

City of Burbank

Rancho Providencia Neighborhood Protection Plan – 2023 Update



December 2023

CONTENTS

Chapter 1.....	1
Introduction.....	1
Chapter 2.....	4
Initial Data Collection (Winter 2022)	4
<i>Traffic Vehicle Counts</i>	4
<i>Vehicle Speed Data</i>	8
<i>Cut-Through Traffic Patterns</i>	12
<i>Parking Demand Data</i>	15
Chapter 3.....	25
Phase 1 Measures and Intermediate Data Collection (Summer-Fall 2022).....	25
<i>Initial Control Measures</i>	25
<i>Initial Opening Operations</i>	26
Early Opening.....	26
3 – 4 Weeks After Opening	28
<i>Phase 1 Measures</i>	28
<i>Intermediate Data Collection</i>	32
6 Months After Opening: Intermediate Data Collection.....	32
Traffic Volume Counts	32
Vehicle Speed Data	36
Parking Demand Data	39
Chapter 4.....	40
Community Outreach Efforts.....	40
<i>Virtual Webinar</i>	40
<i>Orchard Drive and Reese Place Survey</i>	40
<i>Public Notices</i>	41
<i>Public Comment Intake</i>	41
Chapter 5.....	43
Phase 2 Data Collection (January 2023).....	43
<i>Traffic Vehicle Counts</i>	43
<i>Vehicle Speed Data</i>	47
<i>Cut-Through Traffic Patterns</i>	50
<i>Parking Demand Data</i>	53





Chapter 6..... 54
 Data Comparison (2022 – Intermediate – 2023) 54
 Traffic Vehicle Counts..... 54
 Vehicle Speed Data 57
 Cut-through Traffic Patterns..... 59

Chapter 7..... 60
 2023 Rancho Providencia Neighborhood Protection Plan Update 60
 Next Steps for Phase 1 Measures..... 60
 Recommendation 1: Maintain Speed Humps on Reese Place60
 Recommendation 2: Maintain Permit Parking Program on
 Reese Place and Orchard Drive60
 Recommendation 3: Maintain Orchard Street
 Temporary Closure for One Additional Year61
 Additional Recommended Improvements..... 61
 Recommendation 4: Recommend Speed Locations61
 Recommendation 5: No Additional Street Closures68





Tables

- 1 24-hour Directional Traffic Counts, January 2022..... 6**
- 2 85th Percentile Traffic Speed Data, January 2022 10**
- 3 Cut-Through Traffic Patterns, January 2022 14**
- 4 Peak Hour Cut-Through Pattern, January 2022 15**
- 5 Parking Demand Data Weekday, January 2022 16**
- 6 Parking Demand Data Weekend, January 2022..... 19**
- 7 High Parking Demand Street Segments, January 2022 23**
- 8 24-hour Directional Traffic Counts, Intermediate 2022 34**
- 9 85th Percentile Traffic Speed Data, Intermediate 2022 37**
- 10 24-hour Directional Traffic Counts, January 2023 44**
- 11 85th Percentile Traffic Speed Data, January 2023 48**
- 12 Peak Hour Cut-Through Traffic Patterns, January 2023..... 50**
- 13 Cut-Through Pattern, January 2023 52**
- 14 24-hour Directional Traffic Counts Comparison 56**
- 15 85th Percentile Traffic Speed Data Comparison 58**
- 16 Peak Cut-through Pattern Comparison 2022 to 2023 59**

Summary Tables

- S-1 Summary of 24-hour Directional Traffic Counts, January 2022..... 4**
- S-2 Summary of 85th Percentile Traffic Speed Data, January 2022..... 9**
- S-3 High Parking Demand Street Segments, January 2022 22**
- S-4 24-hour Directional Traffic Counts, Intermediate Data 2022 32**
- S-5 Summary of 85th Percentile Traffic Speed Data,
Intermediate Data 2022 36**
- S-6 High Parking Demand Street Segments, Intermediate Data 2022..... 39**
- S-7 Summary of 24-hour Directional Traffic Counts, January 2023..... 44**
- S-8 Summary of 85th Percential Traffic Speed Data, January 2023..... 47**



S-9 High Parking Demand Street Segments, May 2023	53
S-10 24-hour Directional Traffic Counts, Comparison 2022-2023	59
S-11 Recommendations for the Installation of Speed Humps	68

Exhibits

A Existing Traffic Controls (2022)	3
B 3 Days Average Daily Traffic Volume, January 2022	7
C 3 Days Average 85th Percentile Speed, January 2022	11
D Cut-through Traffic Patterns, January 2022	13
E High Parking Demand Street Segments, January 2022	24
F Temporary Closure Plan	31
G 5 Days Average Daily Traffic Volume, Intermediate Data 2022	35
H 5 Days Average 85th Percentile Speed, Intermediate Data 2022	38
I 3 Days Average Daily Traffic Volume, January 2023	46
J 3 Days Average 85th Percentile Speed, January 2023	49
K Cut-through Traffic Patterns, January 2023	51

Appendices

A Average Daily Traffic and Speeds, January 2022
B License Plate Entering/Exiting Data, January 2022
C Parking Demand Data, January 2022
D Turning Movement Counts, January 2022
E Community Outreach Meeting Materials
F Average Daily Traffic and Speeds, Intermediate 2022
G Average Daily Traffic and Speeds, January 2023
H License Plate Entry/Exit Data, January 2023
I City of Burbank Speed Hump Policy



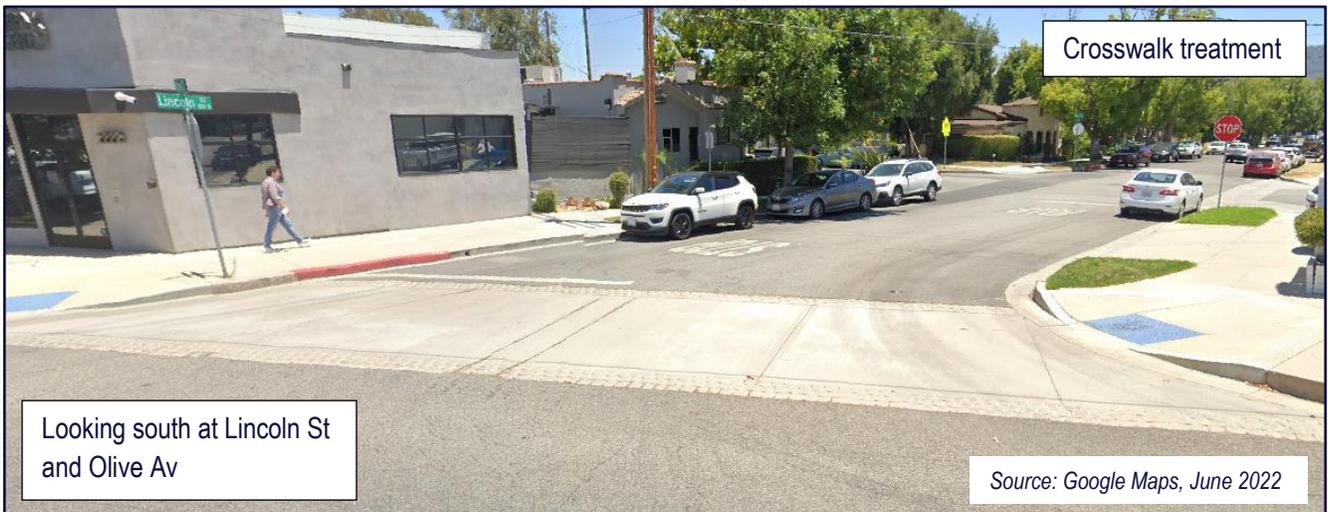
CHAPTER I

Introduction

This Study presents an update to the Rancho Providencia Neighborhood Protection Plan. The Rancho Providencia Neighborhood is bounded by Buena Vista Street, Olive Avenue, Victory Boulevard, Main Street, and Alameda Avenue. This area includes approximately 800 homes, Dolores Huerta Middle School, Saint Finbar Parish School and numerous other businesses. There are 15 north-south streets generally bisected by Oak Street. The *Burbank2035 General Plan* classifies all the streets within the neighborhood as Local Streets except for Oak Street, Verdugo Avenue, and Keystone Street, which are classified as Neighborhood Collector Streets. The streets that serve as a boundary for the Plan area are all Major Arterial Streets except for Buena Vista Street which is a Secondary Arterial Street and Main Street, which is a Neighborhood Collector Street (Complete Streets Plan, Figure 2-37).

The Rancho Providencia Neighborhood Protection Plan was first adopted in August 1998 and updated in October 2001. The 1998 Neighborhood Protection Plan implemented improvements in various areas including the installation of gateway median islands, intersection reconfigurations, new street trees, crosswalk treatments, and preferential parking zones. The October 2001 update included an evaluation of the effectiveness of initial measures implemented in May 2000 (median and crosswalk treatments on Alameda Avenue), and the second phase of measures (completion of treatments at the remaining Alameda Avenue intersections and treatments along Olive Avenue) was completed in October 2000. Overall, the traffic count data collected in the Rancho Providencia Neighborhood identified a decrease in traffic volumes between August 1998 and October 2001 on a majority of streets.

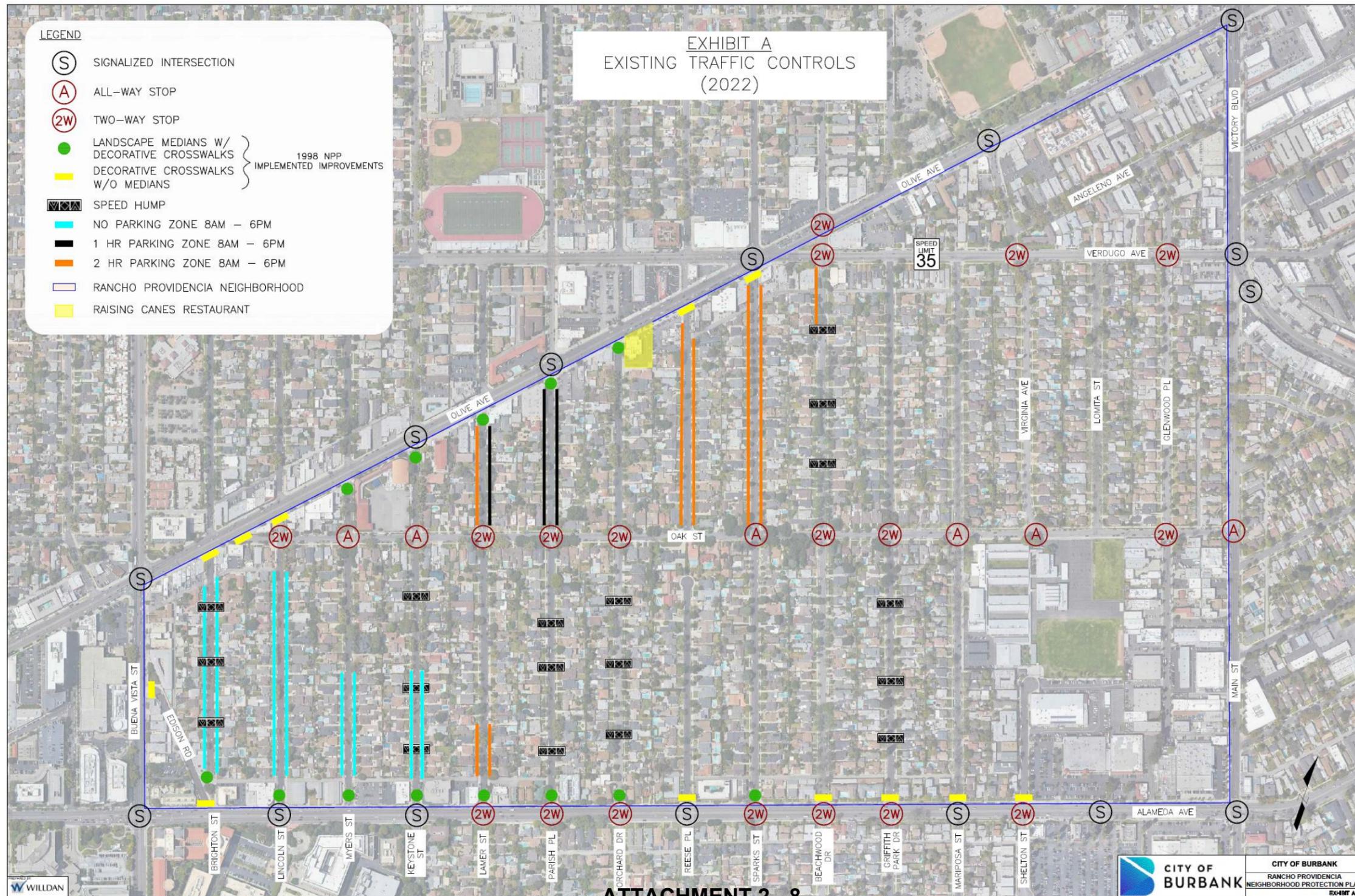




The treatments implemented in 2000 are identified in **Exhibit A**. The traffic controls in the neighborhoods are also identified in this exhibit.



EXHIBIT A – Existing Traffic Controls (January 2022)



WILLDAN



CITY OF BURBANK
RANCHO PROVIDENCIA
NEIGHBORHOOD PROTECTION PLAN
EXHIBIT A

CHAPTER 2

Initial Data Collection (Winter 2022)

The existing traffic conditions of the Rancho Providencia Neighborhood were determined by collecting average daily traffic (ADT), traffic speeds, license plate origin/destination and parking demand data over a 3-day period. The data was collected in January 2022 as the baseline measurement for future assessment of possible traffic calming measures. This section outlines the data and initial findings for the neighborhood.

Appendix A provides the raw data for ADT and traffic speeds. **Appendix B** provides the raw data for the license plate survey. **Appendix C** provides the raw data for parking demand.

Traffic Vehicle Counts

Table 1 presents the January 2022 directional 24-hour traffic counts and the total of the average traffic for both directions. **Exhibit B** graphically identifies streets with an acceptable volume of traffic for Neighborhood Streets (1,000 ADT is considered “little traffic”)¹ and those that have the highest traffic volumes. The highest average traffic counts on the Local and Neighborhood Collector streets are listed on **Table S-1**.

¹ Ben-Joseph, “Residential Street Standards & Neighborhood Traffic Control: A Survey of Cities’ Practices and Public Officials’ Attitudes,” (1995) https://nacto.org/docs/usdg/residential_street_standards_benjoseph.pdf



Table S-1

Summary of 24-hour Directional Traffic Counts
January 2022

SEGMENT #	CLASSIFICATION	STREET	SEGMENT	AVERAGE DAILY TRAFFIC (vehicles)
14	Local	Sparks Street	Oak St to Alameda Av	1,017
15	Local	Sparks Street	Olive Av to Oak St	1,178
20	Local	Mariposa Street	Oak St to Alameda Av	1,466
21	Local	Mariposa Street	Verdugo Av to Oak St	1,062
26	Neighborhood Collector	Oak Street	Beachwood Dr to Mariposa St	1,380
27	Neighborhood Collector	Oak Street	Mariposa St to Main St	1,498

Turning movement counts were gathered at all signalized intersections surrounding the Rancho Providencia Neighborhood. Turning movement counts were also gathered at Olive Avenue/Orchard Drive and Olive Avenue/Reese Place. This data was gathered on 3 weekdays in January 2022. **Appendix D** provides the summary turning movement counts at all locations.

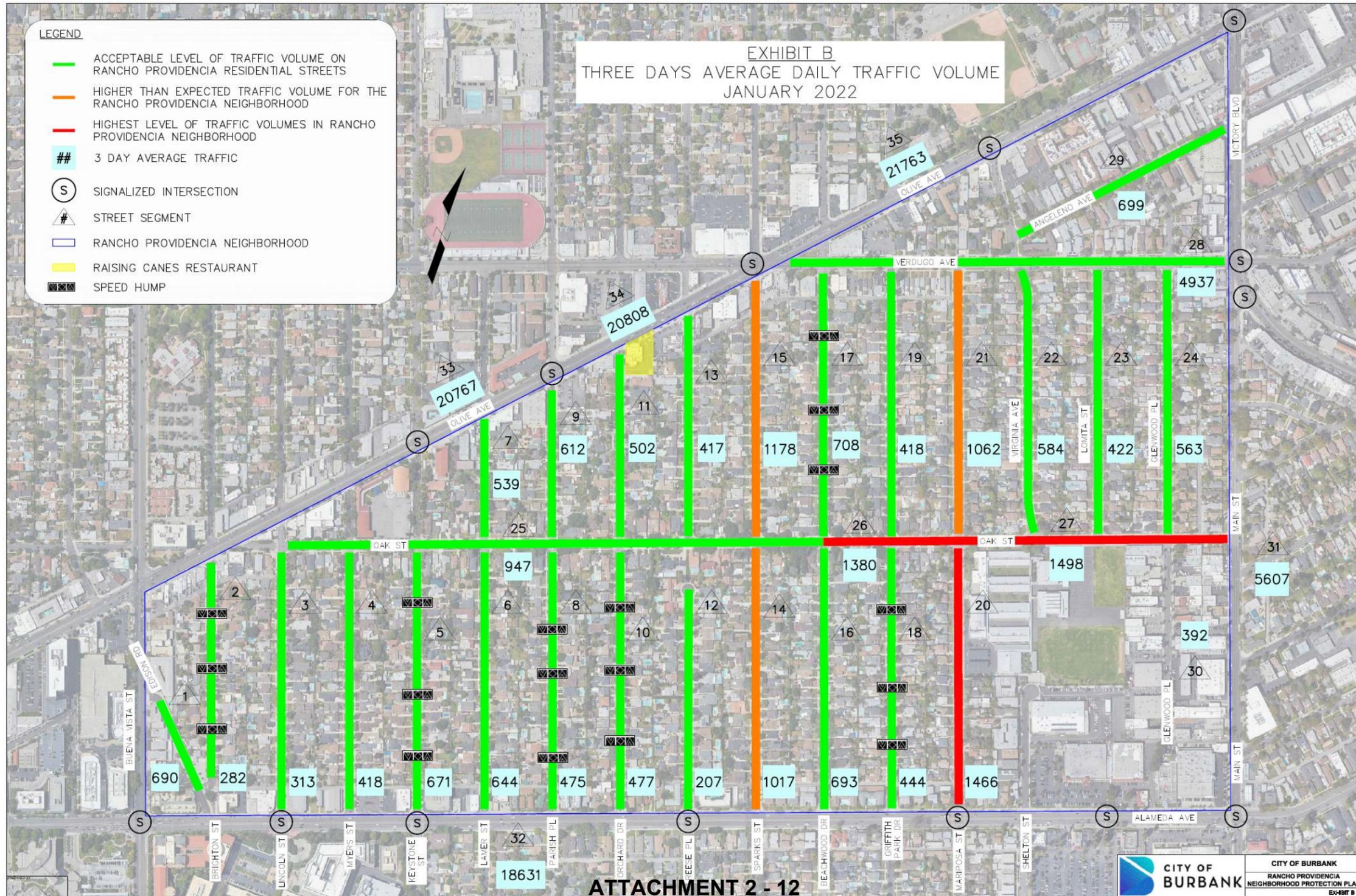


Table 1
24-hour Directional Traffic Counts
January 2022

ADT										
SEGMENT	STREET	1/17/2022		1/18/2022		1/19/2022		3 DAY AVERAGE		
		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	COMBINED
1	EDISON RD	413	255	440	258	437	268	430	260	690
2	BRIGHTON ST	113	159	119	168	125	163	119	163	282
3	LINCOLN ST	122	139	163	158	168	190	151	162	313
4	MYERS ST	169	224	193	249	182	237	181	237	418
5	KEYSTONE ST	304	364	374	277	386	308	355	316	671
6	LAMAR ST	367	254	393	272	353	294	371	273	644
7	LAMAR ST	303	190	345	225	320	233	323	216	539
8	PARISH ST	218	266	215	263	220	244	218	258	475
9	PARISH ST	310	321	316	335	320	233	315	296	612
10	ORCHARD ST	242	226	219	244	223	276	228	249	477
11	ORCHARD ST	230	246	221	289	210	309	220	281	502
12	REESE PL	94	98	90	95	119	126	101	106	207
13	REESE PL	129	284	110	295	138	296	126	292	417
14	SPARKS ST	482	504	509	554	478	525	490	528	1,017
15	SPARKS ST	632	502	635	536	663	567	643	535	1,178
16	BEACHWOOD DR	338	309	369	357	375	331	361	332	693
17	BEACHWOOD DR	337	310	381	379	369	347	362	345	708
18	GRIFFITH PARK	216	221	228	231	213	222	219	225	444
19	GRIFFITH PARK	207	199	202	196	250	199	220	198	418
20	MARIPOSA ST	829	678	779	674	774	663	794	672	1,466
21	MARIPOSA ST	593	425	600	460	616	491	603	459	1,062
22	VIRGINIA AVE	292	294	273	300	287	307	284	300	584
23	LOMITA AVE	265	153	266	147	262	174	264	158	422
24	GLENWOOD PL	292	294	298	262	295	249	295	268	563
25	OAK ST	474	480	489	463	471	464	478	469	947
26	OAK ST	712	616	752	643	748	670	737	643	1,380
27	OAK ST	796	722	754	723	764	734	771	726	1,498
28	VERDUGO AVE	2,617	2,475	2,455	2,400	2,510	2,354	2,527	2,410	4,937
29	ANGELINO AVE	376	341	342	340	334	365	351	349	699
30	GLENWOOD PL	275	117	285	124	257	117	272	119	392
31	MAIN ST	2,134	3,370	2,224	3,446	2,228	3,419	2,195	3,412	5,607
32	ALAMEDA AVE	9,760	8,738	9,661	8,853	9,840	9,042	9,754	8,878	18,631
33	OLIVE AVE	9,877	10,583	9,994	10,751	10,337	10,759	10,069	10,698	20,767
34	OLIVE AVE	9,804	10,848	9,947	10,674	10,220	10,932	9,990	10,818	20,808
35	OLIVE AVE	10,423	11,073	10,650	10,957	10,860	11,326	10,644	11,119	21,763



EXHIBIT B – Average Daily Traffic (ADT) January 2022





Vehicle Speed Data

Table 2 presents the directional 85th percentile speeds on streets within the study area and the combined 3 days of the 85th percentile speed of both directions. All the streets within the Neighborhood have a posted or prima facie speed limit of 25 miles per hour (mph). Verdugo Avenue and Olive Avenue have posted speed limits of 35 mph. The boundary streets of the Neighborhood also have posted speed limits of 35 mph. **Exhibit C** graphically illustrates the combined 85th percentile speeds. Exhibit C identifies 12 street segments experiencing 85th percentile speeds that are 5 miles per hour or more over the speed limit. It is the industry standard that vehicle speeds 5 miles per hour over the speed limit (posted or prima facie) on local streets is acceptable. Any local street with a 25 mph speed limit that experiences speeds above 5 miles per hour is considered to have speeding issues, as noted in the City of Burbank Speed Hump Policy.² The boundary streets of the Neighborhood are not included in this analysis since they are Major Arterial Streets, Secondary Arterial Streets or Neighborhood Collector Streets with 35 mph speed limits (except for the school zone speed limits on Olive Avenue near St. Finbar Parish School and on Main Street between Alameda Avenue and Oak Street). **Table S-2** identifies Local street segments experiencing speeds of 5 miles per hour (mph) or more over the 25-mph speed limit.

² City of Burbank Speed Hump Policy:

<https://www.burbankca.gov/documents/174714/1212192/Adopted+Speed+Hump+Criteria.pdf/f87911fb-dc57-f216-35c7-7950886e1c4f?t=1653496470050>



Table S-2

Summary of 85th Percentile Traffic Speed Data
January 2022

SEGMENT #	CLASSIFICATION	STREET	SEGMENT	85th % SPEED
1	Local	Edison Road	Alameda Av to Buena Vista St	30 mph
3	Local	Lincoln Street	Oak St to Alameda Av	31 mph
4	Local	Myers Street	Oak St to Alameda Av	32 mph
6	Local	Lamer Street	Oak St to Alameda Av	34 mph
7	Local	Lamer Street	Olive Av to Oak St	30 mph
12	Local	Reese Place	Oak St to Alameda Av	30 mph
13	Local	Reese Place	Olive Av to Oak St	33 mph
14	Local	Sparks Street	Olive Av to Oak St	33 mph
15	Local	Sparks Street	Oak St to Alameda Av	34 mph
16	Local	Beachwood Drive	Oak St to Alameda Av	32 mph
19	Local	Griffith Park Drive	Verdugo Av to Oak St	30 mph
20	Local	Mariposa Street	Oak St to Alameda Av	30 mph
21	Local	Mariposa Street	Verdugo Av to Oak St	32 mph
22	Local	Virginia Avenue	Verdugo Av to Oak St	31 mph
23	Local	Lomita Avenue	Verdugo Av to Oak St	30 mph
24	Local	Glenwood Place	Verdugo Av to Oak St	31 mph

mph = miles per hour



Table 2
85th Percentile Traffic Speed Data
January 2022

85TH PERCENTILE SPEED									
SEGMENT	STREET	1/17/2022		1/18/2022		1/19/2022		3 DAY AVG	
		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	COMBINED	
1	EDISON RD	29	30	30	30	30	30	30	
2	BRIGHTON ST	24	23	22	21	24	23	23	
3	LINCOLN ST	33	30	32	30	32	30	31	
4	MYERS ST	35	30	34	29	34	31	32	
5	KEYSTONE ST	22	24	21	23	21	24	23	
6	LAMER ST	33	35	32	34	33	35	34	
7	LAMER ST	32	30	30	28	30	29	30	
8	PARISH ST	23	24	23	24	23	24	24	
9	PARISH ST	30	29	29	29	29	28	29	
10	ORCHARD ST	23	20	22	20	23	20	21	
11	ORCHARD ST	27	25	28	26	28	26	27	
12	REESE PL	30	28	30	29	31	30	30	
13	REESE PL	32	32	32	32	34	33	33	
14	SPARKS ST	34	33	33	33	33	33	33	
15	SPARKS ST	35	34	35	33	34	33	34	
16	BEACHWOOD DR	31	33	32	33	32	33	32	
17	BEACHWOOD DR	28	28	28	28	28	27	28	
18	GRIFFITH PARK	24	22	24	22	24	22	23	
19	GRIFFITH PARK	30	29	32	31	31	29	30	
20	MARIPOSA ST	30	31	30	30	30	31	30	
21	MARIPOSA ST	33	32	32	32	33	32	32	
22	VIRGINIA AVE	32	33	30	30	30	32	31	
23	LOMITA AVE	30	29	30	30	30	29	30	
24	GLENWOOD PL	32	32	30	31	31	30	31	
25	OAK ST	26	26	26	26	26	25	26	
26	OAK ST	26	26	26	26	26	25	26	
27	OAK ST	28	25	26	25	28	25	26	
28	VERDUGO AVE*	31	31	31	31	31	31	31	
29	ANGELINO AVE	29	30	28	28	28	28	29	
30	GLENWOOD PL	Speed data not collected							
31	MAIN ST	Speed data not collected							
32	ALAMEDA AVE**	44	44	44	43	44	43	44	
33	OLIVE AVE**	43	43	43	43	43	43	43	
34	OLIVE AVE**	43	43	43	43	43	43	43	
35	OLIVE AVE**	42	44	42	44	41	43	43	

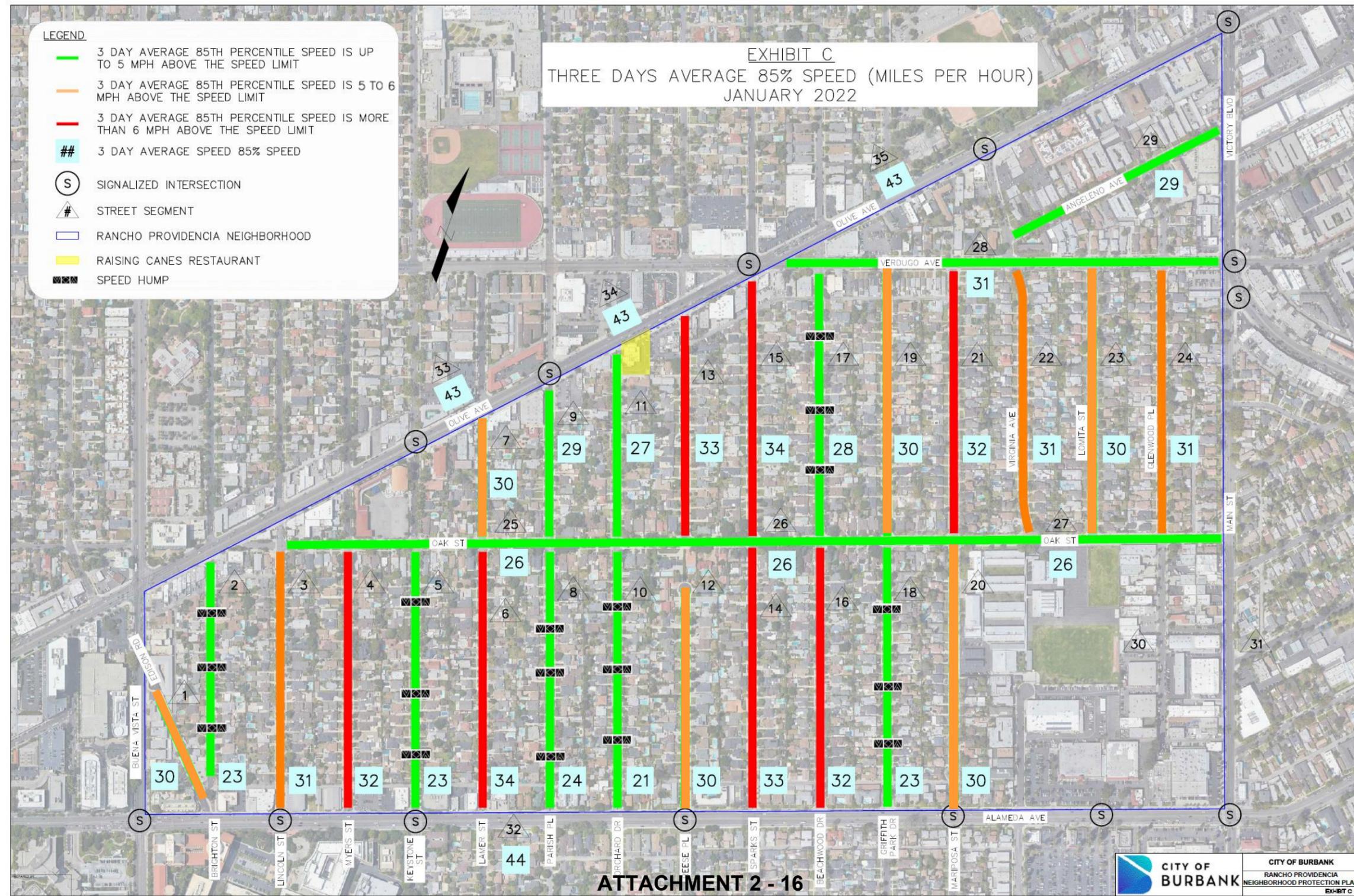
* - Posted speed limit at 35 mph

** - Posted speed limit at 35 mph. Boundary streets of the Neighborhood

 - 85th percentile speeds 5 or more mph above 25 mph prima facie limit



EXHIBIT C – 85 Percentile speeds Map January 2022





Cut-through Traffic Patterns

A license plate survey methodology was used to determine the cut-through traffic occurring in the neighborhood. The data were collected by stationing experienced staff at 12 entry/exit points to the neighborhood for 3 periods (7:00 – 9:00 AM, 11:00 AM – 1:00 PM, and 4:00 – 6:00 PM) on Tuesday, January 18, 2022. Partial license plate digits (last 3) were gathered and compared for entering and exiting vehicles at the 12 entry/exit points. Vehicles that entered the neighborhood and exited the neighborhood in less than 5 minutes were considered as cut-through traffic. These entry/exit points and corresponding estimated cut-through traffic during the 6 hours studied are depicted in **Exhibit D. Table 3** presents a matrix identifying the pattern and number of vehicles from an entry point to an exit point.



EXHIBIT D – Cut-thru traffic Map January 2022

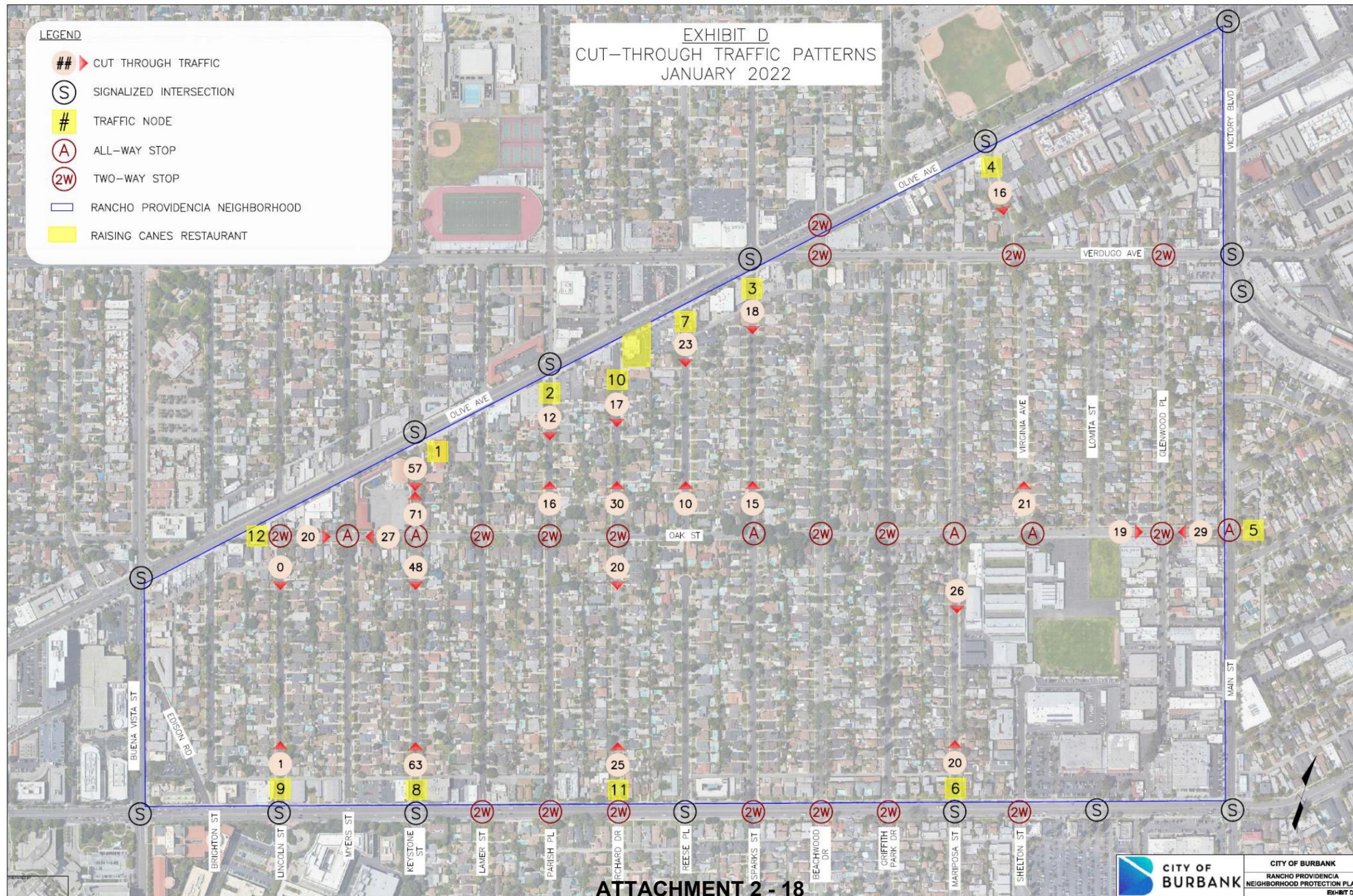


Table 3
Cut-through Traffic Patterns (# of vehicles in pattern)
January 2022

		EXIT POINT												
		NUMBER OF CUT-THROUGH TRAFFIC AM PEAK (7AM TO 9AM)												
ENTRY POINT	NODE	1	2	3	4	5	6	7	8	9	10	11	12	
	1			1	1	0	0	1	0	18	0	1	0	9
	2	0		0	1	0	0	0	0	0	0	0	0	
	3	1	1		2	1	0	2	0	0	1	0	0	
	4	0	1	0		1	1	0	0	0	1	0	1	
	5	4	0	3	3		4	1	1	0	1	0	1	
	6	0	0	0	0	0		0	1	0	1	0	2	
	7	2	1	3	0	0	2		0	0	0	0	1	
	8	17	1	0	0	0	0	0		0	0	0	1	
	9	0	0	0	0	0	0	0	0		0	0	0	
	10	0	0	0	0	0	0	0	0	0		2	0	
	11	1	0	0	0	1	0	0	0	0	0		0	
	12	0	3	1	1	1	2	0	1	0	1	1		

		EXIT POINT												
		NUMBER OF CUT-THROUGH TRAFFIC MID-DAY PEAK (11AM TO 1PM)												
ENTRY POINT	NODE	1	2	3	4	5	6	7	8	9	10	11	12	
	1			0	0	0	1	0	0	8	0	0	1	1
	2	0		0	0	0	0	0	2	0	0	1	0	
	3	0	1		1	2	0	1	0	0	0	0	0	
	4	0	0	0		2	1	1	1	0	0	1	1	
	5	1	1	4	1		0	0	0	0	1	1	2	
	6	1	0	0	5	0		0	0	0	0	0	0	
	7	2	2	1	1	1	2		0	0	0	0	1	
	8	27	0	0	0	2	0	0		0	0	1	1	
	9	0	0	0	0	0	0	0	1		0	0	0	
	10	0	0	0	0	0	0	1	0	0		7	1	
	11	0	1	0	0	0	0	0	0	0	0		1	
	12	1	0	0	0	1	2	0	2	0	0	0		

		EXIT POINT												
		NUMBER OF CUT-THROUGH TRAFFIC PM PEAK (4PM TO 6PM)												
ENTRY POINT	NODE	1	2	3	4	5	6	7	8	9	10	11	12	
	1			0	0	0	0	1	1	13	0	0	0	0
	2	0		0	0	1	3	1	0	0	2	0	1	
	3	0	0		0	0	2	2	0	0	0	0	1	
	4	0	0	0		1	3	0	0	0	0	0	0	
	5	0	0	0	0		0	0	0	0	0	0	0	
	6	1	0	0	5	2		0	0	0	1	0	1	
	7	0	1	2	0	0	1		0	0	0	0	0	
	8	10	1	0	0	1	0	0		0	0	1	0	
	9	0	0	0	0	0	0	0	0		0	0	0	
	10	1	1	0	1	0	0	0	0	0		3	0	
	11	1	0	0	0	0	1	0	0	0	0		1	
	12	1	0	0	0	1	0	0	0	0	0	1		



The cut-through data indicate that Keystone Street between Olive Avenue (Node #1) and Alameda Avenue (Node #8), and vice versa, carries the most cut-through traffic during the three peak periods studied. Keystone Street is a Neighborhood Collector, and it has signalized crossings at Alameda Avenue, Olive Avenue, and other arterial streets outside of the neighborhood. **Table 4** summarizes this pattern.

Table 4
Peak Hour Cut-through Pattern (# of vehicles)
January 2022

STREET	PATTERN	7:00 to 9:00 AM	11:00 AM to 1:00 PM	4:00 to 6:00 PM
Keystone St	Olive Av to Alameda Av	18	8	13
	Alameda Av to Olive Av	17	27	10

Parking Demand Data

Parking demand data were collected for the Rancho Providencia Neighborhood on Parish Street, Orchard Drive, and Reese Place from Olive Avenue to Oak Street. These three streets were considered the most likely to have impacted parking due to the impending opening of the Raising Cane’s restaurant. Each block was separated at approximately the center of the street segment. For consistency, morning (7:00 – 9:00 AM), mid-day (11:00 AM – 1:00 PM), and evening (4:00 – 6:00 PM) data collection periods were used. Data were collected on a weekday, Thursday, March 3, 2022, and on a weekend, Sunday, March 6, 2022. **Tables 5 and 6** provide the parking demand data for a weekday and weekend.



Table 5
 Parking Demand Data (Weekday
 Morning) March 2022

Date: 3/3/2022

Day: Thursday

Approximate Space = Measurement (ft.) divided by 20ft

Side of the Street	Street	From	To	Curb	Restriction	Measurement (ft.)	Approximate Space	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Highest % Demand	
East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	254'	13	8	9	9	9	9	9	9	9	9	69.2%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Green	10 Min Parking 8am-6pm/No Parking Fri 8am-10am	39'	2	0	0	0	0	0	0	0	0	0	0.0%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	279'	14	8	8	8	8	9	9	9	9	9	64.3%
East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	343'	17	8	11	12	12	12	12	13	13	13	76.5%
West	S Orchard Dr	213 Orchard Dr	W Oak St	Regular	No Parking Fri 8am-10am	303'	15	7	7	7	7	8	9	8	7	7	60.0%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	309'	15	5	4	4	4	4	4	3	3	3	33.3%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	153'	8	5	5	5	5	4	5	6	6	6	75.0%
West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	409'	20	9	10	10	10	9	10	10	10	10	50.0%
East	S Reese Pl	W Oak St	220 Reese Pl	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	325'	16	3	3	3	3	3	2	2	3	3	18.8%
West	S Reese Pl	213 Reese Pl	W Oak St	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	264'	13	3	3	3	3	3	3	2	2	2	23.1%
East	S Parish Pl	136 Parish Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	219'	11	4	4	4	3	3	4	4	4	4	36.4%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	41'	2	2	2	2	2	2	2	2	2	2	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	28'	1	1	1	1	0	0	0	0	0	0	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	120'	6	4	4	4	4	4	3	3	4	4	66.7%
East	S Parish Pl	W Oak St	136 Parish Pl	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	278'	14	6	6	6	4	4	5	5	5	5	42.9%
West	S Parish Pl	135 Parish Pl	W Oak St	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	265'	13	2	2	2	2	2	2	2	2	2	15.4%



Table 5 Continued
 Parking Demand Data (Weekday Mid-Day)
 March 2022

Date: 3/3/2022

Day: Thursday

Approximate Space = Measurement (ft.) divided by 20ft

Side of the Street	Street	From	To	Curb	Restriction	Measurement (ft.)	Approximate Space	11:00 AM	11:15 AM	11:30 AM	11:45 AM	12:00 PM	12:15 PM	12:30 PM	12:45 PM	Highest % Demand
East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	254'	13	6	8	8	8	8	8	8	9	69.2%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Green	10 Min Parking 8am-6pm/No Parking Fri 8am-10am	39'	2	0	0	0	0	0	0	0	1	50.0%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	279'	14	7	7	6	7	8	9	9	10	71.4%
East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	343'	17	13	12	12	13	14	14	13	11	82.4%
West	S Orchard Dr	213 Orchard Dr	W Oak St	Regular	No Parking Fri 8am-10am	303'	15	8	9	10	10	10	10	10	10	66.7%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	309'	15	4	4	4	4	3	4	5	5	33.3%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	153'	8	7	7	7	7	7	7	7	7	87.5%
West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	409'	20	11	12	12	12	10	11	11	11	60.0%
East	S Reese Pl	W Oak St	220 Reese Pl	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	325'	16	4	4	4	4	4	5	5	6	37.5%
West	S Reese Pl	213 Reese Pl	W Oak St	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	264'	13	3	3	2	2	2	3	3	3	23.1%
East	S Parish Pl	136 Parish Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	219'	11	4	5	4	4	5	4	4	4	45.5%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	41'	2	2	3	2	2	2	1	1	1	150.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	28'	1	0	0	0	0	1	0	0	0	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	120'	6	3	3	3	3	3	3	3	3	50.0%
East	S Parish Pl	W Oak St	136 Parish Pl	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	278'	14	3	3	3	3	2	2	2	2	21.4%
West	S Parish Pl	135 Parish Pl	W Oak St	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	265'	13	2	2	2	2	3	3	3	3	23.1%



Table 5 Continued
 Parking Demand Data (Weekday Evening)
 March 2022

Date: 3/3/2022

Day: Thursday

Approximate Space = Measurement (ft.) divided by 20ft

Side of the Street	Street	From	To	Curb	Restriction	Measurement (ft.)	Approximate Space	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Highest % Demand
East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	254'	13	9	10	11	11	12	11	11	10	92.3%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Green	10 Min Parking 8am-6pm/No Parking Fri 8am-10am	39'	2	0	0	0	0	0	0	0	0	0.0%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	279'	14	9	9	11	11	11	10	10	9	78.6%
East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	343'	17	12	9	6	5	5	6	6	3	70.6%
West	S Orchard Dr	213 Orchard Dr	W Oak St	Regular	No Parking Fri 8am-10am	303'	15	3	3	3	3	3	4	4	4	26.7%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	309'	15	3	5	5	5	5	4	5	5	33.3%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	153'	8	5	5	5	5	5	4	6	6	75.0%
West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	409'	20	9	8	9	11	10	10	11	10	55.0%
East	S Reese Pl	W Oak St	220 Reese Pl	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	325'	16	7	7	7	8	8	8	6	6	50.0%
West	S Reese Pl	213 Reese Pl	W Oak St	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	264'	13	4	4	4	4	6	5	4	4	46.2%
East	S Parish Pl	136 Parish Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	219'	11	5	5	3	4	3	3	4	4	45.5%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	41'	2	2	2	2	2	2	2	2	2	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	28'	1	0	0	0	0	0	0	0	0	0.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	120'	6	2	2	3	3	3	3	3	3	50.0%
East	S Parish Pl	W Oak St	136 Parish Pl	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	278'	14	2	2	1	1	1	1	1	1	14.3%
West	S Parish Pl	135 Parish Pl	W Oak St	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	265'	13	0	0	0	0	0	0	0	0	0.0%



Table 6
 Parking Demand Data (Weekend Morning)
 March 2022

Date: 3/6/2022

Day: Sunday

Approximate Space = Measurement (ft.) divided by 20ft

Side of the Street	Street	From	To	Curb	Restriction	Measurement (ft.)	Approximate Space	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM	Highest % Demand
East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	254'	13	12	12	11	11	11	11	10	10	92.3%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Green	10 Min Parking 8am-6pm/No Parking Fri 8am-10am	39'	2	0	0	0	0	0	0	0	0	0.0%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	279'	14	10	10	10	10	10	10	10	10	71.4%
East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	343'	17	4	4	4	4	4	4	4	4	23.5%
West	S Orchard Dr	213 Orchard Dr	W Oak St	Regular	No Parking Fri 8am-10am	303'	15	7	7	7	7	7	7	6	6	46.7%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	309'	15	9	9	9	9	9	7	8	8	60.0%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	153'	8	1	1	4	4	6	7	7	7	87.5%
West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	409'	20	12	14	14	13	14	14	16	16	80.0%
East	S Reese Pl	W Oak St	220 Reese Pl	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	325'	16	2	2	2	2	2	2	2	2	12.5%
West	S Reese Pl	213 Reese Pl	W Oak St	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	264'	13	5	6	5	5	5	5	5	5	46.2%
East	S Parish Pl	136 Parish Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	219'	11	5	4	6	5	5	5	5	5	54.5%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	41'	2	2	2	2	2	2	2	2	2	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	28'	1	0	0	0	0	0	0	0	0	0.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	120'	6	2	2	2	2	2	2	2	2	33.3%
East	S Parish Pl	W Oak St	136 Parish Pl	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	278'	14	4	4	3	3	3	3	3	3	28.6%
West	S Parish Pl	135 Parish Pl	W Oak St	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	265'	13	4	4	4	4	4	4	4	4	30.8%



Table 6 Continued
 Parking Demand Data (Weekend Mid-Day)
 March 2022

Date: 3/6/2022

Approximate Space = Measurement (ft.) divided by 20ft

Day: Sunday

Side of the Street	Street	From	To	Curb	Restriction	Measurement (ft.)	Approximate Space	11:00 AM	11:15 AM	11:30 AM	11:45 AM	12:00 PM	12:15 PM	12:30 PM	12:45 PM	Highest % Demand
East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	254'	13	10	10	10	10	10	10	12	12	92.3%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Green	10 Min Parking 8am-6pm/No Parking Fri 8am-10am	39'	2	0	0	0	0	0	0	0	0	0.0%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	279'	14	9	9	9	10	10	10	10	10	71.4%
East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	343'	17	7	7	6	6	6	6	5	5	41.2%
West	S Orchard Dr	213 Orchard Dr	W Oak St	Regular	No Parking Fri 8am-10am	303'	15	6	6	6	6	6	6	6	6	40.0%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	309'	15	10	10	10	11	10	10	10	9	73.3%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	153'	8	7	6	6	7	7	7	6	7	87.5%
West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	409'	20	17	17	17	17	17	18	18	17	90.0%
East	S Reese Pl	W Oak St	220 Reese Pl	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	325'	16	2	2	2	2	2	2	3	3	18.8%
West	S Reese Pl	213 Reese Pl	W Oak St	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	264'	13	7	7	7	7	5	5	5	5	53.8%
East	S Parish Pl	136 Parish Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	219'	11	4	4	4	5	5	5	5	5	45.5%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	41'	2	2	2	2	2	2	2	2	2	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	28'	1	0	0	0	0	0	0	0	0	0.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	120'	6	3	3	3	3	3	3	3	3	50.0%
East	S Parish Pl	W Oak St	136 Parish Pl	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	278'	14	2	2	1	1	2	1	2	2	14.3%
West	S Parish Pl	135 Parish Pl	W Oak St	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	265'	13	4	4	5	5	3	3	2	2	38.5%



Table 6 Continued
 Parking Demand Data (Weekend Evening)
 March 2022

Date: 3/6/2022

Day: Sunday

Approximate Space = Measurement (ft.) divided by 20ft

Side of the Street	Street	From	To	Curb	Restriction	Measurement (ft.)	Approximate Space	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	Highest % Demand
East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	254'	13	10	11	10	9	10	10	10	8	84.6%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Green	10 Min Parking 8am-6pm/No Parking Fri 8am-10am	39'	2	0	0	0	0	1	1	1	0	50.0%
West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	279'	14	8	9	9	10	10	10	12	10	85.7%
East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	343'	17	5	5	4	3	3	2	2	2	29.4%
West	S Orchard Dr	213 Orchard Dr	W Oak St	Regular	No Parking Fri 8am-10am	303'	15	4	6	7	6	8	8	8	9	60.0%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	309'	15	6	7	8	8	7	7	7	7	53.3%
East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	153'	8	4	3	3	4	4	6	6	6	75.0%
West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	409'	20	14	16	16	16	16	13	13	13	80.0%
East	S Reese Pl	W Oak St	220 Reese Pl	Regular	No Parking Fri 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	325'	16	4	4	4	4	4	4	4	4	25.0%
West	S Reese Pl	213 Reese Pl	W Oak St	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	264'	13	5	5	3	3	3	4	4	4	38.5%
East	S Parish Pl	136 Parish Pl	W Olive Ave	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	219'	11	4	4	4	3	3	4	4	4	36.4%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	41'	2	2	2	2	2	2	2	2	1	100.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	28'	1	0	0	0	0	0	0	0	0	0.0%
West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	120'	6	1	1	2	3	3	3	3	3	50.0%
East	S Parish Pl	W Oak St	136 Parish Pl	Regular	No Parking Fri 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	278'	14	5	5	4	4	3	3	3	4	35.7%
West	S Parish Pl	135 Parish Pl	W Oak St	Regular	No Parking Mon 8am-10am/1 Hr Parking 8am-6pm Mon-Fri Except by Permit	265'	13	5	5	4	4	4	2	3	2	38.5%



The threshold for high parking demand was set at 75 percent and indicated that 7 street segments reached or exceeded this demand on the weekday and/or weekend during at least one of the peak periods observed. These high parking demand segments are summarized in **Table 7** and **Exhibit E**.

The 7 street segments identified as having high parking demand are found in **Table S-3**.

Table S-3
High Parking Demand Street Segments
March 2022

SEGMENT #	STREET	SIDE OF SREET	PARKING RESTRICTIONS	SEGMENT
11 (North)	Orchard Drive	East	No Parking Monday 8 am - 10 am	220 Orchard Dr to Olive Av
11 (North)	Orchard Drive	West	No Parking Friday 8 am - 10 am	Olive Av to 213 Orchard Dr
11 (South)	Orchard Drive	East	No Parking Monday 8 am - 10 am	Oak St to 220 Orchard Dr
13 (North)	Reese Place	East	No Parking Friday 8 am - 10 am	118 Reese Pl to Olive Av
13 (North)	Reese Place	West	No Parking Monday 8 am - 10 am 2 Hr Parking 8 am - 6 pm, Mon - Fri Except by Permit	Olive Av to 213 Reese Pl
9 (North)	Parish Place	West	2 spaces s/o Olive Av. No Parking Monday 8 am-10 am	Olive Av to 135 Parish Pl
9 (North)	Parish Place	West	20 min Loading Zone 8 am - 6 pm	Olive Av to 135 Parish Pl



Table 7
High Parking Demand Segments
March 2022

SEGMENT #	Side of the Street	Street	From	To	Curb	Restriction	Approximate Space	HIGHEST % DEMAND								
								WEEKDAY				WEEKEND				
								7:00-9:00 AM	11:00-1:00 PM	4:00-6:00 PM	Average Weekday	7:00 - 9:00 AM	11:00-1:00 PM	4:00-6:00 PM	Average Weekend	Avg Highest % Demand
11(N)	East	S Orchard Dr	220 Orchard Dr	W Olive Ave	Regular	No Parking Mon 8am-10am	13	69.2%	69.2%	92.3%	76.9%	92.3%	92.3%	84.6%	89.7%	82.4%
11(N)	West	S Orchard Dr	W Olive Ave	213 Orchard Dr	Regular	No Parking Fri 8am-10am	14	64.3%	71.4%	78.6%	71.4%	71.4%	71.4%	85.7%	76.2%	73.5%
11(S)	East	S Orchard Dr	W Oak St	220 Orchard Dr	Regular	No Parking Mon 8am-10am	17	76.5%	82.4%	70.6%	76.5%	23.5%	41.2%	29.4%	31.4%	57.2%
13(N)	East	S Reese Pl	220 Reese Pl	W Olive Ave	Regular	No Parking Fri 8am-10am	8	75.0%	87.5%	75.0%	79.2%	87.5%	87.5%	75.0%	83.3%	81.0%
13(N)	West	S Reese Pl	W Olive Ave	213 Reese Pl	Regular	No Parking Mon 8am-10am/2 Hr Parking 8am-6pm Mon-Fri Except by Permit	20	50.0%	60.0%	55.0%	55.0%	80.0%	90.0%	80.0%	83.3%	67.1%
9(N)	West	S Parish Pl	W Olive Ave	135 Parish Pl	Regular	No Parking Mon 8am-10am	2	100.0%	150.0%	100.0%	116.7%	100.0%	100.0%	100.0%	100.0%	109.5%
9(N)	West	S Parish Pl	W Olive Ave	135 Parish Pl	Yellow	20 Min Loading Zone 8am-6pm	1	100.0%	100.0%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	38.1%



EXHIBIT E – Map of High parking demand segments



**High Parking Demand Street Segments
March 2022**

SEGMENT #	HIGHEST % DEMAND								
	WEEKDAY				WEEKEND				Avg Highest % Demand
	7:00-9:00 AM	11:00-1:00 PM	4:00-6:00 PM	Average Weekday	7:00 - 9:00 AM	11:00-1:00 PM	4:00-6:00 PM	Average Weekend	
11(N)	69.2%	69.2%	92.3%	76.9%	92.3%	92.3%	84.6%	89.7%	82.4%
11(N)	64.3%	71.4%	78.6%	71.4%	71.4%	71.4%	85.7%	76.2%	73.5%
11(S)	76.5%	82.4%	70.6%	76.5%	23.5%	41.2%	29.4%	31.4%	57.2%
13(N)	75.0%	87.5%	75.0%	79.2%	87.5%	87.5%	75.0%	83.3%	81.0%
13(N)	50.0%	60.0%	55.0%	55.0%	80.0%	90.0%	80.0%	83.3%	67.1%
9(N)	100.0%	150.0%	100.0%	116.7%	100.0%	100.0%	100.0%	100.0%	109.5%
9(N)	100.0%	100.0%	0.0%	66.7%	0.0%	0.0%	0.0%	0.0%	38.1%

- 11(N) - East side, Orchard Dr: 220 Orchard Dr to Olive Av (13 spaces). No Parking Mondays 8 AM to 10 AM.
- 11(N) - West side, Orchard Dr: Olive Av to 213 Orchard Dr (14 spaces). No Parking Fridays 8 AM to 10 AM.
- 11(S) - East side, Orchard Dr: Oak St to 220 Orchard Dr (17 spaces). No Parking Mondays 8 AM to 10 AM.
- 13(N) - East side, Reese Pl: 118 Reese Pl to Olive Av (8 spaces). No Parking Fridays 8 AM to 10 AM.
- 13(N) - West side, Reese Pl: Olive Av to 213 Reese Pl (20 spaces). No Parking Mondays 8 AM to 10 AM. 2 Hour Parking 8 AM to 6 PM, Monday-Friday, Except by Permit.
- 9(N) - West side, Parish Pl: Olive Av to 135 Parish Pl (2 spaces). No Parking Mondays 8 AM to 10 AM.
- 9(N) - West side, Parish Pl: Olive Av to 135 Parish Pl (1 space, yellow curb). 20 Minute Loading Zone 8 AM to 6 PM.



CHAPTER 3

Phase I Measures and Intermediate Data Collection (Summer-Fall 2022)

During the development of the Rancho Providencia Neighborhood Protection Plan, a Raising Cane's restaurant opened on the southeast corner of Orchard Drive and Olive Avenue. As a result, initial traffic calming measures directly around the Raising Cane's restaurant were addressed as Phase 1 of the overall Plan update to study the effect of such measures and determine whether they should be incorporated or modified within the final Plan update effort.

Initial Control Measures

Ahead of the June 7, 2022, opening date, the Community Development Department, Public Works Department, Burbank Police Department (BPD), and restaurant management collaborated to develop a temporary traffic control plan to address high numbers of customers expected to frequent the new restaurant. The initial plan included:

- Positioning BPD Officers at the intersections on Olive Avenue to keep them clear, control traffic, monitor safety, and maintain the order of the drive-through line. The cost of traffic enforcement was paid for by Raising Cane's;
- Installing parking restrictions along the south side of Olive Avenue eastbound parking lane to ensure an orderly drive-through queue;
- Implementing turn restrictions and signage to ensure the safe and orderly movement of traffic and reduce impacts to the local streets;
- Performing consistent monitoring and communication by City Staff and Raising Cane's personnel; and
- Placing a periodic short-term closure on Orchard Drive during the opening weeks.

In addition to City-implemented measures, Staff worked directly with Raising Cane's on the restaurant's implementation of additional measures, including:

- Deploying private security officers to manage on-site restaurant traffic circulation and discourage vehicle queuing in public streets outside of the designated Olive Avenue queuing area;
- Providing signage at adjacent driveways and intersections encouraging vehicles to keep space clear for vehicle entry and exit;



- Working with local businesses and Burbank Unified School District to secure off-site parking spaces for Raising Cane’s employees in lots with excess off-street parking;
- Providing financial assistance, property improvements, and security presence for adjacent businesses;
- Closing at 10:00 p.m.; and
- Eliminating the use of the drive-through speaker and outdoor amplified music.

Initial Opening Operations

Early Opening

The grand opening impacted travel on Olive Avenue, Orchard Drive, and other neighboring streets intermittently. Field observations and video surveillance were conducted during the initial opening period of the restaurant.

Traffic queues on Olive Avenue extended back to Lamer Street at peak restaurant times. This impeded access to Lamer Street, Parish Street and Orchard Drive.



During the initial opening, BPD directed traffic at Orchard Drive to keep access open for residents and control traffic entering and exiting the Raising Cane's driveway on Olive Avenue.



No access was permitted from the Orchard Drive driveway. All customers (drive through, pick-up, and eat-in) were directed to enter and exit the site from the Olive Avenue driveway.



Residential parking on Orchard Drive and Reese Place and private parking lots nearby were impacted by restaurant customers. In addition, the temporary removal of the Olive Avenue on-street parking impacted customer parking for several commercial businesses immediately west





of the restaurant. Many restaurant patrons parked on the residential side streets and walked to the restaurant.

3 – 4 Weeks After Opening

Approximately one month after the restaurant opening, two elements of the traffic control plan were removed:

- i. The commercial/business permit parking restriction along the south side of Olive Avenue from South Orchard Drive to South Parish Place expired and was not renewed, and;
- ii. Active BPD traffic management was discontinued.

The other elements of the traffic control plan continued to be used to manage traffic and congestion. In addition, while not providing traffic control, BPD began deploying strict enforcement of moving violations in the area surrounding Raising Cane's, notably drivers who queued in a travel lane. The private security guards hired by Raising Cane's began excluding drivers from entering the site when the drive-through queues extended into City streets.

Phase 1 Measures

Following approval by the City Council on August 23, 2022, and informed by data collection in July and August (detailed in Intermediate Data Collection section below), the following measures were installed:

- i. Permit-only preferential parking was installed on South Orchard Drive and on South Reese Place between Olive Avenue and Oak Street. Staff began distributing parking permits to residents on Orchard Drive and Reese Place on September 26, 2022, and allowed time for all residents to apply and receive their permits before beginning enforcement on October 17, 2022.
- ii. City Staff installed speed humps on South Reese Place between Olive Avenue and Oak Street on September 21, 2022.
- iii. A temporary closure on South Orchard Drive south of Olive Avenue was established on September 23, 2022.

The City procured a consultant to develop the temporary closure measures; worked with the Burbank Police Department, Burbank Fire Department, and Department of Public Works to ensure compliance and address any concerns; and engaged the neighboring community in the process. The temporary closure served the purpose of blocking the drive-through queue from



forming into the residential neighborhood. It also enabled drive-through guests to exclusively use the entrance on Orchard Drive, allowing Raising Cane's to double the queue capacity of the restaurant on-site and reduce the likelihood of backups onto Olive Avenue. Walk-up/Pick-up guests were allowed to access the restaurant from Olive Avenue. **Exhibit F** provides the temporary closure plans implemented on Orchard Drive south of Olive Avenue.



The initial grand opening traffic volumes subsided from Summer 2022 to Fall 2022, and the traffic calming measures introduced new means to limit the effects of restaurant traffic on the surrounding neighborhood. Raising Cane's traffic settled into a pattern of intermittent queuing during peak hours (12:00 – 2:00 pm, 7:00 – 9:00 pm), but the vehicle queue rarely reached Olive Avenue after the installation of the traffic calming measures. Raising Cane's security guards continued to direct guests accessing the restaurant (drive-through on Orchard Drive and walk-up on Olive Avenue). Traffic volumes have decreased from the opening period, and speeds on Reese Place have decreased since the installation of speed humps.

While these temporary closure measures limited some of the effects of the restaurant's operations, some issues persisted. Although implementation of parking permits reduced the





number of restaurant patrons parking in the neighborhood and walking to the restaurant, some patrons continued to do so, often leading to ancillary issues like idling and littering. Before Raising Cane's opened, several businesses along Olive Avenue relied upon side streets for overflow patron and employee parking. Now, parking for those businesses is limited to street parking near Orchard Drive or utilization of a set number of parking permits distributed by the City. While that number of permits is dictated by the Burbank Municipal Code, several businesses have expressed concern that the number of permits distributed does not satisfy their needs.



EXHIBIT F – Temporary Closure Plan

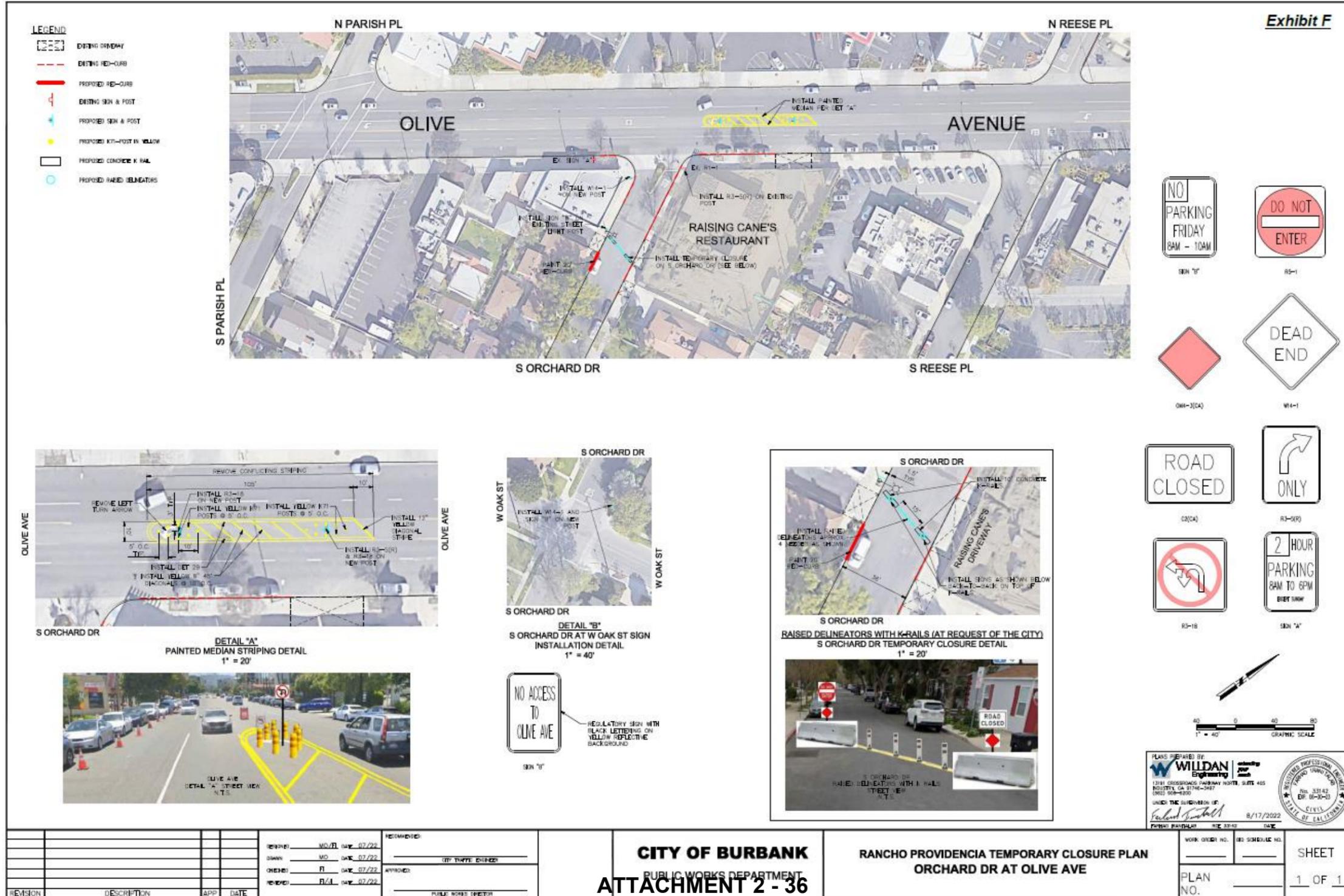


Exhibit F

REVISION	DESCRIPTION	APP'D	DATE

DESIGNED BY: MD/PL DATE: 07/22	REVIEWED BY: _____
DRAWN BY: MD DATE: 07/22	CHECKED BY: _____
CHECKED BY: PL DATE: 07/22	APPROVED BY: _____
REVIEWED BY: PL/AL DATE: 07/22	PUBLIC WORKS DIRECTOR

CITY OF BURBANK
PUBLIC WORKS DEPARTMENT
ATTACHMENT 2 - 36

RANCHO PROVIDENCIA TEMPORARY CLOSURE PLAN
ORCHARD DR AT OLIVE AVE

WORK ORDER NO. _____	SHEET NO. _____
PLAN NO. _____	1 OF 1



Intermediate Data Collection

6 Months After Opening: Intermediate Data Collection

To determine the traffic-related effects of the Phase 1 Measures, a comparison of the intermediate data on Parish Place, Orchard Drive, Reese Place, and Sparks Street was conducted. Data was collected in July 2022 and August 2022 (only on Orchard Drive and Reese Place) to establish traffic conditions after Raising Cane’s opened but before installation of Phase 1 Measures. Follow-up data were collected in November 2022 to observe change in traffic patterns after the installation of Phase 1 Measures. **Appendix F** provides the raw Intermediate Data for ADT, traffic speeds, and parking demand data.

Traffic Volume Counts

Table 8 presents the directional 24-hour traffic counts for the intermediate data collection. **Exhibit G** graphically identifies the intermediate traffic volumes on the four streets analyzed. A summary of the 5-day combined vehicle traffic counts are presented in **Table S-4**.

Table S-4
24-hour Directional Traffic Counts
Intermediate Data 2022
Average (Weekday)

SEGMENT #	CLASSIFI- CATION	STREET	AVERAGE DAILY TRAFFIC - 2022			
			JAN	JUL*	AUG*	NOV
9	Local	Parish Place	618			1,178
11	Local	Orchard Drive	502	1,241	840	551
13	Local	Reese Place	418	1,180	718	818
15	Local	Sparks Street	1,195			1,433

* - Data provided by City of Burbank

The vehicle traffic volumes on Orchard Drive and Reese Place did decline. After the opening of the restaurant. There was a 56 percent decrease in traffic on Orchard Drive (1,241 ADT to 551 ADT) after the Phase 1 Measures were implemented. Reese Place experienced a 31 percent decrease (1,180 ADT to 818 ADT) during this same time period. The comparison





of traffic volumes between August 2022 and November 2022 identified mixed results: Orchard Drive decreased by 34 percent (840 ADT to 551 ADT), Reese Place increased by 14 percent (718 ADT to 818 ADT).

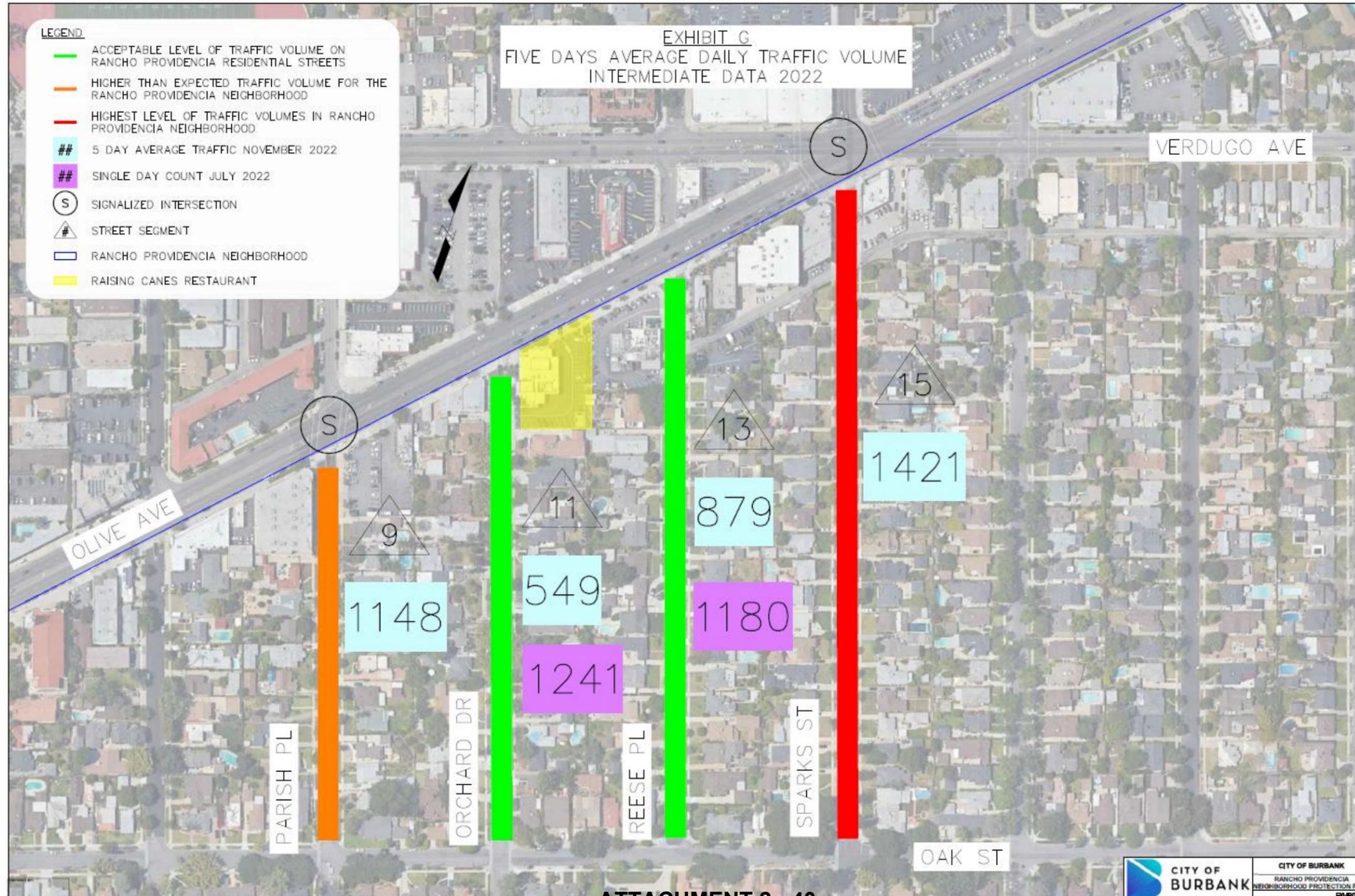


Table 8
24-Hour Traffic Counts
Intermediate Data 2022

COUNT DATE	9 - PARISH ST			11 - ORCHARD ST			13 - REESE PL			15 - SPARKS ST		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
7/27 - 7/28/2022 (Weds/Thurs)				670	571	1241	248	932	1180			
8/09 - 8/10/2022 (Tues/Weds)				490	350	840	154	564	718			
11/01/2022 (Tues)	546	558	1104	239	250	489	188	574	762	774	606	1380
11/02/2022 (Weds)	610	594	1204	299	284	583	193	642	835	821	643	1464
11/03/2022 (Thurs)	614	604	1218	310	270	580	240	616	856	789	667	1456
11/04/2022 (Fri)	668	627	1295	312	274	586	259	827	1086	907	754	1661
11/05/2022 (Sat)	495	425	920	262	247	509	230	626	856	612	531	1143
Nov '22 Weekday Avg			1175			551			818			1433
Nov'22 5-Day Avg			1148			549			879			1421



EXHIBIT G – ADT Intermediate Volume Map, Intermediate Data 2022



Vehicle Speed Data

Table 9 presents the directional 85th percentile speeds on streets within the limited study area. **Exhibit H** graphically illustrates the combined 85th percentile speeds. A summary of the average speeds is identified in **Table S-5**.

Table S-5
Summary of 85th Percentile Traffic Speed Data
Intermediate Data 2022

SEGMENT #	CLASSIFICATION	STREET	AVG 85th % SPEEDS* - 2022							
			JANUARY		JULY		AUGUST		NOVEMBER	
			NB	SB	NB	SB	NB	SB	NB	SB
9	Local	Parish Street	30	29					28	29
11	Local	Orchard Drive	28	26	24	29	28	25	26	27
13	Local	Reese Place	33	32	26	27	31	24	24	25
15	Local	Sparks Street	35	34					32	32

* = miles per hour

Comparing the July to November speeds, Orchard Drive and Reese Place increased in the northbound while decreasing slightly in the southbound direction.

Comparing the August to November speeds, Orchard Drive decreased in the northbound direction from 28 to 26 mph and increased in the southbound direction from 25 to 27 mph; Reese Place decreased in the northbound direction from 31 to 24 mph and increased in the southbound direction from 24 to 25 mph. The installation of speed humps on South Reese Place took place in September 2022 and may have contributed to the 7-mph reduction in northbound speeds.

Any street closure will divert traffic to other adjacent streets, specially within a grid system roadway network. While the increase in traffic volumes and speeds is noticeable, they are still within the acceptable residential street traffic levels. The exception to this is the average speed identified on Sparks Street at 32 mph (7 mph higher than the posted speed limit). This speed is slightly lower than January 2022 that showed an average speed of 34 mph.



Table 9
85th-Percentile Speed Data
Intermediate Data 2022

COUNT DATE	9 - PARISH ST		11 - ORCHARD ST		13 - REESE PL		15 - SPARKS ST	
	NB	SB	NB	SB	NB	SB	NB	SB
7/27 - 7/28/2022 (Weds/Thurs)			24	29	26	27		
8/09 - 8/10/2022 (Tues/Weds)			28	25	31	24		
11/01/2022 (Tues)	29	29	27	28	24	24	32	32
11/02/2022 (Weds)	28	29	26	26	24	25	31	31
11/03/2022 (Thurs)	28	29	25	27	24	25	32	32
11/04/2022 (Fri)	29	30	27	27	24	25	32	32
11/05/2022 (Sat)	28	29	26	26	24	25	33	32
Nov '22 Weekday Avg	28	29	26	27	24	25	32	32
Nov'22 5-Day Avg	28	29	26	27	24	25	32	32



EXHIBIT H – 85th Percentile Speed Intermediate Data map



Parking Demand Data

As part of the Phase 1 Measures, preferential parking was implemented on Orchard Drive and on Reese Place south of Olive Avenue. The parking demand/utilization comparison from August 2022 (before the preferential parking was installed) to November 2022 identified a reduced on-street parking demand on both Orchard Drive and Reese Place (see **Table S-6**). Parking utilization on the residential portion of Orchard Drive decreased from 64.4 percent to 43.1 percent during the evening peak hours of 7:00 PM to 9:00 PM. Reese Place also decreased from 50.9 percent to 43.9 percent during the evening peak hours. From before Raising Cane’s opened in March 2022 to after permit parking was established, parking demand in the problematic evening hours declined on Orchard Drive from 55.9 percent to 43.1 percent and remained steady on Reese Place.

Table S-6

High Parking Demand Street Segments (Weekday, Residential Zones)

SEGMENT #	CLASSIFICATION	STREET	MARCH 2022		AUGUST 2022		NOVEMBER 2022 ¹	
			MID-DAY	EVENING	MID-DAY	EVENING	MID-DAY	EVENING
11	Local	Orchard Drive	69.5%	55.9%	64.4%	64.4%	55.2%	43.1%
13	Local	Reese Place	33.3%	42.1%	42.1%	50.9%	54.4%	43.9%

¹ = After installation of permit parking.



CHAPTER 4

Community Outreach Efforts

Virtual Webinar

On April 7, 2022, Staff held the first public meeting with the community to present background information on the existing Rancho Providencia NPP, to present the results of initial data collection, to outline the process for implementation, and to receive input on how the community envisions improvements to their streets. In this meeting, Staff presented the phased approach for the NPP update process, with Phase 1 focusing on the streets directly around the Raising Cane’s Restaurant and Phase 2 proposing improvements for the entire neighborhood. After the presentation, attendees were encouraged to verbally ask questions and provide comments to which City staff responded. Attendees also submitted questions and comments in writing utilizing the “Q&A” feature on the digital meeting platform. Questions asked verbally during the meeting, written questions submitted in the Q&A panel during the webinar, and questions submitted via email were then answered by City staff. Comments received by those attending the community meeting included concerns about cut-through traffic, high vehicle speeds, and residentially adjacent commercial uses. A copy of the presentation is provided in **Appendix E**. The meeting was viewed by 51 attendees.

Orchard Drive and Reese Place Survey

Staff distributed a survey to residents on Orchard Drive and Reese Place by mail on July 15, 2022, to determine overall support for proposed installation permit parking and speed humps. After distributing the mail survey, 78 percent of residents on South Orchard Drive and 79 percent of residents on South Reese Place supported implementation of permit-only parking from 8:00 a.m. to 10:00 p.m. every day.

Sixty percent of residents on South Reese Place who responded to the survey supported the installation of speed humps on their street. Although 71 percent of residents on Orchard Drive favored speed humps, Staff did not recommend speed humps on that street because a temporary road closure was recommended instead.



In-Person Community Meeting

Staff will hold a Community Meeting on October 19, 2023, to present the draft plan update and collect public comment at the City of Burbank Community Services Building. At the meeting, staff will present the data collected over the course of the plan update development as well as the plan update recommendations. After the presentation, staff will collect public comment and answer questions. This meeting will serve to both hear feedback on the plan and collect comments on the Environmental Review process, open from October 4 through November 3. Those comments will be incorporated into the final recommendation to City Council.

Public Notices

Staff circulated public notices by mail to ensure that neighborhood residents were aware of and had the opportunity to attend and/or provide comments for planned public meetings. All notices were distributed at least 10 business days before the date of any meeting and included contact information for staff managing the Rancho Providencia Neighborhood Protection Plan.

Public notices were distributed for:

- Rancho Providencia Neighborhood Protection Plan public meeting – Circulated on March 24, 2022, in advance of April 7, 2022, public meeting. Notice outlined background information on the NPP update and details on how to participate in the virtual meeting.
- City Council Meeting for Proposed Traffic Calming Measures on Orchard Drive and Reese Place – Circulated on August 8, 2022, in advance of City Council meeting on August 23, 2022, to discuss proposed traffic calming measures including 1) permit-only parking on these streets, 2) speed humps on Reese Place, and 3) a temporary road closure on Orchard Drive. Neighbors were invited to provide public comment in advance or in person at the City Council meeting.
- Installation of “No Parking” signage – Circulated September 14, 2022. Provided information on how to apply for parking permit and timing for permit zone enforcement.
- City Council Meeting for Update on Traffic Calming Measures – Circulated November 21, 2022, in advance of the December 6, 2023, City Council meeting where Staff provided an update on the effects of these recently-installed measures. Neighbors were invited to provide public comment in advance or in person at the City Council meeting.
- Environmental comment period – Posted in Los Angeles Times on September 20, 2023 and uploaded to CEQAnet on October 4, 2023.



- City Council meeting – To be circulated on November 17, 2023, in advance of City Council meeting on December 5, 2023.

Public Comment Intake

Staff provided contact information in every public communication or public presentation regarding the Rancho Providencia Neighborhood Protection Plan. Since the first public notice for the plan update, Staff have received and responded to over 250 comments and questions from neighbors in the residential and business areas of the neighborhood. These comments have provided valuable information on how the community's roadways currently operate and meaningful guidance on how neighbors want to shape the community in the future.



CHAPTER 5

Phase 2 Data Collection (January 2023)

In Phase 2 of the Rancho Providencia Neighborhood Protection Plan update Staff collected and analyzed data for the full neighborhood to inform the final update to the Plan. In order to effectively analyze the neighborhood-wide effect of the Phase 1 Measures (i.e., speed humps on Reese Place, closure of Orchard Drive, permit parking on both streets), data were collected in January 2023 in the same locations and using the same methods as Initial data collection in January 2022, including average daily traffic (ADT), traffic speeds, and license plate entering/exiting traffic.

Appendix G provides the raw ADT and traffic speed data from January 2023. **Appendix H** provides the raw license plate survey data from January 2023.

Traffic Vehicle Counts

Table 10 presents the January 2023 directional 24-hour traffic counts and the total of the average traffic for both directions. **Exhibit I** graphically identifies streets with an acceptable volume of traffic for neighborhood streets and those that have the highest traffic volumes. The highest average January 2023 traffic counts (**Table S-7**) on the neighborhood streets were found on the same 6 segments identified with the highest average traffic counts in the January 2022 data.



Table S-7

Summary of 24-hour Directional Traffic Counts
January 2023

SEGMENT #	CLASSIFICATION	STREET	SEGMENT	AVERAGE DAILY TRAFFIC (vehicles)
14	Local	Sparks Street	Oak St to Alameda Av	1,189
15	Local	Sparks Street	Olive Av to Oak St	1,407
20	Local	Mariposa Steet	Oak St to Alameda Av	1,483
21	Local	Mariposa Steet	Verdugo Av to Oak St	1,174
26	Neighborhood Collector	Oak Street	Beachwood Dr to Mariposa St	1,491
27	Neighborhood Collector	Oak Street	Mariposa St to Main St	1,607



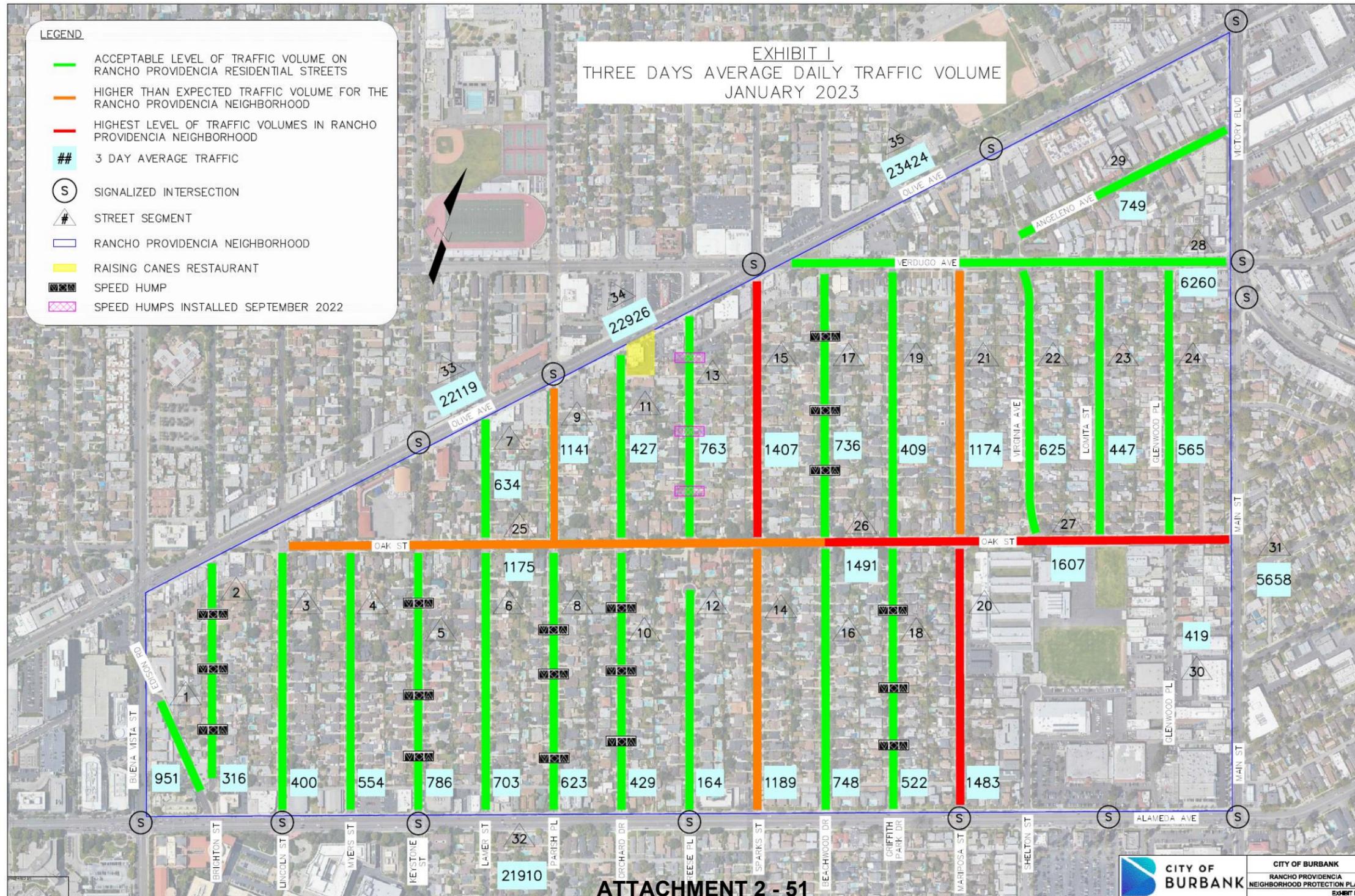
Table 10
24-Hour Directional Counts
January 2023

ADT										
SEGMENT	STREET	1/17/2023		1/18/2023		1/19/2023		3-Day Avg		
		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	Combined
1	EDISON RD	538	419	499	458	485	453	507	443	951
2	BRIGHTON ST	181	132	179	150	183	123	181	135	316
3	LINCOLN ST	203	199	211	183	210	195	208	192	400
4	MYERS ST	237	324	269	328	216	288	241	313	554
5	KEYSTONE ST	362	391	430	396	420	360	404	382	786
6	LAMER ST	261	386	317	418	329	399	302	401	703
7	LAMER ST	384	243	388	261	348	278	373	261	634
8	PARISH ST	334	257	360	290	352	277	349	275	623
9	PARISH ST	524	566	575	592	566	599	555	586	1,141
10	ORCHARD ST	223	203	228	214	214	204	222	207	429
11	ORCHARD ST	210	217	216	235	195	208	207	220	427
12	REESE PL	76	78	84	84	81	89	80	84	164
13	REESE PL	167	562	200	605	177	577	181	581	763
14	SPARKS ST	586	613	598	628	592	551	592	597	1,189
15	SPARKS ST	828	629	804	639	758	563	797	610	1,407
16	BEACHWOOD DR	380	324	428	377	388	346	399	349	748
17	BEACHWOOD DR	358	341	395	345	440	330	398	339	736
18	GRIFFITH PARK	227	246	256	249	297	290	260	262	522
19	GRIFFITH PARK	205	198	236	190	205	194	215	194	409
20	MARIPOSA ST	653	759	712	811	699	816	688	795	1,483
21	MARIPOSA ST	653	507	645	530	656	531	651	523	1,174
22	VIRGINIA AVE	315	309	339	286	305	322	320	306	625
23	LOMITA AVE	265	159	262	185	289	182	272	175	447
24	GLENWOOD PL	296	275	271	238	305	309	291	274	565
25	OAK ST	572	567	570	620	558	637	567	608	1,175
26	OAK ST	760	683	802	732	765	730	776	715	1,491
27	OAK ST	846	722	814	793	867	778	842	764	1,607
28	VERDUGO AVE	3,623	2,621	3,631	2,621	3,639	2,645	3,631	2,629	6,260
29	ANGELENO AVE	358	401	389	398	344	356	364	385	749
30	GLENWOOD PL	295	139	276	127	277	142	283	136	419
31	MAIN ST	2,199	3,519	2,245	3,390	2,219	3,403	2,221	3,437	5,658
32	ALAMEDA AVE	11,589	10,170	11,916	10,574	11,518	9,963	11,674	10,236	21,910
33	OLIVE AVE	10,976	10,536	11,216	10,883	11,061	11,686	11,084	11,035	22,119
34	OLIVE AVE	11,699	10,945	11,687	11,482	11,544	11,421	11,643	11,283	22,926
35	OLIVE AVE	11,470	11,596	11,570	11,915	11,699	12,023	11,580	11,845	23,424

 - Highest average traffic counts on Neighborhood streets



EXHIBIT I – ADT January 2023 Map



Vehicle Speed Data

Table 11 presents the directional 85th percentile speeds on streets within the study area and the combined 3-day average of the 85th percentile speeds of both directions. **Exhibit J** graphically illustrates the combined 85th percentile speeds. **Table S-8** identifies the street segments experiencing 85th percentile speeds of 5 miles per hour (mph) or more over the 25-mph speed limit.

Table S-8
Summary of 85th Percentile Traffic Speed Data
January 2023

SEGMENT #	CLASSIFICATION	STREET	SEGMENT	85% SPEED
3	Local	Lincoln Street	Oak St to Alameda Av	31 mph
4	Local	Myers Street	Oak St to Alameda Av	32 mph
6	Local	Lamer Street	Oak St to Alameda Av	31 mph
9	Local	Parish Place	Olive Av to Oak St	30 mph
11	Local	Orchard Drive	Olive Av to Oak St	30 mph
14	Local	Sparks Street	Oak St to Alameda Av	34 mph
15	Local	Sparks Street	Olive Av to Oak St	35 mph
16	Local	Beachwood Drive	Oak St to Alameda Av	34 mph
19	Local	Griffith Park Drive	Olive Av to Oak St	30 mph
20	Local	Mariposa Street	Oak St to Alameda Av	30 mph
21	Local	Mariposa Street	Verdugo Av to Oak St	32 mph
22	Local	Virginia Avenue	Verdugo Av to Oak St	30 mph
23	Local	Lomita Avenue	Verdugo Av to Oak St	31 mph
24	Local	Glenwood Place	Verdugo Av to Oak St	33 mph

mph = miles per hour



Table 11
85th Percentile Speed
January 2023

85th Percentile Speed									
SEGMENT	STREET	1/17/2023		1/18/2023		1/19/2023		3 DAY AVG	
		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	COMBINED	
1	EDISON RD	25	22	24	22	25	22	23	
2	BRIGHTON ST	25	26	25	24	25	24	25	
3	LINCOLN ST	31	32	31	32	30	30	31	
4	MYERS ST	33	33	32	31	33	31	32	
5	KEYSTONE ST	23	24	23	24	23	24	24	
6	LAMER ST	31	32	31	30	31	32	31	
7	LAMER ST	29	29	29	29	29	29	29	
8	PARISH ST	24	23	24	24	24	23	24	
9	PARISH ST	28	32	28	32	28	31	30	
10	ORCHARD ST	20	20	21	20	20	19	20	
11	ORCHARD ST	29	30	29	30	29	30	30	
12	REESE PL	29	29	29	29	28	28	29	
13	REESE PL	23	21	23	20	22	21	22	
14	SPARKS ST	34	34	34	33	33	34	34	
15	SPARKS ST	34	36	34	36	33	35	35	
16	BEACHWOOD DR	34	34	33	32	34	34	34	
17	BEACHWOOD DR	29	28	29	28	28	28	28	
18	GRIFFITH PARK	26	23	25	23	27	24	25	
19	GRIFFITH PARK	30	29	30	30	30	28	30	
20	MARIPOSA ST	30	31	30	31	30	30	30	
21	MARIPOSA ST	33	32	32	30	32	30	32	
22	VIRGINIA AVE	31	30	30	29	31	29	30	
23	LOMITA AVE	31	31	32	29	30	31	31	
24	GLENWOOD PL	34	34	33	33	33	33	33	
25	OAK ST	27	27	27	27	27	27	27	
26	OAK ST	27	27	27	27	27	27	27	
27	OAK ST	29	29	29	28	29	29	29	
28	VERDUGO AVE*	34	35	33	35	33	35	34	
29	ANGELENO AVE	28	27	28	28	28	28	28	
30	GLENWOOD PL	Speed data not collected							
31	MAIN ST	Speed data not collected							
32	ALAMEDA AVE**	42	44	42	44	42	44	43	
33	OLIVE AVE**	39	42	38	41	39	41	40	
34	OLIVE AVE**	Speed data not collected							
35	OLIVE AVE**	42	45	42	44	42	44	43	

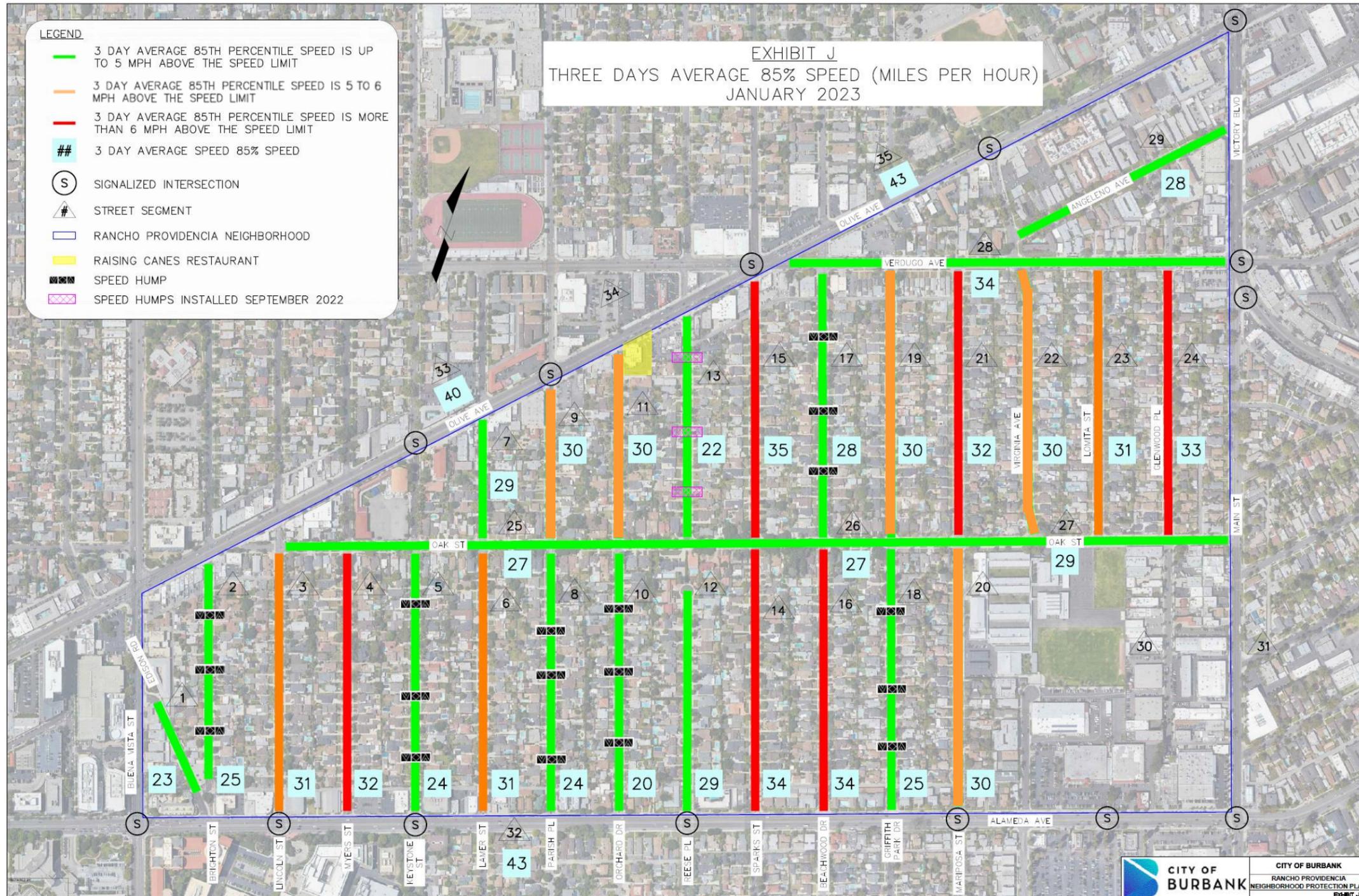
* - Posted speed limit at 35 mph

** - Posted speed limit at 35 mph. Boundary streets of the Neighborhood

 - 85th percentile speeds 5 or more mph above 25 mph prima facie limit



EXHIBIT J – 85th Percentile Speeds January 2023



Cut-through Traffic Patterns

The cut-through traffic occurring in the neighborhood was determined by using a license plate survey method. The same time periods used in the January 2022 Data analysis were used for the January 2023 Data on Thursday, January 19, 2023. Vehicles that entered the neighborhood and exited the neighborhood in less than 5 minutes were considered as cut-through traffic. These entry/exit points and corresponding estimated cut-through traffic are depicted in **Exhibit K. Table 12** presents a matrix identifying the pattern and number of vehicles from an entry point to an exit point. The data indicate that Keystone Street between Olive Avenue (Node #1) and Alameda Avenue (Node #8) and vice versa, remains the highest cut-through traffic pattern during each periods studied. **Table 13** summarizes this After Data pattern.

Table 12
Peak Hour Cut-through Pattern (# of vehicles)
January 2023

STREET	PATTERN	7:00 to 9:00 AM	11:00 AM to 1:00 PM	4:00 to 6:00 PM
Keystone St	Olive Av to Alameda Av	14	8	10
	Alameda Av to Olive Av	12	29	19



EXHIBIT K – Cut-Through Traffic Patterns January 2023

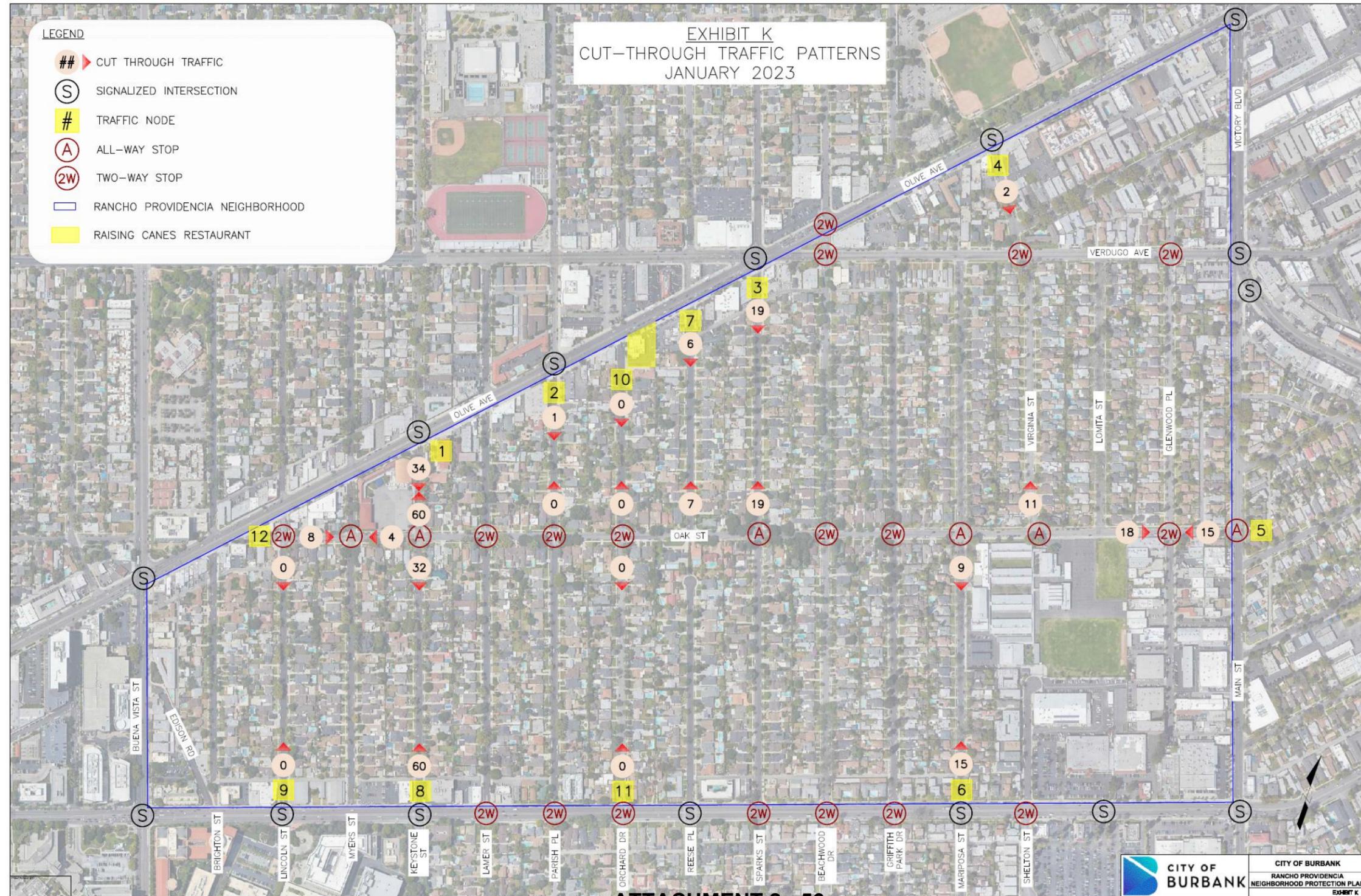


Table 13
Cut-Through Traffic Patterns
January 2023

		EXIT POINT												
		NUMBER OF CUT-THROUGH TRAFFIC AM PEAK (7AM TO 9AM)												
ENTRY POINT	NODE	1	2	3	4	5	6	7	8	9	10	11	12	
	1	0	0	2	0	0	0	0	14	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	1	1	2	1	0	0	0	0	0	0
	4	0	0	0	0	1	0	0	0	0	0	0	0	0
	5	0	0	1	0	0	1	0	0	0	0	0	0	0
	6	0	0	3	3	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	1	0	0	0	0	0	0	0	0
	8	12	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	Temporary Road Closure on Orchard St south of Olive Av												
	11	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	0	0	0	4	0	0	0	0	0	0	0	0

		EXIT POINT												
		NUMBER OF CUT-THROUGH TRAFFIC MID-DAY PEAK (11AM TO 1PM)												
ENTRY POINT	NODE	1	2	3	4	5	6	7	8	9	10	11	12	
	1	0	0	0	0	0	0	0	8	0	0	0	0	0
	2	0	0	0	0	1	0	0	0	0	0	0	0	0
	3	0	0	0	0	1	1	4	0	0	0	0	1	0
	4	0	0	0	0	0	1	0	0	0	0	0	0	0
	5	0	0	3	0	0	0	1	0	0	0	0	1	0
	6	0	0	0	5	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	2	2	0	0	0	0	0	0	1
	8	29	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	Temporary Road Closure on Orchard St south of Olive Av												
	11	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	0	0	0	1	0	0	0	0	0	0	0	0

		EXIT POINT												
		NUMBER OF CUT-THROUGH TRAFFIC PM PEAK (4PM TO 6PM)												
ENTRY POINT	NODE	1	2	3	4	5	6	7	8	9	10	11	12	
	1	0	0	0	0	0	0	0	10	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	1	3	2	1	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	6	1	0	0	0	0	0	0	0	1	0
	6	0	0	4	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	19	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	Temporary Road Closure on Orchard St south of Olive Av												
	11	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	0	0	0	3	0	0	0	0	0	0	0	0



Parking Demand Data

Follow-up collection of Parking Demand Data was collected on the two streets that implemented a permit parking program, Orchard Drive, and Reese Place. Follow-up counts took place in November 2022 and May 2023. March 2022 data collection on these streets identified higher demand in the vicinity of the businesses along Olive Avenue, much of which was time-restricted. After Raising Cane’s opened, parking data for the residential portion of each street showed an increase in demand (August 2022). This information and concerns expressed by residents in the vicinity of Raising Cane’s Restaurant resulted in the implementation of permit parking restrictions on Orchard Drive and Reese Place between Olive Avenue and Oak Street. After implementation, parking demand slightly declined. Data collected in May 2023 showed the continuation of that trend, with parking demand either declining or remaining steady on these streets. With the implementation of automated parking permit enforcement in June 2023, it is expected that non-compliant vehicle parking will further decrease. Staff will consider follow-up parking counts if necessary.

Table S-9

High Parking Demand Street Segments
Highest Demand 15-Minute Period (Weekday), Residential Zones Only

SEGMENT #	CLASSIFICATION	STREET	MARCH 2022		AUGUST 2022		NOVEMBER 2022 ¹		May 2023	
			MID-DAY	EVENING	MID-DAY	EVENING	MID-DAY	EVENING	MID-DAY	EVENING
11	Local	Orchard Drive	69.5%	55.9%	64.4%	64.4%	55.2%	43.1%	50.0%	51.8%
13	Local	Reese Place	33.3%	42.1%	42.1%	50.9%	54.4%	43.9%	42.1%	42.1%

¹ = After installation of permit parking.



CHAPTER 6

Data Comparison (2022 – Intermediate – 2023)

The previous chapters provide details on the data collected for the Rancho Providencia NPP. This chapter will provide the comparison of the 3 data sets. The Intermediate Data set is limited to Parish Street, Orchard Drive, Reese Place and Sparks Street.

Traffic Vehicle Counts

Table 14 summarizes the comparison of ADT traffic count data. **Table S-10** identifies the highest changes in the ADT data.

Table S-10
24-hour Directional Traffic Counts
Comparison 2022 - Intermediate - 2023

SEGMENT #	STREET	SEGMENT	JANUARY 2022 ADT	JULY 2022 ADT*	AUGUST 2022 ADT*	NOV 2022 ADT	January 2023 ADT
9	Parish Place	Olive Av to Oak St	612			1,175	1,141
11	Orchard Drive	Olive Av to Oak St	502	1,241	840	551	427
12	Reese Place	Oak St to Alameda Av	207				164
13	Reese Place	Olive Av to Oak St	417	1,180	718	818	763

ADT = average daily traffic, vehicles per day



Table S-10 Continued

SEGMENT #	STREET	SEGMENT	Difference (JAN 2022 to JAN 2023)	% Change (JAN 2022 to JAN 2023)
9	Parish Place	Olive Av to Oak St	529	86.5%
11	Orchard Drive	Olive Av to Oak St	-75	-14.9%
12	Reese Place	Oak St to Alameda Av	-43	-20.9%
13	Reese Place	Olive Av to Oak St	345	82.7%

As expected, the temporary closure of Orchard Drive south of Olive Avenue did impact the traffic volumes on neighboring streets. The ADT on Orchard Drive reduced by 14.9 percent while the traffic volumes on Parish Place to the west (86.5 percent) and Reese Place to the east (82.7 percent) increased significantly. However, the ADT on Parish Place (1,141 ADT) and Reese Place (763 ADT) are near the standard level of ADT expected on a residential Local Street.

One explanation could be the introduction of the Raising Cane’s restaurant. Motorists who would travel down South Orchard Drive, whether for Raising Cane’s or residents’ vehicle trips over the course of a normal day, are now diverted down neighboring streets. Due to the orientation of traffic flow on Olive Avenue, South Reese Place is the next available travel option for a motorist after South Orchard Drive. While that also may be a possibility for South Parish Place, the notable increase in traffic volume is less clearly tied to the closure on South Orchard Drive. The intersections of South Parish Place/Olive Avenue and South Keystone Street/Olive Avenue are signalized. These two intersections are on Olive Avenue between Buena Vista Street and Sparks Street (a 0.62-mile distance) and serve travel to Burroughs High School and Walt Disney Studios, which had not yet returned from the COVID-19 Pandemic to full-time in-person work when initial data was collected in January 2023.³ The normalization of school and work schedules may have increased travel through the signal on South Parish Place/Olive Avenue.

³ “Disney employees were required to return to the office 4-days per week starting March 1, 2023, although many had begun to transition back before.” LA Times, <https://www.latimes.com/entertainment-arts/business/story/2023-01-09/disney-return-to-office-four-days-bob-iger>



Table 14
24-Hour Directional Traffic Counts
Comparison: 2022, Intermediate, 2023

ADT								
SEGMENT	STREET	January 2022	Intermediate July 2022*	Intermediate August 2022*	Intermediate Nov 2022*	January 2023	# Vehicles Change JAN 2022 to JAN 2023	% Change from JAN 2022 to JAN 2023
1	EDISON RD	690				951	260	37.7%
2	BRIGHTON ST	282				316	34	11.9%
3	LINCOLN ST	313				400	87	27.8%
4	MYERS ST	418				554	136	32.5%
5	KEYSTONE ST	671				786	115	17.2%
6	LAMER ST	644				703	59	9.2%
7	LAMER ST	539				634	95	17.7%
8	PARISH ST	475				623	148	31.1%
9	PARISH ST	612			1,175	1,141	529	86.5%
10	ORCHARD ST	477				429	-48	-10.1%
11	ORCHARD ST	502	1,241	840	551	427	-75	-14.9%
12	REESE PL	207				164	-43	-20.9%
13	REESE PL	417	1,180	718	818	763	345	82.7%
14	SPARKS ST	1,017				1,189	172	16.9%
15	SPARKS ST	1,178			1,433	1,407	229	19.4%
16	BEACHWOOD DR	693				748	55	7.9%
17	BEACHWOOD DR	708				736	29	4.1%
18	GRIFFITH PARK	444				522	78	17.6%
19	GRIFFITH PARK	418				409	-8	-2.0%
20	MARIPOSA ST	1,466				1,483	18	1.2%
21	MARIPOSA ST	1,062				1,174	112	10.6%
22	VIRGINIA AVE	584				625	41	7.0%
23	LOMITA AVE	422				447	25	5.9%
24	GLENWOOD PL	392				565	173	44.2%
25	OAK ST	947				1,175	228	24.0%
26	OAK ST	1,380				1,491	110	8.0%
27	OAK ST	1,498				1,607	109	7.3%
28	VERDUGO AVE	4,937				6,260	1,323	26.8%
29	ANGELINO AVE	699				749	49	7.1%
30	GLENWOOD PL	392				419	27	6.9%
31	MAIN ST	5,607				5,658	51	0.9%
32	ALAMEDA AVE	18,631				21,910	3,279	17.6%
33	OLIVE AVE	20,767				22,119	1,352	6.5%
34	OLIVE AVE	20,808				22,926	2,118	10.2%
35	OLIVE AVE	21,763				23,424	1,661	7.6%

* - Data provided by City of Burbank

- Highest percent increase in vehicle volume
- Highest percent reduction in vehicle volume
- BOLD** - Reduction in traffic volumes





Vehicle Speed Data

Table 15 summarizes the 85th percentile speeds comparison. The decrease in speeds on Edison Road could be a result of the increased volume as workers continued to return to in-person jobs at Walt Disney Studios and Warner Brothers Studios, following remote work schedules during the COVID-19 Pandemic.⁴ Edison Road experienced an increase in ADT of 37.7 percent (from 690 to 951 ADT, Table 14), but more vehicles does not necessarily mean higher speeds. The 23 mph recorded speed on Edison Road is lower than the prima facie speed limit of 25 mph. Reese Place saw an 85th percentile speed of 22 mph in January 2023. The data reflect that speeds decreased after the installation of speed humps in September 2022.

The Orchard Drive speed increase is likely a result of the temporary closure immediately south of Olive Avenue. The majority of vehicles traveling on Orchard Drive are residents. These residents and others using the street (food/package deliveries, gardening/cleaning services, etc.) are now aware of the temporary closure and may be more comfortable traveling faster than recorded in 2022.

The increase in speeds on Oak Street is 3 mph. While this is identified as a high percentage change, the 29 mph speed is still within an acceptable industry standard, within 5 mph over the prima facie speed limit of 25 mph.

⁴ “Warner Brothers Discovery began requiring employees to work at least 3 days per week in the office starting June 1, 2022.” The Hollywood Reporter, <https://www.hollywoodreporter.com/business/business-news/warner-bros-discovery-return-office-plan-david-zaslav-1235143403/>



Table 15
85th Percentile Traffic Speed Data
Comparison: 2022, Intermediate, 2023

85TH PERCENTILE SPEED (MILES PER HOUR)									
SEGMENT	STREET	January 2022	Intermediate July 2022*	Intermediate August 2022*	Intermediate Nov 2022*	January 2023	MPH Change JAN 2022 to JAN 2023	% Change JAN 2022 to JAN 2023	
1	EDISON RD	30				23	-7	-23.3%	
2	BRIGHTON ST	23				25	2	10.6%	
3	LINCOLN ST	31				31	0	0.0%	
4	MYERS ST	32				32	0	1.3%	
5	KEYSTONE ST	23				24	1	6.2%	
6	LAMER ST	34				31	-3	-8.3%	
7	LAMER ST	29				29	0	0.0%	
8	PARISH ST	24				24	0	0.0%	
9	PARISH ST	29			29	30	1	4.2%	
10	ORCHARD ST	21				20	-1	-4.8%	
11	ORCHARD ST	27	27	27	27	30	3	12.8%	
12	REESE PL	30				29	-1	-2.0%	
13	REESE PL	33	26	28	24	22	-11	-32.5%	
14	SPARKS ST	33				34	1	3.0%	
15	SPARKS ST	34			32	35	1	3.6%	
16	BEACHWOOD DR	33				34	1	4.3%	
17	BEACHWOOD DR	28				28	0	0.7%	
18	GRIFFITH PARK	23				25	2	9.6%	
19	GRIFFITH PARK	30				30	0	-1.3%	
20	MARIPOSA ST	30				30	0	0.0%	
21	MARIPOSA ST	32				32	0	-0.6%	
22	VIRGINIA AVE	31				30	-1	-3.2%	
23	LOMITA AVE	30				31	1	4.7%	
24	GLENWOOD PL	31				33	2	7.1%	
25	OAK ST	26				27	1	4.7%	
26	OAK ST	26				27	1	4.7%	
27	OAK ST	26				29	3	12.4%	
28	VERDUGO AVE	31				34	3	9.7%	
29	ANGELINO AVE	28				28	0	0.0%	
30	GLENWOOD PL	Speed data not collected							
31	MAIN ST	Speed data not collected							
32	ALAMEDA AVE	44				43	-1	-2.3%	
33	OLIVE AVE	43				40	-3	-7.0%	
34	OLIVE AVE	43	Speed data not collected						
35	OLIVE AVE	43				43	0	0.0%	

* - Data provided by City of Burbank

- Highest percent increase in speed
- Highest percent reduction in speed
- BOLD** - Reduction in traffic speeds



Cut-through Traffic Patterns

Both sets of data (January 2022 and January 2023) identified the same cut-through pattern in the neighborhood. The pattern that carried the most cut-through traffic was Keystone Street between Olive Avenue (Node #1) and Alameda Avenue (Node #8) and vice versa. **Table 17** summarizes the comparison of the cut-through traffic pattern.

Table 16
Peak Cut-through Pattern (# of vehicles)
Comparison: 2022 to 2023

STREET	PATTERN	7:00 to 9:00 AM		11:00 to 1:00 PM		4:00 to 6:00 PM	
		January 2022	January 2023	January 2022	January 2023	January 2022	January 2023
Keystone St	Olive Av to Alameda Av	18	14	8	8	13	10
	Alameda Av to Olive Av	17	12	27	<u>29</u>	10	<u>19</u>

There was a minor increase in the mid-day pattern from 27 to 29 vehicles, a 7.4 percent increase. The higher increase in cut-through traffic patterns occurred in the PM peak period. This pattern increased from 10 to 19 vehicles.

The January 2023 ADT volume on Keystone Street was 786 ADT. While there was an increase in the cut-through pattern on Keystone Street, these increases (9 vehicles in both the mid-day and evening peak) are not significant to the overall traffic volumes on Keystone Street.



CHAPTER 7

2023 Rancho Providencia Neighborhood Protection Plan Update

While some streets in the Rancho Providencia Neighborhood experienced increased traffic volume and cut-through traffic around the opening of the Raising Cane's Restaurant, several streets exhibited issues before that event, and their persistence cannot be solely attributed to the new restaurant. While Phase 1 Measures sought to address and study the issues in the restaurant's immediate vicinity, this report seeks to identify the long-term issues in the neighborhood and address them with long-term traffic calming measures which comprise the final Plan update.

Next Steps for Phase 1 Measures

Recommendation 1: Maintain Speed Humps on Reese Place

As noted in the Intermediate Data Collection section, speed humps were effective in reducing the average 85th percentile speed on South Reese Place. This measure has directly addressed the speeding concern and has reduced average speeds to below the posted speed limit. Existing speed humps are recommended to stay in place as currently designed.

Recommendation 2: Maintain the Permit Parking Program on Reese Place and Orchard Drive

Since the installation of the parking permit program on Reese Place and Orchard Drive, the instance of patrons parking in residential zones and walking to Raising Cane's has decreased. Parking utilization on Reese Place, the more accessible of the two streets, has decreased from 50.9 percent in August 2023 (when Raising Cane's was open but permit parking program was not yet in place) to 42.1 percent (when permit parking program was in place) in the evening. This was similar to parking utilization before Raising Cane's opened. However, some patrons do continue to utilize the neighborhood to idle in their cars while they eat takeout. Burbank Police Department has recently entered into a contract with a parking enforcement company that is conducting parking permit checks and has the opportunity to improve parking enforcement citywide. These parking control officers have been specifically deployed on Reese Place and Orchard Drive as a focused area of enforcement. City Council approved an amendment to the parking permit hours to 2PM-10PM in order to balance parking needs with neighboring businesses, which, in concert with improved enforcement, can allow more flexibility during the morning and lunch hours while improving enforcement during the more





problematic evening hours. When current permits expire, staff will contact all neighboring businesses to determine which ones desire permits and then re-allocate proportionally in an aggregate amount not to exceed 30 percent of the available street parking within the Permit Parking Zones.

Recommendation 3: Maintain the Orchard Street Temporary Closure for One Additional Year

The primary objective of the temporary closure on Orchard Drive is to keep the Raising Cane’s drive-through line from forming into the residential zone. This closure has been effective at doing so. Staff have considered whether to make it permanent with curb and landscaping installations. While queueing from Raising Canes continues to encroach into the Orchard Street and Olive Avenue public right of way in certain times of day, the incidence of this encroachment has decreased over time as the restaurant has become more established. Further, additional Raising Cane’s Restaurants in Hollywood, North Hollywood, and Northridge have opened or are expected to open within the next year. More restaurant openings could result in reduced demand at the Burbank location resulting in drive-through traffic no longer encroaching into public right of way. If this were to occur, the Orchard Street closure would no longer be necessary, and the City may consider removing it so that its secondary effects on pushing traffic to other nearby streets would also be eliminated. Given that making the closure permanent through permanent curb and drought-tolerant landscaping installations would make its removal more difficult later, and, given the uncertain impact the opening of more Raising Canes locations may have on the Burbank location, the closure should remain in place in its temporary condition for an additional year. During that time, store activity and drive-through activity can be monitored as additional Raising Cane’s Restaurants open nearby. Should drive-through activity continue to spill into the public right of way even after other restaurant locations open, it is recommended that a decision to make the closure permanent be considered at that time.

Additional Recommended Improvements

Recommendation 4: Recommend Speed Humps on Select Local Streets if Supported by Resident Petition

Analysis shows that nearly all local streets without speed humps display average 85th percentile vehicle speeds above the posted speed limit of 25 mph. Analysis shows that of the six street segments equipped with speed humps for both phases of data collection, 5 of them exhibit average speeds at or below the posted 25 mph speed limit. South Reese Place between





Olive Avenue and Oak Street had speed humps installed after Phase 1 data collection occurred (installation in September 2022), and they resulted in a reduction in speeds from 33 mph in January 2022 to 22 mph in January 2023. Data from the Rancho Providencia Neighborhood demonstrate that speed humps are effective at reducing overall average speeds on local streets.

The existing City Speed Hump Policy (**Appendix I**) lists eleven criteria that streets must fulfill in order to qualify for speed hump installation. If a street satisfies each of the criteria, then residents may initiate a petition for speed hump installation. Under the Policy, streets must have average speeds of 5 mph or higher over the 25 mph posted speed limit in order to qualify. They must also have minimum Average Daily Traffic (ADT) of 500 vehicles per day and no more than a maximum of 5,000 vehicles per day. Although 17 local streets within the Plan area exhibit average speeds above the posted speed limit, only 10 would qualify for speed humps under the current Policy. This leaves out segments with speeds just below 30 mph and ADT over 500 (e.g., Lamer Street between Olive Avenue and Oak Street is 29 mph and 634 ADT) and segments with speeds over 30 mph but ADT below 500 (e.g., Lomita Street between Verdugo Avenue and Oaks Street is 31 mph and 445 ADT). Given the demonstrated success of speed humps reducing vehicle speeds in this neighborhood, Staff recommends that local street segments in **Table S-11** shall be eligible for speed hump petitions without requiring Step 2 of the standard speed hump installation request process, which is a Preliminary Engineering Field Survey that collects vehicle speed and volume data. The data collected in the process of the Rancho Providencia Neighborhood Protection Plan serves as the Preliminary Engineering Field Survey. Per that data, staff recommend that the streets identified in **Table S-11** are pre-qualified to petition for speed humps.



Table S-11

Recommendations for the Installation of Speed Humps

SEGMENT #	STREET	SEGMENT	January 2023	
			ADT	85 th Percentile Speed*
3	Lincoln Street	Oak St to Alameda Av	400	31 mph
4	Myers Street	Oak St to Alameda Av	554	32 mph
6	Lamer Street	Oak St to Alameda Av	703	31 mph
7	Lamer Street	Olive Av to Oak St	634	29 mph
9	Parish Place	Olive Av to Oak St	1,141	30 mph
14	Sparks Street	Olive Av to Oak St	1,189	34 mph
15	Sparks Street	Oak St to Alameda Av	1,407	35 mph
16	Beachwood Drive	Oak St to Alameda Av	748	34 mph
19	Griffith Park Drive	Verdugo Av to Oak St	409	30 mph
20	Mariposa Street	Oak St to Alameda Av	1,483	30 mph
21	Mariposa Street	Verdugo Av to Oak St	1,174	32 mph
22	Virginia Avenue	Verdugo Av to Oak St	625	30 mph
23	Lomita Street	Verdugo Av to Oak St	447	31 mph
24	Glenwood Place	Verdugo Av to Oak St	565	33 mph
29	Angeleno Avenue	Virginia Av to Victory Bl	749	28 mph

ADT = average daily traffic, vehicles per day

mph = miles per hour

Although this Plan would provide that these select neighborhood streets now qualify for the addition of speed humps, residents must still present a petition to the City demonstrating that neighbors support the measure. Each street that wishes to install speed humps must complete a petition to demonstrate support in order to certify installation, with at least 80 percent of the total impacted properties on the street contacted and 67 percent of the total impacted properties in support. The full petition criteria can be found on page 3 of the City Speed Hump Policy.

The City of Burbank Speed Hump Policy applies Citywide and is used to evaluate requests for speed humps on streets throughout the City. This Policy identifies criteria for eligibility and requires that eligible streets demonstrate a measured 85th-percentile speed of 30 mph or





higher **and** a minimum of 500 vehicles per day. Staff conducted extensive data collection in the Rancho Providencia Neighborhood, including measuring volumes and speeds on all streets on several different occasions during the evaluation and development of the Plan. This extensive data collection was able to show that the presence of speed humps in this neighborhood has a strong correlation with lower average speeds, and the data demonstrates the effectiveness of speed humps in reducing vehicle speeds to the speed limit or below. Given the amount of data analysis conducted and the conclusion of speed hump effectiveness in this specific neighborhood, Staff recommends that streets in the Rancho Providencia Neighborhood eligible for speed humps demonstrate a measured 85th-percentile speed of 30 mph or higher **or** a minimum of 500 vehicles per day. This means that additional streets would be eligible for speed humps that would otherwise not be eligible under the Citywide Speed Hump Policy. Three streets that fulfill the speed requirement but not the volume requirement (Lincoln Street between Oak Street and Alameda Avenue, Griffith Park Drive between Verdugo Avenue and Oak Street, and Lomita Street between Verdugo Avenue and Oak Street) would become eligible. Two streets that fulfill the volume criterion but not speed (Angeleno Avenue from Virginia Avenue to Victory Boulevard, Lamer Street from Olive Avenue to Oak Street) would also become eligible.

Recommendation 4.1: Speed Hump Design

Any speed hump design shall be consistent with City of Burbank design standards for either speed humps or speed cushions, which shall be deployed based on the context of each specific street and in coordination with Burbank Fire Department. To date in Burbank, speed humps have been deployed at individual locations and across larger neighborhoods. Although residents on the street segments identified in Table S-11 still need a petition to demonstrate sufficient community support, there is a possibility for several adjacent street segments to petition in favor of speed humps.

Policy Considerations

Fire Department staff advise that a concentration of speed humps in the neighborhood may slow emergency vehicle response time. Furthermore, the addition of speed humps will lead to increased wear and tear on emergency vehicles and therefore increased maintenance costs. When speed humps are deployed on a single street, as they were on South Reese Place, an emergency vehicle only has to navigate one set of speed humps while traveling to an emergency. However, several consecutive street segments with speed humps may make them unavoidable during an emergency response, which could potentially increase response times and add to overall fleet maintenance needs.





While not specific to this neighborhood, staff have received other citizen concerns related to speed humps. Cars traveling over speed humps at speed tend to make noise, and the necessary addition of signage can affect aesthetics of an adjacent residential property. It is also possible that speed humps can cause traffic to disperse to other roadways in the vicinity.

Effect on Vehicle Speed

Speed humps are effective at reducing vehicle speed. A comparison of the speed data collected before and after the installation of speed humps on South Reese Place demonstrated speed reduction occurred on that street. Further, a comparison of vehicle speeds measured on streets with pre-existing speed humps versus streets without them showed a positive correlation between presence of speed humps and slower average vehicle speeds. As a result, crash frequency declines where there are lower speeds. Further, even when collisions occur at low speeds, they tend to be less severe. Speed humps work as a safety measure to reduce vehicular speed.

Slotted Speed Humps Research from Other Cities

One possible solution to balance emergency response times against the vehicular safety benefits of installing speed humps is to ensure that the design of speed humps in the neighborhood include pass-by slots so that emergency vehicles do not have to slow down dramatically or navigate a vertical element in the roadway. This traffic calming element is called a “slotted speed hump” or a “speed cushion.” In this plan update, they shall be referred to as slotted speed humps. Field tests have shown that, while slotted speed humps may not reduce vehicle speed as much as speed humps that span the entire roadway, these measures still reduce vehicle speeds while providing little to no delay to fire vehicles.⁵ A Federal Highway Administration (FHWA) study found that in San Diego, fire vehicles can travel over the slotted speed humps at full speed with no delay by navigating through the slots in the middle of the roadway when the center pad was 5.5 feet wide. Similarly, the City of Sacramento found that slotted speed humps cause almost no delay to emergency response time. The city found using slotted speed humps instead of standard speed humps results in a savings of almost 13 seconds per typical roadway segment. In the City of Danville, it was found that no delay

⁵ “A Comparative Study of Speed Humps, Speed Slots and Speed Cushions,” LaToya Johnson and A.J. Nedzesky, https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa1304/Resources3/26%20-%20A%20Comparative%20Study%20of%20Speed%20Humps,%20Speed%20Slots%20and%20Speed%20Cushions.pdf





occurred in response time with slotted speed humps, compared to a 10 to 15 second delay observed with standard speed humps.⁶

There is no standard dimension in the State of California for a slotted speed hump, and speed measurements taken of different widths of slotted speed hump installations in Burbank suggest that the width of the center pad may determine the speed with which an emergency vehicle can navigate and also influences how well they slow regular vehicles. Design varies depending on the local jurisdiction. Standard Plans for the City of Sacramento and City of San Diego depict three pads across the roadway with a center pad of 5.5 feet straddling each lane, and the City of Stockton specifies a 6.5-foot width. Orange County Fire Authority's preferred standard is a 6-foot center pad. Ventura County uses two pads in each lane, with the widest being 6.5 feet.

Fire Response Time Versus Vehicular Speed Assessment

The City of Burbank Standard Plans includes a speed hump design standard without slots as well as slotted speed humps. Most speed humps in Burbank are the standard design, however, some streets have slotted speed humps including a segment of South Beachwood Drive in the Rancho Providencia Neighborhood as well as locations outside of the Rancho Providencia Neighborhood, including North Bel Aire Drive and North Beachwood Drive between Clark Avenue and Magnolia Boulevard. The City's standard slotted speed hump design features a 7-foot standard pad, although an older installation on South Beachwood Drive features a center pad width of 5 feet. Staff took speed measurements of streets with slotted speed humps and found that streets with the 7-foot center pad design reduced exhibited average speeds at or below the speed limit, while the street with a 5-foot center pad design exhibited average speeds above the speed limit. This is most likely due to motorists utilizing the narrower pad to bypass the speed hump, because the narrower slot more closely matches the wheelbase of standard vehicles. This is a dangerous and illegal maneuver due to the vehicle crossing the center line. Based on this data, Staff believes that the center pad is more effective in reducing vehicle speeds when it is 7 feet wide. A separate study of speed hump design⁷ also concluded that slotted speed humps reduce vehicle speed when they are at least 7 feet wide.

⁶ "Traffic Calming ePrimer," FHWA, https://safety.fhwa.dot.gov/speedmgt/ePrimer_modules/module5.cfm

⁷ Chang and Nolan, "An Evaluation of Speed Cushions on Neighborhood Streets: Balancing Emergency Vehicle Mobility with Traffic Calming Needs," (2007) https://safety.fhwa.dot.gov/speedmgt/ref_mats/fhwasa1304/Resources3/21%20-%20An%20Evaluation%20of%20Speed%20Cushions%20on%20Neighborhood%20Streets%20Balancing%20Emergency%20Vehicle%20Mobility%20with%20Traffic%20Calming%20Needs.pdf





Burbank Fire Department has identified that the width of its dual-tire fire vehicles cannot currently navigate through the 7-foot slotted speed hump design without a high likelihood of impacting the speed of the vehicle. Fire vehicles can navigate through the narrower 5-foot-wide slotted speed hump design, but those slotted speed humps do not slow regular vehicles compared to the 7-foot slotted speed hump design. Thus, a 5-foot-wide slotted speed hump design would more closely support maintaining existing emergency vehicle response times, but would not be as effective as 7 foot wide slotted speed humps in reducing overall vehicle speeds.

This plan identifies speed humps as the preferred method to reduce vehicle speeds and improve roadway safety in the neighborhood, but also notes the issues raised by the Fire Department that installing more speed humps within the Rancho Providencia Neighborhood may prolong emergency response times. While slotted speed humps with a center pad width of 7 feet were shown to reduce vehicle speeds while maintaining adequate fire response times in other California cities, Burbank Fire Department highlights that installation of speed humps of any kind in the Rancho Providencia Neighborhood will affect the City's existing excellent emergency response times in this area.

Based on this analysis, Staff is recommending:

1. Streets listed in Table S-11 will be eligible for the installation of slotted speed humps with a supporting petition per the guidelines in the Speed Hump Policy.
2. For streets that have met the petition requirements, slotted speed humps shall be installed to reduce the impacts to emergency response while also reducing vehicle speeds, as approved by the Public Works Director and Fire Chief.





Recommendation 5: No Additional Street Closures Recommended

Staff does not recommend any additional street closures in the Rancho Providencia Neighborhood. City Council approved the closure on South Orchard Drive in order to separate the residential properties from the traffic accessing the Raising Cane's drive-through. This closure has addressed the immediate concern of queuing on Orchard Drive in front of residential properties. Further, it is recommended that this closure remain a temporary closure so that future restaurant activity and the opening of other nearby Raising Cane's locations can be evaluated to determine if the closure remains warranted. There is no other location in the neighborhood where drive-through queuing spills out into the residential neighborhood, which is the justification for the ongoing Orchard Street closure. While the data show that additional trips from the Orchard Street closure likely have been diverted to nearby streets, vehicle volumes on those streets do not exceed levels that are to be expected on any other typical residential street. Therefore, it is not recommended that additional street closures be implemented as part of this plan.





Appendix A

Average Daily Traffic and Speeds

January 2022





Appendix B

License Plate Entering/Exiting Data

January 2022





Appendix C
Parking Demand Data
January 2022





Appendix D
Turning Movement Counts
January 2022





Appendix E

Community Meeting Materials



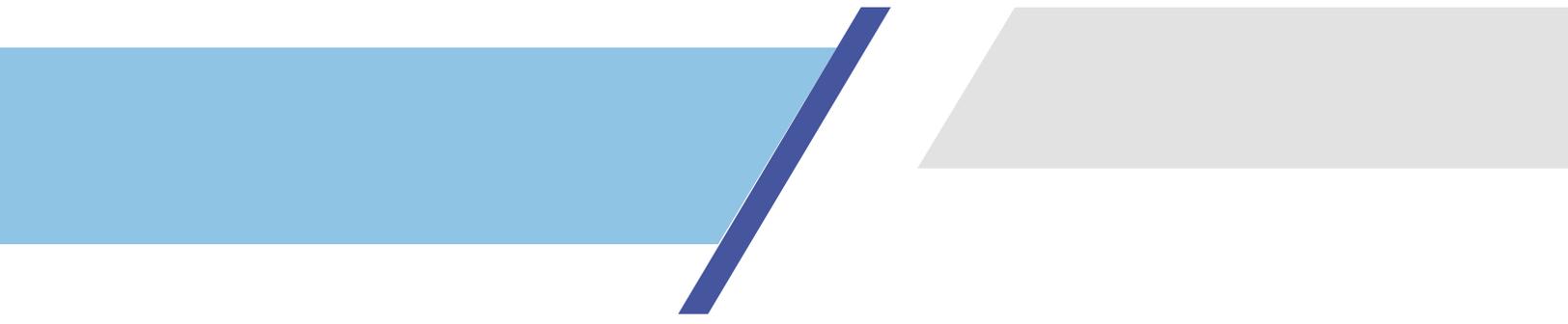


Appendix F

Average Daily Traffic and Speeds

Intermediate Data 2022





Appendix G

Average Daily Traffic and Speeds

January 2023





Appendix H

License Plate Entry/Exit Data

January 2023





Appendix I

City of Burbank Speed Hump Policy

