FEHR PEERS

MEMORANDUM

Date: June 27, 2013

To: Cheryl Burrell, Pebble Beach Company

From: Rob Rees, P.E.

Subject: ***Inclusionary Housing – Transportation Analysis***

WC11-2822

As requested, Fehr & Peers is providing clarification regarding the transportation analysis conducted for the inclusionary housing as part of the Final Environmental Impact Report (FEIR) for the Pebble Beach Company Project.

Fehr & Peers provided supplemental traffic analysis in response to public comments on the draft environmental documentation. Specific to inclusionary housing Fehr & Peers prepared a technical memorandum (attached) dated March 16, 2012 that was referenced in the final environmental document and included in Appendix G to the FEIR.

For traffic the draft environmental document assumed 10 housing units for the Corporation Yard site. The FEIR assumed 18 inclusionary housing units (assumed to be single family dwelling units) that were added to the Corporation Yard. So, the FEIR included a total of 28 dwelling units for the Corporation Yard site. The impact associated with the additional 18 units was fully documented in the March 16th technical memorandum.

The transportation impact of the Corporation Yard housing (10 units + 18 units) is also documented in the FEIR (Chapter 4, page 4-96 through 4-104). The FEIR conclusion states:

> Overall, impacts and required mitigation would be the same as those of the proposed project. Impacts can be reduced with the project mitigation identified for the proposed project, but similar to the proposed project, even with mitigation, certain impacts will remain significant and unavoidable (page 4-104, Line 7 through 11).

If you need additional information, please give me a call.

Attachment:

March 16, 2012 Memorandum

100 Pringle Avenue, Suite 600 Walnut Creek, CA 94596 (925) 930-7100 Fax (925) 933-7090
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ATTACHMENT

MEMORANDUM

Date: March 16, 2012

To: Yonnel Gardes, Kathryn Giberson, and Rich Walters, ICF

From: Sarah Nadiranto and Rob Rees, P.E.

Subject: ***Del Monte Forest Plan DEIR – Response to Comments, Transportation Section***
WC11-2822

BACKGROUND

Fehr & Peers submitted the Transportation Impact Analysis (TIA) for the Del Monte Forest Plan (DMFP) in October 2011. The TIA was used as a technical resource by the consultant team assisting the County of Monterey to prepare the Draft Environmental Impact Report for the Pebble Beach Company Project. Public comments were received on the draft environmental document through January 6, 2012.

As part of the DEIR comments, analysis was requested for 45 guest rooms as part of the Local Coastal Plan (LCP) and 18 inclusionary housing units as part of the project scenarios. This memorandum provides the analysis and fair-share estimates with the added units.

PROJECT CHARACTERISTICS

Additional Units Description

The 45 LCP guest units were assumed to occur at the Lodge in Pebble Beach and the Spanish Bay Resort. 20 guestrooms were added to the Lodge and 25 guestrooms were added to the Spanish Bay Resort. The 18 inclusionary housing units, assumed to be single family dwelling units, were added to the Corporation Yard. Previously, the Corporation Yard housed 10 dwelling units, but with the inclusionary units, it totals 28 dwelling units.

Study Scenarios

Additional analysis was completed for the following scenarios:

- Existing Plus Project with 18 Inclusionary Units
- Near Term Plus Project with 18 Inclusionary Units
- Cumulative Baseline with 45 LCP Units
- Cumulative Plus Project with 45 LCP Units
- Cumulative Plus Project with 45 LCP Units and 18 Inclusionary Units

The Project refers to the original project description in the DEIR for Option 1, the Spyglass Hill Hotel. Results for the scenarios are given in the section below.

Trip Generation

The new proposed project is estimated to generate more traffic than the project description described in the DEIR. **Attachment A** shows the net new trips generated by the proposed project. The 45 LCP units and 18 inclusionary units add a total of 38 trips and 45 trips during the AM and PM peak hour, respectively. **Attachment B** shows the updated volume figures for the scenarios listed above.

ANALYSIS

A traffic analysis was completed for the scenario years listed above for the Spyglass Hill Hotel Alternative (Option 1). Analysis was completed for Alternative 2 for the Cumulative Plus Project with 45 LCP units scenario. **Attachment C** summarizes those results.

Results

Existing Plus Project with 18 Inclusionary Units

Table 1 shows the results with and without the 18 inclusionary units. As expected, most of the intersections achieve the same delay and level of service (LOS). In other cases, the delay has increased, but the LOS has remained the same. Four intersections perform below the County's threshold of LOS C for intersections in the Coastal Zone. These intersections include:

- Highway 1 at Carpenter Street (Less than Significant Impact)
- Highway 1 at Ocean Avenue (Significant Impact)
- Highway 68 at Skyline Forest Drive (Significant Impact)
- Highway 68 at Carmel Hill Professional Center (Significant Impact)

These are the same four intersections that perform below the LOS C threshold in the Existing Plus Project scenario of the DEIR, therefore the impact and mitigation findings in the DEIR can be applied in this scenario. No additional impacts or mitigations are identified in this scenario.

Near Term Plus Project with 18 Inclusionary Units

Table 2 shows the results with and without the 18 inclusionary units. Similar to the Existing scenario, most of the intersections achieve the same delay and LOS. In other cases where delay has increased, the LOS has remained the same. Six intersections perform below the County's threshold of LOS C for intersections in the Coastal Zone. These intersections include:

- Highway 68 at Highway 1 Southbound Off-Ramp (Less than Significant Impact)
- Highway 1 at Carpenter Street (Less than Significant Impact)
- Highway 1 at Ocean Avenue (Less than Significant Impact)

- Highway 1 at Rio Road (Less than Significant Impact)
- Highway 68 at Skyline Forest Drive (Significant Impact)
- Highway 68 at Carmel Hill Professional Center (Significant Impact)

The intersections that fail above are the same intersections that fail in the Near Term Plus Project scenario of the DEIR, therefore the impact and mitigation findings in the DEIR can be applied in this scenario. No additional impacts or mitigations are identified in this scenario.

Cumulative Baseline with 45 LCP Units

Table 3 shows the results with and without the 45 LCP units. This scenario adds the 45 LCP units to no project conditions, so most of the intersections increase in delay. Under No Project conditions, nine intersections perform below the County's threshold of LOS C for intersections in the Coastal Zone. With the 45 LCP units, nine intersections operate below the County's threshold of LOS C, those intersections include:

- Forest Avenue at David Avenue (Less than Significant Impact)
- Highway 68 at Highway 1 Southbound Off-Ramp (Significant Impact)
- Highway 1 at Carpenter Street (Less than Significant Impact)
- Highway 1 at Ocean Avenue (Less than Significant Impact)
- Highway 1 at Rio Road (Less than Significant Impact)
- Highway 68 at Skyline Forest Drive (Significant Impact)
- Highway 68 at Carmel Hill Professional Center (Significant Impact)
- Highway 1 On-Ramp at 17 Mile Drive (Significant Impact)
- Highway 68 at Aguajito Road (Significant Impact)

The intersections that fail above also fail in the Cumulative Baseline scenario of the DEIR. Mitigations applied to the Cumulative Plus Project scenario of the DEIR can be applied to the intersections with significant impact for the Cumulative Baseline with 45 LCP Units. No additional impacts or mitigations are identified in this scenario.

Cumulative Plus Project with 45 LCP Units

Table 4 shows the results with and without the 45 LCP units plus the Project. Most of the intersections achieve the same delay and LOS. In other cases, the delay has increased but the LOS has remained the same. Nine intersections perform below the County's threshold of LOS C for intersections in the Coastal Zone, those intersections include:

- Forest Avenue at David Avenue (Significant Impact)
- Highway 68 at Highway 1 Southbound Off-Ramp (Significant Impact)

- Highway 1 at Carpenter Street (Significant Impact)
- Highway 1 at Ocean Avenue (Less than Significant Impact)
- Highway 1 at Rio Road (Less than Significant Impact)
- Sunset Drive at Congress Road (Significant Impact)
- Highway 68 at Skyline Forest Drive (Significant Impact)
- Highway 68 at Carmel Hill Professional Center (Significant Impact)
- Highway 68 at Aguajito Road (Significant Impact)

The intersections that fail above also fail in the Cumulative Plus Project scenario of the DEIR. Mitigations applied to the Cumulative Plus Project scenario of the DEIR can be applied to the intersections with significant impacts for the Cumulative Plus Project with 45 LCP Units. No additional impacts or mitigations are identified in this scenario.

Cumulative Plus Project with 45 LCP Units and 18 Inclusionary Units

Table 5 shows the results with and without the 45 LCP units and 18 inclusionary Units. Most of the intersections achieve the same delay and LOS. In other cases, the delay has increased but the LOS has remained the same. Nine intersections perform below the County's threshold of LOS C for intersections in the Coastal Zone, those intersections include:

- Forest Avenue at David Avenue (Less than Significant Impact)
- Highway 68 at Highway 1 Southbound Off-Ramp (Significant Impact)
- Highway 68 at Carpenter Street (Les than Significant Impact)
- Highway 1 at Ocean Avenue (Les than Significant Impact)
- Highway 1 at Rio Road (Les than Significant Impact)
- Sunset Drive at Congress Road (Significant Impact)
- Highway 68 at Skyline Forest Drive (Significant Impact)
- Highway 68 at Carmel Hill Professional Center (Significant Impact)
- Highway 68 at Aguajito Road (Significant Impact)

The intersections that fail above also fail in the Cumulative Plus Project scenario of the DEIR. Mitigations applied to the Cumulative Plus Project scenario of the DEIR can be applied to the intersections with significant impacts for the Cumulative Plus Project with 45 LCP units and 18 inclusionary units. No additional impacts or mitigations are identified in this scenario.

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Conclusion

The 45 LCP units and 18 inclusionary units add delay to the different scenarios; however, the impacts and mitigations identified in the DEIR have remained the same.

FAIR-SHARE ESTIMATES

The DEIR states that the DMFP is responsible for its fair-share contribution to traffic impacts based on total traffic if it is a deficient intersection under existing conditions. The fair-share estimates from the DEIR do not include added traffic from the 45 LCP units or 18 inclusionary units. Below summarizes the updated estimates.

Cumulative

Sunset Drive at Congress Road

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	786	72.8%	798	71.0%
Growth	194	18.0%	222	19.8%
Presidio of Monterey	30	2.8%	30	2.7%
DMFP	61	5.7%	65	5.8%
45 LCP Units	8	0.7%	8	0.7%
18 Inclusionary Units	0	0.0%	0	0.0%
Total Volume	***1,079***	***100%***	***1,123***	***100%***

Highway 68 at Aguajito Road

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	1,301	73.6%	1,437	63.1%
Growth	208	11.8%	249	10.9%
Presidio of Monterey	201	11.4%	524	23.0%
DMFP	50	2.8%	61	2.7%
45 LCP Units	4	0.2%	5	0.2%
18 Inclusionary Units	3	0.2%	3	0.1%
Total Volume	***1,767***	***100%***	***2,279***	***100%***

Highway 68 at Highway 1 Southbound Off-Ramp

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	2,673	68.1%	2,725	67.9%
Growth	402	10.2%	420	10.5%
Presidio of Monterey	725	18.5%	725	18.1%
DMFP	111	2.8%	122	3.0%
45 LCP Units	13	0.3%	13	0.3%
18 Inclusionary Units	5	0.1%	9	0.2%

Total Volume	***3,929***	***100%***	***4,014***	***100%***

Forest Avenue at David Avenue

Traffic Component	**AM Peak Hour Traffic**		**PM Peak Hour Traffic**	
Existing	1,533	74.6%	2,086	77.7%
Growth	277	13.5%	344	12.8%
Presidio of Monterey	180	8.7%	180	6.7%
DMFP	57	2.8%	63	2.3%
45 LCP Units	7	0.3%	8	0.3%
18 Inclusionary Units	1	0.1%	5	0.2%
Total Volume	***2,055***	***100%***	***2,686***	***100%***

Please let us know if you have questions. Thank you.

ATTACHMENTS

Attachment A – Trip Generation

Attachment B – Volume Figures

Attachment C – Cumulative Plus Alternative 2 (Single Family Residential Units) with 45 LCP Units Analysis

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TABLE 1
EXISTING INTERSECTION PEAK HOUR LEVEL OF SERVICE WITH DMFP
(+18 INCLUSIONARY UNITS AT CORPORATION YARD)

	Description	Intersection Delay and Level of Service			
		Existing Plus Project Year 2011 (DEIR)		Existing Plus Project Year 2011 (+18 Inclusionary Units)	
		AM	PM	AM	PM
Signalized Intersections[1]					
5	Forest Ave. (Highway 68)/David Ave.	25.4 / C	31.2 / C	25.4 / C	31.3 / C
6	Highway 68 / Prescott Avenue	11.7 / B	20.00 / B	11.7 / B	20.0 / B
8	Highway 68 / SFB Morse Gate	5.4 / A	4.1 / A	5.4 / A	4.1 / A
11	Highway 68 / Community Hospital	7.1 / A	8.8 / A	7.2 / A	8.8 / A
13	Highway 68 / Highway 1 SB Off-Ramp	30.5 / C	34.2 / C	30.6 / C	34.4 / C
16	Highway 1 / Carpenter Street	16.1 / B	**47.1 / D**	16.1 / B	**47.1 / D**
18	Highway 1 / Ocean Avenue	**35.5 / D**	**46.1 / D**	**35.5 / D**	**46.2 / D**
19	Highway 1 / Carmel Valley Road	9.5 / A	17.7 / B	9.5 / A	17.7 / B
20	Highway 1 / Rio Road	30.6 / C	33.1 / C	30.7 / C	33.1 / C
All-Way Stop Intersections[2]					
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	7.2 / A	6.1 / A	7.3 / A	6.1 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	14.0 / B	10.6 / A	14.0 / B	11.0 / B
3	Congress Ave. / Forest Lodge Rd.	11.6 / B	10.7 / B	11.6 / B	10.7 / B
4	Congress Ave. / David Ave.	11.0 / B	10.5 / B	11.1 / B	10.5 / B
10	Skyline Dr. / Skyline Forest Dr.	7.9 / A	8.4 / A	7.9 / A	8.4 / A
17	San Antonio Rd. / Ocean Ave.	8.0 / A	8.9 / A	8.0 / A	8.9 / A
23	Congress Road / SFB Morse Drive	7.8 / A	8.0 / A	7.8 / A	8.0 / A
25	Lopez Road / Sloat Road	8.3 / A	8.5 / A	8.3 / A	8.5 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	10.4 / A	10.8 / A	10.4 / B	10.8 / B
Side-Street Stop Intersections[3]					
7	Highway 68 / Presidio Blvd. [5]	3.9 (4.3) / A (A)	3.5 (3.7) / A (A)	4.6 (6.3) / A (A)	3.7 (3.7) / A (A)
9	Highway 68 / Skyline Forest Dr.	**24.3(>120) / C (F)**	**18.1(>120) / C (F)**	**24.6(>120) / C (F)**	**18.2(>120) / C (F)**
12	Highway 68 / Carmel Hill Professional Center	**63.2(>120) / F(F)**	**38.8(>120) / D(F)**	**63.2(>120) / F(F)**	**39.2(>120) / F(F)**
14	Highway 1 On-Ramp / 17-Mile Dr.	Eliminated with Project	Eliminated with Project	Eliminated with Project	Eliminated with Project
15	Highway 68 / Aguajito Rd. [5]	2.6 (10.5) / A (B)	3.2 (14.0) / A (B)	2.6 (10.5) / A (B)	3.2 (14.0) / A (B)

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TABLE 1
EXISTING INTERSECTION PEAK HOUR LEVEL OF SERVICE WITH DMFP
(+18 INCLUSIONARY UNITS AT CORPORATION YARD)

Description		Intersection Delay and Level of Service			
		Existing Plus Project Year 2011 (DEIR)		Existing Plus Project Year 2011 (+18 Inclusionary Units)	
		AM	PM	AM	PM
21	Congress Road / Spanish Bay / 17-Mile Dr.	4.9 (11.9) / A (B)	6.2 (13.1) / A (B)	4.9 (11.9) / A (B)	6.2 (13.1) / A (B)
22	Congress Road / Forest Lodge	2.3 (11.3) / A (B)	3.8 (14.5) / A (B)	2.4 (11.4) / A (B)	3.8 (14.6) / A (B)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	4.8 (7.6) / A (A)	4.8 (8.4) / A (A)	6.0 (8.4) / A (A)	4.7 (8.5) / A (A)
26	Spyglass Hill Road / Stevenson Drive	4.9 (9.4) / A (A)	4.6 (9.7) / A (A)	5.0 (9.4) / A (A)	4.6 (9.7) / A (A)
27	Forest Lake / Stevenson-Ondulado	3.9 (13.4) / A (B)	3.7 (13.0) / A (B)	3.9 (13.4) / A (B)	3.7 (13.0) / A (B)
29	Palmero Way / 17-Mile Drive	2.2 (17.2) / A (C)	3.5 (18.0) / A (C)	2.2 (17.2) / A (C)	3.5 (18.0) / A (C)
30	Sunridge Road / Ronda Road	2.6 (10.3) / A (B)	3.8 (9.7) / A (A)	2.7 (10.3) / A (B)	3.8 (9.7) / A (A)
31	Sunridge Road / Scenic Drive	0.6 (9.8) / A (A)	0.8 (10.9) / A (B)	0.5 (9.9) / A (A)	0.8 (11.0) / A (B)
32	Sunridge Road / Costanilla Way	5.3 (9.5) / A (A)	2.9 (9.3) / A (A)	5.2 (9.5) / A (A)	3.0 (9.4) / A (A)
33	Sunridge Road / Haul Road [4]	1.0 (6.4) / A (A)	1.1 (5.4) / A (A)	1.2 (6.5) / A (A)	1.3 (5.3) / A (A)

Notes:
Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.
1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.
2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.
3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.
4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.
5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.
Source: Fehr & Peers (October 2011)

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TABLE 2
NEAR-TERM INTERSECTION PEAK HOUR LEVEL OF SERVICE WITH DMFP
(+18 INCLUSIONARY UNITS AT CORPORATION YARD)

Description		Intersection Delay and Level of Service			
		Near-Term Plus Project Year 2015 (DEIR)		Near-Term Plus Project Year 2015 (+18 Inclusionary Units)	
		AM	PM	AM	PM
Signalized Intersections[1]					
5	Forest Ave. (Highway 68)/David Ave.	26.6/ C	33.4 / C	26.6 / C	33.5 / C
6	Highway 68 / Prescott Avenue	12.8 / B	21.5 / C	12.8 / B	21.4 / C
8	Highway 68 / SFB Morse Gate	5.3 / A	4.2 / A	5.2 / A	4.2 / A
11	Highway 68 / Community Hospital	8.4 / A	9.3 / A	8.4 / A	9.3 / A
13	Highway 68 / Highway 1 SB Off-Ramp	34.3 / C	**40.2 / D**	34.4 / C	**40.5 / D**
16	Highway 1 / Carpenter Street	18.4 / B	**59.6 / E**	18.4 / B	**59.7 / E**
18	Highway 1 / Ocean Avenue	**40.7 / D**	**52.9 / D**	**40.7 / D**	**53.0 / D**
19	Highway 1 / Carmel Valley Road	9.9 / A	19.0 / B	9.8 / A	19.0 / B
20	Highway 1 / Rio Road	32.3 / C	**36.0 / D**	32.5 / C	**36.0 / D**
All-Way Stop Intersections[2]					
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	8.4 / A	6.8 / A	8.5 / A	6.9 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	21.2 / C	13.0 / B	21.2 / C	13.0 / B
3	Congress Ave. / Forest Lodge Rd.	13.0 / B	11.5 / B	13.0 / B	11.5 / B
4	Congress Ave. / David Ave.	12.0 / B	11.6 / B	12.1 / B	11.6 / B
10	Skyline Dr. / Skyline Forest Dr.	8.1 / A	8.5 / A	8.1 / A	8.5 / A
17	San Antonio Rd. / Ocean Ave.	8.3 / A	9.3 / A	8.3 / A	9.3 / A
23	Congress Road / SFB Morse Drive	7.9 / A	8.2 / A	8.0 / A	8.2 / A
25	Lopez Road / Sloat Road	8.6 / A	9.1 / A	8.6 / A	9.1 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	11.1 / B	11.7 / A	11.1 / B	11.7 / B
Side-Street Stop Intersections[3]					
7	Highway 68 / Presidio Blvd. [5]	4.3 (4.6) / A (A)	3.7 (3.9) / A (A)	4.4 (4.8) / A (A)	4.0 (4.1) / A (A)
9	Highway 68 / Skyline Forest Dr.	**37.3(>120) / E (F)**	**28.3(>120) / C (F)**	**37.6(>120) / E (F)**	**28.4(>120) / C (F)**
12	Highway 68 / Carmel Hill Professional Center	**93.0(>120) / F(F)**	**>120(>120) / F(F)**	**93.0(>120) / F (F)**	**>120(>120) / F(F)**
14	Highway 1 On-Ramp / 17-Mile Dr.	Eliminated with Project	Eliminated with Project	Eliminated with Project	Eliminated with Project
15	Highway 68 / Aguajito Rd. [5]	3.0 (15.4) / A (C)	3.6 (17.7) / A (C)	3.2 (19.6) / A (C)	3.6 (17.7) / A (C)

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TABLE 2
NEAR-TERM INTERSECTION PEAK HOUR LEVEL OF SERVICE WITH DMFP
(+18 INCLUSIONARY UNITS AT CORPORATION YARD)

Description		Intersection Delay and Level of Service			
		Near-Term Plus Project Year 2015 (DEIR)		Near-Term Plus Project Year 2015 (+18 Inclusionary Units)	
		AM	PM	AM	PM
21	Congress Road / Spanish Bay / 17-Mile Dr.	5.3 (12.6) / A (B)	7.2 (15.1) / A (C)	5.4 (12.6) / A (B)	7.2 (15.1) / A (C)
22	Congress Road / Forest Lodge	3.3 (12.0) / A (B)	4.7 (16.2) / A (C)	3.4 (12.1) / A (B)	4.8 (16.3) / A (C)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	5.0 (8.0) / A (A)	4.9 (8.7) / A (A)	5.0 (8.0) / A (A)	4.9 (8.7) / A (A)
26	Spyglass Hill Road / Stevenson Drive	4.9 (9.7) / A (A)	4.6 (10.1) / A (B)	4.9 (9.7) / A (A)	4.7 (10.0) / A (B)
27	Forest Lake / Stevenson-Ondulado	4.8 (15.3) / A (C)	4.3 (14.2) / A (B)	4.8 (15.3) / A (C)	4.3 (14.3) / A (B)
29	Palmero Way / 17-Mile Drive	3.2 (21.0) / A (C)	4.8 (19.8) / A (C)	3.2 (21.0) / A (C)	4.8 (19.9) / A (C)
30	Sunridge Road / Ronda Road	3.0 (10.7) / A (B)	4.0 (10.0) / A (B)	3.1 (10.8) / A (B)	4.0 (10.0) / A (B)
31	Sunridge Road / Scenic Drive	0.8 (10.3) / A (B)	1.1 (10.8) / A (B)	0.8 (10.3) / A (B)	1.1 (10.8) / A (B)
32	Sunridge Road / Costanilla Way	5.4 (9.8) / A (A)	3.2 (9.5) / A (A)	5.4 (9.8) / A (A)	3.2 (9.5) / A (A)
33	Sunridge Road / Haul Road [4]	1.4 (6.8) / A (A)	1.5 (5.8) / A (A)	1.6 (7.2) / A (A)	1.5 (5.8) / A (A)

Notes:
Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.

1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.

4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.

5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.

Source: Fehr & Peers (October 2011)

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TABLE 3
CUMULATIVE BASELINE INTERSECTION PEAK HOUR LEVEL OF SERVICE
(+45 LCP GUEST ROOMS)

	Description	Intersection Delay and Level of Service			
		Cumulative Baseline Year 2030 (No Project)		Cumulative Baseline Year 2030 (+45 LCP Units)	
		AM	PM	AM	PM
Signalized Intersections[1]					
5	Forest Ave. (Highway 68)/David Ave.	26.5 / C	**38.9 / D**	26.5 / C	**39.0 / D**
6	Highway 68 / Prescott Avenue	15.7 / B	24.0 / C	15.7 / B	24.0 / C
8	Highway 68 / SFB Morse Gate	12.8 / B	17.8 / B	12.8 / B	17.8 / B
11	Highway 68 / Community Hospital	9.5 / A	23.7 / C	9.6 / A	24.1 / C
13	Highway 68 / Highway 1 SB Off-Ramp	**>120.0 / F**	**>120.0 / F**	**>120.0 / F**	**>120.0 / F**
16	Highway 1 / Carpenter Street	18.3 / B	**74.1 / E**	18.3 / B	**74.2 / E**
18	Highway 1 / Ocean Avenue	**45.0 / D**	**63.9 / E**	**45.4 / D**	**64.2 / E**
19	Highway 1 / Carmel Valley Road	10.2 / B	21.7 / C	10.2 / B	21.7 / C
20	Highway 1 / Rio Road	33.7 / C	**38.3 / D**	33.7 / C	**38.3 / D**
All-Way Stop Intersections[2]					
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	8.0 / A	6.6 / A	8.0 / A	6.6 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	18.1 / C	18.2 / C	21.5 / C	18.7 / C
3	Congress Ave. / Forest Lodge Rd.	12.2 / B	12.6 / B	12.2 / B	12.6 / B
4	Congress Ave. / David Ave.	11.3 / B	12.6 / B	11.3 / B	12.6 / B
10	Skyline Dr. / Skyline Forest Dr.	8.2 / A	8.8 / A	8.2 / A	8.8 / A
17	San Antonio Rd. / Ocean Ave.	8.2 / A	9.4 / A	8.2 / A	9.4 / A
23	Congress Road / SFB Morse Drive	7.8 / A	8.1 / A	7.8 / A	8.1 / A
25	Lopez Road / Sloat Road	8.1 / A	8.4 / A	8.1 / A	8.5 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	9.9 / A	10.5 / B	10.0 / A	10.6 / B
Side-Street Stop Intersections[3]					
7	Highway 68 / Presidio Blvd.[5]	12.8(21.6) / B(C)	5.2 (5.6) / A (A)	13.5 (22.9) / B (C)	5.0 (5.4) / A (A)
9	Highway 68 / Skyline Forest Dr.	**>120(>120) / F(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**
12	Highway 68 / Carmel Hill Professional Center	**98.6(>120) / F(F)**	**>120(>120) /F(F)**	**98.6(>120) / F(F)**	**>120(>120) /F(F)**
14	Highway 1 On-Ramp / 17-Mile Dr.	3.1 (16.8) / A (C)	**18.8(56.3)/ (C(F)**	3.7 (16.8) / A (C)	**19.5 (58.3) / F (F)**
15	Highway 68 / Aguajito Rd.[5]	3.1 (17.4) / A (C)	**32.4(>120) / D(F)**	4.4 (17.4) / A (C)	**34.8 (>120) / D (F)**

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TABLE 3
CUMULATIVE BASELINE INTERSECTION PEAK HOUR LEVEL OF SERVICE
(+45 LCP GUEST ROOMS)

	Description	Intersection Delay and Level of Service			
		Cumulative Baseline Year 2030 (No Project)		Cumulative Baseline Year 2030 (+45 LCP Units)	
		AM	PM	AM	PM
21	Congress Road / Spanish Bay / 17-Mile Dr.	5.2 (11.2) / A (B)	6.1 (12.6) / A (B)	5.3 (11.3) A / (B)	6.2 (12.8) / A (B)
22	Congress Road / Forest Lodge	2.8 (11.5) / A (B)	4.2 (15.4) / A (C)	2.8 (11.5) / A (B)	4.3 (15.5) / A (C)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	4.8 (7.5) / A (A)	4.6 (8.2) / A (A)	4.6 (7.7) / A (A)	4.6 (8.3) / A (A)
26	Spyglass Hill Road / Stevenson Drive	3.2 (8.8) / A (A)	2.9 (9.3) / A (A)	3.3 (8.9) / A (A)	3.0 (9.3) / A (A)
27	Forest Lake / Stevenson-Ondulado	4.6 (12.8) / A (B)	4.5 (12.3) / A (B)	4.6 (12.9) / A (B)	4.5 (12.4) / A (B)
29	Palmero Way / 17-Mile Drive	2.9 (17.3) / A (C)	4.4 (18.1) / A (C)	2.9 (17.4) / A (C)	4.4 (18.4) / A (C)
30	Sunridge Road / Ronda Road	2.4 (10.2) / A (B)	4.0 (9.8) / A (A)	2.4 (10.2) / A (B)	4.0 (9.8) / A (A)
31	Sunridge Road / Scenic Drive	0.8 (10.1) / A (B)	1.1 (10.6) / A (B)	0.8 (10.1) / A (B)	1.1 (10.6) / A (B)
32	Sunridge Road / Costanilla Way	5.6 (9.6) / A (A)	3.0 (9.4) / A (A)	5.6 (9.6) / A (A)	3.0 (9.4) / A (A)
33	Sunridge Road / Haul Road [4]	1.2 (7.3) / A (A)	1.6 (5.9) / A (A)	1.2 (7.3) / A (A)	1.7 (5.8) / A (A)

Notes:
Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.

1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.

4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.

5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.

Source: Fehr & Peers (October 2011)

FEHR & PEERS

TABLE 4
CUMULATIVE WITH DMFP INTERSECTION PEAK HOUR LEVEL OF SERVICE
(+45 LCP GUEST ROOMS)

	Description	Intersection Delay and Level of Service			
		Cumulative Plus Project Year 2030		Cumulative Plus Project Year 2030 (+45 LCP Units)	
		AM	PM	AM	PM
Signalized Intersections[1]					
5	Forest Ave. (Highway 68)/David Ave.	27.1 / C	**40.4 / D**	27.2 / C	**40.6 / D**
6	Highway 68 / Prescott Avenue	15.7 / B	24.2/ C	15.7 / B	24.2 / C
8	Highway 68 / SFB Morse Gate	12.9 / B	18.1 / B	12.9 / B	18.2 / B
11	Highway 68 / Community Hospital	9.7 / A	26.2 / C	9.7 / A	26.5 / C
13	Highway 68 / Highway 1 SB Off-Ramp	**>120.0 / F**	**>120.0 / F**	**>120.0 / F**	**>120.0 / F**
16	Highway 1 / Carpenter Street	18.3 / B	**76.0/ E**	18.3 / B	**76.1 / E**
18	Highway 1 / Ocean Avenue	**46.3 / D**	**65.7/ E**	**46.5 / D**	**65.9 / E**
19	Highway 1 / Carmel Valley Road	10.3 / B	22.0 / C	10.3 / B	22.0 / C
20	Highway 1 / Rio Road	33.9 / C	**38.3 / D**	33.9 / C	**38.3 / D**
All-Way Stop Intersections[2]					
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	9.3 / A	7.4 / A	9.6 / A	7.4 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	**25.2 / D**	**26.3 / D**	**31.5 / D**	**26.3 / D**
3	Congress Ave. / Forest Lodge Rd.	12.3 / B	12.8 / B	12.3 / B	12.8 / B
4	Congress Ave. / David Ave.	11.4 / B	12.7 / B	11.4 / B	12.7 / B
10	Skyline Dr. / Skyline Forest Dr.	8.2 / A	8.8 / A	8.2 / A	8.8 / A
17	San Antonio Rd. / Ocean Ave.	8.2 / A	9.5 / A	8.2 / A	9.5 / A
23	Congress Road / SFB Morse Drive	7.9 / A	8.2 / A	7.9 / A	8.2 / A
25	Lopez Road / Sloat Road	8.5 / A	9.0 / A	8.5 / A	9.0 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	10.9 / B	11.8 / B	11.0 / B	12.0 / B
Side-Street Stop Intersections[3]					
7	Highway 68 / Presidio Blvd.[5]	13.9(24.1) / B(C)	5.3 (5.9)/ A (A)	13.9 (24.3) / B (C)	5.5 (6.1) / A (A)
9	Highway 68 / Skyline Forest Dr.	**>120(>120) / F(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**
12	Highway 68 / Carmel Hill Professional Center	**97.2(>120) / F(F)**	**>120(>120) / F(F)**	**97.2(>120)/ F (F)**	**>120(>120) / F(F)**
14	Highway 1 On-Ramp / 17-Mile Dr.	Eliminated with project	Eliminated with project	Eliminated with project	Eliminated with project
15	Highway 68 / Aguajito Rd.[5]	**3.4 (27.9) / A (D)**	**39.7(>120) / E(F)**	**5.2 (47.3) / A (E)**	**39.7 (>120) / F(F)**

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TABLE 4
CUMULATIVE WITH DMFP INTERSECTION PEAK HOUR LEVEL OF SERVICE
(+45 LCP GUEST ROOMS)

Description		Intersection Delay and Level of Service			
		Cumulative Plus Project Year 2030		Cumulative Plus Project Year 2030 (+45 LCP Units)	
		AM	PM	AM	PM
21	Congress Road / Spanish Bay / 17-Mile Dr.	5.3 (12.5) / A (B)	7.0 (14.7) / A (C)	5.4 (12.7) / A (B)	7.1 (14.9) / A (B)
22	Congress Road / Forest Lodge	3.0 (11.7) / A (B)	4.5 (16.1) / A (C)	3.1 (11.7) / A (B)	4.5 (16.1) / A (C)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	5.1 (7.9) / A (A)	5.1 (9.1) / A (A)	5.2 (8.3) / A (A)	5.1 (9.2) / A (A)
26	Spyglass Hill Road / Stevenson Drive	4.8(9.5) / A (A)	4.4(10.0) / A (B)	4.8 (9.5) / A (A)	4.5 (10.0) / A (B)
27	Forest Lake / Stevenson-Ondulado	4.5 (14.2) / A (B)	4.4 (13.7) / A (B)	4.5 (14.3) / A (B)	4.5 (13.8) / A (B)
29	Palmero Way / 17-Mile Drive	2.9 (19.2) / A (C)	4.6 (20.2) / A (C)	2.9 (19.4) / A (C)	4.6 (20.6) / A (C)
30	Sunridge Road / Ronda Road	2.8 (10.4) / A (B)	4.1 (10.1) / A (B)	2.8 (10.4) / A (B)	4.1 (10.0) / A (B)
31	Sunridge Road / Scenic Drive	0.8 (10.2) / A (B)	1.1 (10.9) / A (B)	0.8 (10.2) / A (B)	1.0 (10.9) / A (B)
32	Sunridge Road / Costanilla Way	5.5 (9.7) / A (A)	3.2 (9.5) / A (A)	5.5 (9.7) / A (A)	3.2 (9.5) / A (A)
33	Sunridge Road / Haul Road [4]	1.3 (6.5) / A (A)	1.6 (5.8) / A (A)	1.3 (6.8) / A (A)	1.6 (5.9) / A (A)

Notes:
Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.

1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.

4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.

5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.

Source: Fehr & Peers (October 2011)

FEHR & PEERS

TABLE 5
CUMULATIVE WITH DMFP INTERSECTION PEAK HOUR LEVEL OF SERVICE WITH DMFP
(+18 INCLUSIONARY HOUSING UNITS +45 LCP GUEST ROOMS)

	Description	Intersection Delay and Level of Service			
		Cumulative Plus Project Year 2030		Cumulative Plus Project Year 2030 (+18 Inclusionary Units and 45 CAP Units)	
		AM	PM	AM	PM
Signalized Intersections[1]					
5	Forest Ave. (Highway 68)/David Ave.	27.1 / C	**40.4 / D**	27.2 / C	**40.6 / D**
6	Highway 68 / Prescott Avenue	15.7 / B	24.2/ C	15.7 / B	24.2 / C
8	Highway 68 / SFB Morse Gate	12.9 / B	18.1 / B	12.9 / B	18.2 / B
11	Highway 68 / Community Hospital	9.7 / A	26.2 / C	9.7 / A	26.6 / C
13	Highway 68 / Highway 1 SB Off-Ramp	**>120.0 / F**	**>120.0 / F**	**>120.0 / F**	**>120.0 / F**
16	Highway 1 / Carpenter Street	18.3 / B	**76.0/ E**	18.4 / B	**76.2 / E**
18	Highway 1 / Ocean Avenue	**46.3 / D**	**65.7/ E**	**46.4 / D**	**65.9 / E**
19	Highway 1 / Carmel Valley Road	10.3 / B	22.0 / C	10.3 / B	22.0 / C
20	Highway 1 / Rio Road	33.9 / C	**38.3 / D**	33.9 / C	**38.3 / D**
All-Way Stop Intersections[2]					
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	9.3 / A	7.4 / A	9.8 / A	7.5 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	**25.2 / D**	**26.3 / D**	**31.5 / D**	**26.3 / D**
3	Congress Ave. / Forest Lodge Rd.	12.3 / B	12.8 / B	12.3 / B	12.9 / B
4	Congress Ave. / David Ave.	11.4 / B	12.7 / B	11.5 / B	12.7 / B
10	Skyline Dr. / Skyline Forest Dr.	8.2 / A	8.8 / A	8.2 / A	8.8 / A
17	San Antonio Rd. / Ocean Ave.	8.2 / A	9.5 / A	8.2 / A	9.5 / A
23	Congress Road / SFB Morse Drive	7.9 / A	8.2 / A	7.9 / A	8.2 / A
25	Lopez Road / Sloat Road	8.5 / A	9.0 / A	8.5 / A	9.0 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	10.9 / B	11.8 / B	11.0 / B	12.1 / B
Side-Street Stop Intersections[3]					
7	Highway 68 / Presidio Blvd. [5]	13.9(24.1) / B(C)	5.3 (5.9) / A (A)	14.2 (24.1) / B (C)	5.3 (5.9) / A (A)
9	Highway 68 / Skyline Forest Dr.	**>120(>120) / F(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**
12	Highway 68 / Carmel Hill Professional Center	**97.2(>120) / F(F)**	**>120(>120) / F(F)**	**97.2(>120) / F (F)**	**>120(>120) / F(F)**
14	Highway 1 On-Ramp / 17-Mile Dr.	Eliminated with project	Eliminated with project	Eliminated with project	Eliminated with project
15	Highway 68 / Aguajito Rd. [5]	**3.4 (27.9) / A (D)**	**39.7(>120) / E(F)**	**5.2 (47.3) / A (E)**	**39.7 (>120) / F(F)**

FEHR & PEERS

TABLE 5
CUMULATIVE WITH DMFP INTERSECTION PEAK HOUR LEVEL OF SERVICE WITH DMFP
(+18 INCLUSIONARY HOUSING UNITS +45 LCP GUEST ROOMS)

Description		Intersection Delay and Level of Service			
		Cumulative Plus Project Year 2030		Cumulative Plus Project Year 2030 (+18 Inclusionary Units and 45 CAP Units)	
		AM	PM	AM	PM
21	Congress Road / Spanish Bay / 17-Mile Dr.	5.3 (12.5) / A (B)	7.0 (14.7) / A (C)	5.4 (12.6) / A (B)	7.2 (15.0) / A (C)
22	Congress Road / Forest Lodge	3.0 (11.7) / A (B)	4.5 (16.1) / A (C)	3.1 (11.7) / A (B)	4.6 (16.3) / A (C)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	5.1 (7.9) / A (A)	5.1 (9.1) / A (A)	5.3 (8.2) / A (A)	5.1 (9.0) / A (A)
26	Spyglass Hill Road / Stevenson Drive	4.8(9.5) / A (A)	4.4(10.0) / A (B)	4.9 (9.5) / A (A)	4.5 (10.0) / A (B)
27	Forest Lake / Stevenson-Ondulado	4.5 (14.2) / A (B)	4.4 (13.7) / A (B)	4.5 (14.4) / A (B)	4.4 (13.9) / A (B)
29	Palmero Way / 17-Mile Drive	2.9 (19.2) / A (C)	4.6 (20.2) / A (C)	2.9 (19.4) / A (C)	4.7 (20.6) / A (C)
30	Sunridge Road / Ronda Road	2.8 (10.4) / A (B)	4.1 (10.1) / A (B)	2.9 (10.5) / A (B)	4.1 (10.1) / A (B)
31	Sunridge Road / Scenic Drive	0.8 (10.2) / A (B)	1.1 (10.9) / A (B)	0.8 (10.2) / A (B)	1.1 (10.9) / A (B)
32	Sunridge Road / Costanilla Way	5.5 (9.7) / A (A)	3.2 (9.5) / A (A)	5.4 (9.7) / A (B)	3.3 (9.5) / A (A)
33	Sunridge Road / Haul Road [4]	1.3 (6.5) / A (A)	1.6 (5.8) / A (A)	1.5 (7.4) / A (A)	1.6 (5.8) / A (A)

Notes:
Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.

1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.

4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.

5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.

Source: Fehr & Peers (October 2011)

Attachment A
Trip Generation

FEHR PEERS

DEL MONTE FOREST PLAN - VEHICLE TRIP GENERATION CALCULATIONS

Land Use	Size	Unit /1/	Trip Rates			Trip Estimates						
			AM	PM	Daily	AM	PM	Daily	AM		PM	
									In	Out	In	Out
Updated Project Description												
Additional Guestrooms at Spanish Bay Resort	60	Rooms	0.56	0.59	4.90	34	35	294	20	14	19	16
3,960 sf meeting rooms /2/	95	People	0.34	0.34	3.4	32	32	323	27	5	5	27
1,409 sf Ballroom expansion /2/	34	People	0.34	0.34	3.4	11	11	115	10	1	2	9
Addtl Guestrooms at the Lodge at Pebble Beach /3/	80	Rooms	0.56	0.59	4.90	45	47	392	27	18	25	22
2,100 sf meeting rooms /2/	50	People	0.34	0.34	3.4	17	17	171	14	3	3	14
Equestrian Center /4/	1	Center	--	--	--	--	--	--	--	--	--	--
Driving Range /5/	1	Range	--	--	--	--	--	--	--	--	--	--
Area F-2 Single Family Homes	16	DU	0.75	1.01	9.57	12	16	153	3	9	10	6
Area I-2 Single Family Homes	16	DU	0.75	1.01	9.57	12	16	153	3	9	10	6
Area J Single Family Homes	5	DU	0.75	1.01	9.57	4	5	48	1	3	3	2
Area K Single Family Homes	8	DU	0.75	1.01	9.57	6	8	77	2	4	5	3
Area L Single Family Homes	10	DU	0.75	1.01	9.57	8	10	96	2	6	6	4
Area U Single Family Homes	7	DU	0.75	1.01	9.57	5	7	67	1	4	4	3
Area V Single Family Homes	14	DU	0.75	1.01	9.57	11	14	134	3	8	9	5
Collins Residence Single Family Homes /6/	2	DU	0.75	1.01	9.57	2	2	19	0	2	1	1
PBC Corporate Yard Single Family Homes /7/	28	DU	0.75	1.01	9.57	21	28	268	5	16	18	10
Alternative 1:												
Spyglass Hotel /8/	100	Rooms	0.56	0.59	8.17	56	59	817	34	22	31	28
6,000 sf Spyglass Hotel restaurant	6	KSF	1.39	1.87	22.49	8	11	135	7	1	8	3
19,674 sf Spyglass Hotel Spa /9/	41	PS	0.59	0.59	5.85	24	24	240	12	12	12	12
Alternative 2:												
10 Single Family Homes	10	DU	0.75	1.01	9.57	8	10	96	2	6	6	4
Total with Land Use Alternative 1 (Spyglass Hotel)						307	345	3,502	171	136	171	174
Total with Land Use Alternative 2 (Single Family Residential)						226	261	2,406	120	106	126	135

1. SF = square feet, DU = dwelling units, PS = parking spaces, KSF = thousand square feet

2. Assumption 24 people per 1,000 s.f. for conference-style meetings (per CVENT) 50 percent use is by hotel guests (reduction taken under trip rate), 1.5 people per car for those that drive.

3. Assumes 20 units at the Colton building and 40 units at the Fairway One site which replace 5 units that exist today at Fairway One. The daily rate is adjusted down by 40% because guest rooms are an incremental increase to an existing resort. So, the additional trips would be due to hotel guests and an incremental increase in employment only.

4. These services are currently being provided at the Equestrian Center. Thus, there will be no new trips generated.

5. These services are currently being provided at the Spyglass Course. Thus, there will be no new trips generated.

6. The 2 existing units at the Collins site would be replaced by 4 units.

7. PBC Corporate Yard includes 10 SFDU as part of the project and 18 inclusionary SFDU for a total of 28 SFDU.

8. The hotel trip generation rate is consistent with a hotel that provides a restaurant and meeting rooms. The Spyglass Hotel will provide a 6,677 square foot restaurant and 5,120 square feet of meeting rooms.

9. Assumes that half of the spa clientele come from hotel guests thus making no new vehicle trips. The other half are assumed to have a two to three-hour turnover rate and there would be 10 employees on-site at one time. With 41 parking spaces, 10 will be used by employees and 31 will be used by guests. Using a 3-hour parking turnover rate, there will be approximately about 12 trips in and 12 trips out per hour for a total of 24 trips per peak hour.

10. The 45 LCP Units are included in the Spanish Bay Resort (20 additional rooms) and the Lodge at Pebble Beach (25 additional rooms)

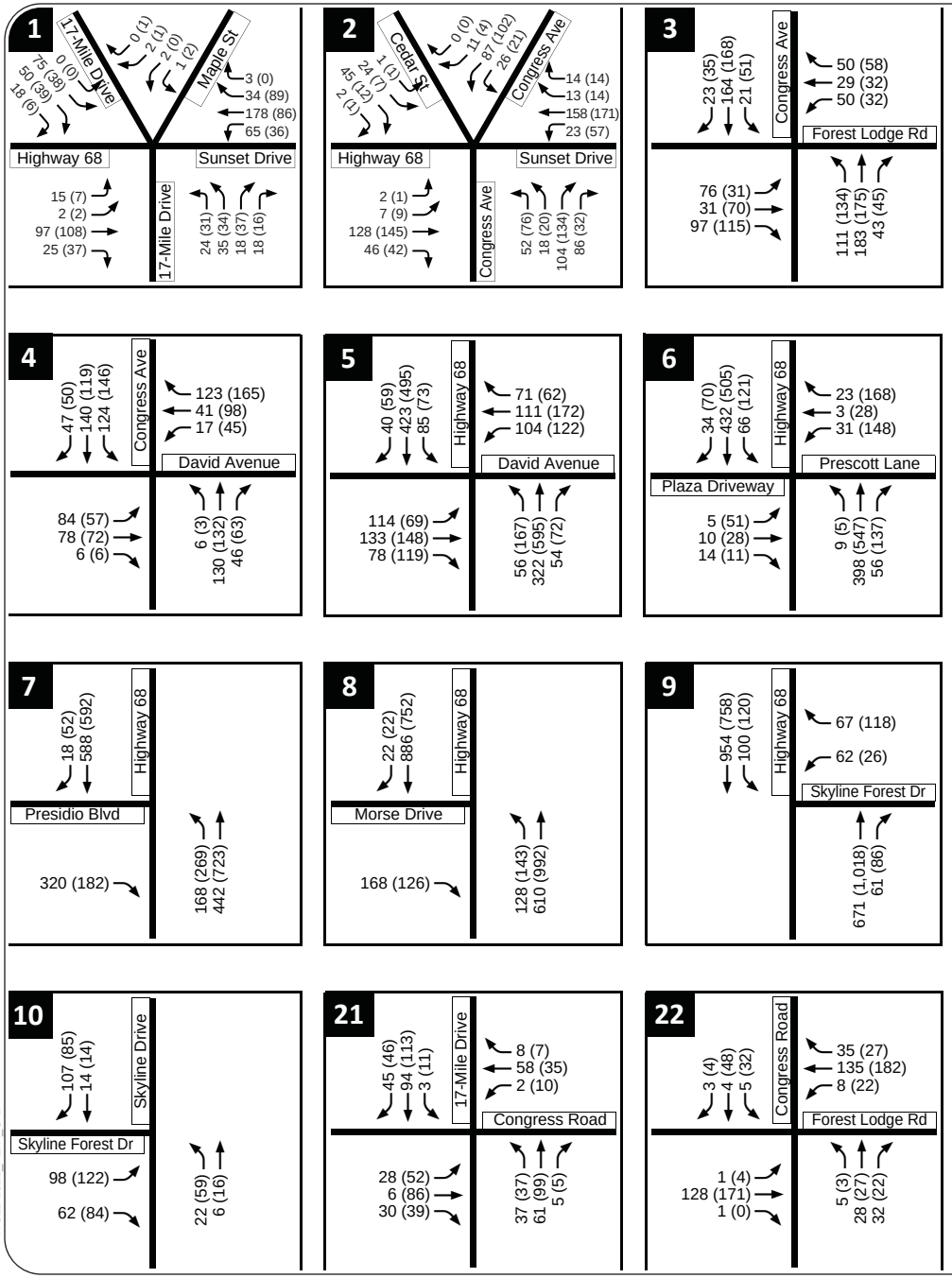
Trip generation rates based on the Institute of Transportation Engineers' Trip Generation Manual (8th Edition), 2008.

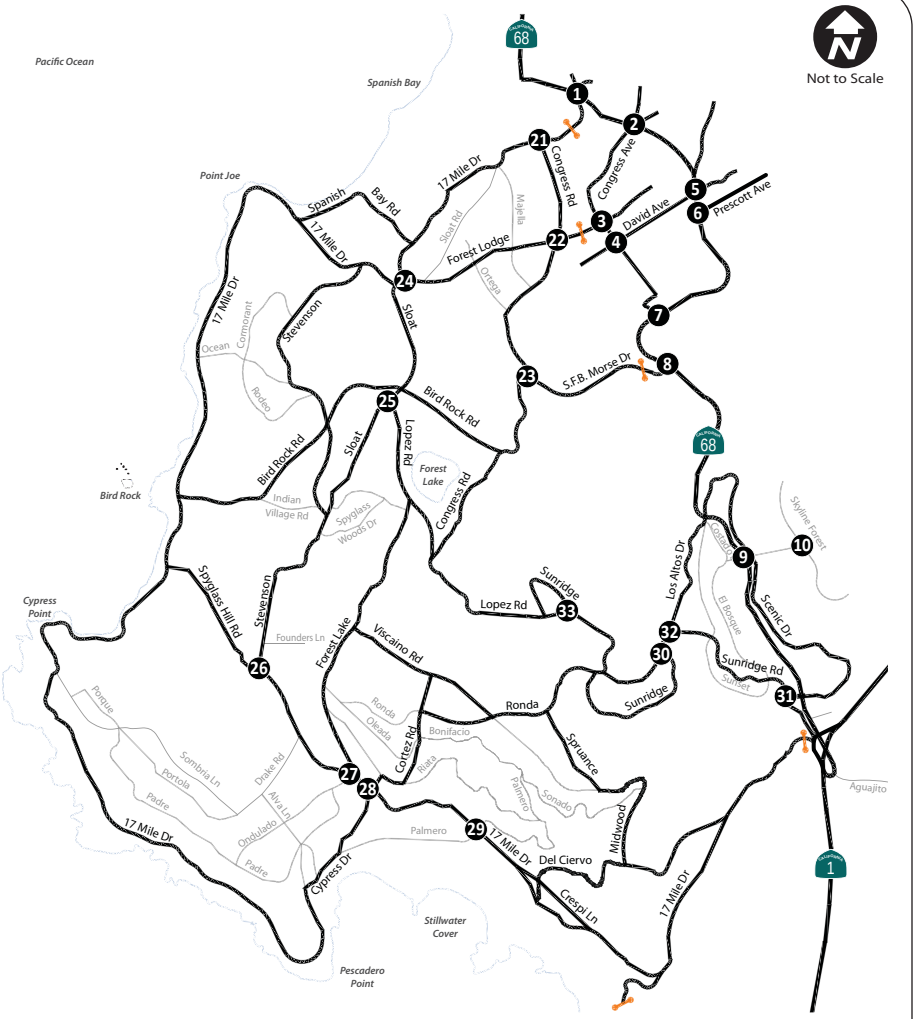
Source: Fehr & Peers, June 2011

Attachment B
Volume Figures

FEHR PEERS

EXISTING PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES





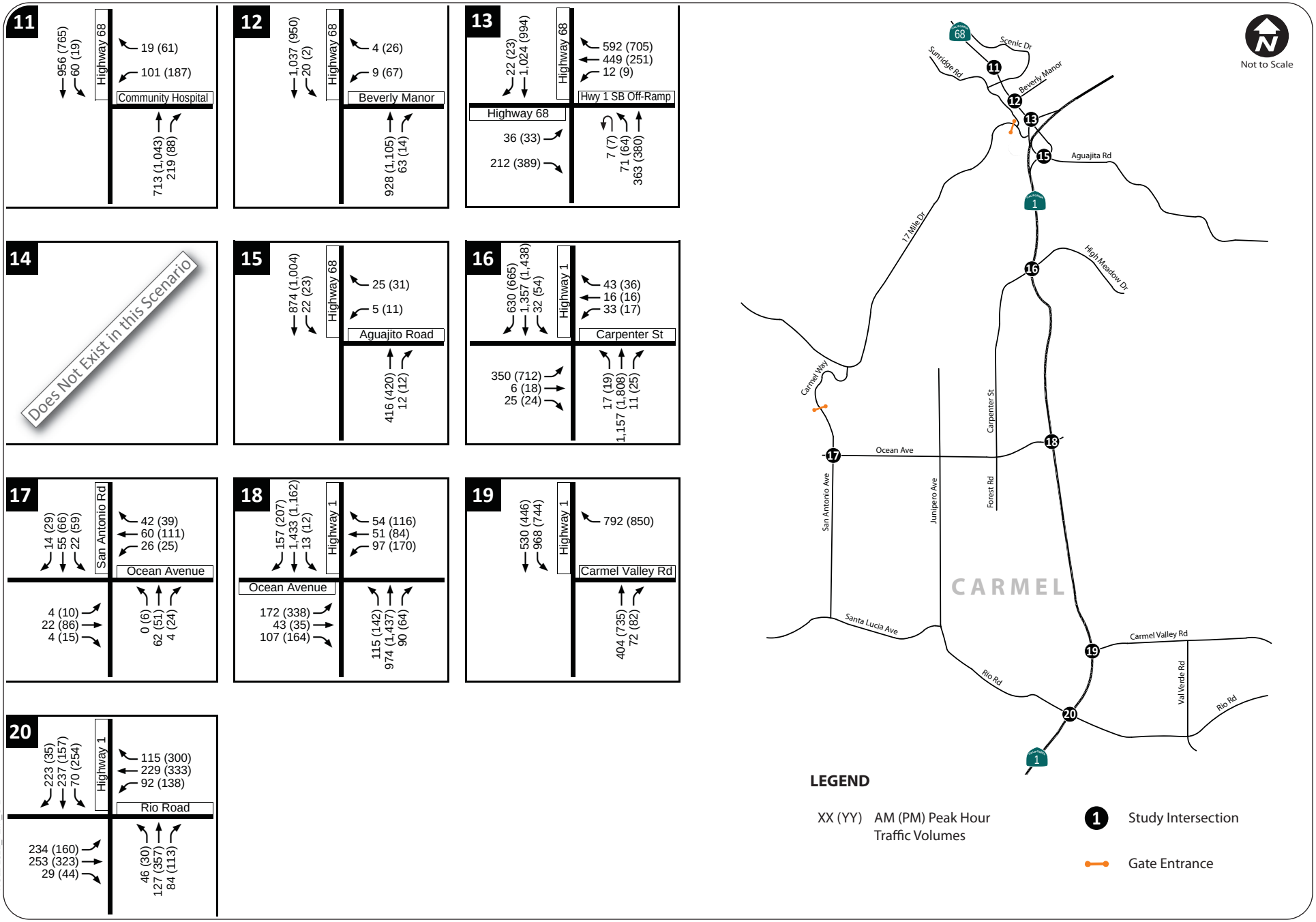
LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

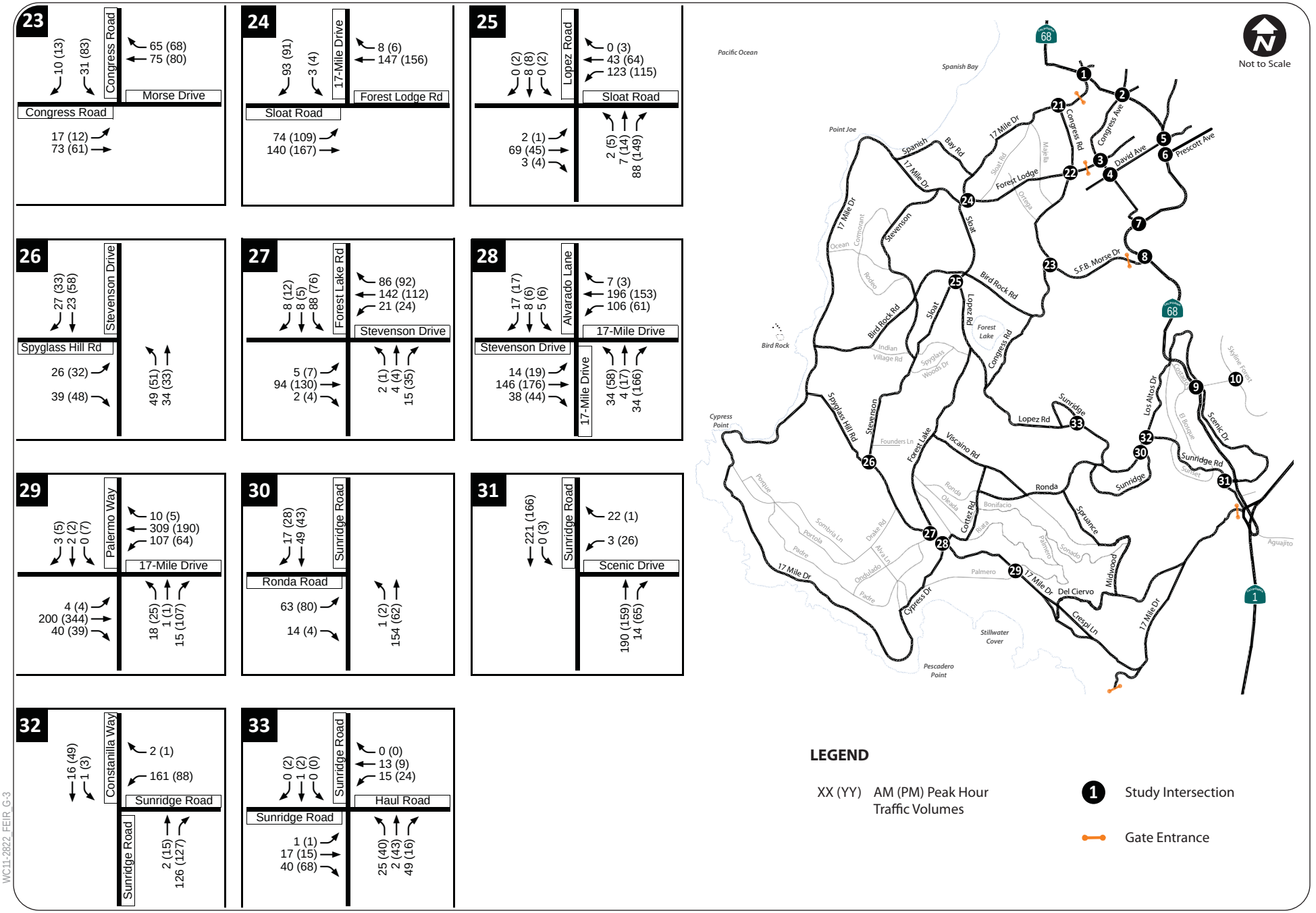
1 Study Intersection

Gate Entrance

EXISTING PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES

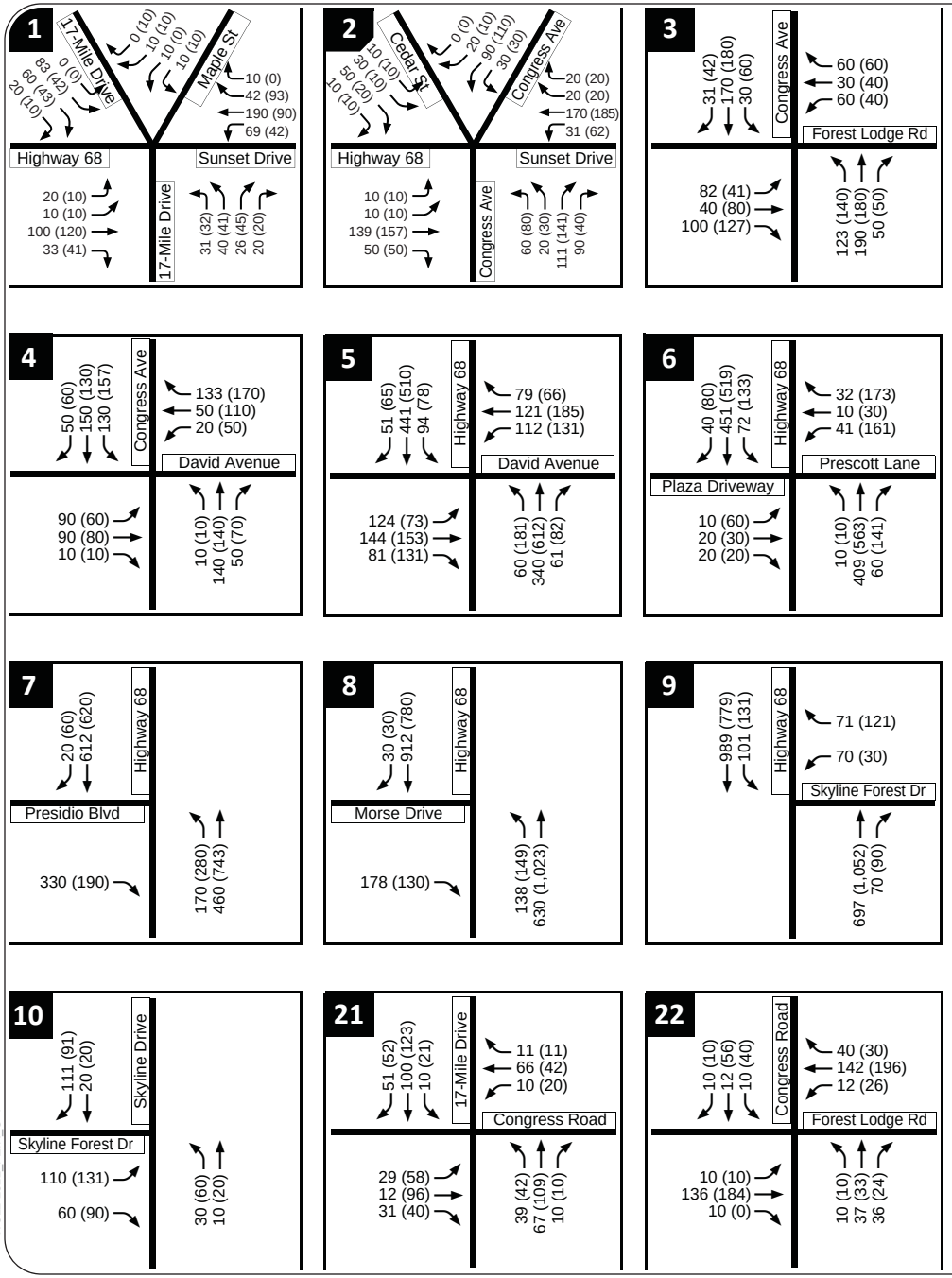


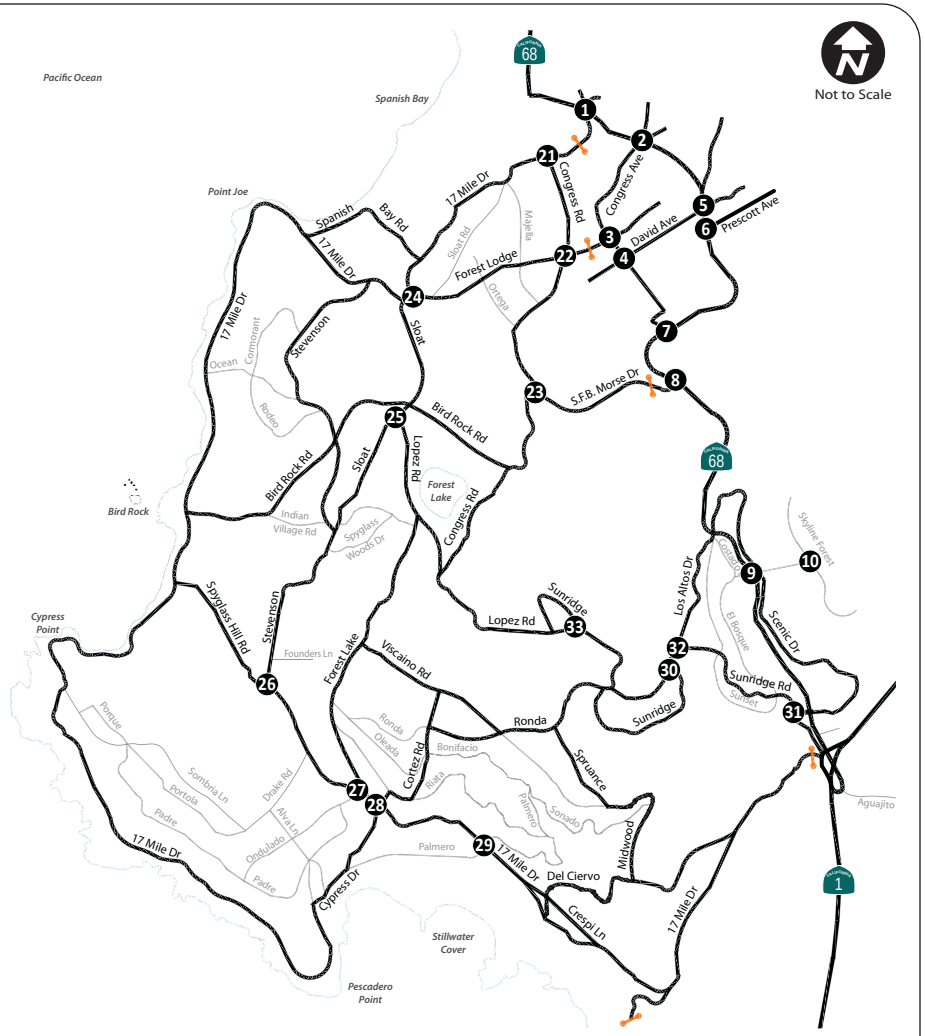
EXISTING PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES



WC11-2822_FEIR_G-3

NEAR-TERM (2015) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES





LEGEND

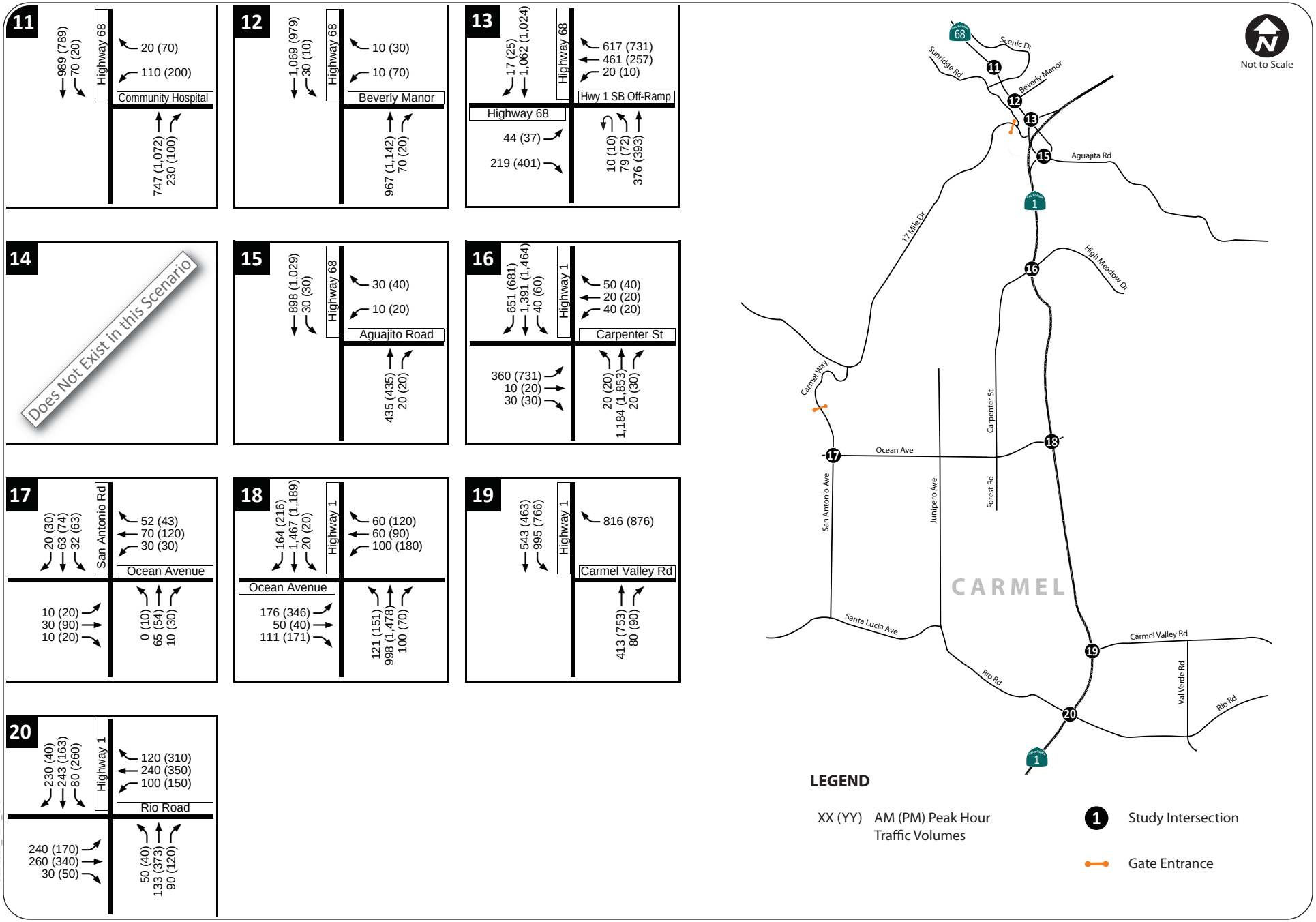
XX (YY) AM (PM) Peak Hour Traffic Volumes

1 Study Intersection

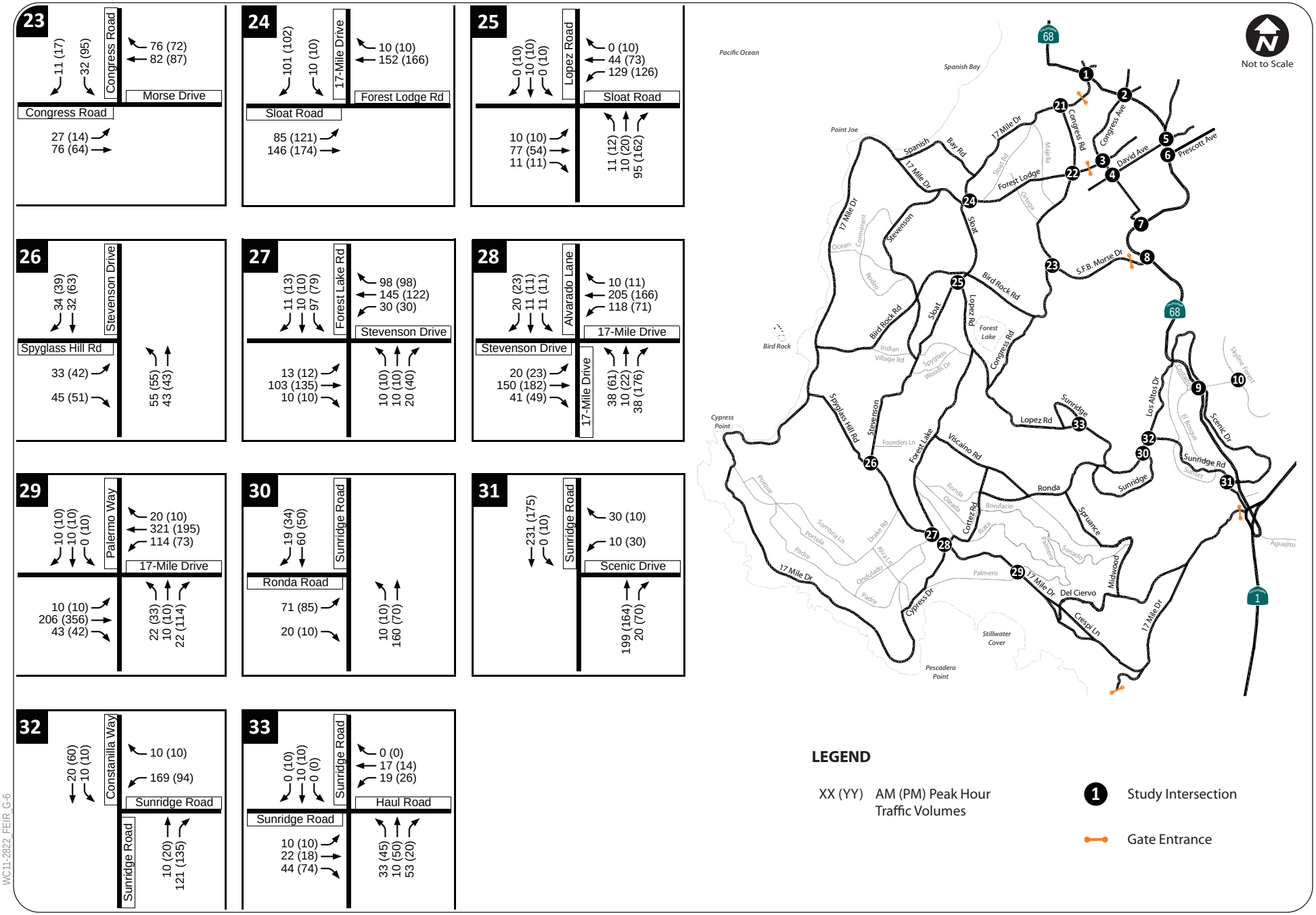
Gate Entrance

WC11-2822_FEIR_G-4

NEAR-TERM (2015) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES

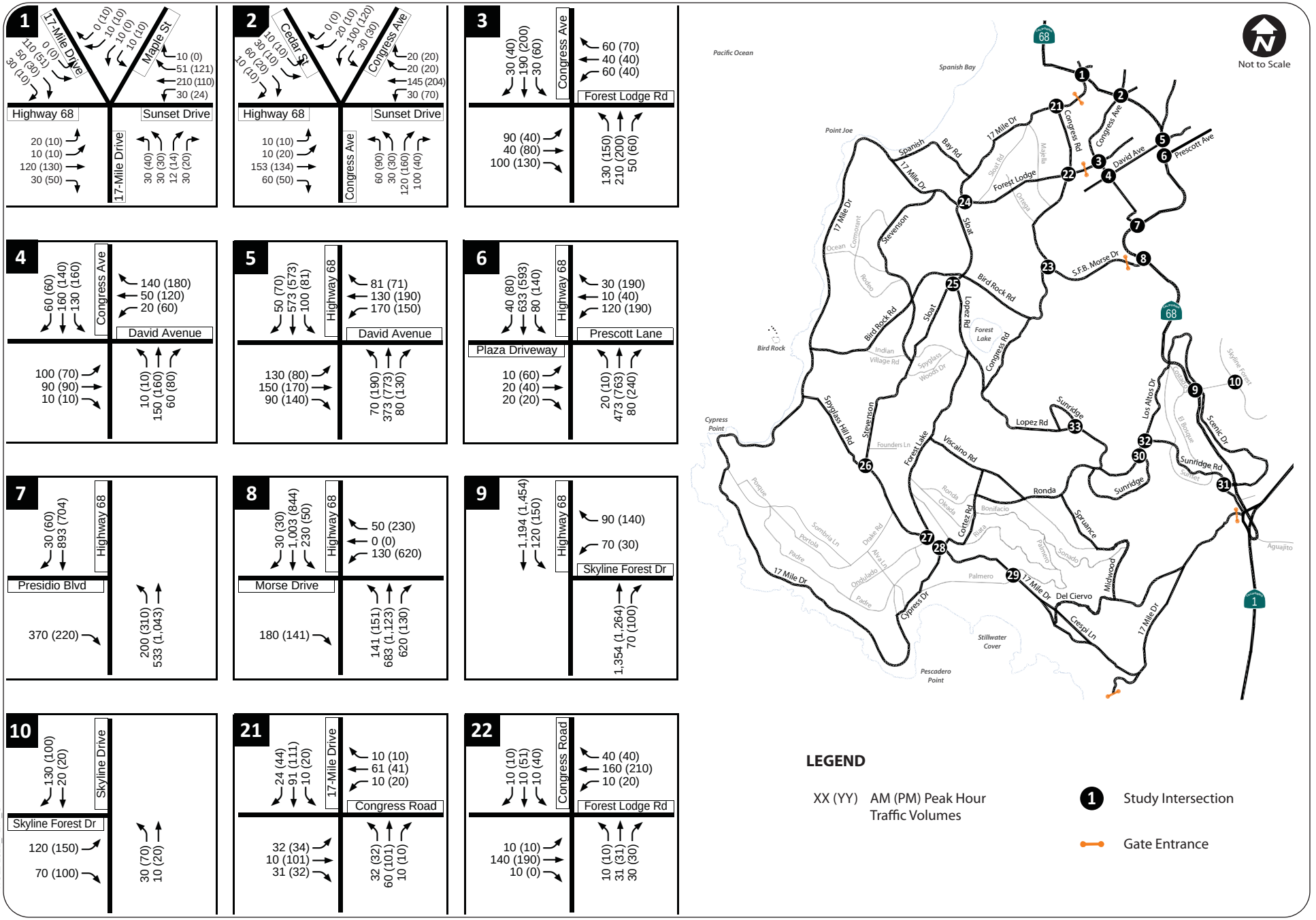


NEAR-TERM (2015) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES



WC11-2822_FEIR_G-6

CUMULATIVE (2030) WITH 45 LCP UNITS PEAK HOUR VOLUMES



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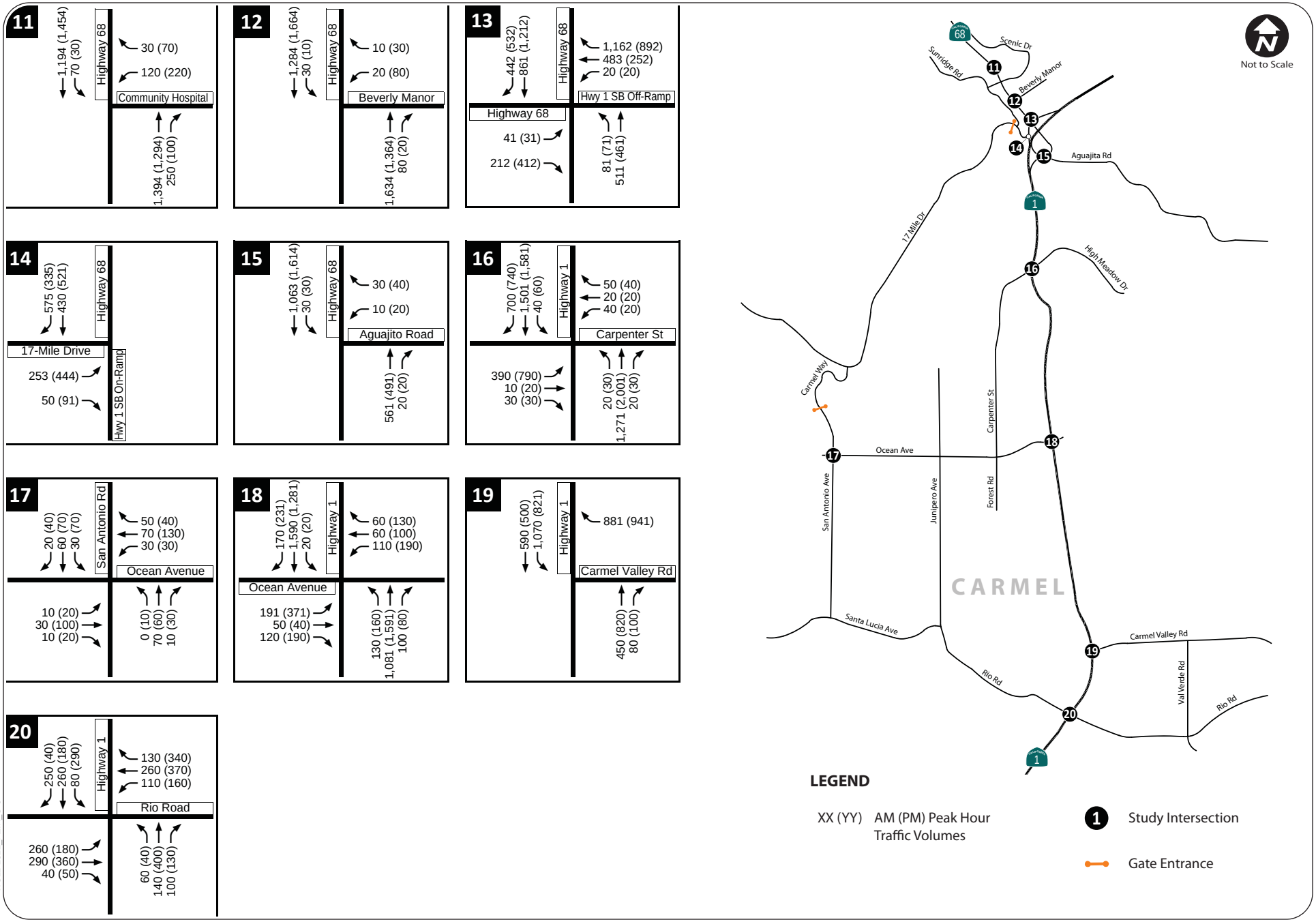
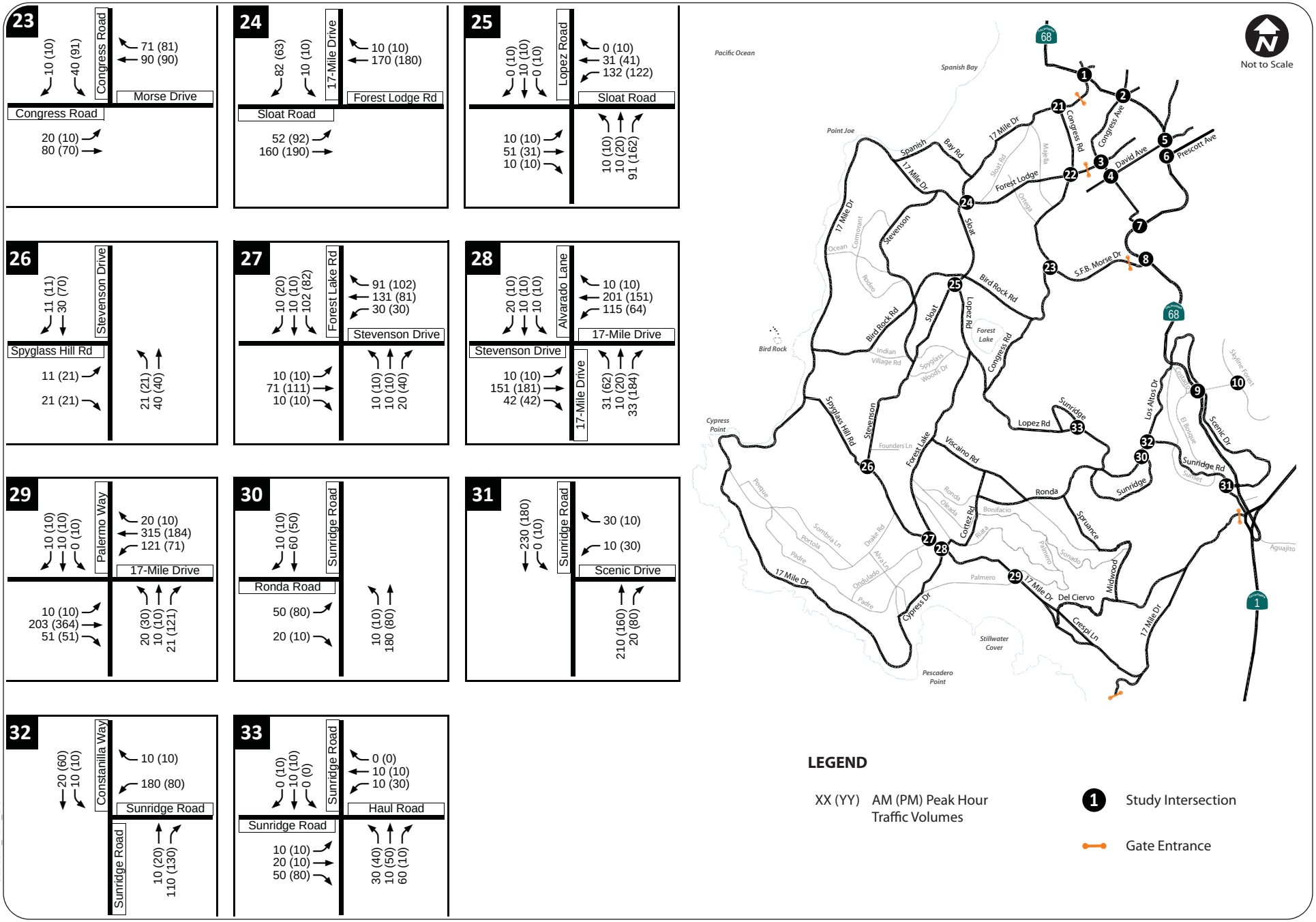
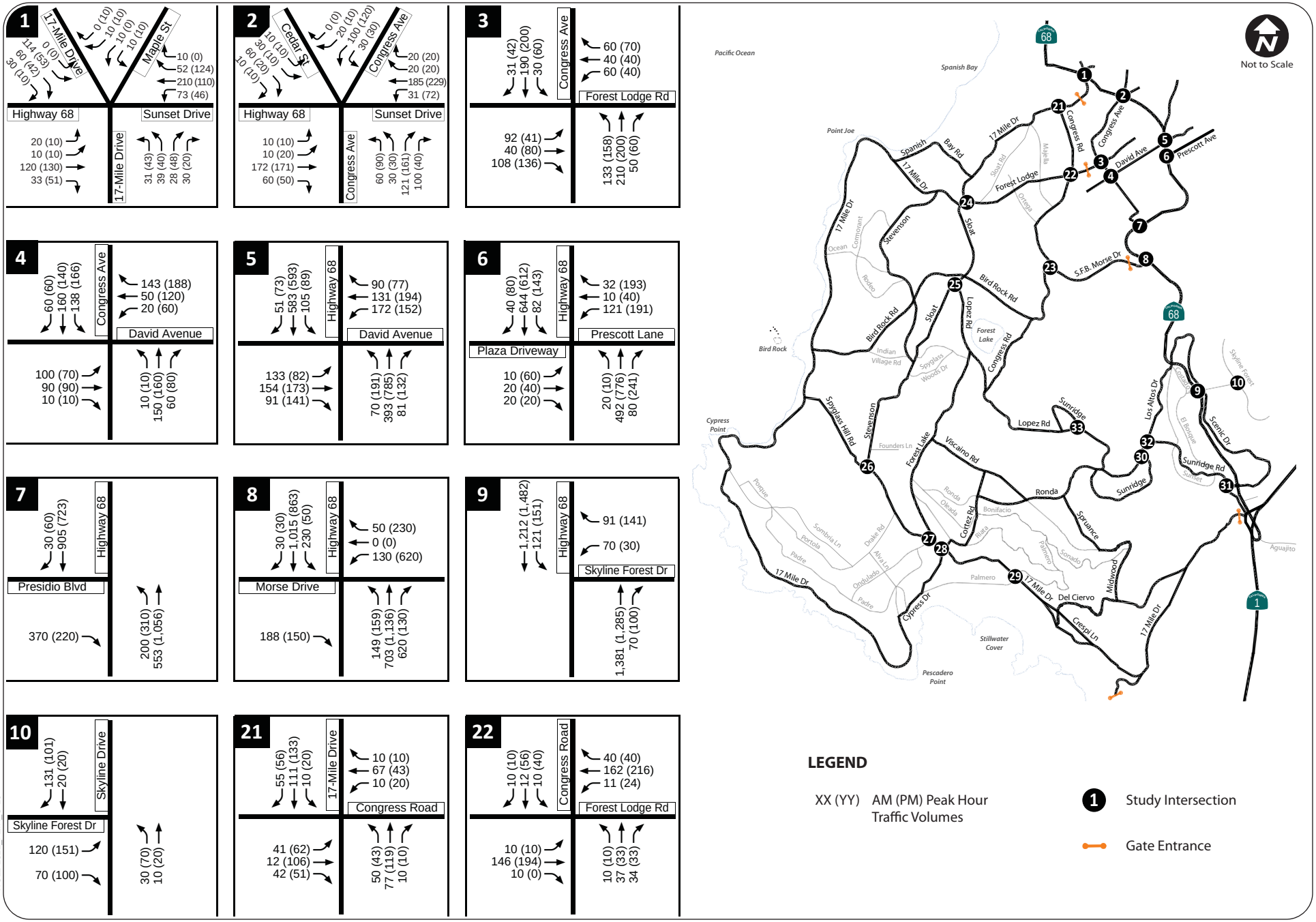


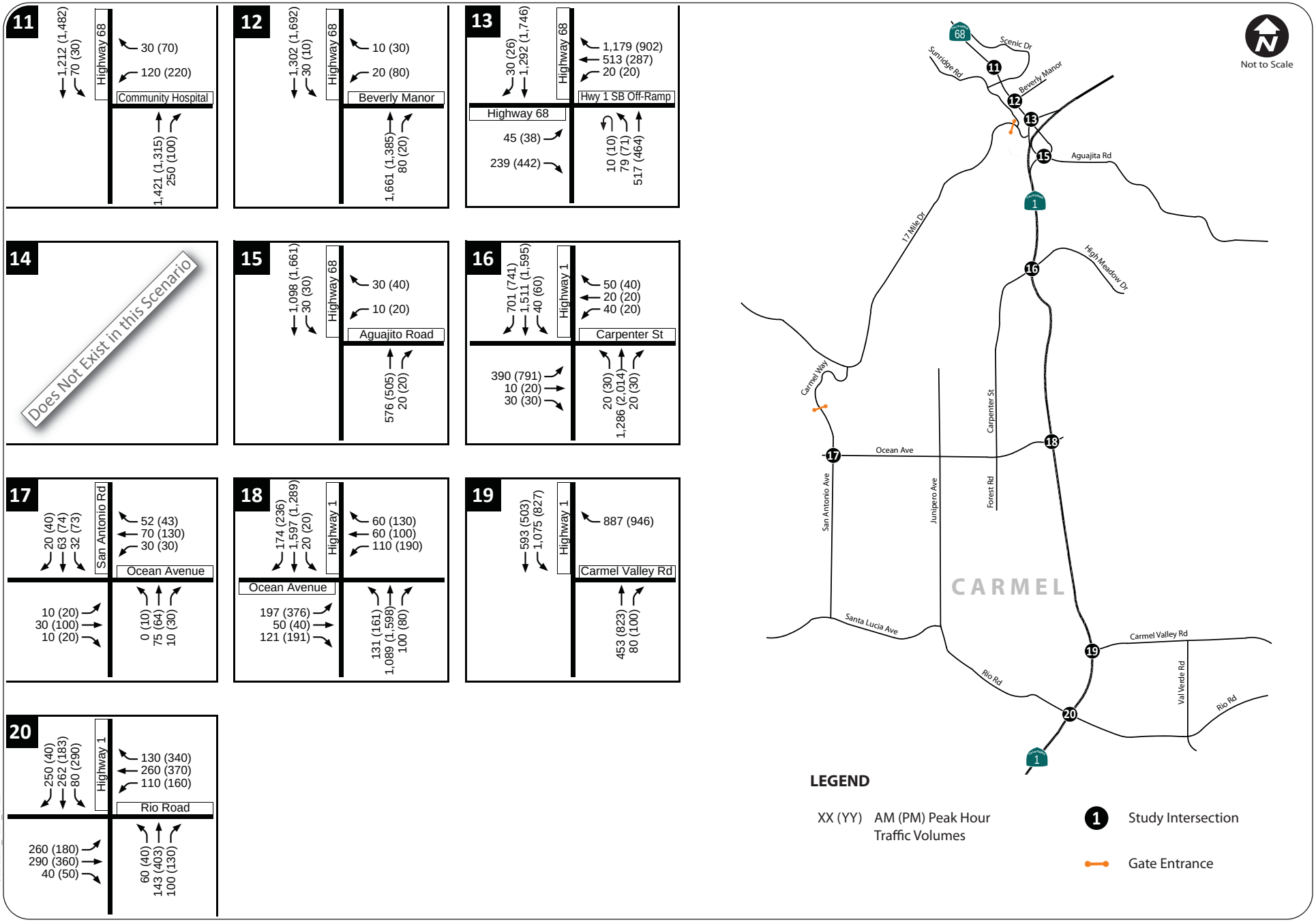
CUMULATIVE (2030) WITH 45 LCP UNITS PEAK HOUR VOLUMES



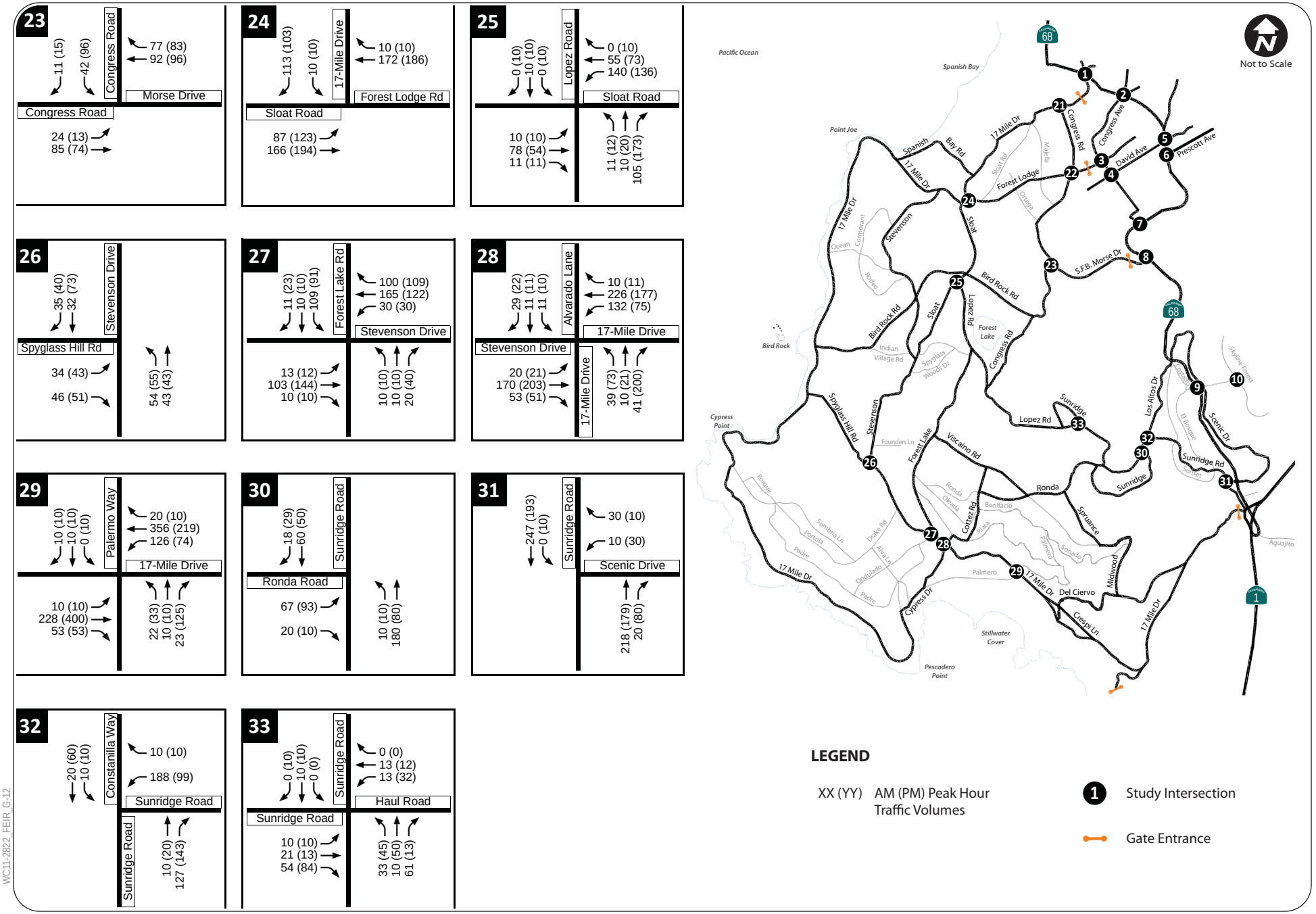
CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 45 LCP UNITS PEAK HOUR VOLUMES



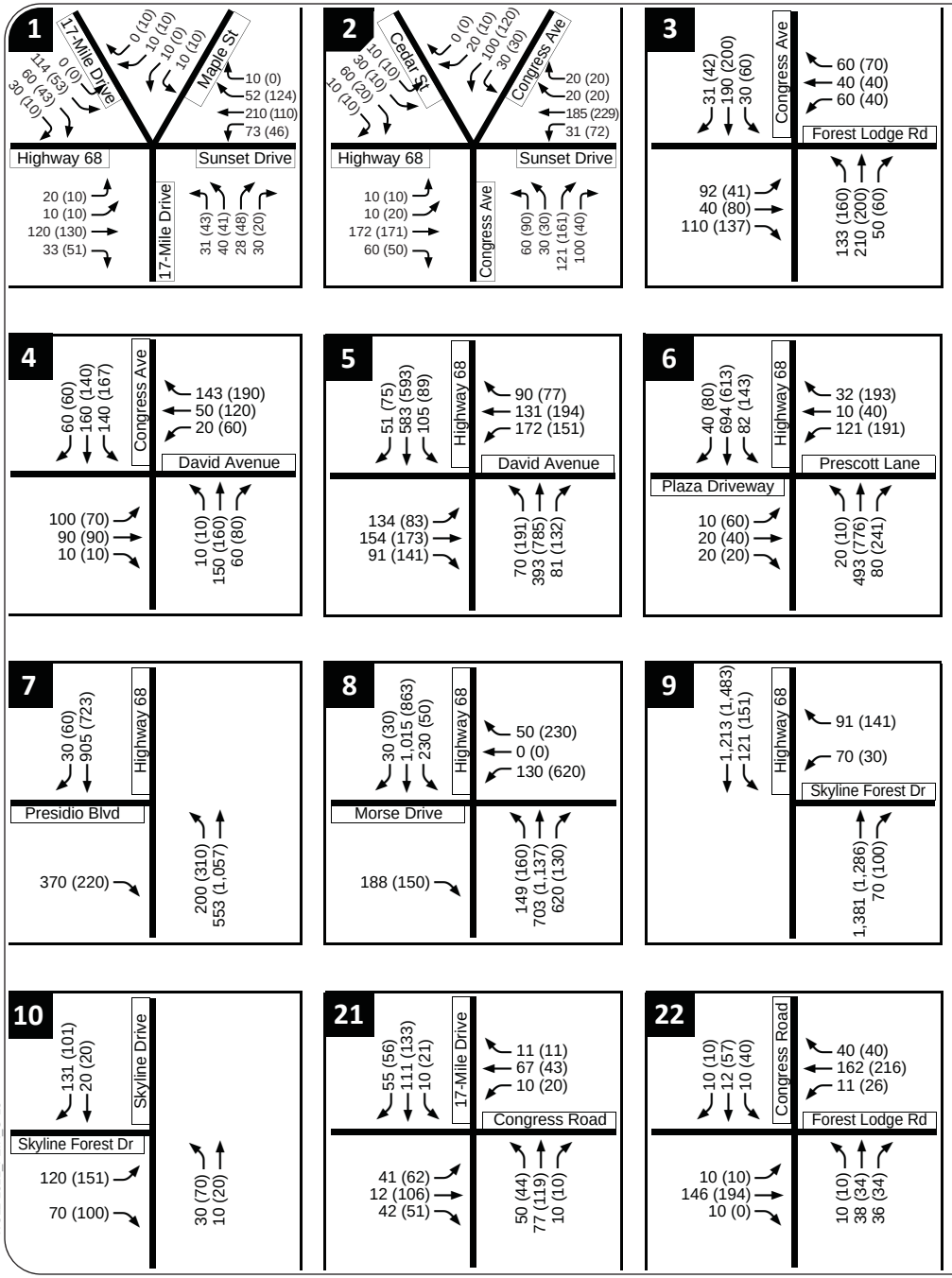
CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 45 LCP UNITS PEAK HOUR VOLUMES

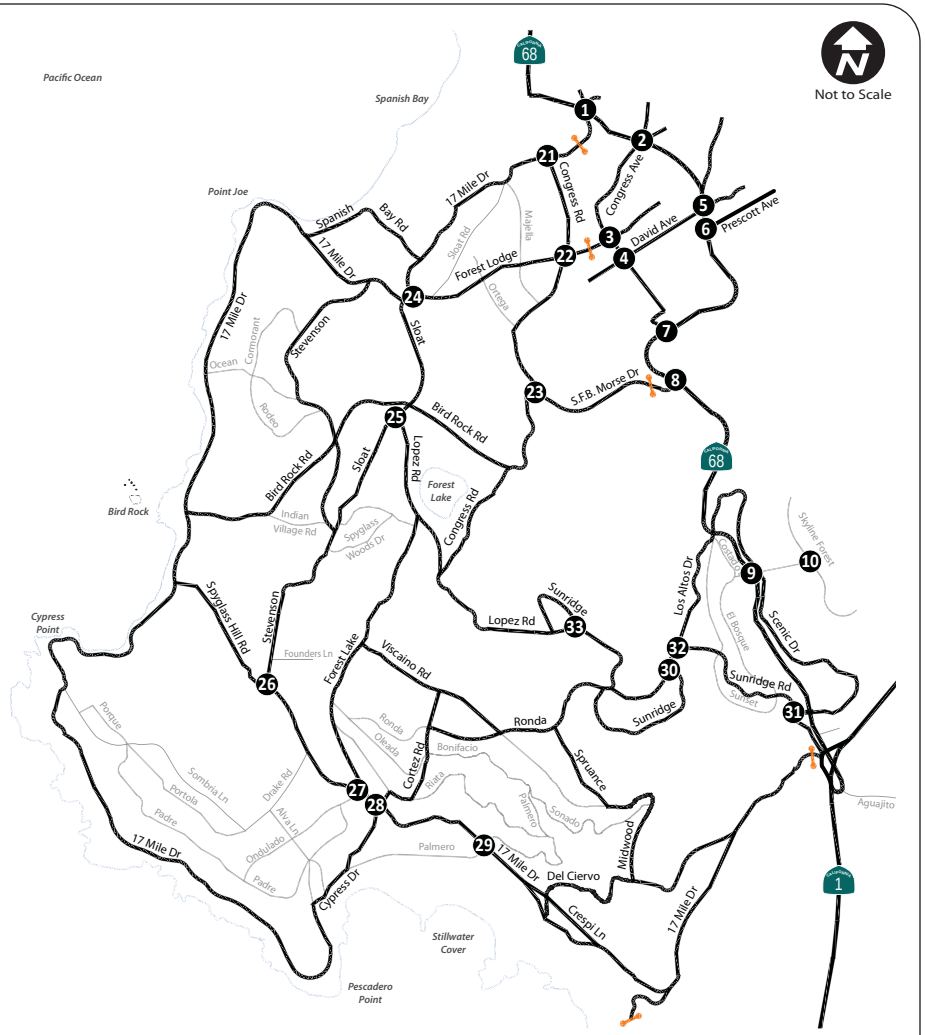


CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 45 LCP UNITS PEAK HOUR VOLUMES



CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS AND 45 LCP UNITS PEAK HOUR VOLUMES





LEGEND

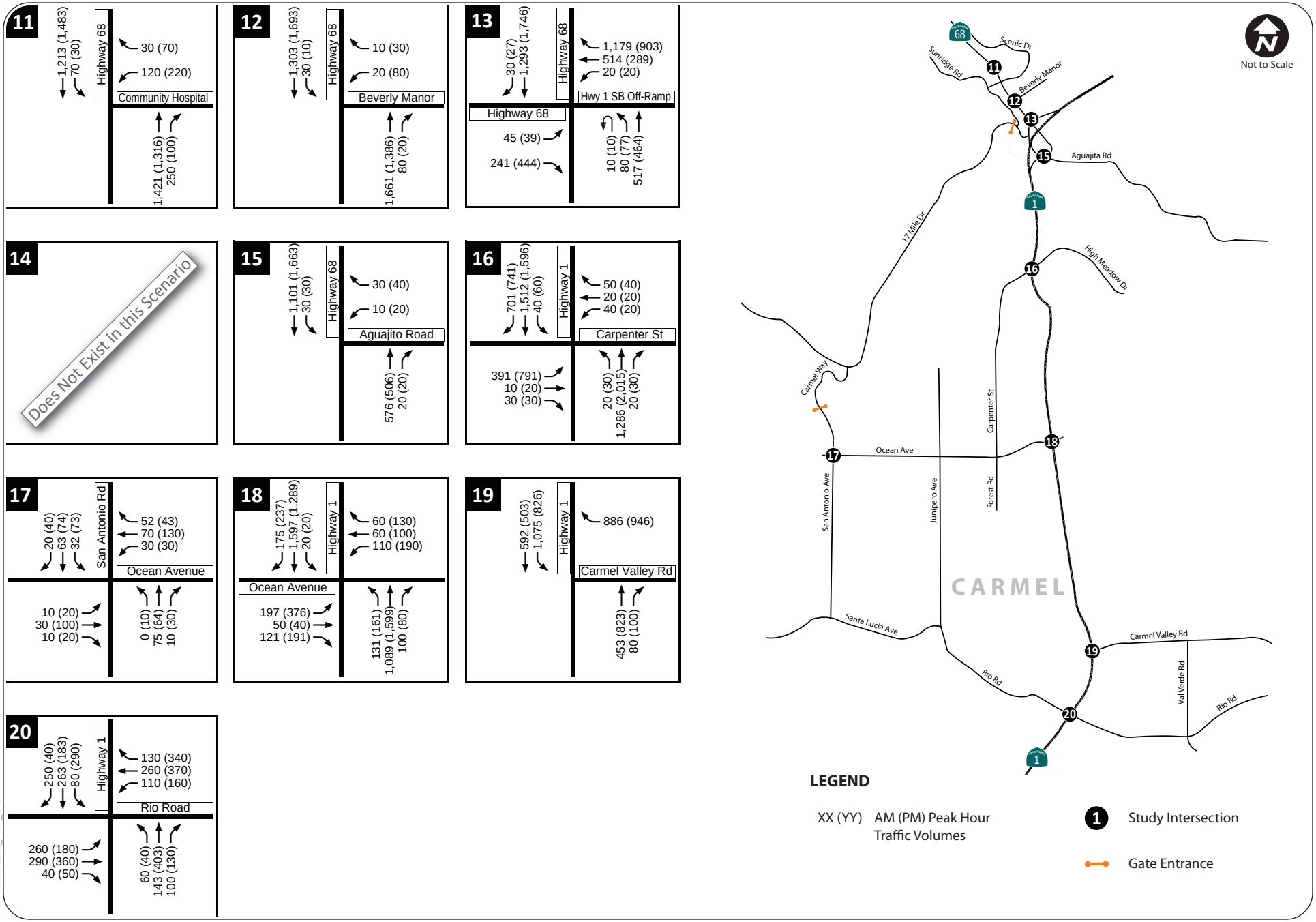
XX (YY) AM (PM) Peak Hour Traffic Volumes

1 Study Intersection

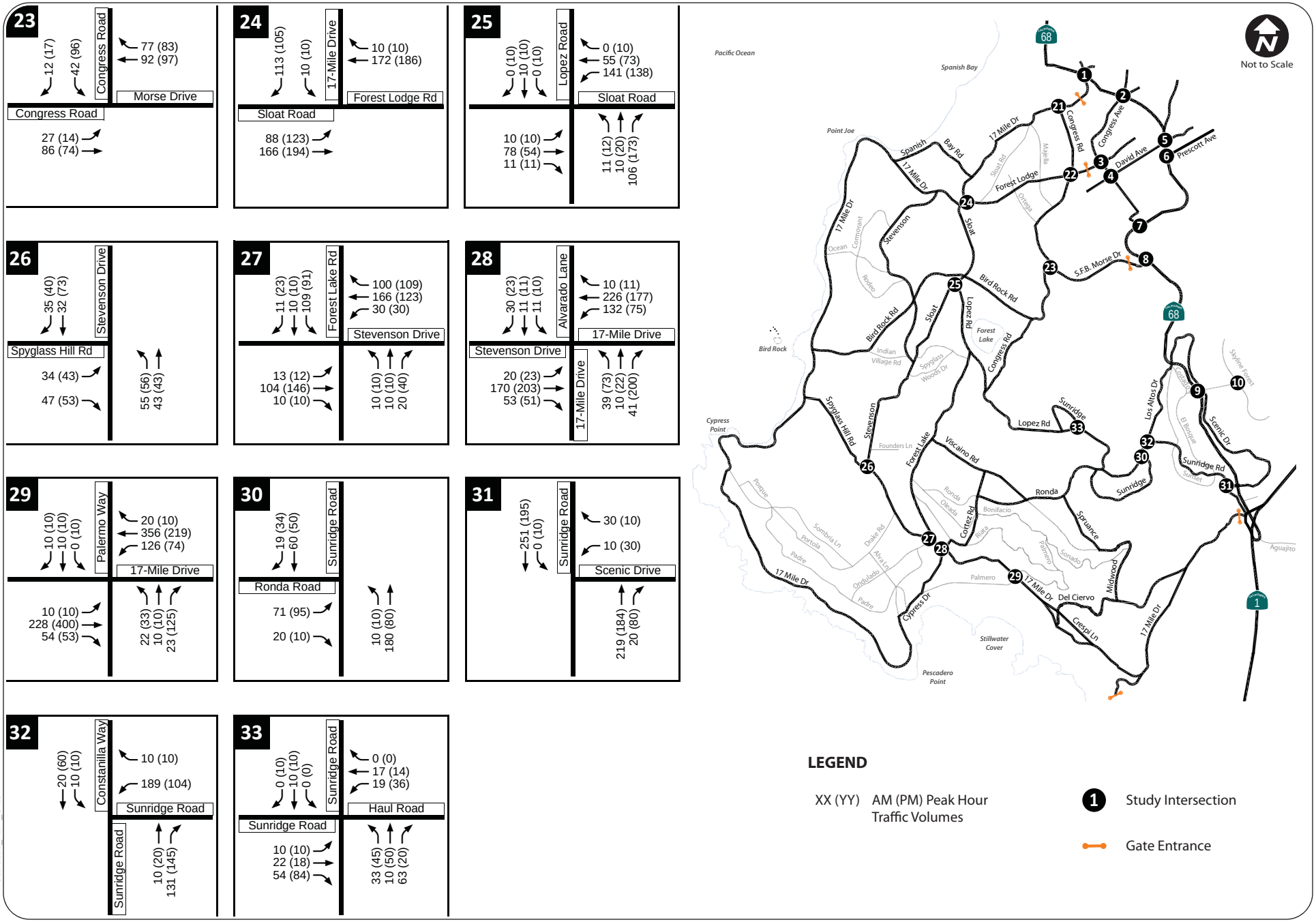
Gate Entrance

WC11-2822_FEIR_G-13

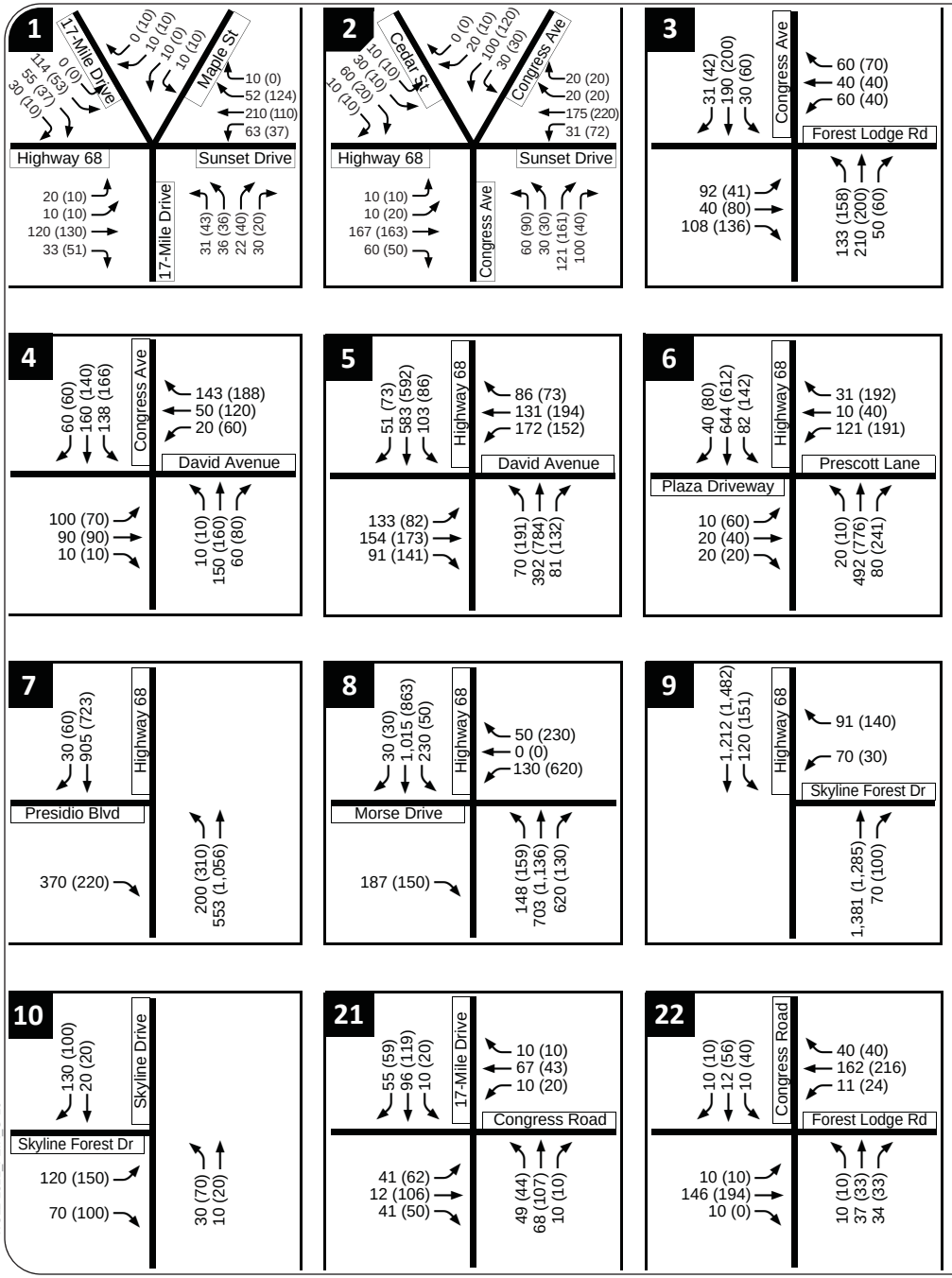
CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS AND 45 LCP UNITS PEAK HOUR VOLUMES

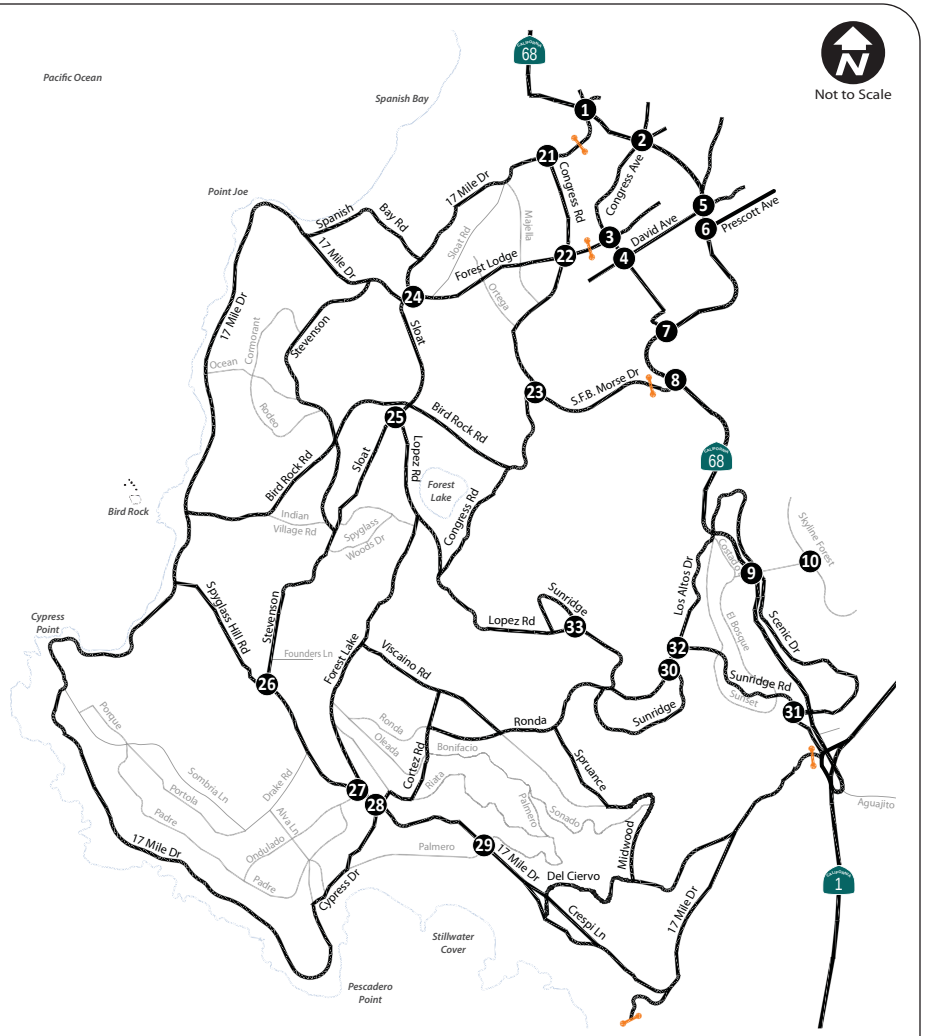


CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS AND 45 LCP UNITS PEAK HOUR VOLUMES



CUMULATIVE (2030) PLUS ALTERNATIVE 2 WITH 45 LCP UNITS PEAK HOUR VOLUMES





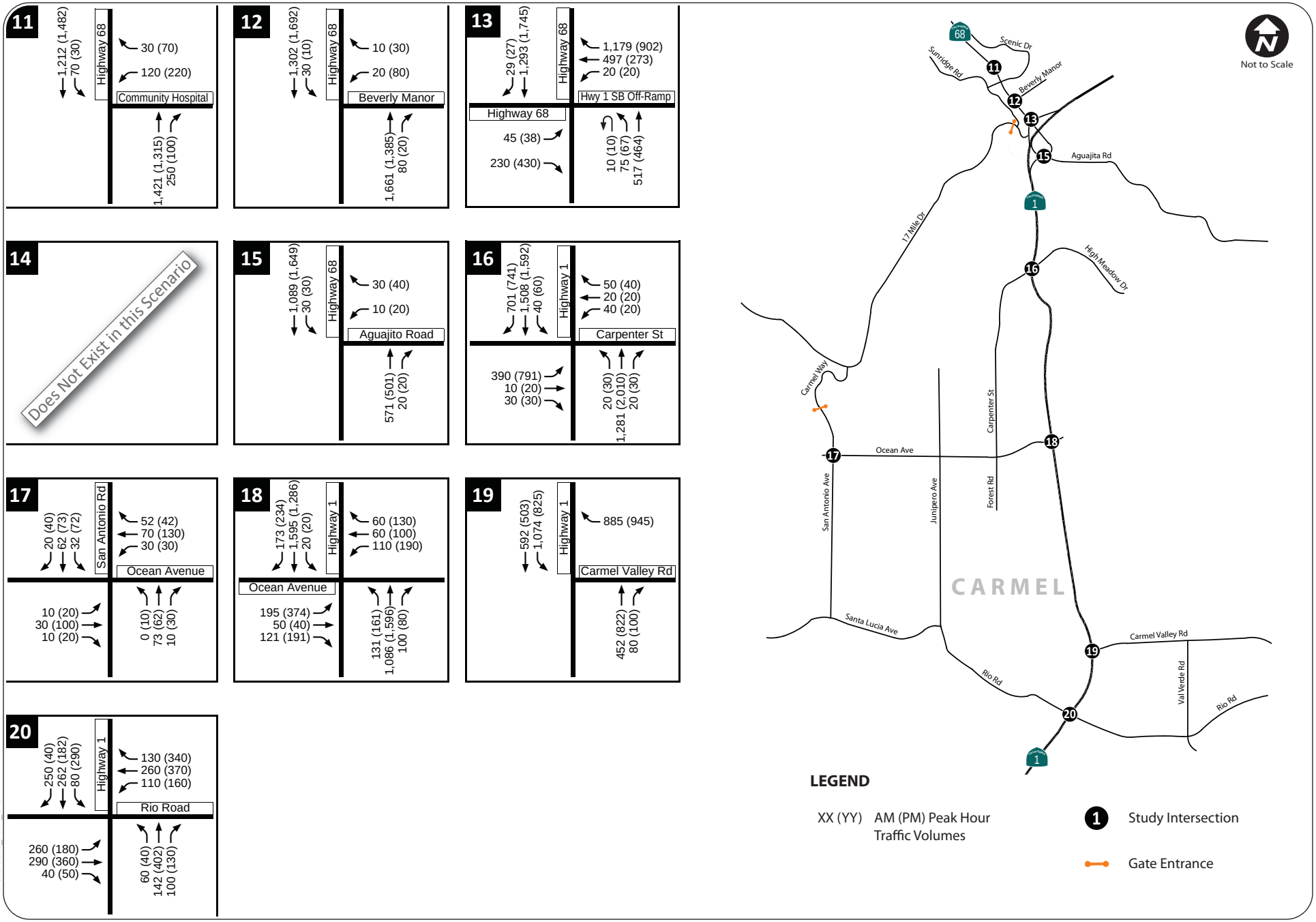
LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

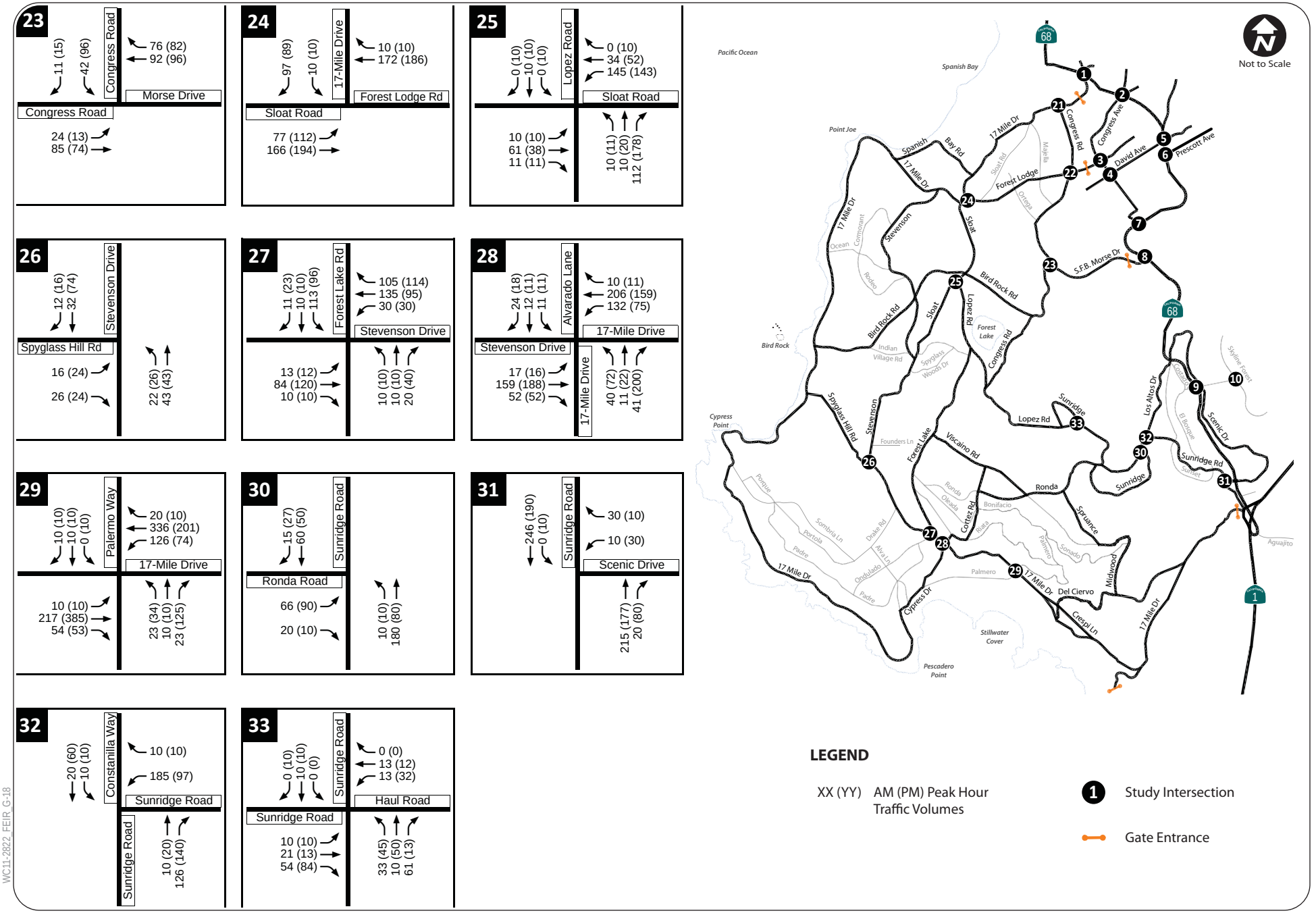
1 Study Intersection

Gate Entrance

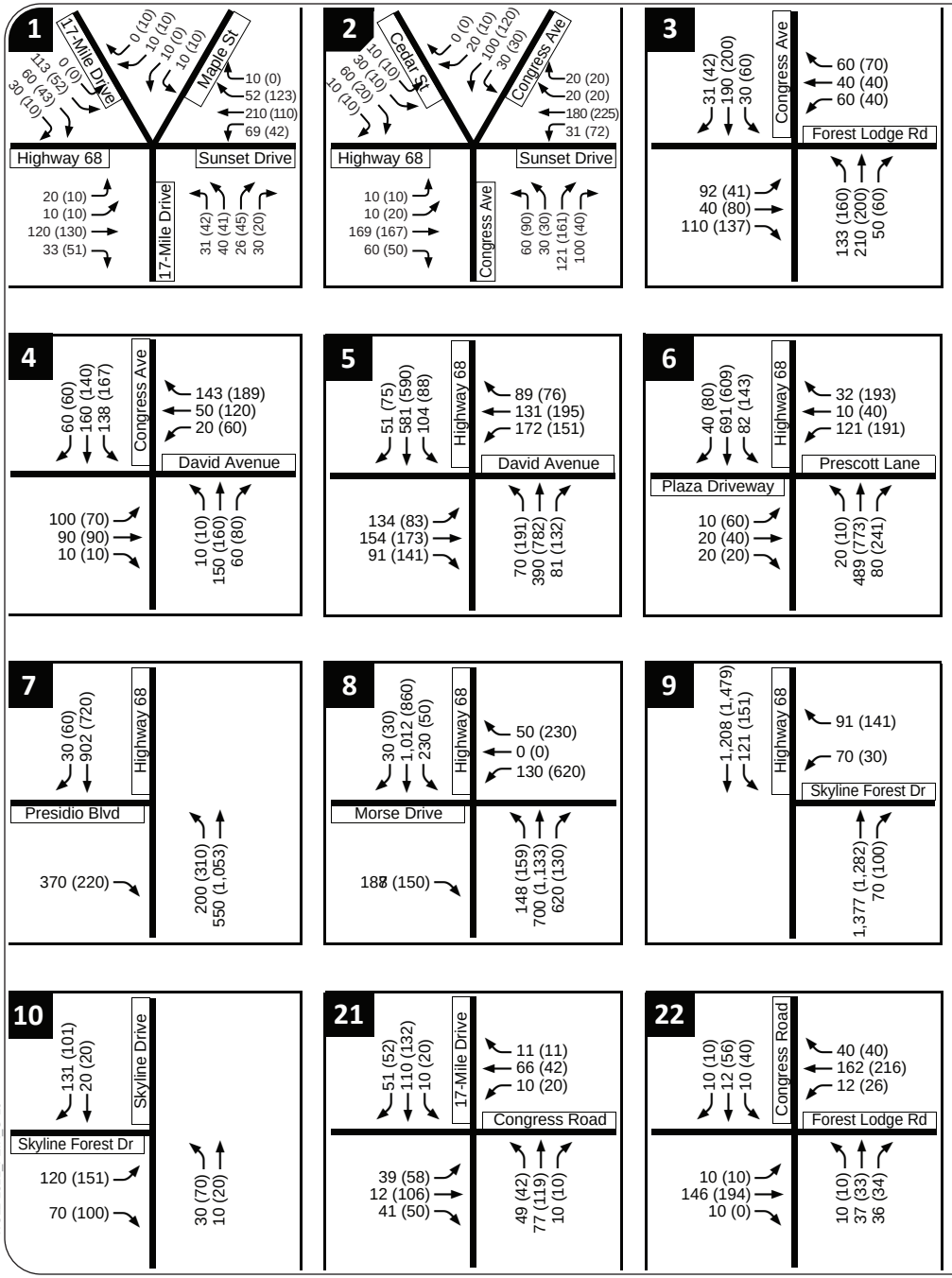
CUMULATIVE (2030) PLUS ALTERNATIVE 2 WITH 45 LCP UNITS PEAK HOUR VOLUMES

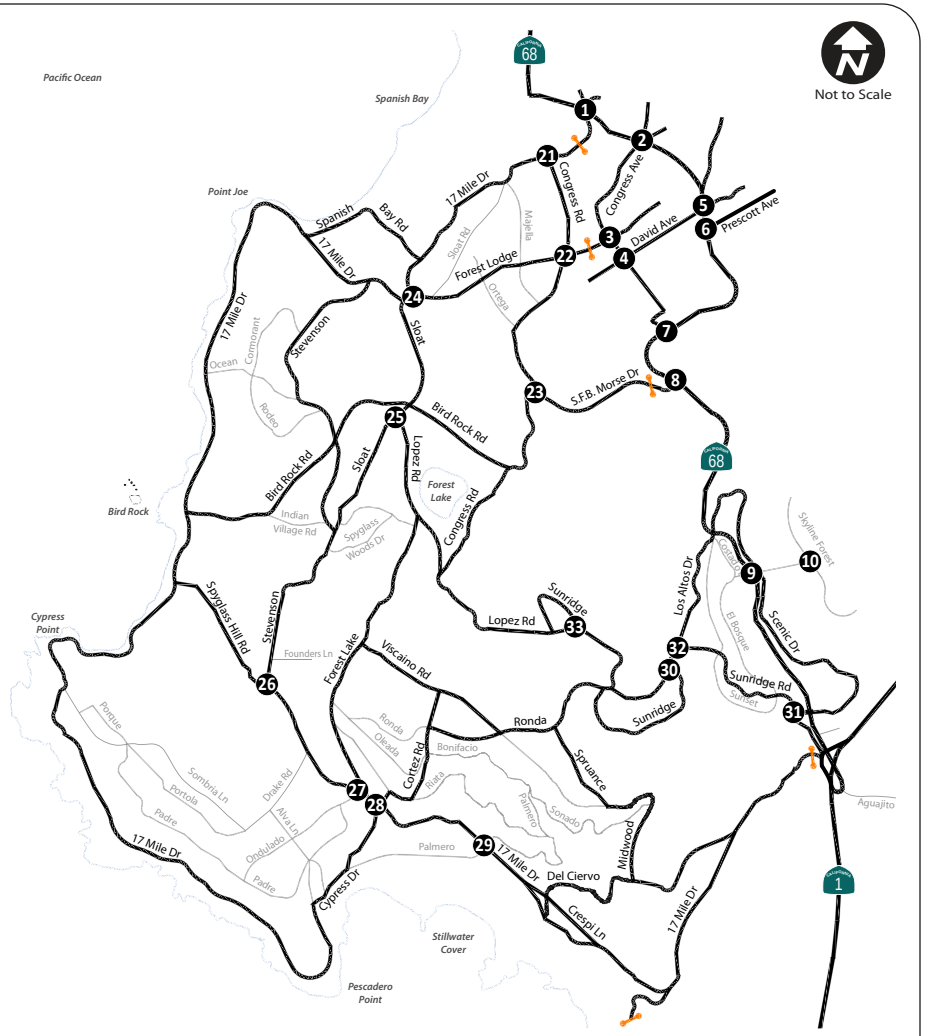


CUMULATIVE (2030) PLUS ALTERNATIVE 2 WITH 45 LCP UNITS PEAK HOUR VOLUMES



CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES





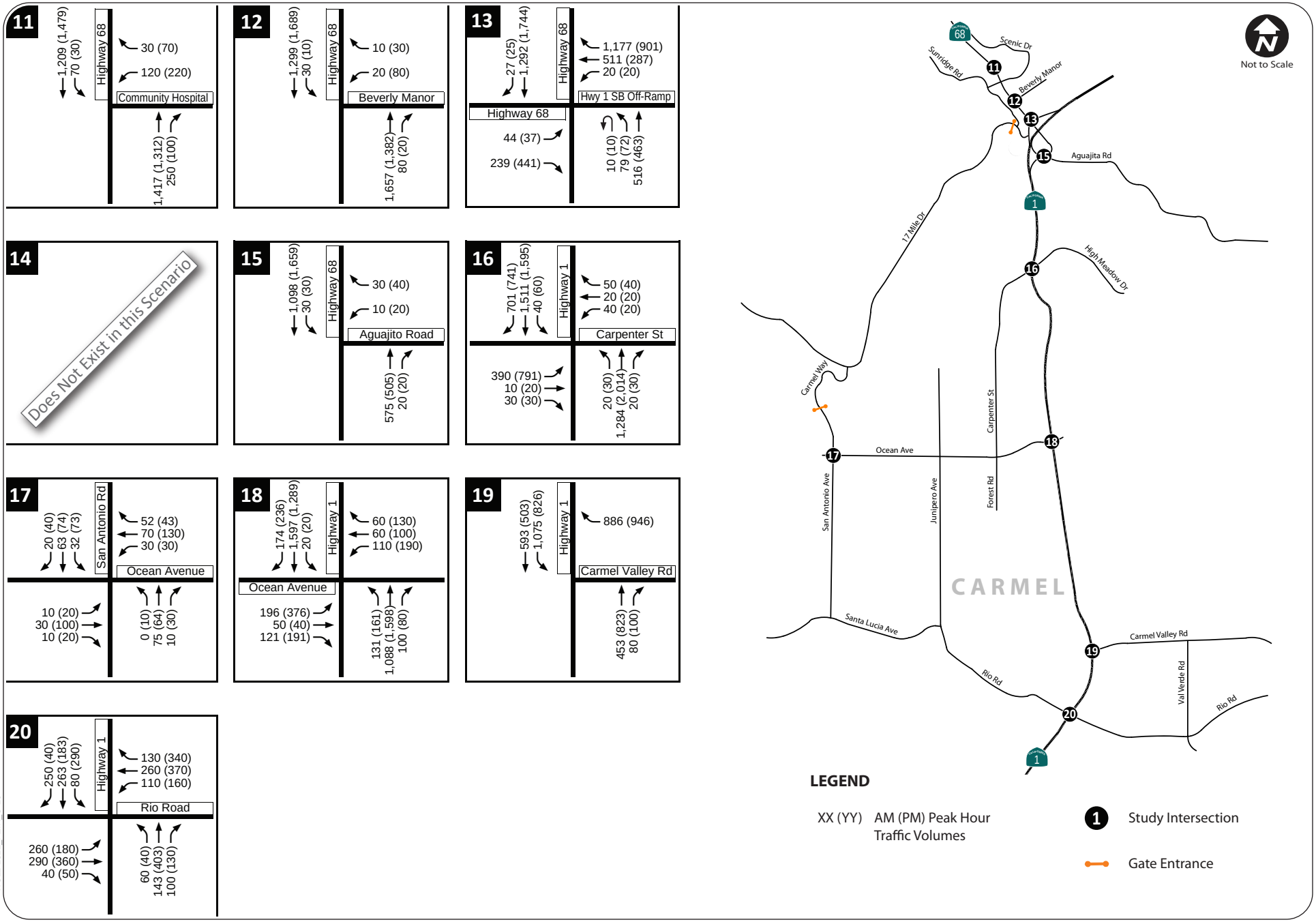
LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

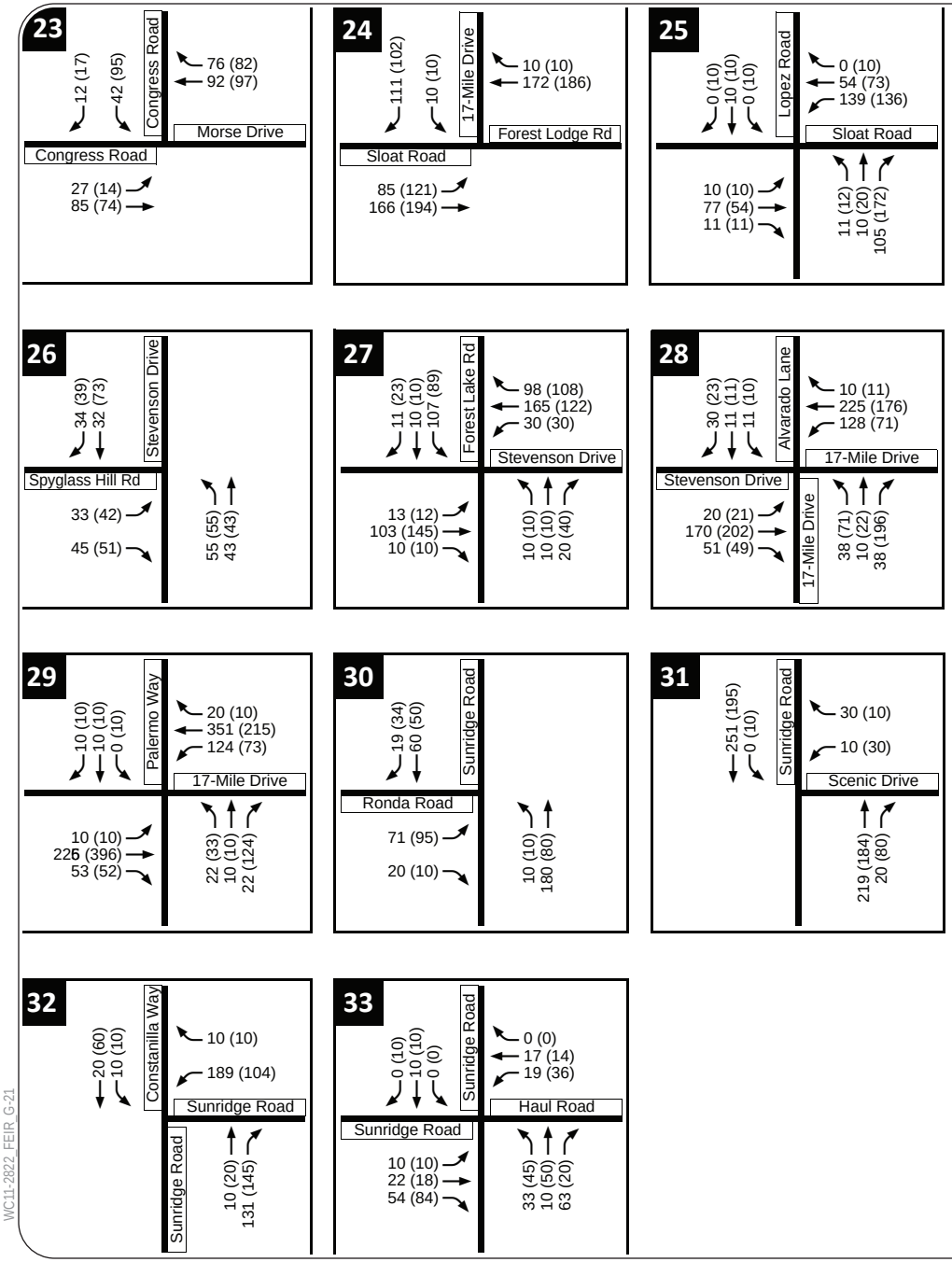
1 Study Intersection

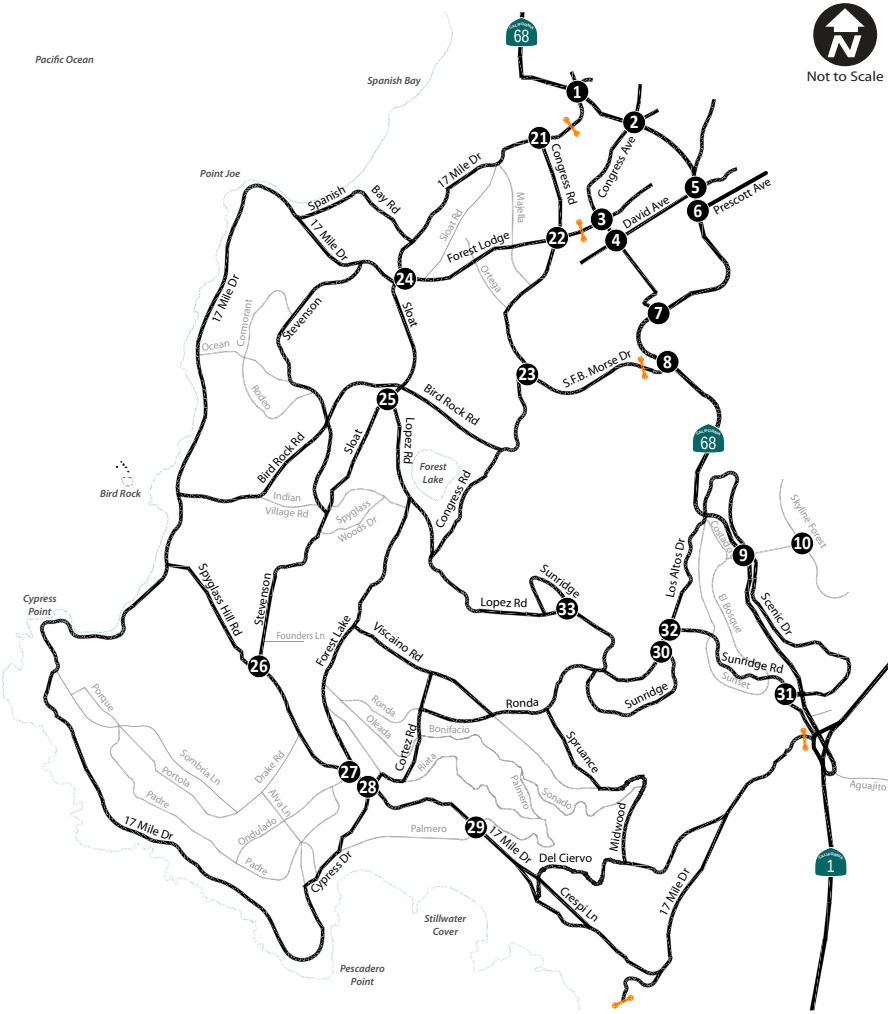
Gate Entrance

CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES



CUMULATIVE (2030) PLUS ALTERNATIVE 1 WITH 18 INCLUSIONARY UNITS PEAK HOUR VOLUMES





LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volumes

1 Study Intersection

Gate Entrance

Attachment C
Cumulative Plus Alternative 2
With 45 LCP Units Analysis

FEHR PEERS

APPENDIX E. AUTO TRAFFIC IMPACTS

This chapter addresses the auto traffic impacts at the study intersections, Forest gates, and highway segments. The analysis results are summarized in the following tables which are contained at the end of this chapter.

- Table E-1 AM Peak Hour Intersection Level of Service with DMFP Alternative 2
- Table E-2 PM Peak Hour Intersection Level of Service with DMFP Alternative 2
- Table E-3 AM and PM Peak Hour Traffic Signal Warrant Analysis with DMFP Alternative 2
- Table E-4 Forest Gate AM and PM Peak Hour volumes and Level of Service with DMFP Alternative 2
- Table E-5 Highway Segment AM Peak Hour Level of Service with DMFP Alternative 2
- Table E-6 Highway Segment PM Peak Hour Level of Service with DMFP Alternative 2

Table E-7 Highway 1 Ramps at Highway 68 (West) AM and PM Peak Hour Level of Service with DMFP Alternative 2The intersection turning movement data for each study scenario is provided in **Appendix B** while the intersection and highway analysis worksheets are provided in **Appendix C**. The peak hour traffic signal warrant worksheets are provided in **Appendix D**.

The analysis in this chapter addresses Alternative 2, which replaces the Spyglass Hotel with 10 single family residential units from Alternative 1.

E.1 IMPACTS AND MITIGATION MEASURES – EXISTING PLUS PROJECT

E.1.1 Forest Intersections

As shown in **Tables E-1** and **Table E-2**, the level of service at all study intersections within the Forest continue to operate at LOS C or better under existing plus project conditions. Additionally, none of the study intersections within the Forest meet peak hour signal warrants (see **Table E-3**). ***Impacts resulting from the DMFP are less than significant at all internal Forest study intersections and no mitigation measures are required.***

E.1.2 Forest Gates

The volume-to-capacity results are presented in **Table E-4**. Traffic conditions for the gates are determined from previous studies identifying the capacity of each entry gate (see **Table E-5**). The service levels represent traffic conditions experienced by the inbound traffic. Under existing plus DMFP conditions, all gates will continue to operate at acceptable levels. ***Impacts resulting from the DMFP are less than significant at all Forest gates and no mitigation measures are required.***

E.1.3 Intersections outside the Forest

Tables E-1 and **Table E-2** show the existing plus DMFP intersection level of service outside the Forest. The signalized and unsignalized intersection service levels generally do not change with additional DMFP traffic. The Highway 68/Highway 1 SB off-ramp intersection improves from unacceptable LOS E/F conditions to LOS C conditions as a result of the DMFP-related improvements at this intersection. Four intersections will operate at levels of service below the County's threshold of LOS C for intersections in the Coastal Zone. These intersections include:

- Highway 68 at Skyline Forest Drive – This is an unsignalized intersection. The left turning traffic from Skyline Drive (the stop-controlled approach) onto Highway 68 currently operates at LOS F during both the weekday AM and PM peak hours and would continue to do so with the DMFP. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.
- Highway 68 at Carmel Hill Professional Center – This is an unsignalized intersection. The left turning traffic from Carmel Hill Professional Center (the stop-controlled approach) onto Highway 68 currently operates at LOS F during both the weekday AM and PM peak hours and would continue to do so with the DMFP. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.
- Highway 1 at Carpenter Avenue – This is a signalized intersection. The intersection currently operates at LOS D (45.9 seconds of delay) during the weekday PM peak hour and would operate at LOS D (46.7 seconds of delay) with the DMFP. This impact is considered **Less Than Significant** because the DMFP would not change the intersection's critical movement volume-to-capacity ratio of 0.91 during the PM peak hour.
- Highway 1 at Ocean Avenue – This is a signalized intersection. The intersection currently operates at LOS D (45.4 seconds of delay) during the weekday PM peak hour and would operate at LOS D (45.9 seconds of delay) with the DMFP. During the AM peak hour the operations would transition from LOS C (34.5 seconds of delay) to LOS D (35.1 seconds of delay). The critical movement volume-to-capacity ratio would not change with the DMFP. This impact is considered **Significant** because the DMFP would cause a change in the LOS from C to D in the AM peak hour.

The all-way stop and side-street stop controlled intersections were evaluated for Warrant 3, the peak hour volume warrant, published by the Federal Highway Administration in the *Manual on Uniform Traffic Control Devices 2000* (MUTCD). The peak hour volume warrant is applied where traffic conditions are such that for one (1) hour of the day, minor street traffic suffers undue delay in entering or crossing a major street. **Table E-3** summarizes the results from the peak hour signal warrant analysis. The following intersections meet the traffic signal peak hour volume warrant:

- Highway 68 / Skyline Forest Drive (both morning and evening peak hours)

Auto
Impact 1 ***Under existing plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Skyline Forest Drive which is anticipated to operate at LOS F without the DMFP. This intersection also meets the peak hour traffic signal warrant without and with the DMFP.***

Auto
Mitigation 1 **Signalize the Highway 68 intersection with Skyline Forest Drive and widen Highway 68 from two to four lanes through the intersection to accommodate traffic signal operations and minimize vehicle queues. The widening would generally occur within 500 to 600 feet on either side of Skyline Forest Drive.**

With mitigation, the Highway 68 intersection with Skyline Forest Drive would operate at LOS A (7.7 seconds of delay) and LOS A (8.9 seconds of delay) during the AM and PM peak hours, respectively. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Traffic Component	AM Peak Hour Traffic	PM Peak Hour Traffic

Existing	1,867	63.6%	2,073	65.2%
Growth	283	9.6%	317	10.0%
Presidio of Monterey	740	25.2%	740	23.2%
DMFP	46	1.6%	50	1.6%
Total Volume	***2,936***	***100%***	***3,180***	***100%***

Discussion

The poor operating conditions at the Highway 68 intersection with Skyline Forest Drive is due to left turning traffic from Skyline Forest Drive (the stop-controlled approach) onto Highway 68. There is an existing refuge lane for the left turning traffic so drivers can cross the westbound traffic flow and wait in the refuge lane until a gap in eastbound traffic occurs. The refuge lane is about 90 feet long and 15 feet wide at its opening, narrowing to 10 feet prior to the merge area.

Observations indicate that the merge area functions reasonably well. Extending the refuge length would not help because the optimal sight distance for drivers using the refuge is at its beginning point. Beyond the existing 90-foot refuge area the sight lines decrease due to the road's curvature.

Installing a traffic signal on Highway 68 at Skyline Forest Drive does require that Highway 68 be widened through the intersection. The widening is necessary because (once signalized) two lanes are needed in both directions on Highway 68 to handle the traffic demand approaching the intersection when the traffic signal light is red for drivers on Highway 68.

The *Skyline Neighborhood Traffic Study*, completed in November 2003, was reviewed. That study concluded that about 20 percent of traffic going through the neighborhood is traffic that is passing through the neighborhood to another destination. The same study also concluded that while cutting through the Skyline neighborhood may seem advantageous for a driver, the actual travel-time through the neighborhood is greater than using Highway 1 and Highway 68. While signalization would not make traveling through the neighborhood faster than the state highway system, it could make the neighborhood route appear more attractive because traffic signals are generally installed on primary routes and not lower volume neighborhood streets.

Auto Impact 2

Under existing plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Carmel Hill Professional Center Driveway which is anticipated to operate at LOS F without the DMFP.

Auto Mitigation 2

Prohibit left turns coming from Carmel Hill Professional Center and construct two westbound through lanes from the Highway 68 and Highway 1 intersection through Carmel Hill Professional Center where the two westbound lanes would merge back to a single lane.

With mitigation, the Carmel Hill Professional Center driveway at Highway 68 would operate at LOS B (12,3 seconds of delay) and LOS C (15.5 seconds of delay) during the AM and PM peak hours, respectively.

Traffic Component	AM Peak Hour Traffic	PM Peak Hour Traffic

Existing	2,015	65.1%	2,113	65.8%
Growth	306	9.9%	318	10.0%
Presidio of Monterey	729	23.6%	726	22.6%
DMFP	45	1.4%	49	1.5%
Total Volume	***3,095***	***100%***	***3,209***	***100%***

Discussion The poor operating condition at the Highway 68 intersection with the Carmel Hill Professional Center Driveway is due to the left turning traffic from the driveway (the stop-controlled approach) onto Highway 68. The DMFP would construct intersection improvements at the adjacent Highway 68 intersection with Highway 1 Southbound Off-Ramp including:

- Widen Highway 68 eastbound from one to two lanes from west of the Carmel Hill Professional Center Driveway to the ramp terminal intersection with Highway 1.
- Widen the Highway 1 southbound off-ramp to provide a left-turn lane and upgrade the traffic signal to allow protected left-turn phasing.
- Reconfigure the Highway 1 southbound on-ramp to separate Pebble Beach-related and highway-related traffic.

These changes are a phased implementation of the full Highway 68 Widening Project and will substantially reduce traffic congestion in the area such that the redesigned intersection at the Highway 1 Southbound Off-Ramp will operate at LOS C. However, this improvement does not include the left turn prohibitions at the driveway to Carmel Hill Professional Center. This mitigation measure was previously identified as a Condition of Approval for the Community Hospital Project.

–

Auto Impact 3 ***Under existing plus DMFP conditions, the DMFP would add traffic to the Highway 1 intersection with Ocean Avenue during the AM peak hour when intersection operations would transition from LOS C (34.5 seconds of delay) to LOS D (35.1 seconds of delay) with the DMF.***

Auto Mitigation 3 **Establish new traffic signal timings at the Highway 1 intersection with Ocean Avenue after the visitor serving uses of the DMFP have been developed. The timings shall be adjusted while maintaining the same off-sets to the adjacent signalized intersection at Carpenter Road.**

With mitigation, the Highway 1 intersection with Ocean Avenue would improve to LOS C (33.1 seconds of delay) during the AM peak hour, bringing the intersection back to an acceptable operation. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Traffic Component	**AM Peak Hour Traffic**		**PM Peak Hour Traffic**	
Existing	3,279	88.7%	3,900	88.6%
Growth	401	10.8%	480	10.9%
DMFP	18	0.5%	21	0.5%

Total Volume	***3,698***	***100%***	***4,401***	***100%***

Discussion The traffic signal timing changes proposed as mitigation will improve vehicle flow through the intersection and minimize vehicle delays without adding additional vehicle capacity.

E.1.4 Highway Segments

Tables E-5 and **Table E-6** show the existing plus DMFP highway segment volume to capacity ratios and levels of service. **Table E-7** shows the levels of service for the ramp merge, diverge, and weave sections for the Highway 1 ramps at Highway 68 (west).

Nine highway segments will operate at levels of service below the County's threshold of LOS C in the Coastal Zone. These segments include:

- Highway 1 northbound on-ramp from Highway 68 (west)
- Highway 1, Highway 68 (west) to Munras Avenue
- Highway 1, Munras Avenue to Fremont Street
- Highway 1, Fremont Street to Fremont Boulevard
- Highway 1, Fremont Boulevard to Imjin Parkway
- Highway 1, North of Highway 156
- Highway 68, West of Skyline Forest Road
- Highway 68, East of Olmsted Road
- Highway 68, East of Laguna Seca
- Highway 156, Highway 1 to US-101

Several of these segments operate at LOS F without the DMFP and the DMFP would add traffic to these segments which represents a **Significant** impact. The Highway 1 northbound on-ramp merge from Highway 68 (west) operates at LOS D with a 29.6 density (29.3 without the DMFP). The DMFP would not change the LOS but would have more than 0.01 v/c change to the merge volumes and so represents a **Significant** impact at this merge location.

Auto Impact 4 ***Under existing plus DMFP conditions, the DMFP would add traffic to the Highway 1, Highway 68, and Highway 156 corridors and some of the highway segments operate at LOS F without the DMFP.***

Auto Mitigation 4 **The DMFP is responsible for its fair-share contribution to this impact through payment of TAMC's regional fee.**

Auto Impact 5 ***Under existing plus DMFP conditions, the DMFP would add traffic to the Highway 1 northbound on-ramp merge from Highway 68 (west) which operates at LOS D during the PM peak hour without the DMFP; and the DMFP would increase the volume by more than 0.01.***

Auto

Mitigation 5 **Replace the Highway 1 northbound merge at Highway 68 (west) with an auxiliary lane between Highway 68 (west) and Munras Avenue.**

With mitigation, Highway 1 northbound between Highway 68 (west) and Munras Avenue would operate at LOS B during the AM and PM peak hours. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because the existing merge operates at unacceptable levels (LOS D) under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	1,964	88.2%	3,090	77.5%
Growth	116	5.2%	255	6.4%
Presidio of Monterey	120	5.4%	605	15.2%
DMFP	27	1.2%	35	0.9%
Total Volume	***2,227***	***100%***	***3,985***	***100%***

Discussion The northbound Highway 1 on-ramp merge at Highway 68 (west) operates at LOS D today during the PM peak hour. Caltrans completed the *Transportation Concept Report (TCR) for State Route 1 in District 5* in April 2006. Segment 14 in the TCR included Highway 1 from the Carmel River Bridge to Highway 156 and the LOS objective was to achieve LOS D for the segment where feasible. The merge segment under study achieves the LOS D objective in the TCR but does not meet the County's significance criteria of LOS C for roads in the coastal zone; thus, the significant impact. Auxiliary lanes are identified in the TCR as one transportation strategy to consider for achieving LOS D. The Regional Development Impact Fee Program was updated in 2008 by TAMC and while it included improvements to Highway 68 at the Highway 1 interchange, the program did not include the auxiliary lane identified in the mitigation measure.

E.2 IMPACTS AND MITIGATION MEASURES – NEAR TERM PLUS PROJECT

E.2.1 Forest Intersections

As shown in **Tables E-1** and **Table E-2**, the level of service at all study intersections within the Forest continue to operate at LOS C or better under near term plus project conditions. Additionally, none of the study intersections within the Forest meet peak hour signal warrants (see **Table E-3**). ***Impacts resulting from the project are less than significant at all internal Forest study intersections and no mitigation measures are required.***

E.2.2 Forest Gates

The volume-to-capacity results are presented in **Table E-4**. Traffic conditions for the gates are determined from previous studies identifying the capacity of each entry gate (see **Table 2-3**). The service levels represent traffic conditions experienced by the inbound traffic. Under existing plus DMFP conditions, all gates will continue to operate at acceptable levels. ***Impacts resulting from the project are less than significant at all Forest gates and no mitigation measures are required.***

E.2.3 Intersections outside the Forest

Tables E-1 and **Table E-2** show the existing plus DMFP intersection level of service outside the Forest. The signalized and unsignalized intersection service levels generally do not change with additional DMFP traffic.

Six intersections will operate at levels of service below the County's threshold of LOS C for intersections in the Coastal Zone. These intersections include:

- Highway 68 at Skyline Forest Drive – This is an unsignalized intersection. The left turning traffic from Skyline Drive (the stop-controlled approach) onto Highway 68 will operate at LOS F during both the weekday AM and PM peak hours under near term conditions. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.
- Highway 68 at Carmel Hill Professional Center – This is an unsignalized intersection. The left turning traffic from Carmel Hill Professional Center (the stop-controlled approach) onto Highway 68 will operate at LOS F during both the weekday AM and PM peak hours under near term conditions. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.
- Highway 68 at Highway 1 Southbound Off-Ramp – This is a signalized intersection. The operations improve under near term conditions from unacceptable LOS E/F conditions to LOS C/D conditions as a result of the DMFP-related road improvements at this intersection. This impact is considered **Less Than Significant** because the DMFP improves intersection operations over the condition without the DMFP.
- Highway 1 at Carpenter Street – This is a signalized intersection. The intersection will operate at LOS E (57.9 seconds of delay) during the weekday PM peak hour and would operate at LOS E (59.2 seconds of delay) with the DMFP. This impact is considered **Less Than Significant** because the DMFP would not change the intersection's critical movement volume-to-capacity ratio of 0.94 during the PM peak hour.
- Highway 1 at Ocean Avenue – This is a signalized intersection. The intersection will operate at LOS D (39.5 seconds of delay) and LOS D (51.8 seconds of delay) during the weekday AM and PM peak hours, respectively. The LOS would remain at D with the DMFP but the delay would increase to 40.5 seconds and 52.6 seconds, respectively. This impact is considered **Significant** because the DMFP would increase the intersection's critical movement volume-to-capacity ratio from 0.81 to 0.82 in the AM peak and 0.92 to 0.93 in PM peak, both of which are equal to the 0.01 threshold change.
- Highway 1 at Rio Road – This is a signalized intersection. The intersection will operate at LOS D (35.9 seconds of delay) during the weekday PM peak hour and would operate at LOS D (36.0 seconds of delay) with the DMFP. This impact is considered **Less Than Significant** because the DMFP would not change the intersection's critical movement volume-to-capacity ratio of 0.74 during the PM peak hour.

The all-way stop and side-street stop controlled intersections were also evaluated for Warrant 3, the peak hour volume warrant, published by the Federal Highway Administration in the *Manual on Uniform Traffic Control Devices 2000* (MUTCD). The peak hour volume warrant is applied where traffic conditions are such that for one (1) hour of the day, minor street traffic suffers undue delay in entering or crossing a major street. **Table E-3** summarizes the results from the peak hour signal warrant analysis. The following intersections meet the traffic signal peak hour volume warrant:

- Highway 68 / Skyline Forest Drive (both morning and evening peak hours)
- Highway 68 / Carmel Hill Professional Center (evening peak hour only)

Auto
Impact 6 ***Under near term plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Skyline Forest Drive which is***

anticipated to operate at LOS F without the DMFP. This intersection will also meet the peak hour traffic signal warrant without and with the DMFP.

Auto Mitigation 6 **Implement Auto Mitigation 1.**

With mitigation, the Highway 68 intersection with Skyline Forest Drive would operate at LOS A (7.7 seconds of delay) and LOS A (9.1 seconds of delay) during the AM and PM peak hours, respectively. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Auto Impact 7 ***Under near term plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Carmel Hill Professional Center Driveway which is anticipated to operate at LOS F without the DMFP. This intersection meets the peak hour traffic signal warrant without or with the DMFP.***

Auto Mitigation 7 **Implement Auto Mitigation 2.**

With mitigation, the Carmel Hill Professional Center driveway with Highway 68 would operate at LOS B (12.7 seconds of delay) and LOS C (16.2 seconds of delay) during the AM and PM peak hours, respectively.

Auto Impact 8 ***Under near term plus DMFP conditions, the DMFP would add traffic to the Highway 1 intersection with Ocean Avenue during the AM and PM peak hours when intersection operations would be LOS D; and the DMFP would increase the intersections critical volume-to-capacity ratio by 0.01 during both peak hours.***

Auto Mitigation 8 **Construct an eastbound to southbound and westbound to northbound right-turn lane approaching Highway 1 and establish new traffic signal timings at the Highway 1 intersection with Ocean Avenue.**

With mitigation, the Highway 1 intersection with Ocean Avenue would improve to LOS C (24.4 seconds of delay) and LOS C (34.8 seconds of delay) during the AM and PM peak hours, respectively. These off-sets the DMFP impact, and improves intersection operations to LOS C or better. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	3,279	88.7%	3,900	88.6%
Growth	401	10.8%	480	10.9%
DMFP	18	0.5%	21	0.5%
Total Volume	***3,698***	***100%***	***4,401***	***100%***

Discussion The eastbound right-turn lane at the Highway 1 intersection with Ocean Avenue was also identified in the *September Ranch EIR* as a mitigation measure with the understanding that the September Ranch Project would contribute its fair-share to construct the improvement.

E.2.4 Highway Segments

Tables E-5 and **Table E-6** show the near term plus DMFP highway segment volume to capacity ratios and levels of service. **Table E-7** shows the levels of service for the ramp merge, diverge, and weave sections for the Highway 1 ramps at Highway 68 (west).

Nine highway segments will operate at levels of service below the County's threshold of LOS C in the Coastal Zone. These segments include:

- Highway 1 northbound on-ramp from Highway 68 (west)
- Highway 1, Highway 68 (west) to Munras Avenue
- Highway 1, Munras Avenue to Fremont Street
- Highway 1, Fremont Street to Fremont Boulevard
- Highway 1, Fremont Boulevard to Imjin Parkway
- Highway 1, North of Highway 156
- Highway 68, West of Skyline Forest Road
- Highway 68, East of Olmsted Road
- Highway 68, East of Laguna Seca
- Highway 156, Highway 1 to US-101

Several of these segments operate at LOS F without the DMFP and the DMFP would add traffic to these segments which represents a **Significant** impact. The Highway 1 northbound on-ramp merge from Highway 68 (west) operates at LOS D with a 30.3 density (30.0 without the DMFP). The DMFP would not change the LOS but would have more than 0.01 v/c change to the merge volumes and so represents a **Significant** impact at this merge location.

Auto Impact 9 ***Under near term plus DMFP conditions, the DMFP would add traffic to the Highway 1 and Highway 156 corridors and some of the segments along these corridors operate at LOS F.***

Auto Mitigation 9 **Implement Auto Mitigation 4.**

Auto Impact 10 ***Under near term plus DMFP conditions, the DMFP would add traffic to the Highway 1 northbound on-ramp merge from Highway 68 (west) which operates at LOS D during the PM peak hour without the DMFP; and the DMFP would increase the volume by more than 0.01.***

Auto Mitigation 10 **Implement Auto Mitigation 5.**

With mitigation, Highway 1 northbound between Highway 68 (west) and Munras Avenue would operate at LOS B during the AM and PM peak hour. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because the existing merge operates at unacceptable levels (LOS D) under existing conditions.

E.3 IMPACTS AND MITIGATION MEASURES – CUMULATIVE PLUS PROJECT

E.3.1 Forest Intersections

As shown in **Tables E-1** and **Table E-2**, the level of service at all study intersections within the Forest continue to operate at LOS C or better under cumulative plus project conditions. Additionally, none of the study intersections within the Forest meet peak hour signal warrants (see **Table E-3**). ***Impacts resulting from the project are less than significant at all internal Forest study intersections and no mitigation measures are required.***

E.3.2 Forest Gates

The volume-to-capacity results are presented in **Table E-4**. Traffic conditions for the gates are determined from previous studies identifying the capacity of each entry gate (see **Table 2-3**). The service levels represent traffic conditions experienced by the inbound traffic. Under existing plus DMFP conditions, all gates will continue to operate at acceptable levels. ***Impacts resulting from the project are less than significant at all Forest gates and no mitigation measures are required.***

E.3.3 Intersections outside the Forest

Tables E-1 and **Table E-2** show the existing plus DMFP intersection level of service outside the Forest. The signalized and unsignalized intersection service levels generally do not change with additional DMFP traffic.

Nine intersections will operate at levels of service below the County's threshold of LOS C for intersections in the Coastal Zone. These intersections include:

- Sunset Drive at Congress Road – This is an all-way stop controlled intersection. The intersection will operate at LOS C with 18.1 seconds and 18.2 seconds of delay during the weekday AM and PM peak hour respectively. With the DMFP, the intersection will operate at LOS D with 26.6 seconds and 27.0 seconds of delay during the AM and PM peak hour. This impact is considered Significant because the DMFP would cause a change in the LOS from C to D in the AM and PM peak hour.
- Forest Avenue at David Avenue – This is a signalized intersection. The intersection will operate at LOS D (38.9 seconds of delay) during the weekday PM peak hour and LOS D (40.2 seconds of delay) with the DMFP. This impact is considered **Significant** because the DMFP would increase the intersection's critical movement volume-to-capacity ratio from 0.78 to 0.79 in the PM peak which is equal to the 0.01 threshold change.
- Highway 68 at Skyline Forest Drive – This is an unsignalized intersection. The left turning traffic from Skyline Drive (the stop-controlled approach) onto Highway 68 operates at LOS F during both the weekday AM and PM peak hours under cumulative conditions. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.

- Highway 68 at Carmel Hill Professional Center – This is an unsignalized intersection. The left turning traffic from Carmel Hill Professional Center (the stop-controlled approach) onto Highway 68 operates at LOS F during both the weekday AM and PM peak hours under cumulative conditions. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.
- Highway 68 at Highway 1 Southbound Off-Ramp – This is a signalized intersection. The operations would be LOS F conditions under cumulative conditions without or with the DMFP. The intersections critical volume-to-capacity ratio would improve from 1.56 to 1.38 during the AM peak hour and from 1.54 to 1.30 during the PM peak hour. The improved ratios occur as a result of the DMFP road improvements. Even with the improved ratios this impact is considered **Significant** because the DMFP adds traffic to an intersection that would operate at LOS F.
- Highway 68 at Aguajito Road – This is an unsignalized intersection. The left turning traffic from Aguajito Road (the stop-controlled approach) onto Highway 68 operates at LOS F during the weekday AM and PM peak hours under cumulative conditions. This impact is considered **Significant** because the DMFP adds more than one vehicle trip to an intersection operating at LOS F without the DMFP.
- Highway 1 at Carpenter Street – This is a signalized intersection. The intersection will operate at LOS E (74.1 seconds of delay) during the weekday PM peak hour and would operate at LOS E (75.7 seconds of delay) with the DMFP. The impact is considered **Significant** because the DMFP would increase the intersection's critical movement volume-to-capacity ratio from 0.98 to 0.99 in the PM peak which is equal to the 0.01 threshold change.
- Highway 1 at Ocean Avenue – This is a signalized intersection. The intersection will operate at LOS D (45.0 seconds of delay) and LOS E (63.9 seconds of delay) during the weekday AM and PM peak hours, respectively. The LOS would remain at D and E with the DMFP but the delay would increase to 46.2 seconds and 65.5 seconds, respectively. This impact is considered **Less Than Significant** because the DMFP would not worsen the intersection's critical movement volume-to-capacity ratio of 0.84 in the AM peak hour and 0.97 in the PM peak hour.
- Highway 1 at Rio Road – This is a signalized intersection. The intersection will operate at LOS D (38.3 seconds of delay) during the weekday PM peak hour and would operate at LOS D (38.2 seconds of delay) with the DMFP. This impact is considered **Less Than Significant** because the DMFP would not change the intersection's critical movement volume-to-capacity ratio of 0.76 during the PM peak hour.

The all-way stop and side-street stop controlled intersections were also evaluated for Warrant 3, the peak hour volume warrant, published by the Federal Highway Administration in the *Manual on Uniform Traffic Control Devices 2000* (MUTCD). The peak hour volume warrant is applied where traffic conditions are such that for one (1) hour of the day, minor street traffic suffers undue delay in entering or crossing a major street. **Table E-3** summarizes the results from the peak hour signal warrant analysis. The following intersections meet the traffic signal peak hour volume warrant:

- Highway 68 / Skyline Forest Drive (both morning and evening peak hours)Highway 68 / Carmel Hill Professional Center (evening peak hour only)

Auto
Impact 11 ***Under cumulative plus DMFP conditions, the DMFP would add traffic to the Sunset Drive intersection with Congress Avenue during the AM and PM peak hour and cause the LOS to deteriorate from LOS C to D.***

Auto
Mitigation 11 **Restripe the westbound approach to provide a left-turn pocket.**

With mitigation the Sunset Drive intersection with Congress Avenue would improve to LOS B (14.9 seconds of delay) and LOS C (20.5 seconds of delay) during the AM and PM peak hour, respectively. The DMFP is responsible for its fair-share contribution to this impact based on new traffic growth because the intersection operated at acceptable levels under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	786	73.9%	798	72.1%
Growth	194	18.2	222	20.1%
Presidio of Monterey	30	2.8	30	2.7%
DMFP	54	5.1	56	5.1%
Total Volume	***1,064***	***100%***	***1,106***	***100%***

Auto Impact 12 ***Under cumulative plus DMFP conditions, the DMFP would add traffic to the Forest Avenue intersection with David Avenue during the PM peak hour when intersection operations would be LOS D; and the DMFP would increase the intersection critical volume-to-capacity ratio by 0.01.***

Auto Mitigation 12 **Establish new traffic signal timings and phasings at the Forest Avenue intersection with David Avenue to allow protected left-turns from the westbound and eastbound approach after the visitor serving uses of the DMFP have been developed. The timings shall be adjusted while maintaining the same off-sets to the adjacent signalized intersections in the corridor.**

With mitigation, the Forest Avenue intersection with David Avenue would improve to LOS C (29.6 seconds of delay) during the PM peak hour. These off-sets the DMFP impact and the intersection would operate at LOS C. The DMFP is responsible for its fair-share contribution to this impact based on new traffic growth because the intersection operated at acceptable levels under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	1,533	74.9%	2,086	78.0%
Growth	277	13.5%	344	12.9%
Presidio of Monterey	180	8.8%	180	6.7%
DMFP	57	2.8%	63	2.4%
Total Volume	***2,047***	***100%***	***2,673***	***100%***

Discussion The traffic signal timing changes proposed as mitigation will improve vehicle flow through the intersection and minimize vehicle delays without adding additional vehicle capacity. These changes will achieve LOS C or better.

Auto Impact 13 ***Under cumulative plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Skyline Forest Drive which is anticipated to operate at LOS F without the DMFP. This intersection will also meet the peak hour traffic signal warrant without and with the DMFP.***

Auto Mitigation 13 **Implement Auto Mitigation 1.**

With mitigation, the Highway 68 intersection with Skyline Forest Drive would operate at LOS A (9.7 seconds of delay) and LOS A (9.2 seconds of delay) during the AM and PM peak hours, respectively. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Auto Impact 14 ***Under cumulative plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Carmel Hill Professional Center Driveway which is anticipated to operate at LOS F without the DMFP. This intersection will meet peak hour traffic signal warrant without or with the DMFP.***

Auto Mitigation 14 **Implement Auto Mitigation 2.**

With mitigation, the Carmel Hill Professional Center driveway with Highway 68 would operate at LOS B (18.7 seconds of delay) and LOS C (19.3 seconds of delay) during the AM and PM peak hours, respectively. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Auto Impact 15 ***Under cumulative plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Highway 1 southbound off-ramp intersection which is anticipated to operate at LOS F without the DMFP.***

Auto Mitigation 15 **Implement Auto Mitigation 2. Plus, construct a third eastbound lane on Highway 68 from about the Scenic Drive over-crossing through the Highway 1 intersection. One lane would become a dedicated lane to the Highway 1 southbound on-ramp. The other two lanes would continue across the widened Highway 68 overcrossing.**

With mitigation, the Highway 68 intersection with Highway 1 southbound off-ramp would operate at LOS C (20.1 seconds of delay) and LOS B (17.9 seconds of delay) during the AM and PM peak hours, respectively. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	2,673	68.7%	2,725	68.5%
Growth	402	10.3%	420	10.6%
Presidio of Monterey	725	18.6%	725	18.2%
DMFP	95	2.4%	106	2.7%
Total Volume	***3,895***	***100%***	***3,976***	***100%***

Discussion The DMFP includes improvements at this intersection that eliminate the project's intersection impact under existing and near term conditions. The poor operating conditions under cumulative i.e., LOS F are directly attributable to the POM's *Real Property Master Plan* which includes provisions for a new access control point. This access would be located on Highway 68 at the SFB Morse Drive intersection and contribute over 800 cars to the Highway 68 corridor during the AM and PM peak hours. The additional traffic would be redistributed from the existing POM gates at Franklin and Taylor and the High Street gate would be closed. The additional traffic associated with

the POM was not contemplated when the Highway 68 Widening Project was studied by Caltrans. Nor, was it considered in when TAMC developed the regional development fee program. As indicated in Auto Impact 15 the cumulative traffic including POM traffic would cause LOS F operations at the Highway 68 intersection with the Highway 1 southbound off-ramp. Excluding the POM-related traffic would improve the cumulative intersection operations from LOS F to LOS D. Application of Auto Mitigation 2 (i.e., the Highway 68 Widening Project) would further improve intersection operations to LOS B during the AM and PM peak hours.

Auto Impact 16 ***Under cumulative plus DMFP conditions, the DMFP would add more than one vehicle to the Highway 68 intersection with Aguajito Road intersection which is anticipated to operate at LOS F without the DMFP.***

Auto Mitigation 16 **Construct a refuge lane on Highway 68 for traffic turning left out of the Aguajito Road intersection.**

With mitigation, the Highway 68 intersection with Aguajito Road would operate at LOS A (2.4 seconds of delay) and LOS C (23.0 seconds of delay) during the AM and PM peak hours, respectively. The DMFP is responsible for its fair-share contribution to this impact based on new traffic because the intersection operates at acceptable levels under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	1,301	74.3%	1,437	63.6%
Growth	208	11.9%	249	11.0%
Presidio of Monterey	201	11.5%	524	23.2%
DMFP	40	2.3%	50	2.2%
Total Volume	***1,750***	***100%***	***2,260***	***100%***

Discussion The poor operating conditions under cumulative i.e., LOS F are directly attributable to the POM's *Real Property Master Plan* which includes provisions for a new access control point. This access would be located on Highway 68 at the SFB Morse Drive intersection and contribute over 800 cars to the Highway 68 corridor during the AM and PM peak hours. The additional traffic would be redistributed from the existing POM gates at Franklin and Taylor and the High Street gate would be closed. Excluding the POM traffic from the analysis would improve cumulative operations for westbound traffic at Aguajito Road to LOS B and C during the AM and PM peak hours, respectively, without the stated mitigation measure.

Auto Impact 17 ***Under cumulative plus DMFP conditions, the DMFP would add traffic to the Highway 1 intersection with Carpenter Road during the PM peak hour when the intersection operates at LOS E with the DMFP; and the DMFP would increase intersection critical volume-to-capacity ratio by 0.01.***

Auto Mitigation 17 **Establish new traffic signal timings at the Highway 1 intersection with Carpenter Road after the visitor serving uses of the DMFP have been developed. The timings shall be adjusted while maintaining the same off-sets to the adjacent signalized intersection at Ocean Avenue.**

With mitigation, the Highway 1 intersection with Carpenter Road would improve to LOS E (63.1 seconds of delay) during the PM peak hour. These off-sets the DMFP impact, but the existing deficiency would remain. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because it is a deficient intersection under existing conditions.

Traffic Component	AM Peak Hour Traffic		PM Peak Hour Traffic	
Existing	3,651	88.8%	4,801	89.2%
Growth	439	10.7%	559	10.4%
DMFP	20	0.5%	24	0.4%
Total Volume	***4,110***	***100%***	***5,384***	***100%***

Discussion Making improvements to Highway 1 through the Carmel area is controversial. Past studies have identified possible improvements, but none have been formally adopted and none have been incorporated into the regional transportation fee program.

The most recent study *Carmel Valley Master Plan SR-1 Study* (August 2009) assumed improvements to the Highway 1 corridor including a second northbound lane from south of Rio Road through the Carmel Valley Road intersection and a second right-turn lane from Rio Road onto Highway 1. The study also identified intersection improvement at Ocean Avenue including a westbound right turn lane at Ocean Avenue and extending the southbound lane merge at the intersection. The study did note that long-term capacity improvements including additional lanes are needed to improve the corridor to an acceptable LOS standard. However, the study excluded the Highway 1 improvements from the Carmel Valley Transportation Improvement Program because, in part, the roadway deficiencies are existing and traffic growth from the Carmel Valley Master Plan is expected to only contribute between 4 and 11% to the corridor's traffic. The traffic signal timing changes proposed as mitigation will improve vehicle flow through the intersection and minimize vehicle delays without adding additional vehicle capacity.

E.3.4 Highway Segments

Tables 4-5 and **Table E-6** show the cumulative plus DMFP highway segment volume to capacity ratios and levels of service. Table E-7 shows the levels of service for the ramp merge, diverge, and weave sections for the Highway 1 ramps at Highway 68 (west).

Ten highway segments will operate at levels of service below the County's threshold of LOS C in the Coastal Zone. These segments include:

- Highway 1 northbound on-ramp from Highway 68 (west)
- Highway 1, Highway 68 (west) to Munras Avenue
- Highway 1, Munras Avenue to Fremont Street
- Highway 1, Fremont Street to Fremont Boulevard
- Highway 1, Fremont Boulevard to Imjin Parkway
- Highway 1, North of Highway 156
- Highway 68, West of Skyline Forest Road
- Highway 68, East of Olmsted Road
- Highway 68, East of Laguna Seca

- Highway 156, Highway 1 to US-101
- US 101, North of Highway 156

Several of these segments operate at LOS F without the DMFP and the DMFP would add traffic to these segments which represents a **Significant** impact. The Highway 1 northbound on-ramp merge from Highway 68 (west) would operate at LOS E with a 35.7 density (density is 35.4 without the DMFP) during the PM peak hour. The DMFP would add traffic to this location and so represents a ***Significant*** impact at this merge location.

Auto Impact 18 ***Under cumulative plus DMFP conditions, the DMFP would add traffic to the Highway 1 and Highway 156 corridors and some of the segments along these corridors operate at LOS F.***

Auto Mitigation 18 **Implement Auto Mitigation 4.**

Auto Impact 19 ***Under cumulative plus DMFP conditions, the DMFP would add traffic to the Highway 1 northbound on-ramp merge from Highway 68 (west) which operates at LOS E during the PM peak hour without the DMFP; and the DMFP would increase the volume by more than 0.01.***

Auto Mitigation 19 **Implement Auto Mitigation 5.**

With mitigation, Highway 1 northbound between Highway 68 (west) and Munras Avenue would operate at LOS B and D during the AM and PM peak hours respectively. The DMFP is responsible for its fair-share contribution to this impact based on total traffic because the existing merge operates at unacceptable levels (LOS D) under existing conditions.

Discussion The poor operating conditions under cumulative i.e., LOS E are directly attributable to the POM's *Real Property Master Plan* which includes provisions for a new access control point. This access would be located on Highway 68 at the SFB Morse Drive intersection and contribute over 800 cars to the Highway 68 corridor during the AM and PM peak hours. The additional traffic would be redistributed from the existing POM gates at Franklin and Taylor and the High Street gate would be closed.

Excluding the POM traffic from the analysis would improve cumulative operations for the Highway 1 northbound merge from Highway 68 (west) to LOS D during the PM peak hour without the stated mitigation measure which still exceeds the County's LOS C threshold but is within Caltrans LOS D objective for the Highway 1 corridor through Monterey County.

TABLE E-1
AM PEAK HOUR INTERSECTION LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

	Description	Intersection Delay and Level of Service					
		Existing Year 2011 LOS		Near Term Year 2015 LOS		Cumulative Year 2030 LOS	
		No Project	With DMFP	No Project	With DMFP	No Project	With DMFP Plus 45 LCP Guest Units
Signalized Intersections[1]							
5	Forest Ave. (Highway 68) / David Ave.	24.8 / C	25.3 / C	25.8 / C	26.4 / C	26.5 / C	27.0 / C
6	Highway 68 / Prescott Avenue	11.2 / B	11.4 / B	12.7 / B	12.8 / B	15.7 / B	15.7 / B
8	Highway 68 / SFB Morse Gate	5.3 / A	5.4 / A	5.5 / A	5.3 / A	12.8 / B	12.9 / B
11	Highway 68 / Community Hospital	7.1 / A	7.1 / A	8.2 / A	8.4 / A	9.5 / A	9.7 / A
13	Highway 68 / Highway 1 SB Off-Ramp	**80.8 / F**	29.8 / C	**105.7 / F**	33.7 / C	**>120.0 / F**	**>120.0 / F**
16	Highway 1 / Carpenter Street	16.0 / B	16.1 / B	18.3 / B	18.4 / B	18.3 / B	18.3 / B
18	Highway 1 / Ocean Avenue	34.5 / C	**35.1 / D**	**39.5 / D**	**40.5 / D**	**45.0 / D**	**46.2 / D**
19	Highway 1 / Carmel Valley Road	9.4 / A	9.5 / A	9.7 / A	9.4 / A	10.2 / B	10.3 / B
20	Highway 1 / Rio Road	30.5 / C	30.6 / C	32.3 / C	32.3 / C	33.7 / C	33.9 / C
All-Way Stop Intersections[2]							
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	6.9 / A	7.2 / A	7.3 / A	7.7 / A	8.0 / A	9.1 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	11.8 / B	12.9 / B	16.3 / C	17.8 / C	18.1 / C	**26.6 / D**
3	Congress Ave. / Forest Lodge Rd.	11.5 / B	11.6 / B	12.9 / B	13.0 / B	12.2 / B	12.3 / B
4	Congress Ave. / David Ave.	10.9 / B	11.0 / B	11.9 / B	12.0 / B	11.3 / B	11.4 / B
10	Skyline Dr. / Skyline Forest Dr.	7.9 / A	7.9 / A	8.1 / A	8.1 / A	8.2 / A	8.2 / A
17	San Antonio Rd. / Ocean Ave.	7.9 / A	7.9 / A	8.2 / A	8.3 / A	8.2 / A	8.2 / A
23	Congress Road / SFB Morse Drive	7.7 / A	7.8 / A	7.8 / A	7.9 / A	7.8 / A	7.9 / A
25	Lopez Road / Sloat Road	8.0 / A	8.2 / A	8.2 / A	8.4 / A	8.1 / A	8.3 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	9.4 / A	10.0 / A	9.9 / A	10.6 / B	9.9 / A	10.6 / A
Side-Street Stop Intersections[3]							
7	Highway 68 / Presidio Blvd.[5]	3.8 (4.3) / A (A)	4.1 (4.6) / A (A)	4.2 (4.7) / A (A)	4.3 (4.6) / A (A)	12.8(21.6) / B(C)	14.3 (25.0) / B

TABLE E-1
AM PEAK HOUR INTERSECTION LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

Description		Intersection Delay and Level of Service					
		Existing Year 2011 LOS		Near Term Year 2015 LOS		Cumulative Year 2030 LOS	
		No Project	With DMFP	No Project	With DMFP	No Project	With DMFP Plus 45 LCP Guest Units
							(C) (C)
9	Highway 68 / Skyline Forest Dr.	**21.4(>120) / C(F)**	**24.3(>120) / C(F)**	**33.3(>120) / D(F)**	**37.3(>120) / E(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**
12	Highway 68 / Carmel Hill Professional Center	**64.6(>120) / F(F)**	**63.2(>120) / F(F)**	**95.0(>120) / F(F)**	**93.0(>120) / F(F)**	**98.6(>120) / F(F)**	**>120(>120) / F(F)**
14	Highway 1 SB On-Ramp / 17-Mile Dr.	3.2 (14.1) / A (B)	Eliminated with project	3.5 (15.1) / A (C)	Eliminated with project	3.1 (16.8) / A (C)	Eliminated with project
15	Highway 68 / Aguajito Rd. [5]	2.6 (9.5) / A (A)	2.1 (8.5) / A (A)	2.4 (11.8) / A (B)	2.5 (10.5) / A (B)	3.1 (17.4) / A (C)	**5.0 (43.3) / A (E)**
21	Congress Road /Spanish Bay /17-Mile Dr	4.8 (10.6) / A (B)	5.0 (11.6) / A (B)	5.2 (11.2) / A (B)	5.5 (12.3) / A (B)	5.2 (11.2) / A (B)	5.5 (12.3) / A (B)
22	Congress Road / Forest Lodge	2.0 (11.1) / A (B)	2.3 (11.3) / A (B)	3.1 (11.8) / A (B)	3.3 (12.0) / A (B)	2.8 (11.5) / A (B)	3.1 (11.7) / A (B)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	4.5 (7.1) / A (A)	4.7 (7.5) / A (A)	4.6 (7.4) / A (A)	4.7 (7.8) / A (A)	4.8 (7.5) / A (A)	5.1 (8.0) / A (A)
26	Spyglass Hill Road / Stevenson Drive	2.9 (8.6) / A (A)	3.5 (8.8) / A (A)	3.2 (8.9) / A (A)	3.6 (9.1) / A (A)	3.2 (8.8) / A (A)	3.6 (9.0) / A (A)
27	Forest Lake / Stevenson-Ondulado	4.0 (11.9) / A (B)	4.1 (12.7) / A (B)	4.8 (13.4) / A (B)	5.0 (14.3) / A (B)	4.6 (12.8) / A (B)	4.7 (13.6) / A (B)
29	Palmero Way / 17-Mile Drive	2.2 (15.5) / A (C)	2.3 (16.5) / A (C)	3.1 (18.4) / A (C)	3.2 (20.0) / A (C)	2.9 (17.3) / A (C)	3.0 (18.8) / A (C)
30	Sunridge Road / Ronda Road	2.1 (10.0) / A (A)	2.6 (10.2) / A (B)	2.6 (10.4) / A (B)	3.0 (10.7) / A (B)	2.4 (10.2) / A (B)	2.8 (10.4) / A (B)
31	Sunridge Road / Scenic Drive	0.6 (9.8) / A (A)	0.6(9.8) / A (A)	0.9 (10.2) / A (B)	0.9 (10.3) / A (B)	0.8 (10.1) / A (B)	0.8 (10.2) / A (B)
32	Sunridge Road / Constanilla Way	5.5 (9.5) / A (A)	5.2 (9.5) / A (A)	5.6 (9.7) / A (A)	5.4 (9.7) / A (A)	5.6 (9.6) / A (A)	5.4 (9.7) / A (A)
33	Sunridge Road / Haul Road[4]	0.8 (5.3) / A (A)	1.1 (5.4) / A (A)	1.2 (7.4) / A (A)	1.4 (6.4) / A (A)	1.2 (7.3) / A (A)	1.3 (7.1) / A (A)

Notes:

Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.

1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.

4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.

5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic

TABLE E-1
AM PEAK HOUR INTERSECTION LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

Description	Intersection Delay and Level of Service					
	Existing Year 2011 LOS		Near Term Year 2015 LOS		Cumulative Year 2030 LOS	
	No Project	With DMFP	No Project	With DMFP	No Project	With DMFP Plus 45 LCP Guest Units

is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.

Source: Fehr & Peers (October 2011)

TABLE E-2
PM PEAK HOUR INTERSECTION LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

	Description	Intersection Delay and Level of Service					
		Existing Year 2011 LOS		Near Term Year 2015 LOS		Cumulative Year 2030 LOS	
		No Project	With DMFP	No Project	With DMFP	No Project	With DMFP Plus 45 LCP Guest Units
Signalized Intersections[1]							
5	Forest Ave. (Highway 68) / David Ave.	30.1 / C	31.1 / C	32.4 / C	33.3 / C	**38.9 / D**	**40.2 / D**
6	Highway 68 / Prescott Avenue	19.2 / B	19.9 / B	21.4 / C	21.4 / C	24.0 / C	24.1 / C
8	Highway 68 / SFB Morse Gate	3.9 / A	4.1 / A	4.0 / A	4.2 / A	17.8 / B	18.2 / B
11	Highway 68 / Community Hospital	8.7 / A	8.8 / A	9.1 / A	9.3 / A	23.7 / C	26.5 / C
13	Highway 68 / Highway 1 Off-Ramp	**70.1 / E**	34.2 / C	**79.0 / E**	**39.8 / D**	**>120.0 / F**	**>120.0 / F**
16	Highway 1 / Carpenter Street	**45.9 / D**	**46.7 / D**	**57.9 / E**	**59.2 / E**	**74.1 / E**	**75.7 / E**
18	Highway 1 / Ocean Avenue	**45.4 / D**	**45.9 / D**	**51.8 / D**	**52.6 / D**	**63.9 / E**	**65.5 / E**
19	Highway 1 / Carmel Valley Road	17.4 / B	17.7 / B	18.7 / B	18.5 / B	21.7 / C	21.9 / C
20	Highway 1 / Rio Road	32.9 / C	33.1 / C	**35.9 / D**	**36.0 / D**	**38.3 / D**	**38.2 / D**
All-Way Stop Intersections[2]							
1	Sunset Dr. (Highway 68) / 17-Mile Dr.[4]	5.6 / A	6.0 / A	6.0 / A	6.5 / A	6.6 / A	7.1 / A
2	Sunset Dr. (Highway 68) / Congress Rd.[4]	9.6 / A	10.5 / B	11.4 / B	13.9 / B	18.2 / C	**27.0 / D**
3	Congress Ave. / Forest Lodge Rd.	10.6 / B	10.7 / B	11.4 / B	11.5 / B	12.6 / B	12.8 / B
4	Congress Ave. / David Ave.	10.5 / B	10.5 / B	11.5 / B	11.6 / B	12.6 / B	12.7 / B
10	Skyline Dr. / Skyline Forest Dr.	8.3 / A	8.3 / A	8.5 / A	8.5 / A	8.8 / A	8.8 / A
17	San Antonio Rd. / Ocean Ave.	8.8 / A	8.9 / A	9.2 / A	9.2 / A	9.4 / A	9.5 / A
23	Congress Road / SFB Morse Drive	7.9 / A	8.0 / A	8.1 / A	8.2 / A	8.1 / A	8.2 / A
25	Lopez Road / Sloat Road	8.0 / A	8.4 / A	8.5 / A	8.9 / A	8.4 / A	8.9 / A
28	Stevenson Drive / 17-Mile Drive / Alvarado	9.6 / A	10.4 / B	10.3 / B	11.2 / B	10.5 / B	11.5 / B

TABLE E-2
PM PEAK HOUR INTERSECTION LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

	Description	Intersection Delay and Level of Service					
		Existing Year 2011 LOS		Near Term Year 2015 LOS		Cumulative Year 2030 LOS	
		No Project	With DMFP	No Project	With DMFP	No Project	With DMFP Plus 45 LCP Guest Units
Side-Street Stop Intersections[3]							
7	Highway 68 / Presidio Blvd.[5]	3.6 (3.8) / A (A)	3.6 (3.7) / A (A)	3.7 (3.9) / A (A)	3.8 (4.0) / A (A)	5.2 (5.6) / A (A)	5.4 (5.8) / A (A)
9	Highway 68 / Skyline Forest Dr.	**15.9(>120) / C(F)**	**17.9(>120) / C(F)**	**25.1(>120) / D(F)**	**28.0(>120) / D(F)**	**>120(>120) / F(F)**	**>120(>120) / F(F)**
12	Highway 68 / Carmel Hill Professional Center	**23.4(>120) / C(F)**	**38.8(>120) / E(F)**	**39.3(>120) / E(F)**	**>120(>120) / F(F)**	**>120(>120) /F(F)**	**>120(>120) / F(F)**
14	Highway 1 On-Ramp / 17-Mile Dr.	8.7 (22.9) / A (C)	Eliminated with project	9.6 (25.7) / A (D)	Eliminated with project	**18.8(56.3)/ (C(F)**	Eliminated with project
15	Highway 68 / Aguajito Rd.[5]	2.9 (11.0) / A (B)	3.0 (11.9) / A (B)	3.3 (16.0) / A (C)	3.6 (19.6) / A (C)	**32.4(>120) / D(F)**	**49.2(>120) / F(F)**
21	Congress Road / Spanish Bay / 17-Mile Dr.	5.5 (11.8) / A (B)	6.3 (12.7) / A(B)	6.2 (12.9) / A (B)	7.2 (14.5) / A (B)	6.1 (12.6) / A (B)	7.2 (14.4) / A (B)
22	Congress Road / Forest Lodge	3.5 (13.9) / A (B)	3.8 (14.5) / A (B)	4.4 (15.4) / A (C)	4.7 (16.2) / A (C)	4.2 (15.4) / A (C)	4.5 (16.1) / A (C)
24	Sloat Road / Forest Lodge / 17-Mile Dr.[4]	4.1 (7.7) / A (A)	4.5 (8.3) / A (A)	4.5 (7.8) / A (A)	4.8 (8.6) / A (A)	4.6 (8.2) / A (A)	5.0 (9.0) / A (A)
26	Spyglass Hill Road / Stevenson Drive	2.7 (9.0) / A (A)	3.1 (9.1) / A (A)	3.1 (9.3) / A (A)	3.3 (9.4) / A (A)	2.9 (9.3) / A (A)	3.1 (9.4) / A (A)
27	Forest Lake / Stevenson-Ondulado	3.9 (11.7) / A (B)	4.0 (12.4) / A (B)	4.4 (12.6) / A (B)	4.6 (13.5) / A (A)	4.5 (12.3) / A (B)	4.7 (13.1) / A (B)
29	Palmero Way / 17-Mile Drive	3.5 (16.2) / A (C)	3.6 (17.3) / A (C)	4.6 (17.7) / A (C)	4.8 (19.0) / A (C)	4.4 (18.1) / A (C)	4.7 (19.7) / A (C)
30	Sunridge Road / Ronda Road	3.7 (9.5) / A (A)	3.8 (9.6) / A (A)	3.9 (9.8) / A (A)	3.9 (10.0) / A (A)	4.0 (9.8) / A (A)	4.0 (10.0) / A (A)
31	Sunridge Road / Scenic Drive	0.8 (10.6) / A (B)	0.8 (10.8) / A (B)	1.2 (10.5) / A (B)	1.2 (10.7) / A (B)	1.1 (10.6) / A (B)	1.1 (10.9) / A (B)
32	Sunridge Road / Constanilla Way	2.5 (9.2) / A (A)	2.9 (9.3) / A (A)	2.8 (9.4) / A (A)	3.1 (9.5) / A (A)	3.0 (9.4) / A (A)	3.2 (9.5) / A (A)
33	Sunridge Road / Haul Road[4]	1.1 (5.6) / A (A)	1.1 (5.7) / A (A)	1.4 (5.5) / A (A)	1.5 (5.7) / A (A)	1.6 (5.9) / A (A)	1.6 (5.9) / A (A)

Notes:

Intersections with calculated delay greater than 120 seconds are shown with >120 to indicate that the analysis tool has limitations above this delay level.

1 Signalized intersection level of service based on control delay per vehicle, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

2 All-way stop intersection level of service based on average intersection delay, according to the *Highway Capacity Manual*, Transportation Research Board, 2000.

3 Side street stop controlled intersection level of service based on average control delay for critical side street movement, according to the 2010 *Highway Capacity Manual*, Transportation Research Board, 2010.

TABLE E-2
PM PEAK HOUR INTERSECTION LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

Description	Intersection Delay and Level of Service					
	Existing Year 2011 LOS		Near Term Year 2015 LOS		Cumulative Year 2030 LOS	
	No Project	With DMFP	No Project	With DMFP	No Project	With DMFP Plus 45 LCP Guest Units

4 These intersections are analyzed using SimTraffic software because of unique conditions including more than four approach legs.

5 The Aguajito Road left turning traffic is fewer than 20 vehicles in the peak hour and so SimTraffic provides a more reasonable analysis result. Presidio Boulevard side-street left turning traffic is prohibited and so SimTraffic provides more reasonable result for the right turning traffic at the intersection.

Source: Fehr & Peers (October 2011)

TABLE E-3
PEAK HOUR TRAFFIC SIGNAL WARRANT ANALYSIS WITH DMFP ALTERNATIVE 2

Description		Period	Existing Year 2011	Near Term Year 2015	Cumulative Year 2030
1	Sunset Drive (Highway 68) / 17-Mile Dr	AM(PM)	No (No)	No (No)	No (No)
2	Sunset Drive (Highway 68) / Congress Road	AM(PM)	No (No)	No (No)	No (No)
3	Congress Avenue / Forest Lodge Road	AM(PM)	No (No)	No (No)	No (No)
4	Congress Avenue / David Avenue[1]	AM(PM)	No (No)	No (No)	No (No)
7	Highway 68 / Presidio Boulevard [2]	AM(PM)	No (No)	No (No)	No (No)
9	Highway 68 / Skyline Forest Drive	AM(PM)	**Yes (Yes)**	**Yes (Yes)**	**Yes (Yes)**
10	Skyline Drive / Skyline Forest Drive	AM(PM)	No (No)	No (No)	No (No)
12	Highway 68 / Carmel Hill Professional Center	AM(PM)	No **(Yes)**	No **(Yes)**	No **(Yes)**
14	Highway 1 SB On-Ramp / 17-Mile Drive	AM(PM)	Intersection eliminated with DMFP		
15	Highway 68 / Aguajito Road	AM(PM)	No (No)	No (No)	No (No)
17	San Antonio Road / Ocean Avenue	AM(PM)	No (No)	No (No)	No (No)
21	Congress Road / Spanish Bay / 17-Mile Dr.	AM(PM)	No (No)	No (No)	No (No)
22	Congress Road / Forest Lodge	AM(PM)	No (No)	No (No)	No (No)
23	Congress Road / SFB Morse Drive	AM(PM)	No (No)	No (No)	No (No)
24	Sloat Road / Forest Lodge / 17-Mile Dr.	AM(PM)	No (No)	No (No)	No (No)
25	Lopez Road / Sloat Road	AM(PM)	No (No)	No (No)	No (No)
26	Spyglass Hill Road / Stevenson Drive	AM(PM)	No (No)	No (No)	No (No)
27	Forest Lake / Stevenson-Ondulado	AM(PM)	No (No)	No (No)	No (No)
28	Stevenson Drive / 17-Mile Drive / Alvarado	AM(PM)	No (No)	No (No)	No (No)
29	Palmero Way / 17-Mile Drive	AM(PM)	No (No)	No (No)	No (No)
30	Sunridge Road / Ronda Road	AM(PM)	No (No)	No (No)	No (No)
31	Sunridge Road / Scenic Drive	AM(PM)	No (No)	No (No)	No (No)
32	Sunridge Road / Constanilla Way	AM(PM)	No (No)	No (No)	No (No)
33	Sunridge Road / Haul Road	AM(PM)	No (No)	No (No)	No (No)

Yes – The intersection meets the peak hour traffic signal warrant

No – The intersection does not meet the peak hour traffic signal warrant

1 The Congress Avenue / David Avenue intersection does not meet the peak hour signal warrants when the westbound right turn volume is removed from the calculation which was done because the westbound right-turn movements operates independently from the westbound through and left movements.

2 The Presidio Boulevard intersection does not meet the peak hour signal warrant when the right turn volume is removed from the calculation which was done because left turns from Presidio Boulevard are prohibited.

Source: Fehr & Peers (October 2011)

TABLE E-4
FOREST GATE PEAK HOUR VOLUMES AND LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

Description	Capacity	Peak Hour	Peak Hour Volume (Volume-to-Capacity Ratio)[1]		
			Existing Year 2011	Near Term Year 2015	Cumulative Year 2030
Pacific Grove Gate	600	AM	139 (0.23)	141 (0.24)	153 (0.26)
		PM	156 (0.26)	160 (0.27)	175 (0.29)
Carmel Gate	900	AM	132 (0.15)	136 (0.15)	150 (0.17)
		PM	141 (0.16)	145 (0.16)	160 (0.18)
Highway 1 Gate	920	AM	509 (0.55)	523 (0.57)	576 (0.63)
		PM	360 (0.39)	369 (0.40)	405 (0.44)
Country Club Gate	600	AM	192 (0.32)	197 (0.33)	218 (0.36)
		PM	222 (0.37)	228 (0.38)	252 (0.42)
SFB Morse Gate	520	AM	138 (0.27)	142 (0.27)	156 (0.30)
		PM	140 (0.27)	144 (0.28)	158 (0.30)

Note:
1 Volume-to-capacity ratio describes the inbound peak hour traffic flow as it relates to gate capacity. A ratio less than 0.9 is considered acceptable.

Source: Fehr & Peers (October 2011)

TABLE E-5
HIGHWAY SEGMENT AM PEAK HOUR LEVEL OF SERVICE WITH DMFP ALTERNATIVE 1

Segment	Segment Capacity	Direction	Volume (Volume-to-Capacity Ratio) / Level of Service		
			Existing Year 2011	Near Term Year 2015	Cumulative Year 2030
Highway 1					
Pebble Beach to Munras Avenue[1]	3,550	NB	2,320 (0.65) / C	2,330 (0.66) / C	**2,470 (0.70) / D**
Munras Avenue to Fremont Street	3,550 3,550	NB SB	1,780 (0.50) / C **2,600 (0.73) / D**	1,810 (0..51) / C **2,640 (0.74) / D**	1,980 (0.56) / C **3,200 (0.90) / E**
Fremont Street to Fremont Boulevard	3,550 3,550	NB SB	1,740 (0.49) / C **3,850 (1.08) / F**	1,780 (0.50) / C **3,920 (1.10) / F**	1,950 (0.55) / C **4,460 (1.26) / F**
Fremont Boulevard to Imjin Parkway	5,330 5,330	NB SB	1,810 (0.34) / B **3,880 (0.73) / D**	1,830 (0.34) / B **3,910 (0.73) / D**	1,920 (0.36) / B **4,220 (0.79) / D**
North of Highway 156	1,420 1,420	NB SB	**1,000 (0.70) / D** **1,930 (1.36) / F**	**1,050 (0.74) / D** **2,030 (1.43) / F**	**1,290 (0.91) / E** **2,530 (1.78) / F**
Highway 68					
West of Skyline Forest Drive	1,420 1,420	EB WB	**1,060 (0.75) / D** 740 (0.52) / C	**1,090 (0.77) / D** 770 (0.54) / C	**1,330 (0.94) / E** **1,470 (1.04) / F**
East of Olmsted Road	1,420 1,420	EB WB	**1,020 (0.72) / D** **1,080 (0.76) / D**	**1,020 (0.72) / D** **1,080 (0.76) / D**	**1,060 (0.75) / D** **1,270 (0.89) / E**
East of Laguna Seca	1,420	EB WB	**1,630 (1.15) / F** **1,110 (0.78) / D**	**1,640 (1.15) / F** **1,120 (0.79) / D**	**1,680 (1.18) / F** **1,240 (0.87) / D**
US-101					
South of Salinas	3,550 3,550	NB SB	960 (0.27) / B 880 (0.25) / B	970 (0.27) / B 80 (0.25) / B	980 (0.28) / B 900 (0.25) / B
North of Highway 156	3,550 3,550	NB SB	1,510 (0.43) / B 2,000 (0.56) / C	1,550 (0.44) / B 2,060 (0.58) / C	1,710 (0.48) / C 2,310 (0.65) / C
Highway 156					
Highway 1 to US-101	1,420 1,420	NB SB	770 (0.54) / C **1,280 (0.90) / E**	780 (0.55) / C **1,280 (0.90) / E**	**800 (0.56) / C** **1,350 (0.95) / E**

1 Southbound segment analyzed as a weave section.
Source: Fehr & Peers (October 2011)

TABLE E-6
HIGHWAY SEGMENT PM PEAK HOUR LEVEL OF SERVICE WITH DMFP ALTERNATIVE 1

Segment	Segment Capacity	Direction	Volume (Volume-to-Capacity Ratio) / Level of Service		
			Existing Year 2011	Near Term Year 2015	Cumulative Year 2030
Highway 1					
Pebble Beach to Munras Avenue[1]	3,550	NB	**3,090 (0.87) / D**	**3,100 (0.87) / D**	**3,650 (1.03) / F**
Munras Avenue to Fremont Street	3,550 3,550	NB SB	**2,440 (0.69) / D** 2,0140 (0.57) / C	**2,470 (0.70) / D** 2,040 (0.57) / C	**3,020 (0.85) / D** 2,220 (0.63) / C
Fremont Street to Fremont Boulevard	3,550 3,550	NB SB	**3,580 (1.01) / F** **2,740 (0.77) / D**	**3,640 (1.03) / F** **2,790 (0.79) / D**	**4,160 (1.17) / F** **3,050 (0.86) / D**
Fremont Boulevard to Imjin Parkway	5,330 5,330	NB SB	**4,440 (0.83) / D** 2,650 (0.50) / C	**4,480 (0.84) / D** 2,670 (0.50) / C	**4,800 (0.90) / E** 2,790 (0.52) / C
North of Highway 156	1,420 1,420	NB SB	**2,240 (1.58) / F** **1,400 (0.99) / E**	**2,370 (1.67) / F** **1,480 (1.04) / F**	**2,940 (2.07) / F** **1,810 (1.27) / F**
Highway 68					
West of Skyline Forest Drive	1,420 1,420	EB WB	880 (0.62) / C **1,140 (0.80) / D**	910 (0.64) / C **1,180 (0.83) / D**	**1,630 (1.15) / F** **1,430 (1.01) / F**
East of Olmsted Road	1,420 1,420	EB WB	**1,040 (0.73) / D** **1,200 (0.85) / D**	**1,040 (0.73) / D** **1,200 (0.85) / D**	**1,230 (0.87) / D** **1,240 (0.87) / D**
East of Laguna Seca	1,420 1,420	EB WB	**1,290 (0.91) / E** **1,710 (1.20) / F**	**1,300 (0.92) / E** **1,720 (1.21) / F**	**1,420 (1.00) / E** **1,760 (1.24) / F**
US-101					
South of Salinas	3,550 3,550	NB SB	1,260 (0.35) / B 1,580 (0.45) / B	1,270 (0.36) / B 1,590 (0.45) / B	1,280 (0.36) / B 1,610 (0.45) / B
North of Highway 156	3,550 3,550	NB SB	2,160 (0.61) / C 2,300 (0.65) / C	2,220 (0.63) / C 2,360 (0.66) / C	**2,490 (0.70) / D** **2,600 (0.73) / D**
Highway 156					
Highway 1 to US-101	1,420 1,420	NB SB	**1,690 (1.19) / F** 900 (0.63) / C	**1,700 (1.20) / F** 900 (0.63) / C	**1,770 (1.25) / F** 920 (0.65) / C

1 Southbound segment analyzed as a weave section.
Source: Fehr & Peers (October 2011)

TABLE E-7
HIGHWAY 1 RAMPS AT HIGHWAY 68 (WEST)
PEAK HOUR LEVEL OF SERVICE WITH DMFP ALTERNATIVE 2

Freeway	Peak Hour	Existing		Base (2015)		Cumulative (2030)	
		Density (pcplpm) [1]	LOS	Density (pcplpm) [1]	LOS	Density (pcplpm) [1]	LOS
Merge /1/							
Highway 1 NB On-Ramp from Highway 68	AM	20.2	C	20.6	C	21.1	C
	PM	**29.6**	**D**	**30.3**	**D**	**35.7**	**E**
Highway 1 SB On-Ramp from Highway 68	AM	20.4	C	20.9	C	21.4	C
	PM	21.2	C	21.6	C	22.5	C
Diverge /1/							
Highway 1 NB Off-Ramp to Highway 68	AM	18.3	B	18.8	B	19.2	B
	PM	21.2	C	21.6	C	22.5	C
		Weaving Speed	**LOS**	**Weaving Speed**	**LOS**	**Weaving Speed**	**LOS**
Weave /2/							
Highway 1 SB Off-Ramp to Highway 68	AM	38.3	B	37.7	B	32.9	C
	PM	35.0	C	34.8	C	33.8	C

Notes:
1 Passenger car equivalence per lane per mile
2 *Highway Capacity Manual*, Transportation Research Board, 2000
3 Caltrans Highway Design Manual Methodology
Source: Fehr & Peers (October 2011)