University of California Los Angeles Student Chapter
Institute of Transportation Engineers

Trip Generation for Urban Gas Stations

Abstract

Before conducting the study, the ITE at UCLA Student Chapter hypothesized that gas stations that have a fast food restaurant located on the premises will lead to an increase in trip generation and the number of parked cars on the premises. The increase would be especially apparent during the lunch hours from 11am until 1pm.

In order to evaluate the above hypothesis, inbound and outbound trips at three gas stations containing a fast food restaurant on the premises were counted. Trips were counted for each site between 7 AM and 7 PM on weekdays (Monday, Tuesday, and Thursday) at each of the three sites. The counts were conducted on different days for the week: Site #1 = Monday December 15, 2008; Site #2 = Tuesday December 16, 2008; and Site #3 = Thursday March 26, 2009. Also the number of parked vehicles on the premise, excluding those at the gas pumps, was recorded every 15 minutes.

The gas stations were located at three different locations in the Los Angeles area. The first location was a Shell station located in downtown Los Angeles at the intersection of Olympic Blvd and Grand Ave. The Shell station contained a Subway inside the building that did not have any seating. The second location was a Chevron station at the intersection of Mindanao Way and Lincoln Blvd in the city of Marina Del Rey. This station contained a McDonald's inside the building with a drive through circling the building. The third location was also a Chevron station with a McDonalds attached. The station was located at the intersection of El Segundo Blvd and Sepulveda Blvd in the city of El Segundo. This last station was located in close proximity to many corporate offices, generating a significant number of pedestrian traffic during the lunch period. It should be noted though that the pedestrian, bicycle, truck, or transit traffic was not counted at any of the three sites.

The results of the data collection are summarized in the attached tables. Our hypothesis was confirmed at the third station (El Segundo) when compared to the off-peak hours of 1300 to 1500. The morning peak hours from 0700 to 0900 also had more trips. This is probably due to the land uses surrounding the site with the office workers coming to the station before they go to work in the morning.

Our hypothesis did not hold up well at the other two stations. The first station in downtown Los Angeles had a total of 261 incoming and outgoing cars during the lunch hours, while during the off-peak hours there were a total of 266 incoming and outgoing cars. The trips at the station were fairly constant all day. The second station had a total of 470 incoming and outgoing cars during the lunch hours, while during the off-peak hours it had a total of 589 incoming and outgoing cars. Also, according to the Parking Generation table, all three stations had much lower parking generation rates.

Stations 1 and 2 had more parked cars during the evening peak hour than the morning peak hour, while station 3 had much more parked cars in the morning peak hour than the evening peak hour. This is probably due to the employees at the surrounding offices buying food from McDonald's in the morning before work.

All three stations had a total of more cars exiting than leaving by about 100 cars. This is probably due to the number of parked cars at each station. Since many vehicles enter the premises and do not leave for a while, the counts tend to not match up as, if the cars had entered the premises and then left immediately afterwards.

Data Collection Site Overview

1. 504 W Olympic Blvd, Los Angeles, CA 90015
2. 4680 Lincoln Blvd, Marina Del Rey, CA 90292
3. 101 S Sepulveda Blvd, El Segundo, CA

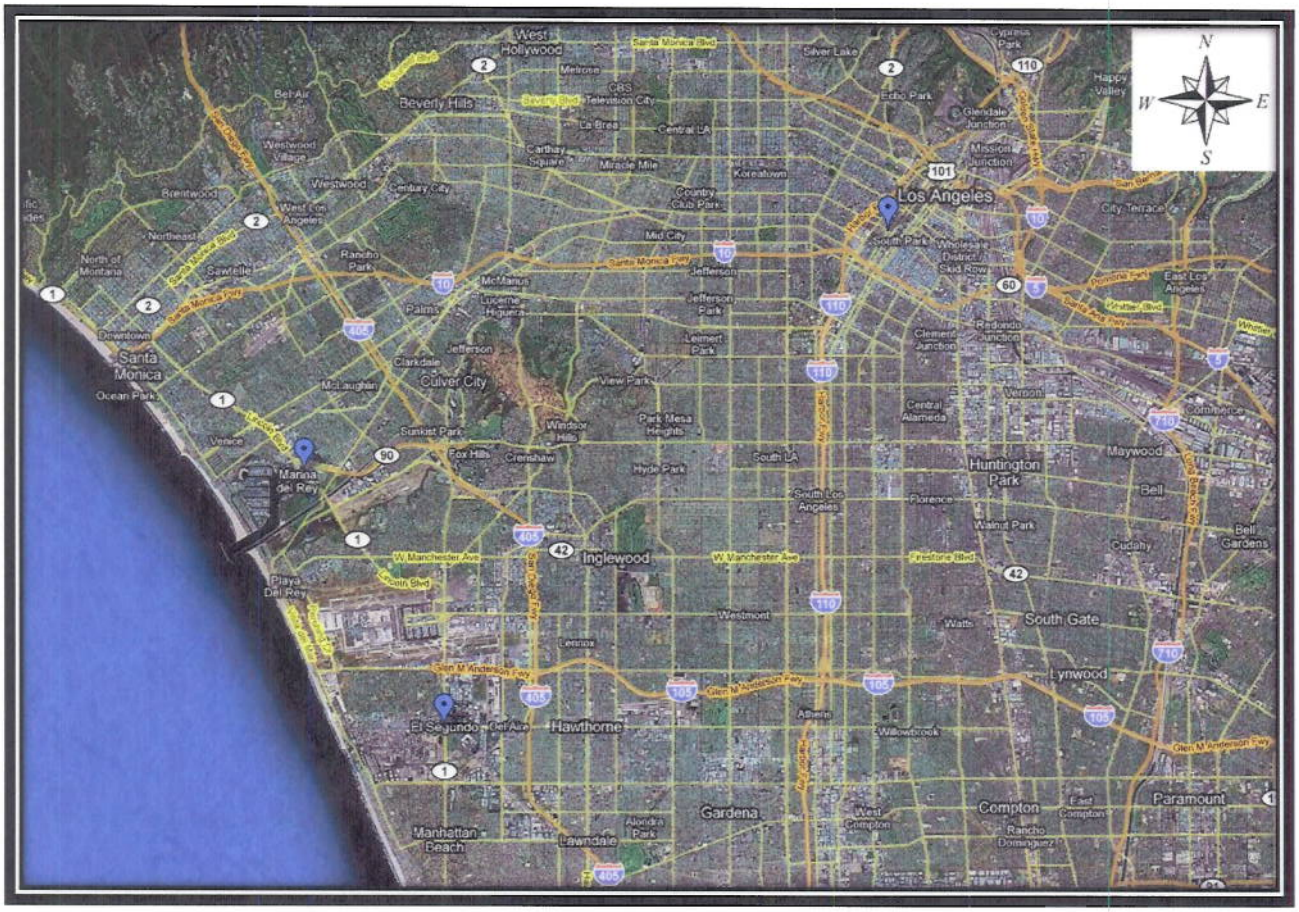

Figure 1: Locations of all three stations in Los Angeles area

Station 1 - Downtown LA

Figure 2: Northwest View of Site

Station 2 - Marina Del Rey

Figure 3: Northeast View of Site

Station 3 - El Segundo

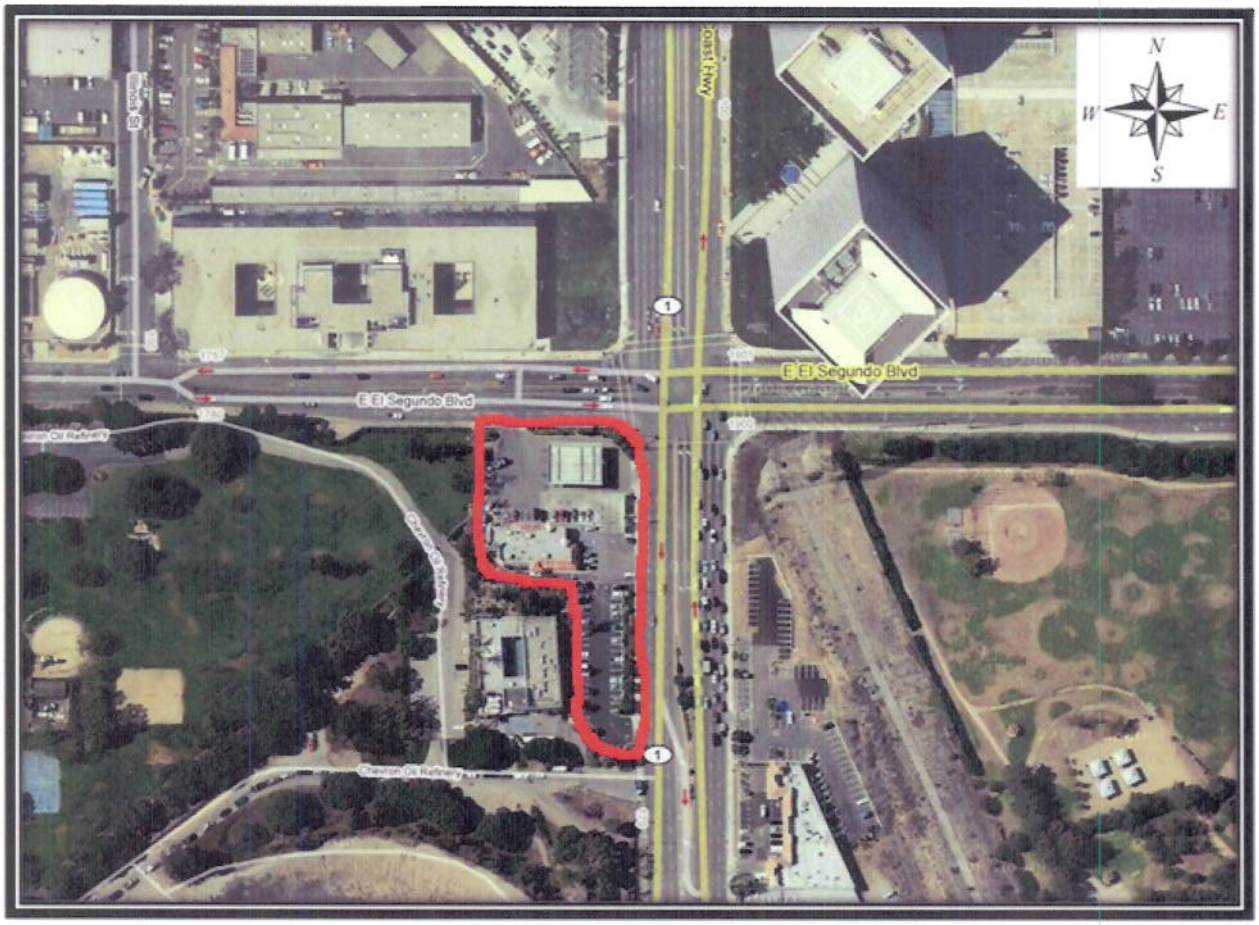

Figure 4: West View of Site

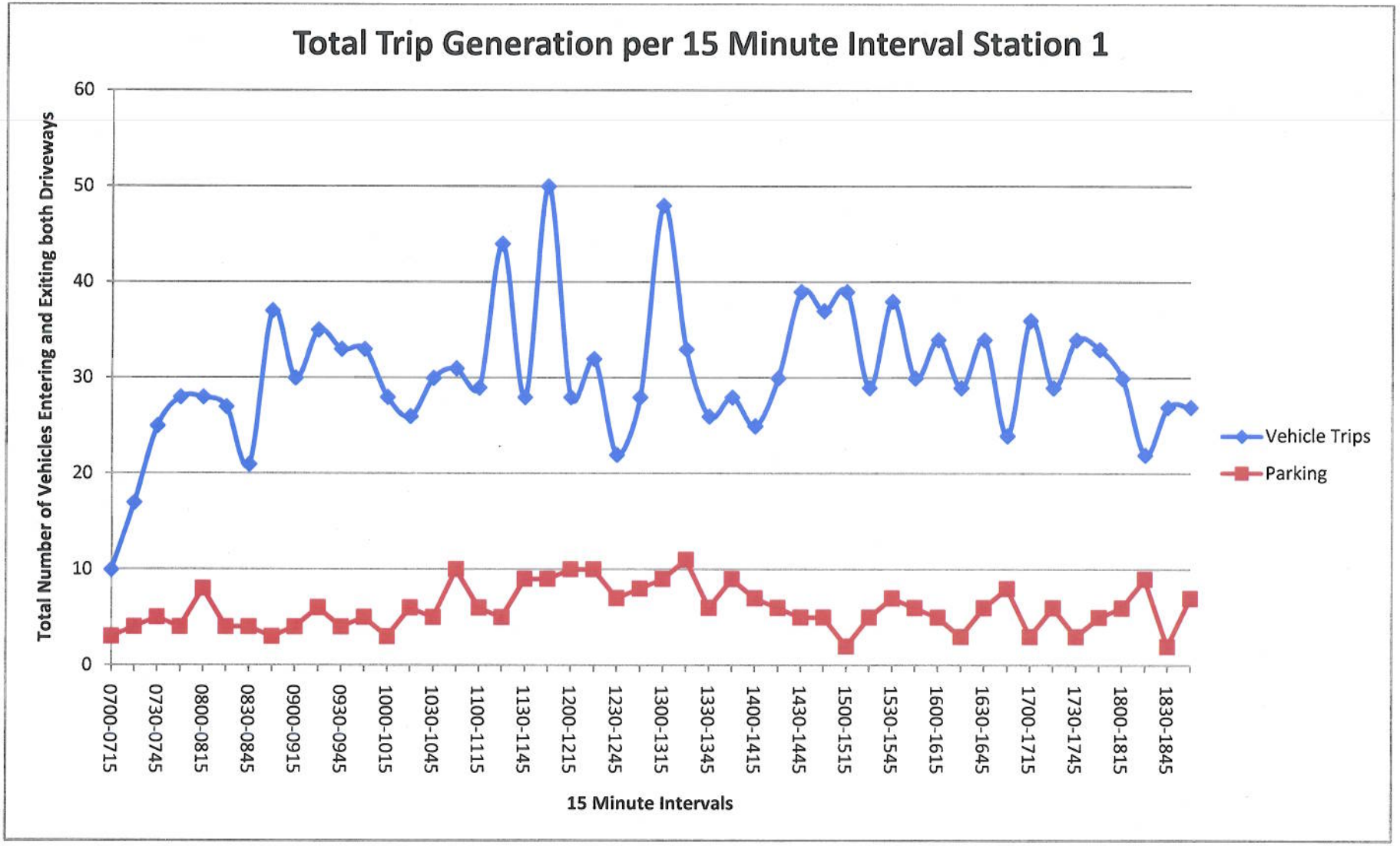

Figure 5: Total Trip Generation for Station 1 Including Vehicle Trips and Parking

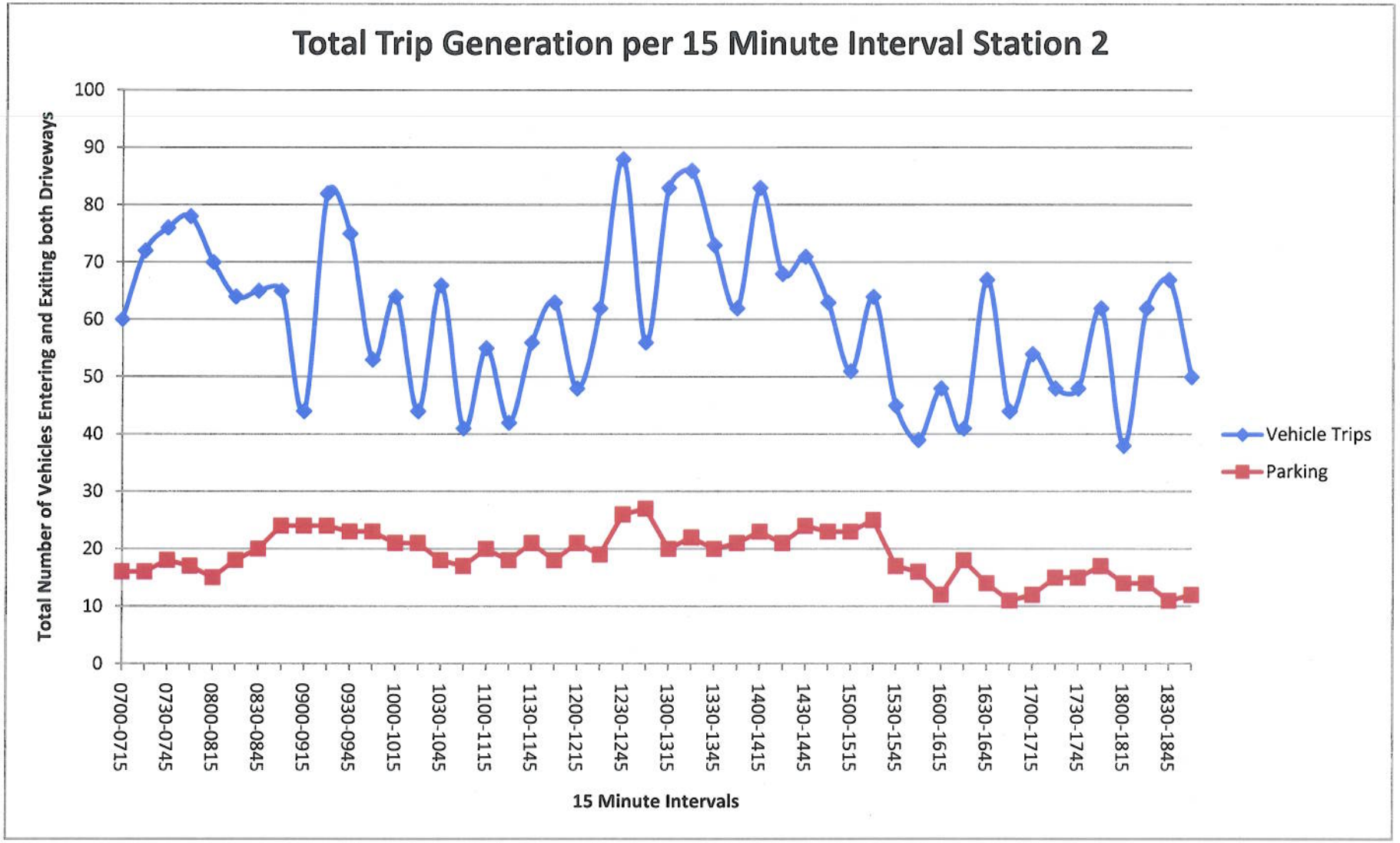

Figure 6: Total Trip Generation for Station 2 Including Vehicle Trips and Parking

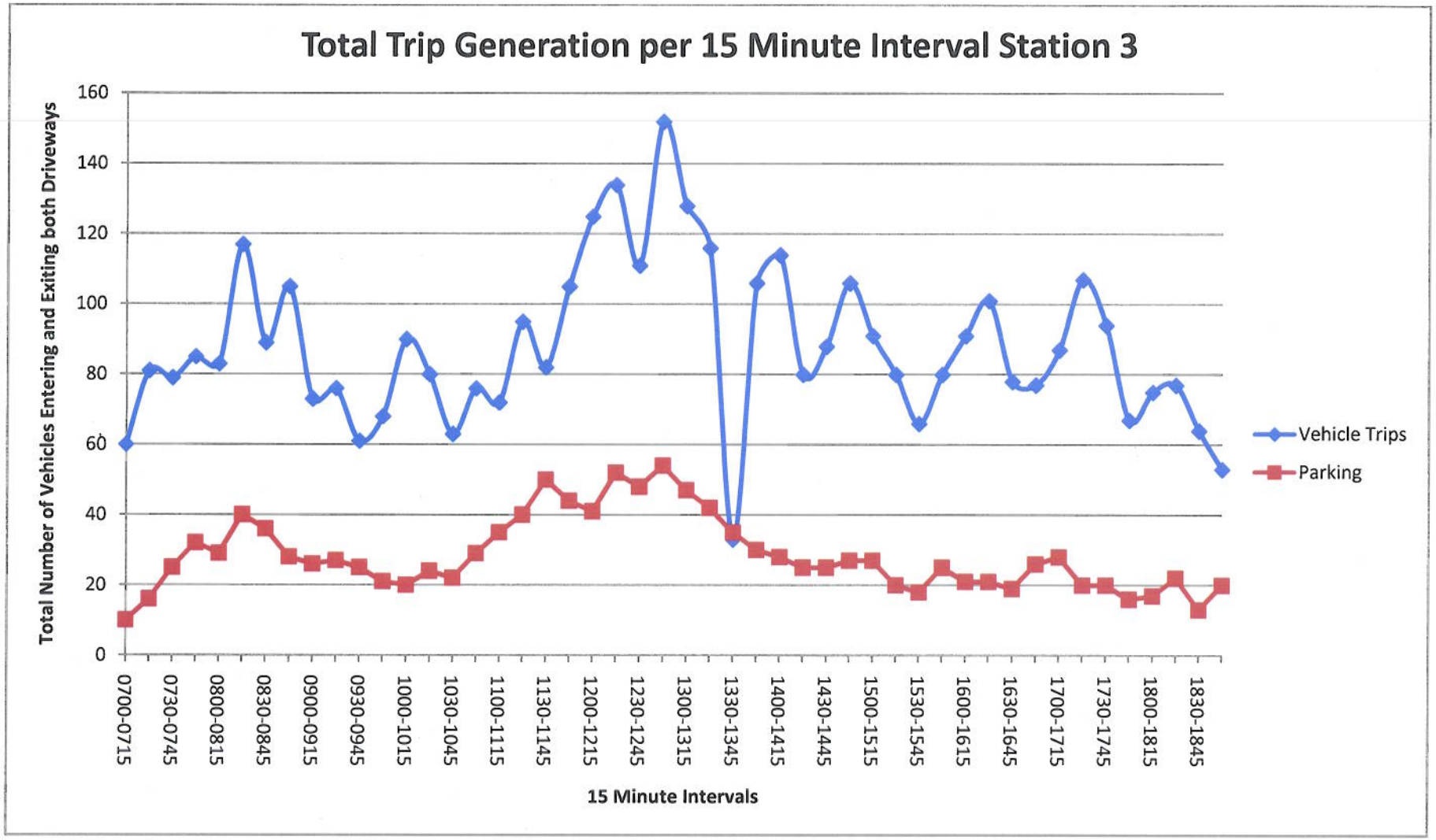

Figure 7: Total Trip Generation for Station 3 Including Vehicle Trips and Parking

Parking Demand Survey Form

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*(fill in all highlighted cells - * are required data)*

		Land Use Code*				
		Name of Site	Hanh's Texaco Service			
		Brief Description of Site	Shell gas station with Subway located inside			
Transit*	no	**City**	Los Angeles			
Area*	CBD	**State**	CA	**Country**	US	
TMP*	no					
Parking Price*	$0	Daily Rate	$	Hourly Rate		

Site Size*	18,828	**Units***	18827.55	**Occupancy***	10.88%	**Land Use**
Site Size		**Units**		**Occupancy**		
Site Size		**Units**		**Occupancy**		
Site Size		**Units**		**Occupancy**		

Number of Parking Spaces Provided at Site 16

Highest Observed Parking Demand for the following hours of the day *(hour beginning)**

Date	15-Dec-08						
Day	Monday						
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	5						
8:00 AM	8						
9:00 AM	6						
10:00 AM	10						
11:00 AM	9						
12 Noon	10						
1:00 PM	11						
2:00 PM	7						
3:00 PM	7						
4:00 PM	8						
5:00 PM	6						
6:00 PM	9						
7:00 PM							
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person	Forest Pfeiffer	**Organization**	ITE @ UCLA
Phone	714-399-5889		
Fax			
Email	pfife00@ucla.edu		
Notes			

Enter data on the web at www.ite.org

IF not entered on web site, please mail to:

Institute of Transportation Engineers, 1099 14th Street, NW Suite 300 West; Washington, DC 20005-3438

Comments to: ite_staff@ite.org

or rsm@dksassociates.com

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Parking Demand Survey Form

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*(fill in all highlighted cells - * are required data)*

		Land Use Code*				
		Name of Site	Chevron			
		Brief Description of Site				
Transit*	no		Chevron gas station with a McDonald's attached			
Area*	CND	**City**	Marina Del Rey			
TMP*	no	**State**	CA	**Country**	US	
Parking Price*	$0	Daily Rate	$	Hourly Rate		

Site Size*	30,099	**Units***	30099	**Occupancy***	10.69%	**Land Use**
Site Size		**Units**		**Occupancy**		
Site Size		**Units**		**Occupancy**		
Site Size		**Units**		**Occupancy**		

Number of Parking Spaces Provided at Site 23

Highest Observed Parking Demand for the following hours of the day *(hour beginning)**

Date	16-Dec-08						
Day	Tuesday						
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	18						
8:00 AM	24						
9:00 AM	24						
10:00 AM	21						
11:00 AM	21						
12 Noon	27						
1:00 PM	22						
2:00 PM	24						
3:00 PM	25						
4:00 PM	18						
5:00 PM	17						
6:00 PM	14						
7:00 PM							
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person	Sharon Liu	**Organization**	ITE @ UCLA
Phone	714-872-3645		
Fax			
Email	shuwen.sharon.liu@gmail.com		
Notes			

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*(fill in all highlighted cells - * are required data)*

			Land Use Code*				
			Name of Site	Chevron			
			Brief Description of Site				
Transit*	no		Chevron gas station with McDonald's attached				
Area*	CBD		**City**	El Segundo			
TMP*	no		**State**	CA	**Country**	US	
Parking Price*		$0	Daily Rate	$	Hourly Rate		

Site Size*	38,809	**Units***	38809	**Occupancy***	17.11%	**Land Use**	
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			

Number of Parking Spaces Provided at Site 63

Highest Observed Parking Demand for the following hours of the day *(hour beginning)**

Date	26-Mar-09						
Day	Thursday						
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	32						
8:00 AM	40						
9:00 AM	27						
10:00 AM	29						
11:00 AM	50						
12 Noon	54						
1:00 PM	47						
2:00 PM	28						
3:00 PM	27						
4:00 PM	26						
5:00 PM	28						
6:00 PM	22						
7:00 PM							
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person	Forest Pfeiffer	**Organization**	ITE @ UCLA
Phone	714-399-5889		
Fax			
Email	pfife00@ucla.edu		
Notes			

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Parking Summary Tables

Station 1

AM Peak Hours Total Parked Cars*	35	
PM Peak Hours Total Parked Cars**	59	
	Time	**Number of Parked Cars**
AM Peak Hour Parked Cars	0715-0815	21
PM Peak Hour Parked Cars	1515-1615	23

Station 2

AM Peak Hours Total Parked Cars*	144	
PM Peak Hours Total Parked Cars**	195	
	Time	**Number of Parked Cars**
AM Peak Hour Parked Cars	0800-0900	77
PM Peak Hour Parked Cars	1500-1600	81

Station 3

AM Peak Hours Total Parked Cars*	216	
PM Peak Hours Total Parked Cars**	261	
	Time	**Number of Parked Cars**
AM Peak Hour Parked Cars	0745-0845	137
PM Peak Hour Parked Cars	1615-1715	94

** Total number of parked cars during hours of 7am to 9am*
*** Total number of parked cars during hours of 3pm to 6pm*

MOTOR VEHICLE TRIP GENERATION DATA | **OTHER MODES TRIP GENERATION**

Trip Generation		Time Period	Vehicle Trips	RATE Vehicle Trips/1000SF	ITE Trip Gen. Rate/1000SF*	RATE Vehicle Trips/ Fueling Station	ITE Trip Gen. Rate/Fueling Station**	Bicycle Trips	Pedestrian Trips	Total Trips
Site 1	**AM Peak Hour**	0845 - 0945	135	7.17	63.50	16.88	12.58	N/A	N/A	135
	PM Peak Hour	1500 - 1600	136	7.22	52.40	17.00	15.65	N/A	N/A	136
	Other Peak Hours	1100 - 1200	151	8.02	N/A	18.88	N/A	N/A	N/A	151
Site 2	**AM Peak Hour**	0715 - 0815	296	9.83	54.81	24.67	10.56	N/A	N/A	296
	PM Peak Hour	1630 - 1730	213	7.08	46.14	17.75	13.57	N/A	N/A	213
	Other Peak Hours	1230 - 1330	313	10.40	N/A	26.08	N/A	N/A	N/A	313
Site 3	**AM Peak Hour**	0800 - 0900	394	10.15	54.81	32.83	10.56	N/A	N/A	394
	PM Peak Hour	1645 - 1745	365	9.41	46.14	30.42	13.57	N/A	N/A	365
	Other Peak Hours	1215 - 1315	525	13.53	N/A	43.75	N/A	N/A	N/A	525

ITE Trip Generation Rates from ITE Trip Generation Manual 8th Edition
*Fast Food - Site 1 uses Fast Food without Drive-Through Window (Code #933) and sites 2 and 3 use Fast-Food with Drive-Through Window land use (Code #934)
**Gas Station - Site 1 uses Gasoline/Service Station (Code #944) and Stations 2 and 3 use Gasoline/Service Station with Convenience Market (Code #945)
note: Site 1 has 8 fueling stations
Site 2 has 12 fueling stations
Site 3 has 12 fueling stations

MOTOR VEHICLE PARKING GENERATION DATA

Motor Vehicle Parking Generation		Time Peak Hour	Number of Vehicles	Rate eg. Vehicles/1000SF	ITE Parking Gen Rate compare *	Bicycle Parking
Site 1	**Day 1**	1130 - 1230	38	2.02	12.33	N/A
Site 2	**Day 1**	0845 - 0945	95	3.16	14.81	N/A
Site 3	**Day 1**	1215 - 1315	201	5.18	14.81	N/A

ITE Parking Generation Rates from ITE Trip Generation Manual 3rd Edition
*Fast Food - Site 1 uses Fast Food without Drive-Through Window (Code #933) and sites 2 and 3 use Fast-Food with Drive-Through Window land use (Code #934)

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Trip Generation Data Form (Part 1)

[Station 1]

Land Use/Building Type:[1] Gas Station	ITE Land Use Code:
Source: Field Observations	Source No. (*ITE use only*):
Name of Development: Hunk's Texaco Service - Shell station with Subway	Day of the Week: Monday
City: Los Angeles State/Province: CA Zip/Postal Code: 90045	Day: 15 Month: December Year: 2003
Country: United States	Metropolitan Area:

1. For fast-food land use, please specify if hamburger- or nonhamburger-based.

Location Within Area:

☐ (1) CBD ☐ (3) Suburban (Non-CBD) ☐ (5) Rural
☐ (2) Urban (Non-CBD) ☐ (4) Suburban CBD ☐ (6) Freeway Interchange Area (Rural)
☐ (7) Not Given

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated		Actual	Estimated
_____ (1) Employees (#)	☐	☐	_____ (9) Parking Spaces (% occupied: _____)	☐	☐
_____ (2) Persons (#)	☐	☐	_____ (10) Beds (% occupied: _____)	☐	☐
_____ (3) Total Units (#) (indicate unit:_____)	☐	☐	_____ (11) Seats (#)	☐	☐
_____ (4) Occupied Units (#) (indicate unit:_____)	☐	☐	8 (12) Servicing Positions/Vehicle Fueling Positions	☒	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐	_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐	_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐	_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
			_____ (16) Other _____	☐	☐
_____ (8) Total Acres (% developed: _____)	☐	☐	_____ (17) Other _____	☐	☐

Detailed Description of Development:[3]

Shell station with Subway inside. No inside seating. Located next to a public pay parking lot and across the street from another public pay parking lot.

2. Definitions for several independent variables can be found in the *Trip Generation*, Second Edition, *User's Guide* Glossary.

3. Please provide all pertinent information to describe the subject project, including the presence of bicycle/pedestrian facilities. To report bicycle/pedestrian volumes, please refer to Part 4 of this data form.

Other Data:

Vehicle Occupancy (#):
_____ A.M. _____ P.M. _____ 24-hour %

Percent by Transit:
_____ A.M. % _____ P.M. % _____ 24-hour %

Percent by Carpool/Vanpool:
_____ A.M. % _____ P.M. % _____ 24-hour %

Employees by Shift:

	Start Time	End Time	Employees (#)
First Shift:	_____	_____	_____
Second Shift:	_____	_____	_____
Third Shift:	_____	_____	_____

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

At the time of this study, was there a TDM program (that may have impacted the trip generation characteristics of this site) underway?

☒ No

☐ Yes (If yes, please check appropriate box/boxes, describe the nature of the TDM program(s) and provide a source for any studies that may help quantify this impact. Attach additional sheets if necessary)

☐ (1) Transit Service
☐ (2) Carpool Programs
☐ (3) Vanpool Programs
☐ (4) Bicycle/Pedestrian Facilities and Site Improvements
☐ (5) Employer Support Measures
☐ (6) Preferential HOV Treatments
☐ (7) Transit and Ridesharing Incentives
☐ (8) Parking Supply and Pricing Management
☐ (9) Tolls and Congestion Pricing
☐ (10) Variable Work Hours/Compressed Work Weeks
☐ (11) Telecommuting
☐ (12) Other _____

Please Complete Form on Other Side

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Trip Generation Data Form (Part 2)

[Driveway 1 - Grand Ave]

Summary of Driveway Volumes ***(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)***

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:																		
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[2] Time: 0730 - 0830	31		29		60													
P.M. Peak Hour Generator[2] Time: 1530 - 1630	49		41		90													
Peak Hour Generator[3] Time (Weekend):																		

[1] **Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.**
[2] **Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.**
[3] **Highest hourly volume during the entire day. Please specify the peak hour.**
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00	47		35		82		3:00-4:00	47		38		85	
6:15-7:15							11:15-12:15	42		36		78		3:15-4:15	48		42		90	
6:30-7:30							11:30-12:30	47		29		76		3:30-4:30	49		44		93	
6:45-7:45							11:45-12:45	48		30		78		3:45-4:45	47		43		90	
7:00-8:00	23		23		46		12:00-1:00	35		26		61		4:00-5:00	43		43		86	
7:15-8:15	29		26		55		12:15-1:15	45		30		75		4:15-5:15	41		41		82	
7:30-8:30	31		29		60		12:30-1:30	43		28		71		4:30-5:30	41		40		81	
7:45-8:45	27		29		56		12:45-1:45	43		30		73		4:45-5:45	45		37		82	
8:00-9:00	28		38		66		1:00-2:00	42		27		69		5:00-6:00	47		30		77	

☒ **Check if Part 3, 4 and/or additional information is attached.**

Survey conducted by: Name: Forest Pfeiffer

Organization: ITE at UCLA

Address:

City/State/Zip:

Telephone #: Fax #: E-mail:

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: Forest Pfeiffer / ITE at UCLA **City/State:** Los Angeles, CA

Telephone Number: 714-399-5889

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information. [Driveway 1 - Grand Ave.]

Day of the week: Monday **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)**

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15	6	7			13	
12:15-12:30							12:15-12:30	13	6			19	
12:30-12:45							12:30-12:45	9	5			14	
12:45-1:00							12:45-1:00	7	8			15	
1:00-1:15							1:00-1:15	16	11			27	
1:15-1:30							1:15-1:30	11	4			15	
1:30-1:45							1:30-1:45	9	7			26	
1:45-2:00							1:45-2:00	6	5			11	
2:00-2:15							2:00-2:15	10	6			16	
2:15-2:30							2:15-2:30	12	6			18	
2:30-2:45							2:30-2:45	4	11			15	
2:45-3:00							2:45-3:00	12	12			24	
3:00-3:15							3:00-3:15	13	7			20	
3:15-3:30							3:15-3:30	10	7			27	
3:30-3:45							3:30-3:45	12	14			26	
3:45-4:00							3:45-4:00	12	10			22	
4:00-4:15							4:00-4:15	14	11			25	
4:15-4:30							4:15-4:30	11	9			20	
4:30-4:45							4:30-4:45	10	13			23	
4:45-5:00							4:45-5:00	8	10			18	
5:00-5:15							5:00-5:15	12	9			21	
5:15-5:30							5:15-5:30	11	8			19	
5:30-5:45							5:30-5:45	14	10			24	
5:45-6:00							5:45-6:00	10	6			16	
6:00-6:15							6:00-6:15	11	9			20	
6:15-6:30							6:15-6:30	9	4			13	
6:30-6:45							6:30-6:45	10	8			18	
6:45-7:00							6:45-7:00	8	9			17	
7:00-7:15	3	3			6		7:00-7:15						
7:15-7:30	4	6			10		7:15-7:30						
7:30-7:45	8	6			14		7:30-7:45						
7:45-8:00	8	8			16		7:45-8:00						
8:00-8:15	9	6			15		8:00-8:15						
8:15-8:30	6	9			15		8:15-8:30						
8:30-8:45	4	6			10		8:30-8:45						
8:45-9:00	9	7			16		8:45-9:00						
9:00-9:15	13	9			22		9:00-9:15						
9:15-9:30	12	7			19		9:15-9:30						
9:30-9:45	10	5			15		9:30-9:45						
9:45-10:00	15	5			20		9:45-10:00						
10:00-10:15	11	8			19		10:00-10:15						
10:15-10:30	7	8			15		10:15-10:30						
10:30-10:45	12	8			20		10:30-10:45						
10:45-11:00	11	6			17		10:45-11:00						
11:00-11:15	11	6			17		11:00-11:15						
11:15-11:30	8	13			21		11:15-11:30						
11:30-11:45	8	4			12		11:30-11:45						
11:45-12:00	20	12			32		11:45-12:00						

Institute of Transportation Engineers

Trip Generation Data Form (Part 2)

Summary of Driveway Volumes **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)** [Driveway 2- Olympic Blvd]

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[2] Time: 0800-0900	29		28		57													
P.M. Peak Hour Generator[2] Time: 1700-1800	26		26		52													
Peak Hour Generator[3] Time (Weekend):																		

[1] **Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.**
[2] **Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.**
[3] **Highest hourly volume during the entire day. Please specify the peak hour.**
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00	32		32		64		3:00-4:00	24		27		51	
6:15-7:15							11:15-12:15	37		35		72		3:15-4:15	22		19		41	
6:30-7:30							11:30-12:30	29		33		62		3:30-4:30	18		20		38	
6:45-7:45							11:45-12:45	22		32		54		3:45-4:45	18		19		37	
7:00-8:00	17		17		34		12:00-1:00	21		28		49		4:00-5:00	18		17		35	
7:15-8:15	22		21		43		12:15-1:15	27		28		55		4:15-5:15	21		20		41	
7:30-8:30	25		23		48		12:30-1:30	30		30		60		4:30-5:30	24		18		42	
7:45-8:45	24		24		48		12:45-1:45	31		31		62		4:45-5:45	23		18		41	
8:00-9:00	29		28		57		1:00-2:00	34		32		66		5:00-6:00	26		26		52	

☒ **Check if Part 3, 4 and/or additional information is attached.**

Survey conducted by: Name: Evangelos

Organization: ITE at UCLA

Address: _____

City/State/Zip: _____

Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: Guang Le / ITE at UCLA **City/State:** Los Angeles, CA

Telephone Number: 909-333-9325

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information. [Driveway 2 - Olympic Blvd]

Day of the week: Monday

(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15	6		9		15	
12:15-12:30							12:15-12:30	5		8		13	
12:30-12:45							12:30-12:45	4		4		8	
12:45-1:00							12:45-1:00	6		7		13	
1:00-1:15							1:00-1:15	12		9		21	
1:15-1:30							1:15-1:30	8		10		18	
1:30-1:45							1:30-1:45	5		5		10	
1:45-2:00							1:45-2:00	9		8		17	
2:00-2:15							2:00-2:15	3		6		9	
2:15-2:30							2:15-2:30	5		7		12	
2:30-2:45							2:30-2:45	12		9		21	
2:45-3:00							2:45-3:00	7		6		13	
3:00-3:15							3:00-3:15	7		12		19	
3:15-3:30							3:15-3:30	7		5		12	
3:30-3:45							3:30-3:45	6		6		12	
3:45-4:00							3:45-4:00	4		4		8	
4:00-4:15							4:00-4:15	5		4		9	
4:15-4:30							4:15-4:30	3		6		9	
4:30-4:45							4:30-4:45	6		5		11	
4:45-5:00							4:45-5:00	4		2		6	
5:00-5:15							5:00-5:15	8		7		15	
5:15-5:30							5:15-5:30	6		4		10	
5:30-5:45							5:30-5:45	5		5		10	
5:45-6:00							5:45-6:00	7		10		17	
6:00-6:15							6:00-6:15	5		5		10	
6:15-6:30							6:15-6:30	6		3		9	
6:30-6:45							6:30-6:45	4		5		9	
6:45-7:00							6:45-7:00	6		4		10	
7:00-7:15	2		2		4		7:00-7:15						
7:15-7:30	3		4		7		7:15-7:30						
7:30-7:45	7		4		11		7:30-7:45						
7:45-8:00	5		7		12		7:45-8:00						
8:00-8:15	7		6		13		8:00-8:15						
8:15-8:30	6		6		12		8:15-8:30						
8:30-8:45	6		5		11		8:30-8:45						
8:45-9:00	10		11		21		8:45-9:00						
9:00-9:15	2		6		8		9:00-9:15						
9:15-9:30	6		10		16		9:15-9:30						
9:30-9:45	8		10		18		9:30-9:45						
9:45-10:00	3		10		13		9:45-10:00						
10:00-10:15	6		3		9		10:00-10:15						
10:15-10:30	4		7		11		10:15-10:30						
10:30-10:45	4		6		10		10:30-10:45						
10:45-11:00	8		6		14		10:45-11:00						
11:00-11:15	6		6		12		11:00-11:15						
11:15-11:30	13		10		23		11:15-11:30						
11:30-11:45	11		5		16		11:30-11:45						
11:45-12:00	7		11		18		11:45-12:00						

Institute of Transportation Engineers

Trip Generation Data Form (Part 1)

[Station 2]

Land Use/Building Type:[1] Gas Station	ITE Land Use Code:
Source: Field Observation	Source No. (*ITE use only*):
Name of Development: Chevron station - with McDonald's	Day of the Week: Tuesday
City: Marina Del Rey State/Province: CA Zip/Postal Code: 90292	Day: 16 Month: December Year: 2003
Country: United States	Metropolitan Area:

1. For fast-food land use, please specify if hamburger- or nonhamburger-based.

Location Within Area:

☐ (1) CBD ☐ (3) Suburban (Non-CBD) ☐ (5) Rural
☐ (2) Urban (Non-CBD) ☐ (4) Suburban CBD ☐ (6) Freeway Interchange Area (Rural)
☐ (7) Not Given

Detailed Description of Development:[3]
McDonald's had a drive-through, and inside seating

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated		Actual	Estimated
_____ (1) Employees (#)	☐	☐	_____ (9) Parking Spaces (% occupied: _____)	☐	☐
_____ (2) Persons (#)	☐	☐	_____ (10) Beds (% occupied: _____)	☐	☐
_____ (3) Total Units (#) (indicate unit:_____)	☐	☐	_____ (11) Seats (#)	☐	☐
_____ (4) Occupied Units (#) (indicate unit:_____)	☐	☐	8 (12) Servicing Positions/Vehicle Fueling Positions	☒	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐	_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐	_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐	_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
			_____ (16) Other _____	☐	☐
_____ (8) Total Acres (% developed: _____)	☐	☐	_____ (17) Other _____	☐	☐

2. Definitions for several independent variables can be found in the *Trip Generation*, Second Edition, *User's Guide* Glossary.

3. Please provide all pertinent information to describe the subject project, including the presence of bicycle/pedestrian facilities. To report bicycle/pedestrian volumes, please refer to Part 4 of this data form.

Other Data:

Vehicle Occupancy (#):
_____ A.M. _____ P.M. _____ 24-hour %

Percent by Transit:
_____ A.M. % _____ P.M. % _____ 24-hour %

Percent by Carpool/Vanpool:
_____ A.M. % _____ P.M. % _____ 24-hour %

Employees by Shift:

First Shift:	Start Time _____	End Time _____	Employees (#) _____
Second Shift:	Start Time _____	End Time _____	Employees (#) _____
Third Shift:	Start Time _____	End Time _____	Employees (#) _____

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

At the time of this study, was there a TDM program (that may have impacted the trip generation characteristics of this site) underway?

☒ No

☐ Yes (If yes, please check appropriate box/boxes, describe the nature of the TDM program(s) and provide a source for any studies that may help quantify this impact. Attach additional sheets if necessary)

☐ (1) Transit Service
☐ (2) Carpool Programs
☐ (3) Vanpool Programs
☐ (4) Bicycle/Pedestrian Facilities and Site Improvements
☐ (5) Employer Support Measures
☐ (6) Preferential HOV Treatments
☐ (7) Transit and Ridesharing Incentives
☐ (8) Parking Supply and Pricing Management
☐ (9) Tolls and Congestion Pricing
☐ (10) Variable Work Hours/Compressed Work Weeks
☐ (11) Telecommuting
☐ (12) Other _____

Please Complete Form on Other Side

Institute of Transportation Engineers

Trip Generation Data Form (Part 2)

[Driveway 1 - Maintenance Way]

Summary of Driveway Volumes **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)**

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[3] Time: 0730 - 0830	64		59		123													
P.M. Peak Hour Generator[3] Time: 1700 - 1800	76		38		114													
Peak Hour Generator[3] Time (Weekend):																		

[1] **Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.**
[2] **Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.**
[3] **Highest hourly volume during the entire day. Please specify the peak hour.**
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00	66		39		105		3:00-4:00	49		28		77	
6:15-7:15							11:15-12:15	57		38		95		3:15-4:15	48		30		78	
6:30-7:30							11:30-12:30	65		47		112		3:30-4:30	37		24		61	
6:45-7:45							11:45-12:45	72		48		120		3:45-4:45	49		26		75	
7:00-8:00	57		40		97		12:00-1:00	67		43		110		4:00-5:00	60		31		91	
7:15-8:15	61		53		114		12:15-1:15	70		48		118		4:15-5:15	69		34		103	
7:30-8:30	64		59		123		12:30-1:30	79		42		121		4:30-5:30	72		43		115	
7:45-8:45	61		60		121		12:45-1:45	74		41		115		4:45-5:45	72		37		109	
8:00-9:00	59		56		115		1:00-2:00	79		46		125		5:00-6:00	76		38		114	

☐ **Check if Part 3, 4 and/or additional information is attached.**

Survey conducted by: Name: Sharon Lin / Quang Le

Organization: ITE at UCLA

Address:

City/State/Zip:

Telephone #: Fax #: E-mail:

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

ite Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: Quang Ye Sharon Lin / ITE at UCLA **City/State:** Marina Del Rey, Ca

Telephone Number: 714-872-3645

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information. [Driveway 1 - Mindanao Way]

Day of the week: Tuesday

(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15	11		8		19	
12:15-12:30							12:15-12:30	18		16		34	
12:30-12:45							12:30-12:45	25		13		38	
12:45-1:00							12:45-1:00	13		6		19	
1:00-1:15							1:00-1:15	24		13		37	
1:15-1:30							1:15-1:30	17		10		27	
1:30-1:45							1:30-1:45	20		12		32	
1:45-2:00							1:45-2:00	18		11		29	
2:00-2:15							2:00-2:15	22		18		40	
2:15-2:30							2:15-2:30	18		10		28	
2:30-2:45							2:30-2:45	29		10		39	
2:45-3:00							2:45-3:00	18		10		28	
3:00-3:15							3:00-3:15	11		7		18	
3:15-3:30							3:15-3:30	25		8		33	
3:30-3:45							3:30-3:45	7		9		16	
3:45-4:00							3:45-4:00	6		4		10	
4:00-4:15							4:00-4:15	10		9		19	
4:15-4:30							4:15-4:30	14		2		16	
4:30-4:45							4:30-4:45	19		11		30	
4:45-5:00							4:45-5:00	17		9		26	
5:00-5:15							5:00-5:15	19		12		31	
5:15-5:30							5:15-5:30	17		11		28	
5:30-5:45							5:30-5:45	19		5		24	
5:45-6:00							5:45-6:00	21		10		31	
6:00-6:15							6:00-6:15	12		4		16	
6:15-6:30							6:15-6:30	17		8		25	
6:30-6:45							6:30-6:45	20		15		35	
6:45-7:00							6:45-7:00	18		5		23	
7:00-7:15	4		6		15		7:00-7:15						
7:15-7:30	15		7		22		7:15-7:30						
7:30-7:45	16		13		29		7:30-7:45						
7:45-8:00	17		14		31		7:45-8:00						
8:00-8:15	13		19		32		8:00-8:15						
8:15-8:30	18		13		31		8:15-8:30						
8:30-8:45	13		14		27		8:30-8:45						
8:45-9:00	15		10		25		8:45-9:00						
9:00-9:15	15		6		21		9:00-9:15						
9:15-9:30	18		9		27		9:15-9:30						
9:30-9:45	12		13		25		9:30-9:45						
9:45-10:00	10		14		24		9:45-10:00						
10:00-10:15	18		12		30		10:00-10:15						
10:15-10:30	13		8		21		10:15-10:30						
10:30-10:45	15		17		32		10:30-10:45						
10:45-11:00	11		8		19		10:45-11:00						
11:00-11:15	20		9		29		11:00-11:15						
11:15-11:30	10		7		17		11:15-11:30						
11:30-11:45	18		12		30		11:30-11:45						
11:45-12:00	18		11		29		11:45-12:00						

Institute of Transportation Engineers

Trip Generation Data Form (Part 2)

Summary of Driveway Volumes **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)** [Driveway 2 - Lincoln Blvd]

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[3] Time: 0700-0715	98		94		189													
P.M. Peak Hour Generator[3] Time: 1545-1645	52		70		120													
Peak Hour Generator[3] Time (Weekend):																		

[1] **Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.**
[2] **Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.**
[3] **Highest hourly volume during the entire day. Please specify the peak hour.**
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00	49		62		111		3:00-4:00	49		73		122	
6:15-7:15							11:15-12:15	51		63		114		3:15-4:15	46		72		118	
6:30-7:30							11:30-12:30	46		71		117		3:30-4:30	48		64		112	
6:45-7:45							11:45-12:45	62		79		141		3:45-4:45	50		70		120	
7:00-8:00	90		99		189		12:00-1:00	63		81		144		4:00-5:00	42		67		109	
7:15-8:15	81		101		182		12:15-1:15	73		88		161		4:15-5:15	39		64		103	
7:30-8:30	75		90		165		12:30-1:30	94		98		192		4:30-5:30	36		62		98	
7:45-8:45	71		85		156		12:45-1:45	86		97		183		4:45-5:45	34		51		85	
8:00-9:00	71		78		149		1:00-2:00	83		96		179		5:00-6:00	41		57		98	

☐ **Check if Part 3, 4 and/or additional information is attached.**

Survey conducted by: Name: Danny Gandasetiawan / Sharon Liu
Organization: ITE at UCLA
Address:
City/State/Zip:
Telephone #: Fax #: E-mail:

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: Sharon Liu Danny Gandaset-Iwaan ITE at UCLA **City/State:** Marina Del Rey, CA

Telephone Number: 714-251-4448

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information. [Driveway 2 - Lincoln Blvd]

Day of the week: Tuesday

(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15	12		17		29	
12:15-12:30							12:15-12:30	9		19		28	
12:30-12:45							12:30-12:45	25		25		50	
12:45-1:00							12:45-1:00	17		20		37	
1:00-1:15							1:00-1:15	22		24		46	
1:15-1:30							1:15-1:30	30		29		59	
1:30-1:45							1:30-1:45	17		24		41	
1:45-2:00							1:45-2:00	14		19		33	
2:00-2:15							2:00-2:15	20		23		43	
2:15-2:30							2:15-2:30	15		25		40	
2:30-2:45							2:30-2:45	17		15		32	
2:45-3:00							2:45-3:00	12		23		35	
3:00-3:15							3:00-3:15	15		18		33	
3:15-3:30							3:15-3:30	11		20		31	
3:30-3:45							3:30-3:45	10		19		29	
3:45-4:00							3:45-4:00	13		16		29	
4:00-4:15							4:00-4:15	12		17		29	
4:15-4:30							4:15-4:30	13		12		25	
4:30-4:45							4:30-4:45	12		25		37	
4:45-5:00							4:45-5:00	5		13		18	
5:00-5:15							5:00-5:15	9		14		23	
5:15-5:30							5:15-5:30	10		10		20	
5:30-5:45							5:30-5:45	10		14		24	
5:45-6:00							5:45-6:00	12		19		31	
6:00-6:15							6:00-6:15	6		16		22	
6:15-6:30							6:15-6:30	15		22		37	
6:30-6:45							6:30-6:45	9		23		32	
6:45-7:00							6:45-7:00	12		15		27	
7:00-7:15	24		21		45		7:00-7:15						
7:15-7:30	23		27		50		7:15-7:30						
7:30-7:45	22		25		47		7:30-7:45						
7:45-8:00	21		26		47		7:45-8:00						
8:00-8:15	15		23		38		8:00-8:15						
8:15-8:30	17		16		33		8:15-8:30						
8:30-8:45	18		20		38		8:30-8:45						
8:45-9:00	21		19		40		8:45-9:00						
9:00-9:15	10		13		23		9:00-9:15						
9:15-9:30	28		27		55		9:15-9:30						
9:30-9:45	24		26		50		9:30-9:45						
9:45-10:00	14		18		32		9:45-10:00						
10:00-10:15	18		16		34		10:00-10:15						
10:15-10:30	8		15		23		10:15-10:30						
10:30-10:45	14		20		34		10:30-10:45						
10:45-11:00	11		11		22		10:45-11:00						
11:00-11:15	10		16		26		11:00-11:15						
11:15-11:30	14		11		25		11:15-11:30						
11:30-11:45	9		17		26		11:30-11:45						
11:45-12:00	16		18		34		11:45-12:00						

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Trip Generation Data Form (Part 1)

[Station 3]

Land Use/Building Type:[1] Gas Station	ITE Land Use Code:
Source: Field Observation	Source No. (*ITE use only*):
Name of Development: Chevron station - McDonald's attached	Day of the Week: Thursday
City: El Segundo State/Province: CA Zip/Postal Code: 90245	Day: 26 Month: March Year: 2009
Country: United States	Metropolitan Area:

1. For fast-food land use, please specify if hamburger- or nonhamburger-based.

Location Within Area:

☐ (1) CBD ☐ (2) Urban (Non-CBD) ☐ (3) Suburban (Non-CBD) ☐ (4) Suburban CBD ☐ (5) Rural ☐ (6) Freeway Interchange Area (Rural) ☐ (7) Not Given

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated		Actual	Estimated
_____ (1) Employees (#)	☐	☐	_____ (9) Parking Spaces (% occupied: _____)	☐	☐
_____ (2) Persons (#)	☐	☐	_____ (10) Beds (% occupied: _____)	☐	☐
_____ (3) Total Units (#) (indicate unit: _____)	☐	☐	_____ (11) Seats (#)	☐	☐
_____ (4) Occupied Units (#) (indicate unit: _____)	☐	☐	12 (12) Servicing Positions/Vehicle Fueling Positions	☒	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐	_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐	_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐	_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
			_____ (16) Other _____	☐	☐
_____ (8) Total Acres (% developed: _____)	☐	☐	_____ (17) Other _____	☐	☐

Detailed Description of Development:[3]

Chevron station with a McDonald's. The McDonald's had a drive-through and seating inside. There were many corporate offices located within a close proximity of the station

2. Definitions for several independent variables can be found in the *Trip Generation*, Second Edition, *User's Guide* Glossary.

3. Please provide all pertinent information to describe the subject project, including the presence of bicycle/pedestrian facilities. To report bicycle/pedestrian volumes, please refer to Part 4 of this data form.

Other Data:

Vehicle Occupancy (#):
_____ A.M. _____ P.M. _____ 24-hour %

Percent by Transit:
_____ A.M. % _____ P.M. % _____ 24-hour %

Percent by Carpool/Vanpool:
_____ A.M. % _____ P.M. % _____ 24-hour %

Employees by Shift:

	Start Time	End Time	Employees (#)
First Shift:	_____	_____	_____
Second Shift:	_____	_____	_____
Third Shift:	_____	_____	_____

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

At the time of this study, was there a TDM program (that may have impacted the trip generation characteristics of this site) underway?

☒ No

☐ Yes (If yes, please check appropriate box/boxes, describe the nature of the TDM program(s) and provide a source for any studies that may help quantify this impact. Attach additional sheets if necessary)

☐ (1) Transit Service
☐ (2) Carpool Programs
☐ (3) Vanpool Programs
☐ (4) Bicycle/Pedestrian Facilities and Site Improvements
☐ (5) Employer Support Measures
☐ (6) Preferential HOV Treatments
☐ (7) Transit and Ridesharing Incentives
☐ (8) Parking Supply and Pricing Management
☐ (9) Tolls and Congestion Pricing
☐ (10) Variable Work Hours/Compressed Work Weeks
☐ (11) Telecommuting
☐ (12) Other _____

Please Complete Form on Other Side

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Trip Generation Data Form (Part 2)

[Driveway #1 - El Segundo Blvd]

Summary of Driveway Volumes **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)**

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[2] Time: 0730 - 0830	75		99		174													
P.M. Peak Hour Generator[2] Time: 1645 - 1745	66		103		169													
Peak Hour Generator[3] Time (Weekend):																		

[1] **Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.**
[2] **Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.**
[3] **Highest hourly volume during the entire day. Please specify the peak hour.**
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00	54		80		134		3:00-4:00	45		90		135	
6:15-7:15							11:15-12:15	64		98		162		3:15-4:15	48		79		127	
6:30-7:30							11:30-12:30	63		112		175		3:30-4:30	49		83		132	
6:45-7:45							11:45-12:45	61		128		189		3:45-4:45	50		86		136	
7:00-8:00	69		70		139		12:00-1:00	61		131		194		4:00-5:00	46		92		138	
7:15-8:15	71		83		154		12:15-1:15	57		144		201		4:15-5:15	54		87		141	
7:30-8:30	75		99		174		12:30-1:30	61		146		207		4:30-5:30	61		96		157	
7:45-8:45	73		96		169		12:45-1:45	65		125		190		4:45-5:45	66		103		169	
8:00-9:00	72		93		165		1:00-2:00	59		113		172		5:00-6:00	59		111		170	

☒ **Check if Part 3, 4 and/or additional information is attached.**

Survey conducted by: Name: Forest Pfeiffer / Brooke Pfeiffer / Andrew Liu

Organization: ITE at UCLA

Address: _____

City/State/Zip: _____

Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

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Trip Generation Data Form (Part 3)

Name/Organization: Brooks Hunter, Andrew Lin Forest Heiffer / ITE at UCLA **City/State:** El Segundo, CA

Telephone Number: 714-399-5889

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information. [Driveway 1 - El Segundo Blvd]

Day of the week: Thursday *(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)*

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15	21		32		53	
12:15-12:30							12:15-12:30	14		33		47	
12:30-12:45							12:30-12:45	11		32		43	
12:45-1:00							12:45-1:00	15		34		49	
1:00-1:15							1:00-1:15	17		45		62	
1:15-1:30							1:15-1:30	18		35		53	
1:30-1:45							1:30-1:45	5		11		16	
1:45-2:00							1:45-2:00	19		22		41	
2:00-2:15							2:00-2:15	19		33		52	
2:15-2:30							2:15-2:30	4		23		27	
2:30-2:45							2:30-2:45	8		29		37	
2:45-3:00							2:45-3:00	19		28		47	
3:00-3:15							3:00-3:15	9		30		39	
3:15-3:30							3:15-3:30	9		29		38	
3:30-3:45							3:30-3:45	10		15		25	
3:45-4:00							3:45-4:00	17		16		33	
4:00-4:15							4:00-4:15	12		19		31	
4:15-4:30							4:15-4:30	10		33		43	
4:30-4:45							4:30-4:45	11		18		29	
4:45-5:00							4:45-5:00	13		22		35	
5:00-5:15							5:00-5:15	20		14		34	
5:15-5:30							5:15-5:30	17		42		59	
5:30-5:45							5:30-5:45	16		25		41	
5:45-6:00							5:45-6:00	6		30		36	
6:00-6:15							6:00-6:15	10		22		32	
6:15-6:30							6:15-6:30	14		23		37	
6:30-6:45							6:30-6:45	7		19		26	
6:45-7:00							6:45-7:00	4		9		13	
7:00-7:15	15		8		23		7:00-7:15						
7:15-7:30	16		12		28		7:30-7:45						
7:30-7:45	18		20		38		7:45-8:00						
7:45-8:00	20		30		50		8:00-8:15						
8:00-8:15	17		21		38		8:15-8:30						
8:15-8:30	20		28		48		8:30-8:45						
8:30-8:45	16		17		33		8:45-9:00						
8:45-9:00	19		27		46		9:00-9:15						
9:00-9:15	10		16		26		9:15-9:30						
9:15-9:30	8		13		21		9:30-9:45						
9:30-9:45	11		14		25		9:45-10:00						
9:45-10:00	6		15		21		10:00-10:15						
10:00-10:15	18		23		41		10:15-10:30						
10:15-10:30	15		22		37		10:30-10:45						
10:30-10:45	7		15		22		10:45-11:00						
10:45-11:00	12		11		23		11:00-11:15						
11:00-11:15	11		14		25		11:15-11:30						
11:15-11:30	15		19		34		11:30-11:45						
11:30-11:45	13		16		29		11:45-12:00						
11:45-12:00	15		31		46								

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Trip Generation Data Form (Part 2)

[Driveway 2 - Sepulveda Blvd]

Summary of Driveway Volumes **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)**

	Average Weekday (M-F)						Saturday						Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks
24-Hour Volume																		
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):																		
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[2] Time: 0500 - 0900	134		95		229													
P.M. Peak Hour Generator[2] Time: 1545 - 1645	134		80		214													
Peak Hour Generator[3] Time (Weekend):																		

[1] Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.
[2] Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
[3] Highest hourly volume during the entire day. Please specify the peak hour.
Please refer to the *Trip Generation User's Guide* for full definition of terms.

Hourly Driveway Volumes- Average Weekday (M-F)

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00							11:00-12:00	128		92		220		3:00-4:00	117		65		182	
6:15-7:15							11:15-12:15	143		102		245		3:15-4:15	116		74		190	
6:30-7:30							11:30-12:30	166		105		271		3:30-4:30	130		76		206	
6:45-7:45							11:45-12:45	180		106		286		3:45-4:45	134		80		214	
7:00-8:00	108		58		166		12:00-1:00	208		122		330		4:00-5:00	130		79		209	
7:15-8:15	104		70		174		12:15-1:15	210		114		324		4:15-5:15	120		82		202	
7:30-8:30	116		74		190		12:30-1:30	191		109		300		4:30-5:30	110		82		192	
7:45-8:45	123		82		205		12:45-1:45	161		88		249		4:45-5:45	111		85		196	
8:00-9:00	134		95		229		1:00-2:00	135		76		211		5:00-6:00	104		81		185	

☒ Check if Part 3, 4 and/or additional information is attached.

Survey conducted by: Name: Siriaya Tritipeskul / Deborah Duran / Matt Bennett
Organization: ITE at UCLA
Address:
City/State/Zip:
Telephone #: Fax #: E-mail:

Please return to: Institute of Transportation Engineers
Technical Projects Division
1099 14th Street, NW, Suite 300 West
Washington, DC 20005-3438 USA
Telephone: +1 202-289-0222
Fax: +1 202-289-7722
ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: Deborah Puan, Matt Bennett / Sirinya Tritipeskul / ITE at UCLA **City/State:** El Segundo, CA

Telephone Number: 818-521-5024

Detailed Driveway Volumes: Attach this sheet to Parts 1 and 2 if you are providing additional information.

[Driveway 2 - Sepulveda Blvd

Day of the week: Thursday

(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)

A.M. Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
12:00-12:15							12:00-12:15	43		29		72	
12:15-12:30							12:15-12:30	58		29		87	
12:30-12:45							12:30-12:45	43		25		68	
12:45-1:00							12:45-1:00	64		39		103	
1:00-1:15							1:00-1:15	45		21		66	
1:15-1:30							1:15-1:30	39		24		63	
1:30-1:45							1:30-1:45	13		4		17	
1:45-2:00							1:45-2:00	38		27		65	
2:00-2:15							2:00-2:15	41		21		62	
2:15-2:30							2:15-2:30	32		21		53	
2:30-2:45							2:30-2:45	27		24		51	
2:45-3:00							2:45-3:00	35		24		59	
3:00-3:15							3:00-3:15	39		13		52	
3:15-3:30							3:15-3:30	25		17		42	
3:30-3:45							3:30-3:45	24		17		41	
3:45-4:00							3:45-4:00	29		18		47	
4:00-4:15							4:00-4:15	38		22		60	
4:15-4:30							4:15-4:30	39		19		58	
4:30-4:45							4:30-4:45	28		21		49	
4:45-5:00							4:45-5:00	25		17		42	
5:00-5:15							5:00-5:15	28		25		53	
5:15-5:30							5:15-5:30	29		19		48	
5:30-5:45							5:30-5:45	29		24		53	
5:45-6:00							5:45-6:00	18		13		31	
6:00-6:15							6:00-6:15	32		11		43	
6:15-6:30							6:15-6:30	28		12		40	
6:30-6:45							6:30-6:45	19		19		38	
6:45-7:00							6:45-7:00	23		17		40	
7:00-7:15	29		8		37		7:00-7:15						
7:15-7:30	33		20		53		7:15-7:30						
7:30-7:45	24		17		41		7:30-7:45						
7:45-8:00	22		13		35		7:45-8:00						
8:00-8:15	25		20		45		8:00-8:15						
8:15-8:30	45		24		69		8:15-8:30						
8:30-8:45	31		25		56		8:30-8:45						
8:45-9:00	33		26		59		8:45-9:00						
9:00-9:15	24		23		47		9:00-9:15						
9:15-9:30	33		22		55		9:15-9:30						
9:30-9:45	21		15		36		9:30-9:45						
9:45-10:00	29		18		47		9:45-10:00						
10:00-10:15	30		19		49		10:00-10:15						
10:15-10:30	25		18		43		10:15-10:30						
10:30-10:45	24		17		41		10:30-10:45						
10:45-11:00	33		20		53		10:45-11:00						
11:00-11:15	28		19		47		11:00-11:15						
11:15-11:30	35		26		61		11:15-11:30						
11:30-11:45	29		24		53		11:30-11:45						
11:45-12:00	36		23		59		11:45-12:00						