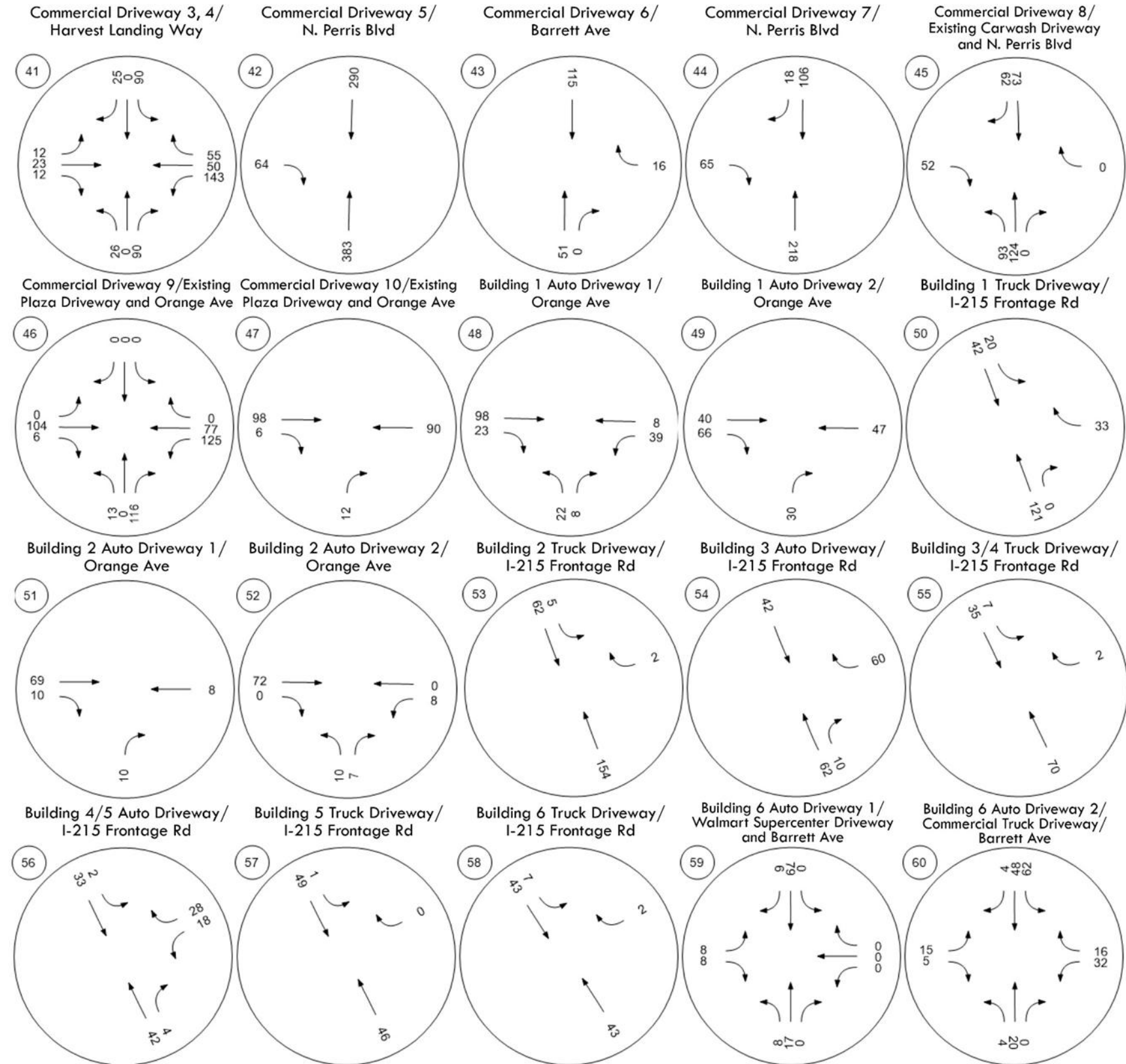
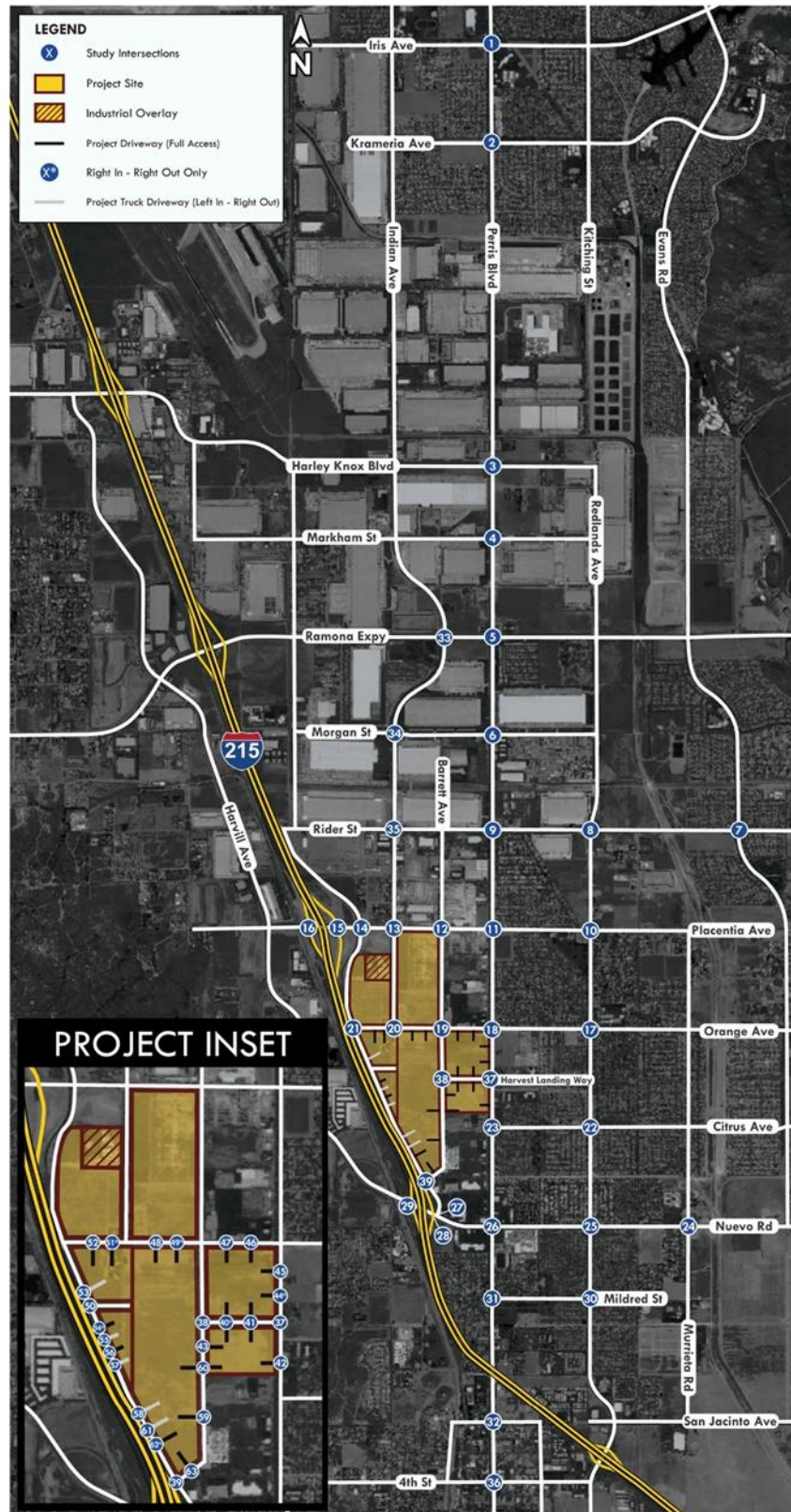


Figure 5.2d: Opening Year I 2026 PM Peak Hour PCE Project Trip Assignment (Continued)

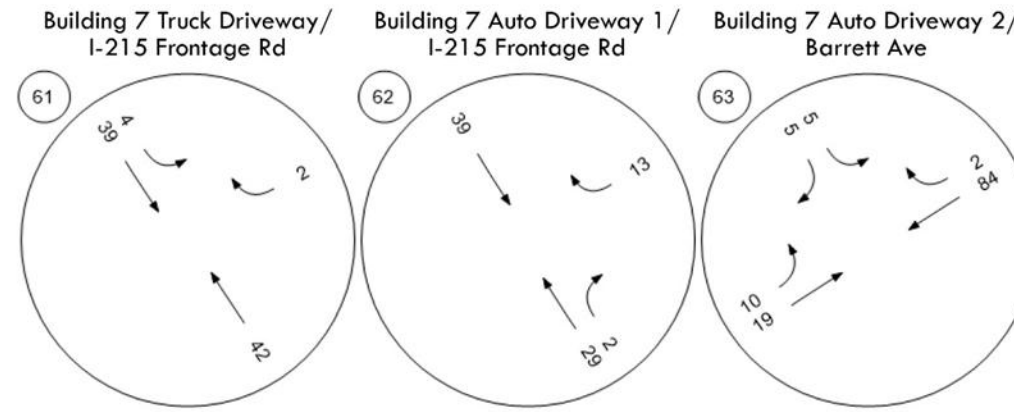
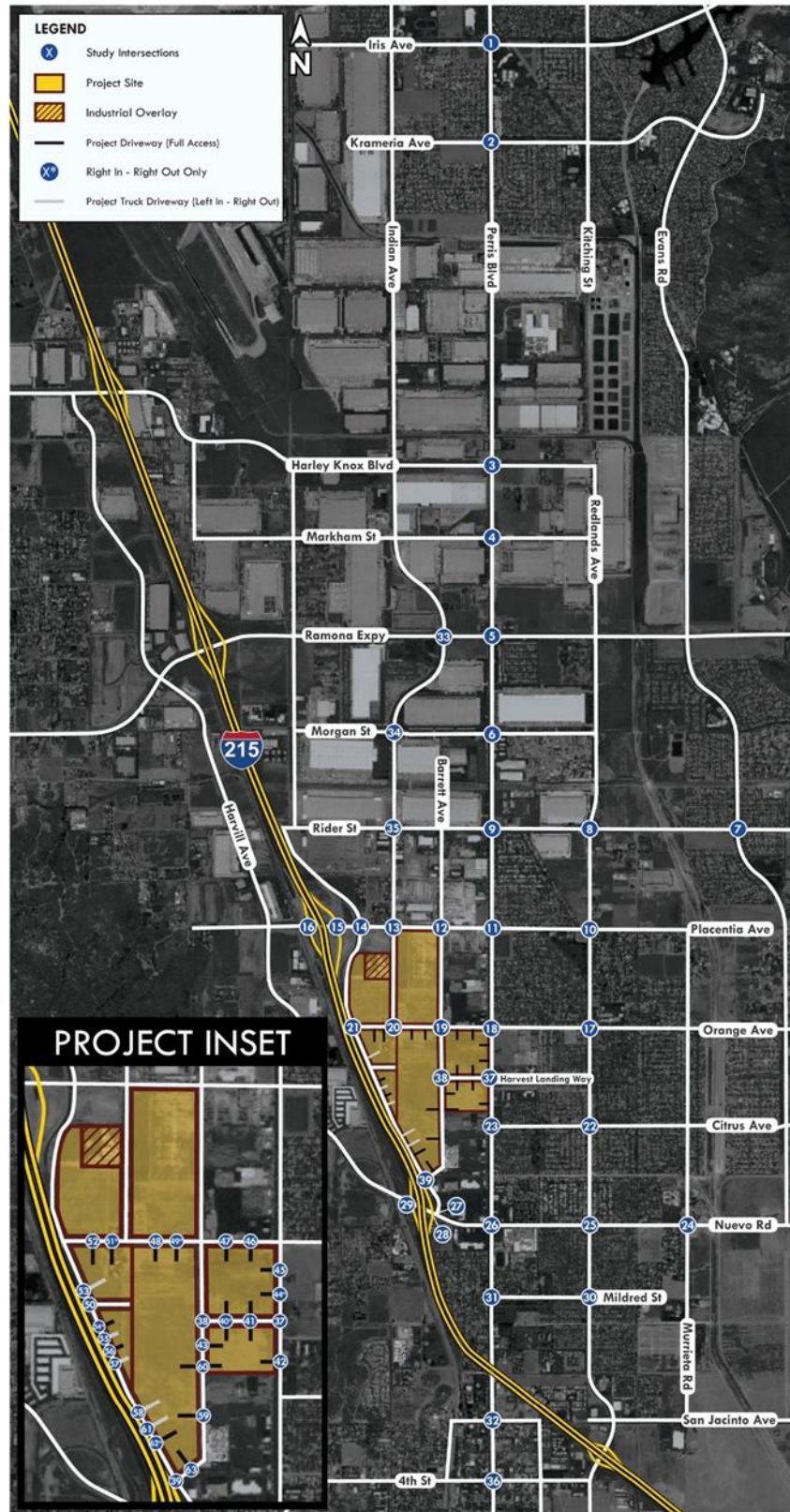


Figure 5.3a: Opening Year I 2026 With Project AM Peak Hour PCE Traffic Volumes

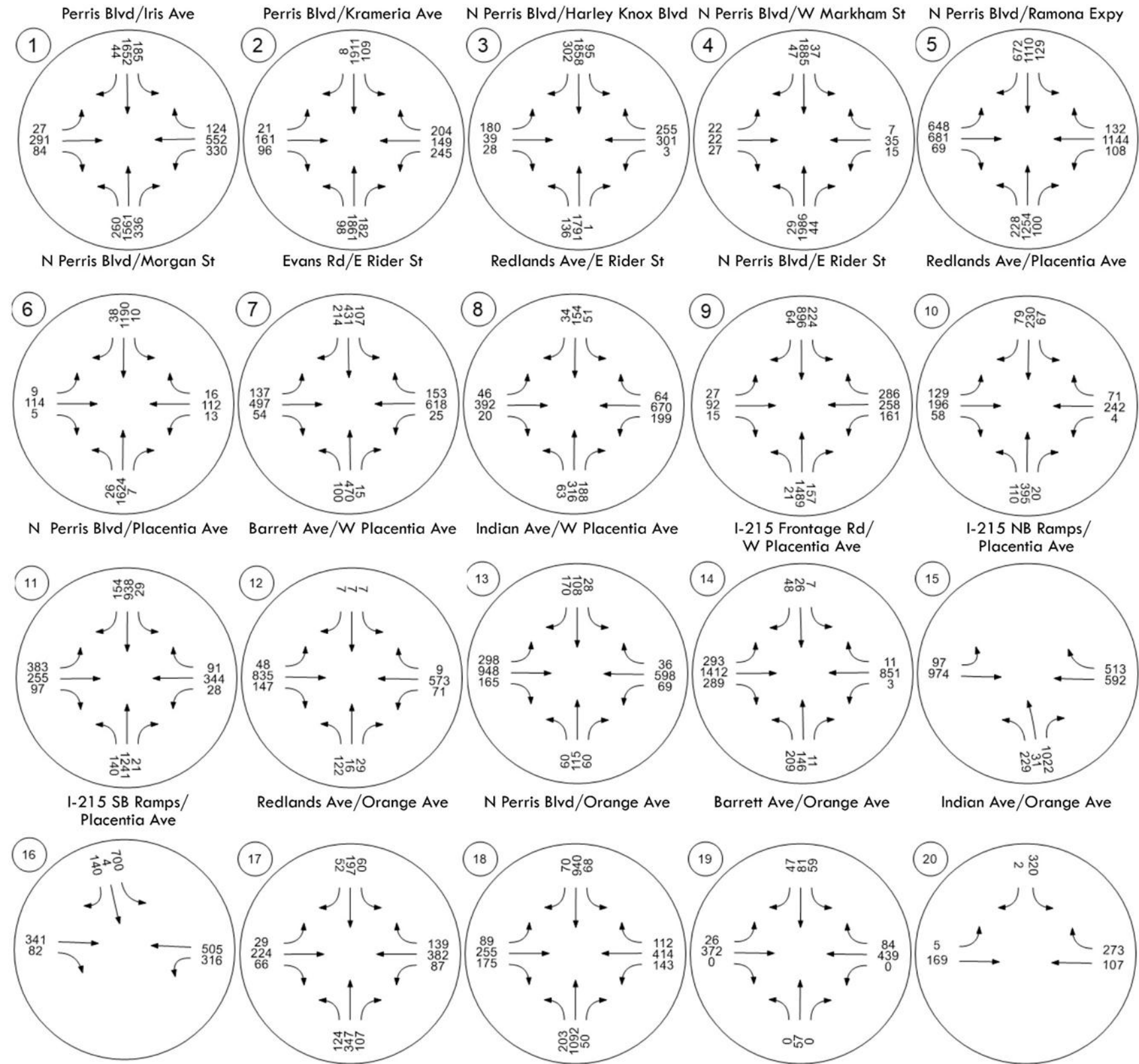
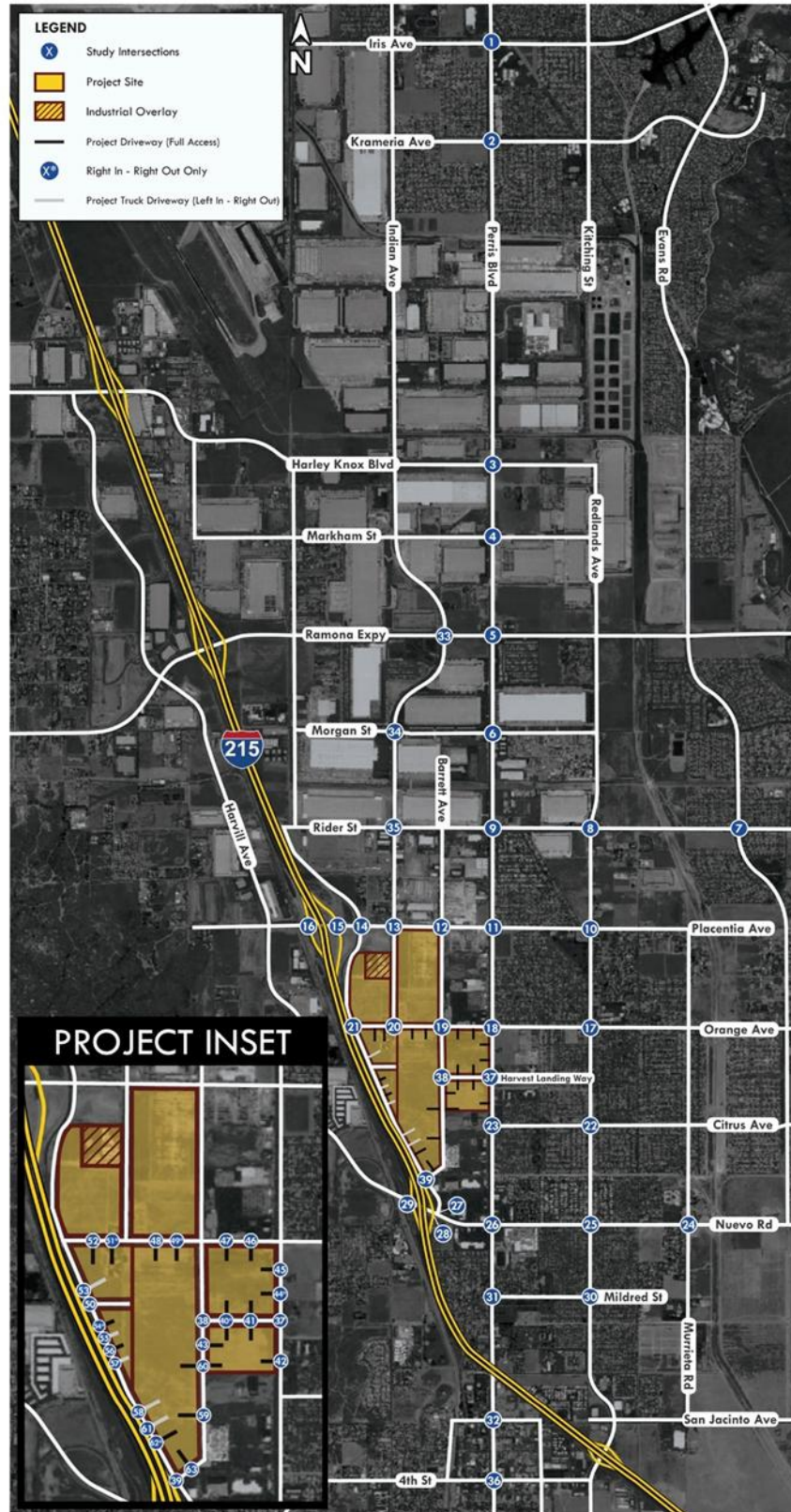


Figure 5.3b: Opening Year I 2026 With Project AM Peak Hour PCE Traffic Volumes (Continued)

