# Appendix D

# Traffic Level of Service Analysis

This appendix contains complex quantitative data and traffic turning movement counts used to calculate traffic impacts of the project. If you have difficulty accessing these data, please call 415-927-6713 for assistance.

# **Appendix D Level of Service**

# Level of Service and Vehicle Trip Generation

Lead agencies are permitted to consider vehicle Level of Service (LOS) outside of the CEQA process to determine the operational impacts of proposed development as part of the update of a city's General Plan. The following sections describe the process to project the number of trips to be generated as part of Larkspur's General Plan Update at the study intersections and gateway locations, with the corresponding LOS at the study intersections. Because California no longer considers vehicle delay as an environmental impact under CEQA, the following analyses are provided for informational and planning purposes only.

### **Level of Service Definitions**

Signalized intersection LOS is defined in terms of the average total motor vehicle delay for all movements through an intersection. Vehicle delay is a method of quantifying several intangible factors, including driver discomfort, frustration, and lost travel time. Specifically, LOS criteria are stated in terms of average delay per vehicle during a specified period. Vehicle delay is based on many variables, including signal phasing (i.e., the order of movements through the intersection), signal cycle length, and traffic volumes with respect to intersection capacity.

Unsignalized intersection LOS criteria can be further reduced to three intersection types: all-way stop-controlled, two-way stop-controlled, and one-way stop-controlled. All-way stop-controlled intersection LOS is expressed in terms of the average vehicle delay of all the movements, much like that of a signalized intersection.

Two-way and one-way stop-controlled intersection LOS is defined in terms of the average vehicle delay for individual movement(s). This is because the performance of the stop-controlled approach is more closely reflected in terms of its specific movements, rather than its performance overall. Intersection average vehicle delay (i.e., average delay of all movements) for a one-way and two-way stop-controlled intersection should be viewed with discretion.

Table 4.14-1 lists the criteria used to define level of service for signalized and unsignalized intersections.

Table 4.14-1 Highway Capacity Manual Level of Service Definitions for Intersection Control Delay

Level of	Level of Service Definitions for Intersections						
Service	Average Control Delay Per Vehicle (Seconds)		Description				
	Signalized	Unsignalized					
А	≤ 10	≤ 10	Free flow				
В	> 10 – 20	> 10 – 15	Stable flow (slight delays)				
С	> 20 – 35	>15-25	Stable flow (slight delays)				
D	> 35 – 55	> 25 – 35	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)				
E	> 55 – 80	> 35 – 50	Unstable flow (intolerable delay)				
F	> 80	> 50	Forced flow (jammed)				

Source: Transportation Research Board, 2000.

## Trips by Traffic Analysis Zone

The number of projected trips based on the increase in the number of residential units and Accessory Dwelling Units (ADUs) associated with the General Plan Buildout scenario for each of the city's 17 Traffic Analysis Zones (TAZs) are summarized in Table 4.14-2. The city's TAZs and estimated number of daily and PM peak hour trips to be generated per TAZ under the General Plan Buildout scenario are illustrated in Exhibit XXX.

Table 4.14-2 Projected Vehicle Trip Generation by TAZ

TAZ	# Residential Units	# ADUs	Weekday Daily	Weekday PM Peak Hour Projec Trips		
	Onits		Project Trips	Total Trips	Inbound	Outbound
TAZ 1	-	15	83	7	5	2
TAZ 2	-	60	309	28	19	9
TAZ 3	540	2	2,406	219	145	74
TAZ 4	-	-	-	-	-	-
TAZ 5	25	-	131	12	8	4

TAZ 6	50	-	277	25	17	9
TAZ 7	200	12	1,052	96	63	32
TAZ 8	100	15	576	52	35	17
TAZ 9	23	13	179	16	11	5
TAZ 10	-	22	121	11	7	4
TAZ 11	50	-	248	22	15	7
TAZ 12	-	12	60	5	4	2
TAZ 13	26	49	393	35	24	12
TAZ 14	26	27	249	22	15	7
TAZ 15	-	-	-	-	-	-
TAZ 16	-	50	276	25	17	8
TAZ 17	-	23	120	11	7	4

These project trips correspond to the increases in the numbers of residential units and ADUs that are envisioned as part of the General Plan Buildout scenario. Over one-third of the project trips would be generated in TAZ 3, which encompasses the Larkspur Landing area north of East Sir Francis Drake Boulevard and east of Highway 101. Approximately 16 percent of project trips would be generated from TAZ 7, encompassing the area south of Sir Francis Drake Boulevard immediately west of Highway 101. The remaining 47 percent of project trips would be generated from TAZs throughout Larkspur.

#### Intersection Level of Service

Intersection LOS analysis for Existing Conditions, 2040 Conditions without General Plan Buildout, and 2040 Conditions with General Plan Buildout was conducted at 24 study intersections throughout Larkspur. Existing traffic volumes were determined using motor vehicle turning movement counts that were conducted at the intersections during the morning peak period (7:00 AM to 9:00 AM) and the evening peak period (4:00 PM to 6:00 PM). The intersection counts along Sir Francis Drake Boulevard were conducted on October 10, 2018, and the intersection counts at the remainder of intersections were collected between March 6 to March 13, 2018. Counts were collected on weekdays when schools were in session, capturing school-related motor vehicle traffic. The peak-hour volumes can be considered representative of the highest intersection volumes experienced at each intersection on an average weekday.

The 2040 Conditions without General Plan Buildout scenario assumes no land use changes for Larkspur between the Existing Conditions and General Plan buildout year of 2040 but does assume growth for the surrounding communities. To account for the expected increase in

travel from adjacent communities, this scenario assumed a 5 percent increase in traffic volumes from Existing Conditions for all movements. This assumption represents a conservative approach since it assumes growth in traffic volumes despite that regional volumes in communities throughout Marin County have been generally flat over the past decade.

The 2040 Conditions with General Plan Buildout scenario includes both the trips generated by the proposed General Plan Buildout land use changes, as estimated through the Trip Forecasting method, and the increase in trips as described in the Future Conditions Without General Plan Buildout scenario.

The following assumptions were used to estimate the projected number of vehicle trips associated with the General Plan Buildout scenario:

- Trip Generation Weekday daily and PM peak hour trip rates from the Institute of Transportation Engineers' Trip Generation Manual were used to estimate vehicle trips associated with each of the land use categories identified as part of the General Plan Buildout scenario. Some land use categories proposed as part of General Plan Buildout that are not represented in the Trip Generation Manual were assumed using an appropriate mix of compatible land uses.
- Mode Choice Appropriate consideration was taken for non-vehicular trip making (i.e., bicycling, walking and transit) based on Census data for Larkspur, as well as for internal capture and pass-by trip making.
- Trip Distribution to provide a conservative estimate of the impacts of trips generated under the General Plan Buildout condition, all vehicle trips were assumed to have an origin or destination outside of the City of Larkspur. Thus, for the purposes of the General Plan operational analyses, all General Plan Buildout trips pass through one of the City's gateway locations.

The study intersections and peak-hour turning movement counts for each scenario for the AM and PM peak hour periods are shown in Exhibit XXX (Existing Conditions), Exhibit YYY (2040 Conditions without General Plan Buildout) and Exhibit ZZZ (2040 Conditions with General Plan Buildout).

General Plan Policy CIR-3.2 states, "where feasible, given the needs of all users listed in Policy CIR-3.1, maintain standards for acceptable Levels of Service during peak periods. Where these standards cannot be feasibly maintained due to new traffic generated by a proposed project, require other measures to reduce peak traffic and/or reduce the VMT generated by the new development."

Further, Action Program CIR-3.2a states that the city should "strive to maintain no less than Level of Service (LOS) at the D level for signalized and unsignalized intersections by using planning procedures defined in up-to-date releases from the Transportation Research Board. The City acknowledges that in 2020, LOS E or lower exists at the following signalized intersections and that "most measures which would alleviate traffic congestion there would not be desirable." These intersections operating at LOS E or lower include:

Redwood High School / Doherty Drive / Riviera Circle (PM peak hour period)

• East Sir Francis Drake Boulevard / Larkspur Landing West (PM peak hour period)

#### AM Peak Hour

Table 4.14-3 summarizes the intersection LOS and estimated delay in seconds for the AM peakhour under each of the three scenarios: Existing Conditions, Future Conditions without General Plan Buildout, and 2040 Conditions with General Plan Buildout. As shown, development under the 2040 Conditions with General Plan Buildout scenario would slightly increase delay at most of the study intersections over the 2040 Conditions without General Plan Buildout scenario. However, no intersection level of service degrades to LOS E or worse with the addition of traffic volumes associated with General Plan conditions. Implementation of the General Plan would not result in significant degradation of level of service to study intersections. Therefore, impacts related to LOS for the AM peak hour from implementation of the General Plan would be consistent with Policy CIR-3.2.

Additionally, the analysis considered intersections projected to operate at LOS E or lower in 2040 and that increases vehicle delay by two seconds or greater as a result of traffic volumes associated with General Plan conditions. In the AM peak period, the intersection of Sir Francis Drake Boulevard / Bon Air Center / La Cuesta, projected to operate at LOS E under both the 2040 Conditions with and without General Plan Buildout scenarios, would increase delay by approximately 6 seconds.

Table 4.14-3 Intersection Level of Service (AM Peak Hour)

Intersection	Control	Existing Conditions		2040 Conditions without GP Buildout		2040 Conditions with GP Buildout	
				AM P	eak Hour		
		LOS	Delay	LOS	Delay	LOS	Delay
Drakes Landing / Bon Air Center / Barry	AWSC	В	10	В	10	В	11
El Portal / Via Casitas	SSSC	А	8	А	9	А	9
Bon Air / Eliseo	Signal	В	17	В	20	С	21
Magnolia / Estelle	AWSC	С	18	С	20	С	21
Magnolia / Frances	AWSC	С	20	С	23	С	25
Magnolia / Skylark / Dartmouth	AWSC	С	15	С	17	С	18
Magnolia / Bon Air	Signal	С	23	С	25	С	26
Magnolia / Creekside	SSSC	Α	1	А	1	А	1

Intersection	Control	Conditions		2040 Conditions without GP Buildout		2040 Conditions with GP Buildout	
				AM P	eak Hour		
		LOS	Delay	LOS	Delay	LOS	Delay
Magnolia / Doherty	Signal	В	16	В	17	В	18
Magnolia / Ward	Signal	В	18	В	19	С	21
Magnolia / King	AWSC	В	14	С	15	С	16
Magnolia / Baltimore	SSSC	Α	2	А	2	А	2
Magnolia / Alexander	SSSC	А	3	А	4	А	4
Doherty / Larkspur Plaza / Rose	Signal	А	7	А	7	А	7
Doherty / Piper Park / Rose	SSSC	А	2	А	2	А	2
Redwood HS / Doherty / Riviera	AWSC	С	21	С	24	D	29
Redwood HS / Lucky / Doherty	AWSC	С	16	С	18	С	20
Redwood Highway / Wornum	Signal	С	28	С	29	С	30
Redwood Highway / Industrial	Signal	В	16	В	17	В	19
ESFDB / Larkspur Landing W.	Signal	С	28	С	29	С	30
ESFDB / Larkspur Landing E.	Signal	А	8	А	8	А	9
SFDB / Eliseo / Barry	Signal	D	38	D	42	D	49
SFDB / Bon Air Center / La Cuesta	Signal	D	46	E	56	E	62
SFDB / El Portal	Signal	В	19	В	19	С	22

Notes: AWSC= all-way stop-controlled, SSSC=side-street stop-controlled. Delay is measured in seconds per vehicle.

Source: Parisi Transportation Consulting, 2018, 2021.

Table 4.14-summarizes the intersection LOS for the PM peak hour under each of the three scenarios: Existing Conditions, 2040 Conditions without General Plan Buildout, and 2040 Conditions with General Plan Buildout. LOS at the following intersections degrade from LOS D to LOS E with project trips associated with General Plan Buildout:

- Magnolia Avenue / Estelle Avenue
- Redwood Highway / Wornum Drive
- Sir Francis Drake Boulevard / Bon Air Center / La Cuesta

In addition, two additional intersections projected to operate at LOS E or lower in 2040 and that would experience increases in vehicle delay at two seconds or greater as a result of traffic volumes associated with General Plan Buildout:

- Redwood High School / Doherty Drive / Riviera Circle
- East Sir Francis Drake Boulevard / Larkspur Landing West

Table 4.14-4 Intersection Level of Service (PM Peak Hour)

Intersection	Existin Condit Control		ng itions without		2040 Conditions without GP Buildout		ons dout
				PM P	eak Hour		
		LOS	Delay	LOS	DELAY	LOS	LOS
Drakes Landing / Bon Air Center / Barry	AWSC	A	8	А	8	А	9
El Portal / Via Casitas	SSSC	А	9	А	9	А	10
Bon Air / Eliseo	Signal	В	14	В	15	В	16
Magnolia / Estelle	AWSC	D	28	D	35	Е	38
Magnolia / Frances	AWSC	D	26	D	31	D	33
Magnolia / Skylark / Dartmouth	AWSC	В	14	С	15	С	16
Magnolia / Bon Air	Signal	В	17	В	18	В	19
Magnolia / Creekside	SSSC	А	< 1	А	< 1	А	< 1
Magnolia / Doherty	Signal	С	21	С	22	С	24
Magnolia / Ward	Signal	В	17	В	17	В	19
Magnolia / King	AWSC	С	20	С	23	D	27

Intersection	Control	Existing Conditions		2040 Conditions without GP Buildout		2040 Conditions with GP Buildout				
		PM Peak Hour								
		LOS	Delay	LOS	DELAY	LOS	LOS			
Magnolia / Baltimore	SSSC	Α	1	А	1	А	1			
Magnolia / Alexander	SSSC	Α	2	А	2	А	2			
Doherty / Larkspur Plaza / Rose	Signal	А	5	А	5	А	5			
Doherty / Piper Park / Rose	SSSC	А	3	А	3	А	3			
Redwood HS / Doherty / Riviera	AWSC	F	62	F	76	F	83			
Redwood HS / Lucky / Doherty	AWSC	В	14	С	16	С	17			
Redwood Highway / Wornum	Signal	D	41	D	50	E	63			
Redwood Highway / Industrial	Signal	В	16	В	18	В	17			
ESFDB / Larkspur Landing W.	Signal	E	71	F	87	F	111			
ESFDB / Larkspur Landing E.	Signal	А	9	А	9	А	10			
SFDB / Eliseo / Barry	Signal	С	24	С	27	С	34			
SFDB / Bon Air Center / La Cuesta	Signal	D	40	D	49	E	58			
SFDB / El Portal	Signal	В	15	В	15	В	15			

Notes: AWSC= all-way stop-controlled, SSSC=side-street stop-controlled. Delay is measured in seconds per vehicle.

Source: Parisi Transportation Consulting, 2018, 2021.

# **Queuing Analysis**

Impacts of vehicle queue length were also analyzed at the study intersections. This section describes impacts to the 95<sup>th</sup> percentile queue lengths for turn pockets at the project study intersections. Tables 4.14-5 and 4.14-6 provide comparisons of left-turning traffic volume and 95<sup>th</sup> percentile queue at the study intersections for which projected queue lengths are expected

to extend beyond the existing turn pocket lengths under the 2040 Conditions with General Plan Buildout scenario. The table also displays the approximate length of the identified turn pockets at each of the intersections. Table 4.14-5 provides queue length impacts for the AM peak period and Table 4.14-6 provides queue length impacts for the PM peak periods.

The 95<sup>th</sup> percentile queue length is the vehicle queue length that may be exceeded five percent of the time during the analysis time period, and which is considered the 'design queue.' It is a useful parameter for determining the appropriate length of turn pockets but may not be typical of what an average driver would experience since it represents what may be the maximum queue length for a given time period.

Queue lengths in excess of storage capacity for turning vehicles may result in conditions where through traffic lanes can be blocked and visibility for drivers of stopped vehicles or pedestrians in crosswalks is reduced.

Table 4.14-5 Left-Turn LOS and Queuing Summary (AM Peak Hour)

Intersection	Control	Left Turn Pocket	Existing Conditions		2040 Conditions without GP Buildout		2040 Conditions with GP Buildout	
		Length	AM Peak Hour					
		(ft)	Left Turn Volume	95% Queue (ft)	Left Turn Volume	95% Queue (ft)	Left Turn Volume	95% Queue (ft)
Magnolia / Doherty	SB Left Turn	200	364	310	382	350	395	380
Redwood Highway / Wornum	NB Left Turn	80	91	130	96	140	96	140
Redwood Highway / Wornum	EB Left Turn	150	441	300	463	320	488	380
SFDB / Eliseo / Barry	WB Left Turn	250	346	220	363	230	375	250

Table 4.14-6 Left-Turn LOS and Queuing Summary (PM Peak Hour)

Intersection	Control	Left Turn Pocket		Existing Conditions		2040 Conditions without GP Buildout		nditions with Buildout
		Length			PM P	eak Hour	•	
		(ft)	Left Turn Volume	95% Queue (ft)	Left Turn Volume	95% Queue (ft)	Left Turn Volume	95% Queue (ft)
Magnolia / Doherty	SB Left Turn	200	259	250	272	280	281	300
Redwood Highway / Wornum	NB Left Turn	80	100	70	105	80	105	80
Redwood Highway / Wornum	EB Left Turn	150	544	400	571	440	608	480
SFDB / Eliseo / Barry	WB Left Turn	250	329	240	345	260	396	310

### Magnolia Boulevard/Doherty Drive

Under the Existing Conditions scenario, the 95 percent queue length for the southbound to eastbound left turn movements at the Magnolia Boulevard/Doherty Drive intersection exceeds the approximately 200 feet of capacity of the left turn lane by approximately 110 feet in the AM peak period and 50 feet in the PM peak period, indicating that the queued left-turning vehicles can block the through lane on southbound Magnolia during both the AM and PM peak hours. The length of the queued left-turning vehicles increases in the 2040 Conditions without General Plan Buildout scenario in both peak periods to approximately 350 feet in the AM peak hour period and 280 feet in the PM peak hour, as well as in the 2040 Conditions with General Plan Buildout scenario where the queues are approximately 380 feet in the AM and 300 feet in the PM peak periods.

Options for the accommodation of the existing and projected left-turn vehicular queueing from southbound Magnolia to eastbound Doherty include the extension of the left-turn pocket through minor widening in the landscaped area between the roadway and the Class I pathway, or consideration of a roundabout design at the intersection that may facilitate vehicle movements more efficiently.

Redwood Highway/Wornum Drive

Under the Existing Conditions scenario, the 95 percent queue length for the eastbound to northbound left-turn movements at the Redwood Highway/Wornum Drive intersection exceeds the approximately 150 feet of capacity of the left turn lane by approximately 150 feet in the AM peak period and by approximately 250 feet in the PM peak period, indicating that the queued left-turning vehicles can block the right-turn lane on eastbound Wornum Drive during both the AM and PM peak hours. The length of the queued left-turning vehicles increases in the 2040 Conditions without General Plan Buildout scenario in both peak periods to approximately 320 feet in the AM and 440 feet in the PM peak periods, as well as in the 2040 Conditions with General Plan Buildout scenario to approximately 380 feet in the AM and 480 feet in the PM peak periods.

In addition, the 95<sup>th</sup> percentile queue length for the northbound to westbound left turn movement at this intersection exceeds the approximately 80 feet of capacity in the AM peak period, with a 95<sup>th</sup> percentile queue of approximately 130 feet under the Existing Conditions scenario. In both the 2040 Conditions without General Plan Buildout and Future Conditions with General Plan Buildout scenarios the queue length increases to approximately 140 feet during the AM peak. The queue length is not expected to increase under the Future Conditions with General Plan Buildout Conditions over the Future Conditions without General Plan Buildout scenario.

The accommodation of queue lengths on Wornum Drive and Redwood Highway may be addressed if Wornum Drive were redeveloped as an interchange ramp, as is currently being considered. This would be subject to more technical evaluation.

Sir Francis Drake Boulevard/Eliseo Drive/Barry Way

Under the Existing Conditions scenario, the 95 percent queue length for the westbound to southbound left-turn movements at the Sir Francis Drake Boulevard/Eliseo Drive/Barry Way intersection is approximately 220 feet and 240 feet in length in the AM and PM peak hours, respectively, with approximately 250 feet of capacity for the two left-turn lanes.

In the Future Conditions without General Plan Buildout scenario, the capacity of the left-turn lanes is exceeded by approximately 10 feet in the PM peak period, to 260 feet, lengthening to approximately 310 feet under the Future Conditions With General Plan Buildout scenario.

Mitigations intended to reduce instances of left-turn queuing blocking the through travel lanes may include time-of-day signal timing adjustments to reflect traffic volumes and considerations to extend the westbound left-turn lane through the narrowing of the center median. In addition, restrictions on u-turning at this intersection may help to increase the capacity of the turn-pocket lanes.

## **Daily Traffic Volumes**

The total average daily traffic (ADT) volumes at the city's "gateway" locations under each of the three scenarios (Existing Conditions, 2040 Conditions without General Plan Buildout, and 2040

Conditions with General Plan Buildout) are summarized in Table 4.14-2. Daily trip estimates include all inbound and outbound vehicles traveling to and from Larkspur.

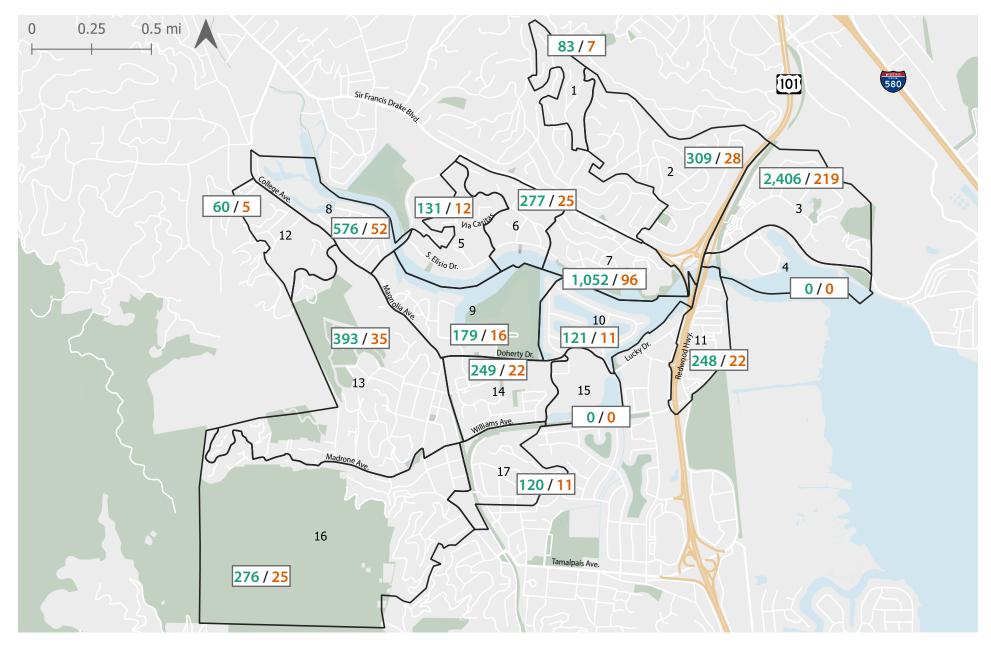
The estimated vehicle traffic estimates at the gateway locations include vehicle trips that drive 'through' Larkspur to and from neighboring jurisdictions as well as vehicle trips made with origins and destinations in Larkspur. In addition, traffic volume estimates are very conservative in that 'through' trips are double counted at gateway locations when a vehicle trip enters Larkspur from one gateway and exits at another gateway. Further, under the 2040 Conditions with General Plan Buildout scenario, all project trips were assumed to have an origin or destination outside of Larkspur and therefore all project trips were distributed to a gateway location while a subset of these project trips would have origins and destinations in Larkspur. Implementation of General Plan policies would also reduce the need for some vehicle trips, both within Larkspur and those with destinations outside of the city.

**Table 4.14-2 Gateway Vehicle Traffic Volume (Total Daily ADT)** 

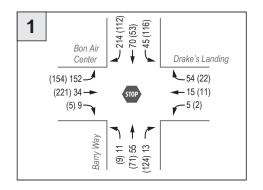
Location	Existing Conditions	2040 Conditions without GP Buildout	2040 Conditions with GP Buildout	% Change
Sir Francis Drake Blvd. to the west	25,400	26,700	27,500	3%
Via La Cumbre	2,200	2,300	2,400	4%
East Sir Francis Drake Blvd. to the east	28,700	30,100	31,200	4%
Tamal Vista Blvd. to the south	7,400	7,700	8,200	6%
Corte Madera Ave. to the south	12,300	12,900	13,300	3%
College Ave. to the west	14,600	15,400	15,800	3%
Redwood Highway at Wornum Drive	11,900	12,500	12,900	3%
Highway 101 Ramps				
at Sir Francis Drake Boulevard (West)	26,100	27,400	28,600	4%
Highway 101 Ramps at Sir Francis Drake Boulevard East	28,100	29,500	30,600	4%

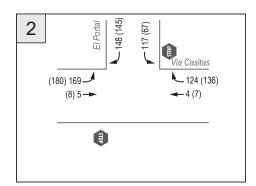
Under the Existing Conditions scenario, a total of approximately 157,000 vehicle trips enter or exit the city on an average weekday, and an estimated 165,000 vehicle trips under the 2040 Conditions Without General Plan Buildout scenario. As previously noted, the number of daily (weekday) vehicle trips into and out of Larkspur would be projected to increase by approximately 4 percent to approximately 171,000 under the 2040 Conditions with General Plan Buildout scenario. This includes vehicle trips that passing through Larkspur from

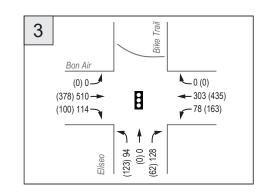
neighboring jurisdictions as well as vehicle trips that are entering and existing the city via the Highway 101 on/off ramps in Larkspur.

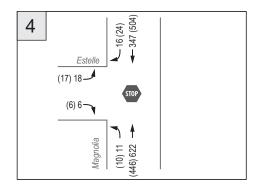


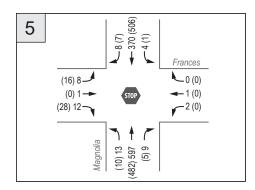
Larkspur General Plan Update
Figure 1: Project Trips Per Traffic Analysis Zone

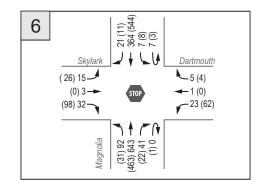


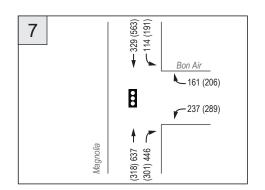


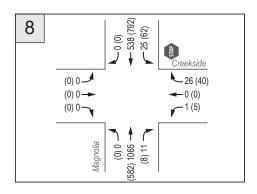


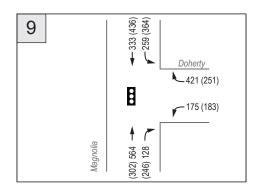


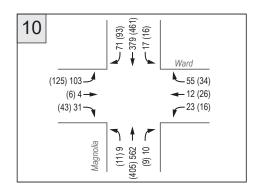


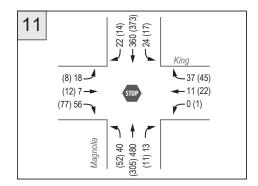


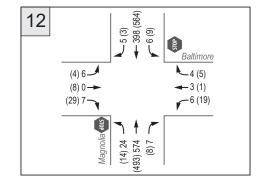






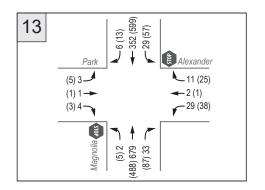


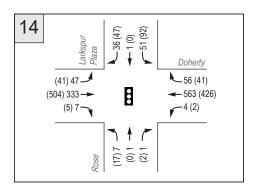


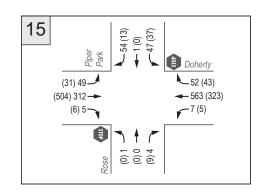


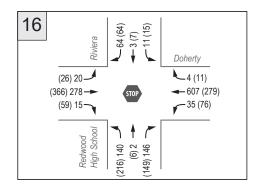
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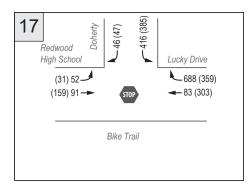


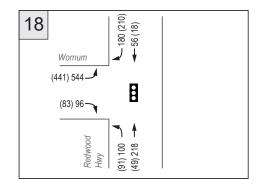


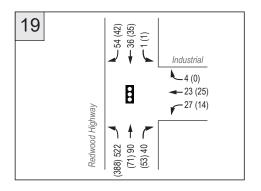


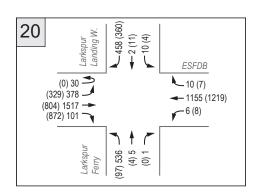


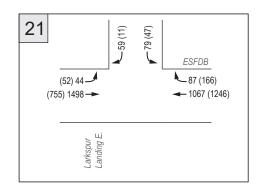


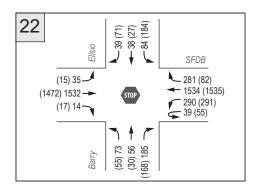


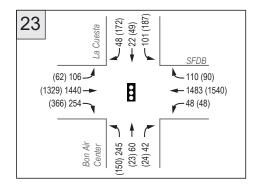


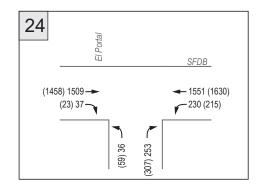






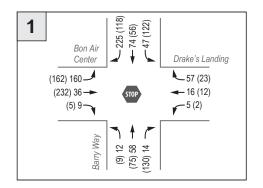


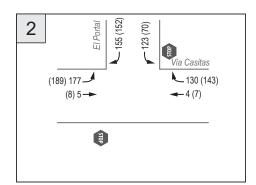


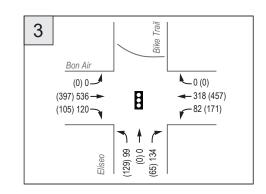


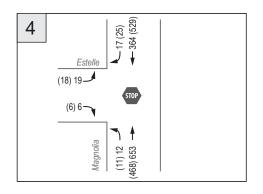
LEGEND: xx PM Peak (xx) AM Peak

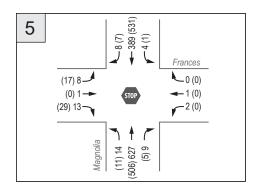


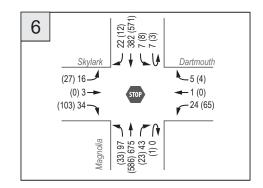


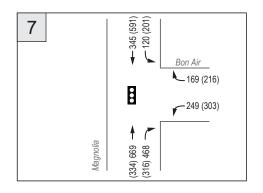


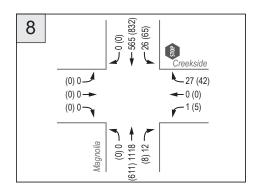


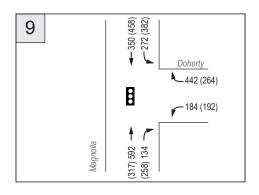


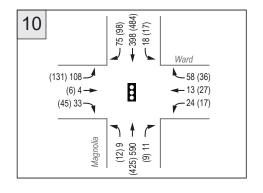


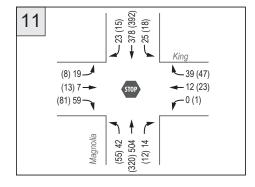


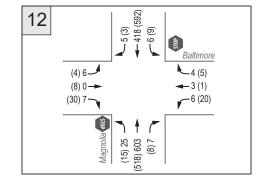












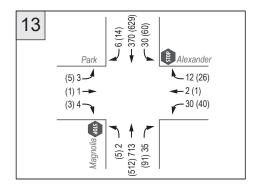
LEGEND: xx PM Peak

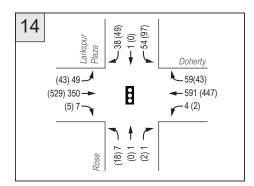
(xx) AM Peak

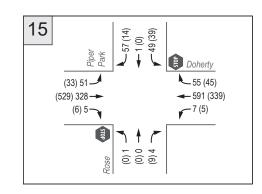
Signal Controlled Intersection STOP Stop Controlled Intersection

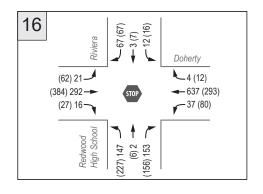


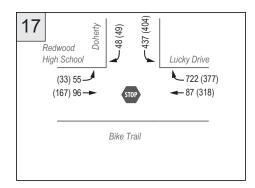


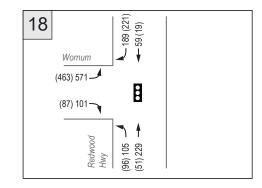


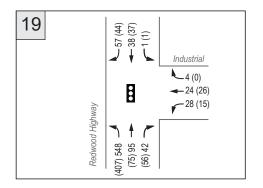


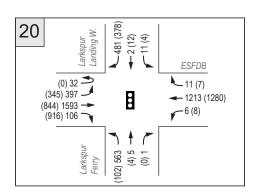


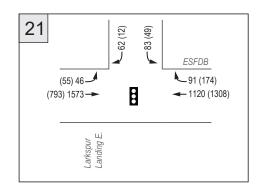


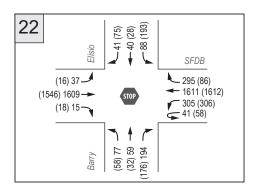


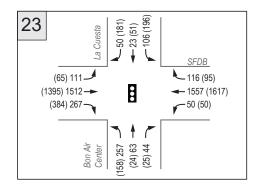


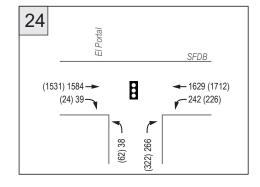










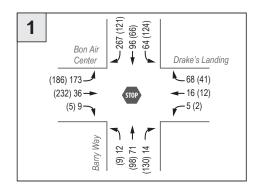


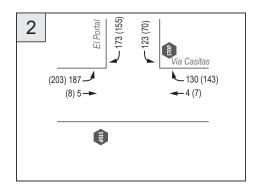
LEGEND: xx PM Peak (xx) AM Peak

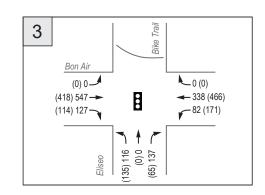


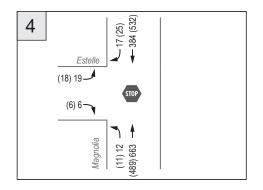


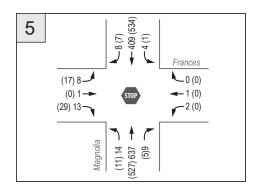


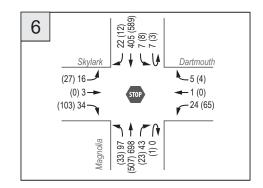


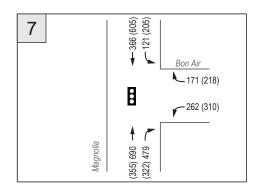


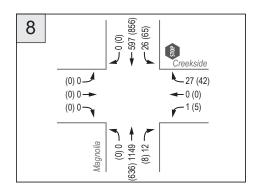


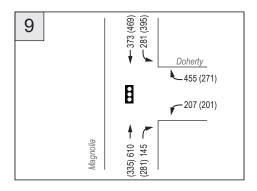


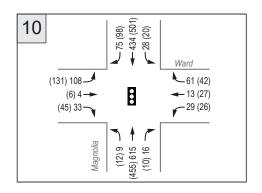


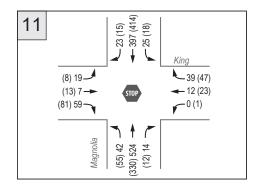


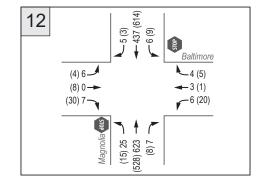












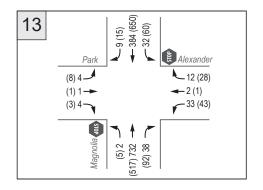
LEGEND: xx PM Peak

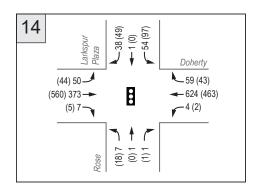
(xx) AM Peak

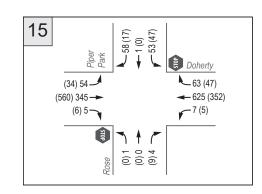
Signal Controlled Intersection STOP Stop Controlled Intersection

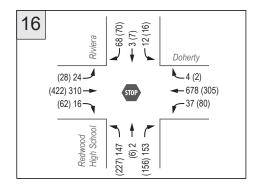


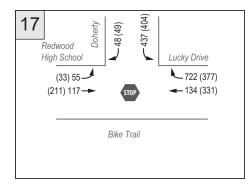


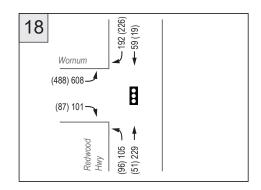


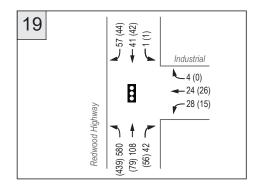


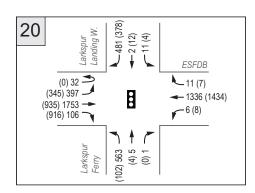


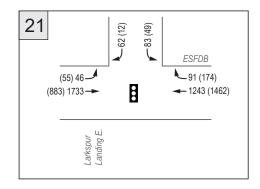


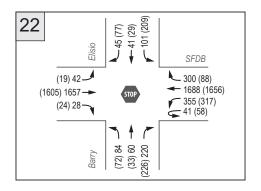


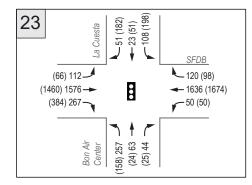


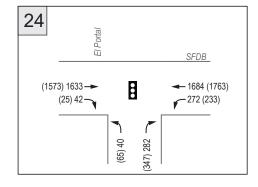












LEGEND: xx PM Peak (xx) AM Peak



