

University of California, Los Angeles
Institute of Transportation Engineers, Student Chapter
Data Collection Project Report

To: Karen Aspelin, ITE Western District
From: Danny Gandasetiawan, ITE @ UCLA DCP Manager

Subject: 2010 Data Collection Project Report
Date: June 20, 2010

Introduction

The Data Collection Project was created by the ITE Western District to encourage Student Chapter involvement with the profession and the field by collecting relevant transportation data. An RFP submitted by the ITE Western District provided a list of land uses that needed a source of accurate data. The ITE Student Chapter at UCLA has chosen coffee shops with drive-through services as their land use.

Motivation

ITE Student Chapter at UCLA strives to work on the Data Collection Project to provide the necessary results required in the RFP, while creating networking bonds with ITE professionals and Student Chapter mentors. Each year, the grant received for completing the Data Collection Project will be used to help fund students to go to the ITE Western District Annual Meeting.

Problem Statement

In recent years, the number of coffee drinkers in a hurry has drastically increased. Therefore, accurate data of coffee shops with drive through services is crucial. The ITE Western District initially requested data because there may be a lack of current data for certain land uses.

Methods/Procedure

The data collection process consists of trip generation, parking demand, and queuing data. Data collection was done at three locations from 7am – 6pm, taking counts in 15-minute intervals. Cars, pedestrians, and bicyclists were all accounted for. Parking and queue counts were made at the end of each 15 minute interval. In total, approximately 60 person-hours were spent collecting data. Approximately 20 hours will be spent compiling and analyzing data, and writing deliverables.

The first location was a Starbucks Coffee in Santa Monica, and data was collected on Wednesday, February 24, 2010. One main difference about the land use was that it had a one-way parking lot. The second location was also a Starbucks Coffee in North Hollywood, and data was collected on Thursday, March 11, 2010. A notable characteristic of this location was that it shared a parking lot with California Credit Union. This made it difficult to determine whether patrons were visiting the bank or the coffee shop. However it was possible to count patrons parking on the California Credit Union side as pedestrians. The third location was in the city of Los Angeles, and data was collected on Wednesday, March 17, 2010.

Results

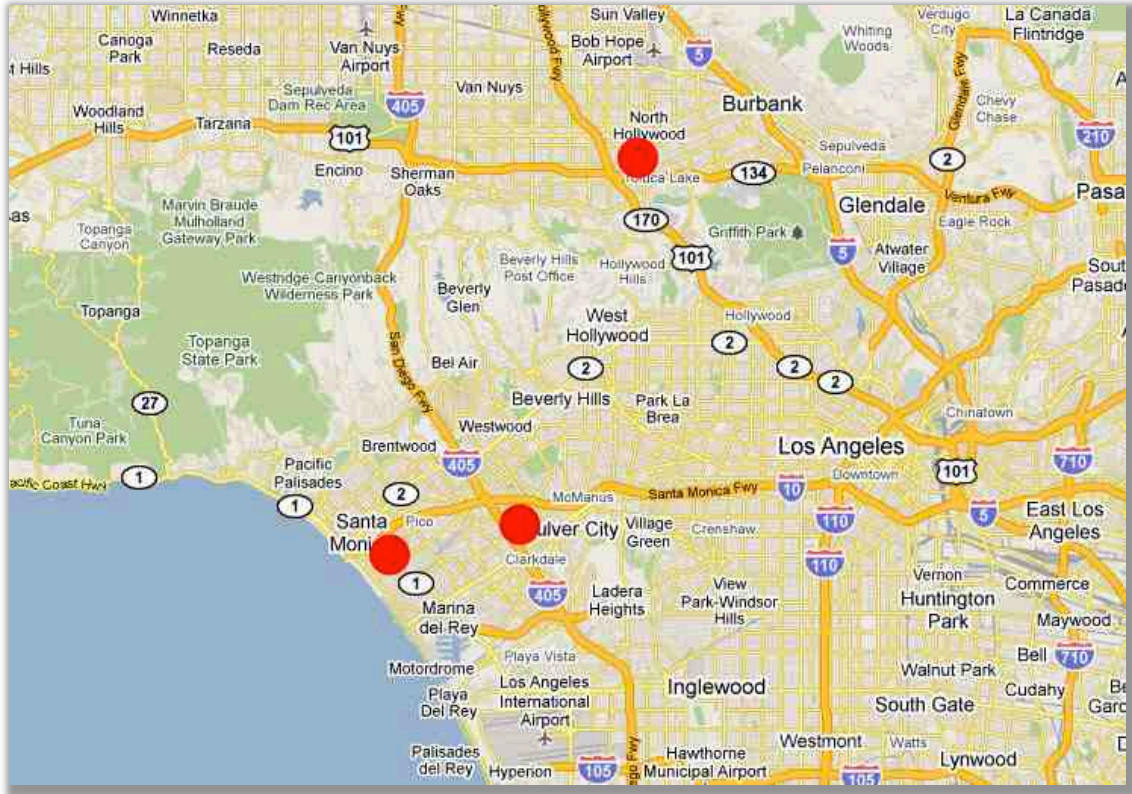
The tables and charts below show a summary of the three locations for the duration of the data-collecting period. Tables also include the ITE Parking Demand Survey Forms and the ITE Trip Generation Forms.

Conclusions

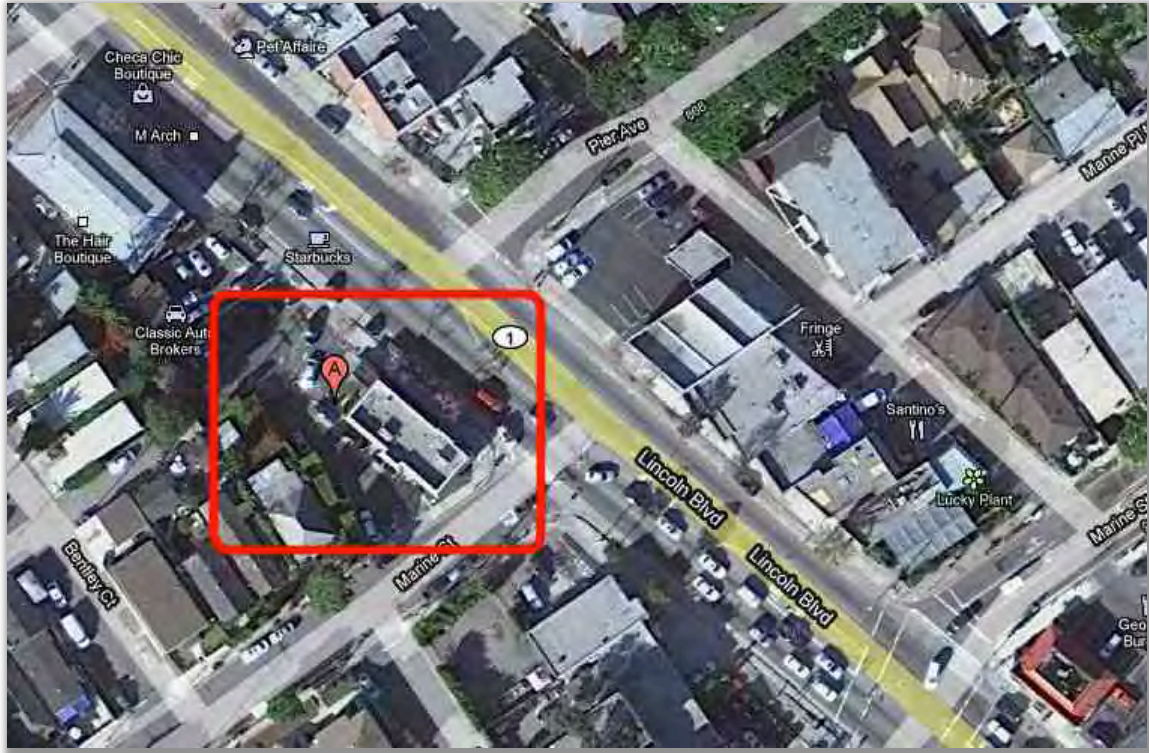
The tables and charts above show a summary of the data collected at the three locations. Simple analysis shows that the three sites were fairly similar in their overall trends. Morning peak hours generally occurred from 7am-9am, and there was a second local maximum around noon. The major influx of drivers was assumed to be due to the morning rush and lunch hour. The most notable analysis of this data was that while the number of trips observed by the store was similar, there was little correlation between trip generation and square footage of the location.

Data Collection Site Overview

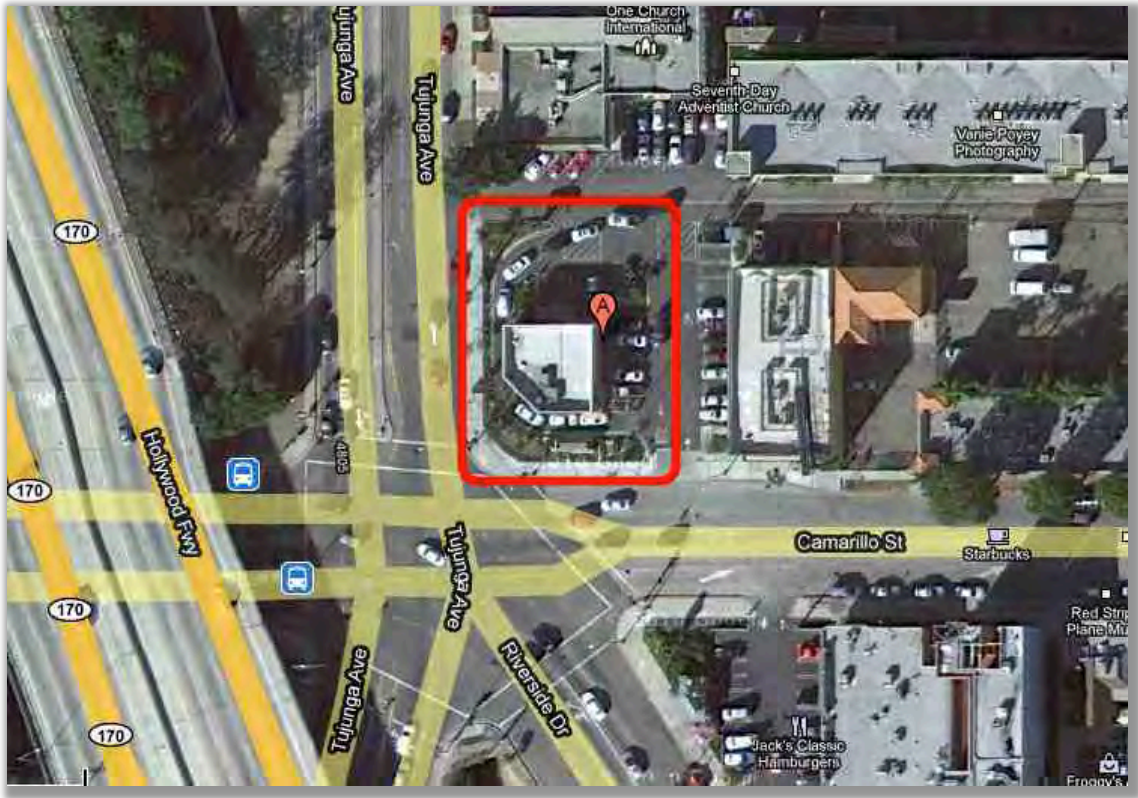
1. 3020 Lincoln Blvd., Santa Monica, CA 90405
2. 11331 Camarillo St., North Hollywood, CA 91602
3. 3470 S Sepulveda Blvd., Los Angeles, CA 90034



Location 1: Santa Monica, CA



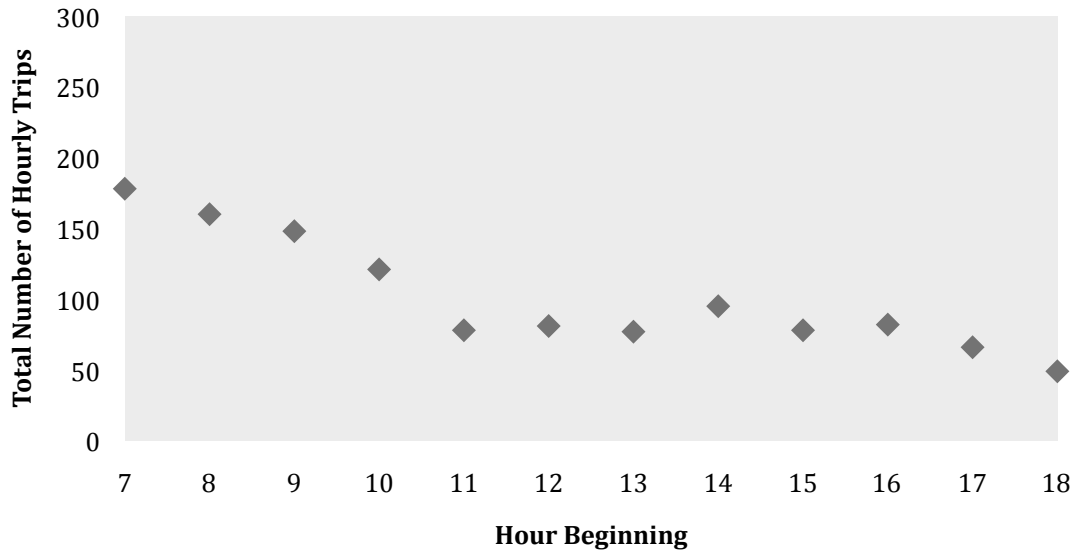
Location2: North Hollywood, CA



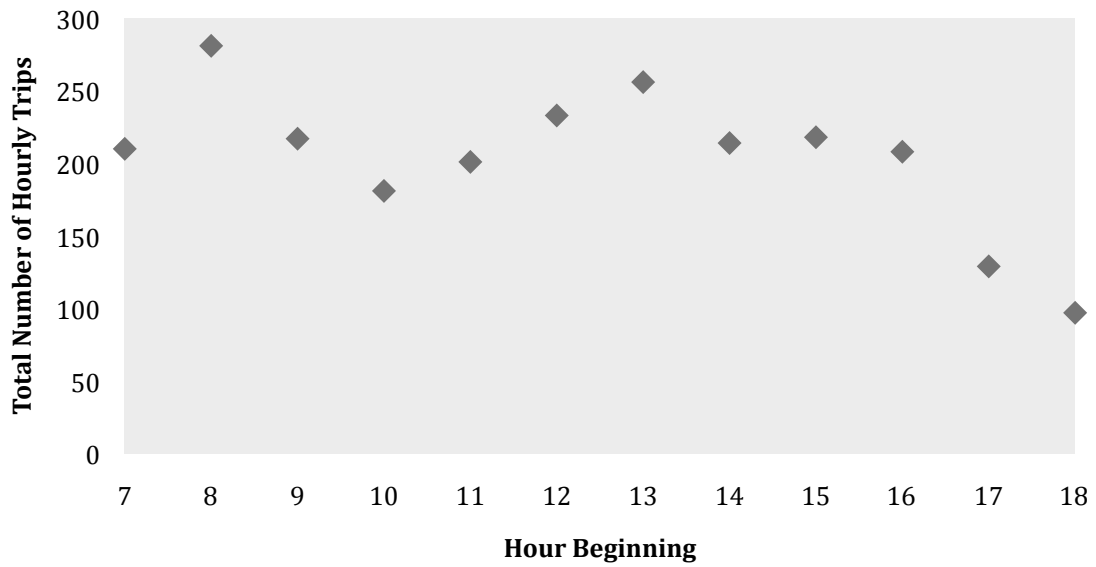
Location3: Los Angeles, CA



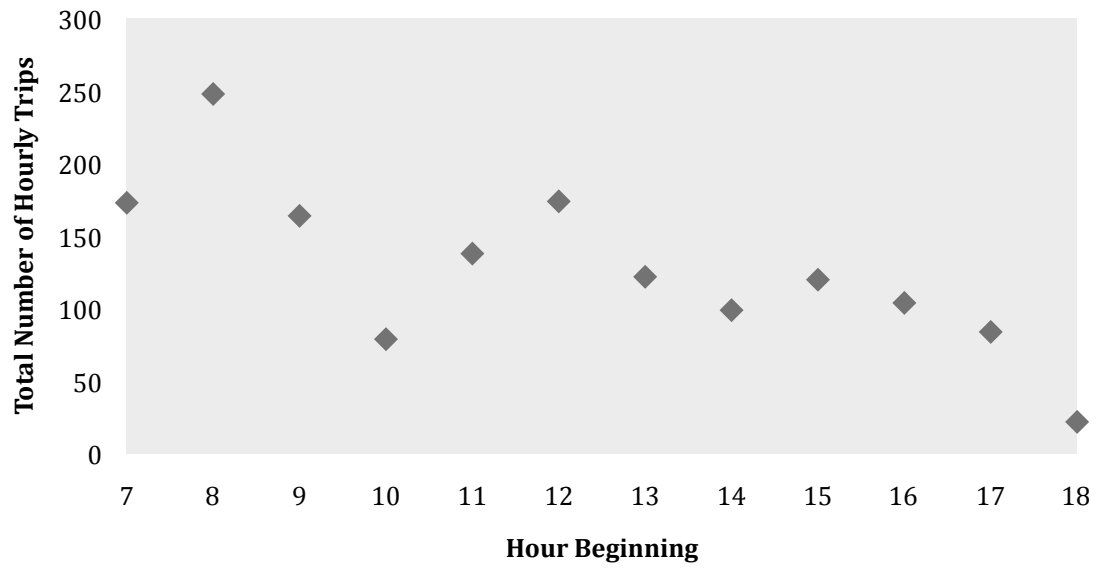
Trip Generation, Santa Monica



Trip Generation, North Hollywood



Trip Generation, Los Angeles



Trip Generation**Motor Vehicle Trip Generation Data****Other Modes Trip Generation**

		Time Period	Vehicle Trips	Rate (trips/kSF)	ITE Trip Gen. Rate	Bicycle Trips	Pedestrians	Total Trips
Santa Monica (1570 SF)	AM Peak Hour	0715-0815	157	99.97	111	0	22	179
	PM Peak Hour of Gen	1430-1530	94	59.86	No Data	0	2	96
	Peak Hour of Adjacent St. Traffic	0745-0845	81	50.94	111	0	17	178
North Hollywood* (1987 SF)	AM Peak Hour	0745-0845	281	141.44	128.77	0	32	313
	PM Peak Hour of Gen	1315-1415	253	127.35	No Data	0	10	263
	Peak Hour of Adjacent St. Traffic	1600-1700	191	96.14	43	0	10	263
Los Angeles (658 SF)	AM Peak Hour	0800-0900	214	325.18	111	0	34	248
	PM Peak Hour of Gen	1215-1315	171	259.84	No Data	0	9	180
	Peak Hour of Adjacent St. Traffic	1615-1715	103	156.51	43	0	9	180

Parking Generation

	Time of Peak Observation	Number of Vehicles	Rate (Veh/kSF)	ITE Parking Demand Rate**	Bicycle Parking
Santa Monica	1500	11***	7	17	0
North Hollywood*	1645	19	9.6	17	0
Los Angeles	0715	15	22.8	17	0

* Shared lot with California Credit Union

** From unpublished data

*** When all parking spaces filled, drivers parked on-street and walked in, making this number for parking demand artificially low.

AM Peak Period Trip Data for Coffee Shops with Drive Through Service

Variable	Santa Monica	North Hollywood	Los Angeles
Peak Hour	0700-0800	0745-0845	0800-0900
All Vehicles	161	281	214
Trucks	0	0	0
Pedestrians	17	32	34
Bicycles	0	0	0
Total Trips	178	313	248
Trip Rate	113.98	157.55	376.84
% Entering	54.1	55.9	57
% Exiting	45.9	44.1	43

PM Peak Period Trip Data for Coffee Shops with Drive Through Service

Variable	Santa Monica	North Hollywood	Los Angeles
Peak Hour	1430-1530	1315-1415	1215-1315
All Vehicles	94	253	171
Trucks	0	0	0
Pedestrians	2	10	9
Bicycles	0	0	0
Total Trips	96	263	180
Trip Rate	61.13	132.38	273.51
% Entering	54.3	52.6	49.7
% Exiting	45.7	47.4	50.3

Daily Trip Data for Coffee Shops with Drive Through Service

Variable	Santa Monica	North Hollywood	Los Angeles
Peak Hour	0715-0815	0745-0845	0800-0900
All Vehicles	157	281	214
Trucks	0	0	0
Pedestrians	22	32	34
Bicycles	0	0	0
Total Trips	179	313	248
Trip Rate	113.98	157.55	376.84
% Entering	54.1	55.9	57
% Exiting	45.9	44.1	43



Parking Demand Survey Form

Institute of Transportation Engineers

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

Land Use Code*

Name of Site

Brief Description of Site

Transit*

Area*

TMP*

City

State

Country

Parking Price* \$

Daily Rate \$

Hourly Rate

Site Size*

Units*

Occupancy*

Land Use

Site Size

Units

Occupancy

Site Size

Units

Occupancy

Number of Parking Spaces Provided at Site

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

Date	<input type="text" value="2/24/10"/>					
Day	<input type="text" value="Wednesday"/>					
12 Mid						
1:00 AM						
2:00 AM						
3:00 AM						
4:00 AM						
5:00 AM						
6:00 AM						
7:00 AM	<input type="text" value="9"/>					
8:00 AM	<input type="text" value="11"/>					
9:00 AM	<input type="text" value="10"/>					
10:00 AM	<input type="text" value="9"/>					
11:00 AM	<input type="text" value="10"/>					
12 Noon	<input type="text" value="10"/>					
1:00 PM	<input type="text" value="10"/>					
2:00 PM	<input type="text" value="11"/>					
3:00 PM	<input type="text" value="11"/>					
4:00 PM	<input type="text" value="11"/>					
5:00 PM	<input type="text" value="10"/>					
6:00 PM	<input type="text" value="8"/>					
7:00 PM						
8:00 PM						
9:00 PM						
10:00 PM						
11:00 PM						

Person

Organization

Phone

Fax

Email

Notes

Enter data on the web at www.ite.org

Comments to: ite_staff@ite.org

IF not entered on web site, please mail to:

or rsm@dksassociates.com

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

Form version 1.4



Parking Demand Survey Form

Institute of Transportation Engineers

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

Land Use Code* Shared Land Use

Name of Site Starbucks Coffee

Brief Description of Site

Shared parking lot with California Credit Union

City North Hollywood

State CA

Country USA

Transit* No

Area* CBD

TMP* No

Parking Price* \$ -

Daily Rate

\$

Hourly Rate

Site Size* 1,987

Units* 1987

Occupancy*

Land Use

Site Size

Units

Occupancy

Site Size

Units

Occupancy

Site Size

Units

Occupancy

Number of Parking Spaces Provided at Site 20

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

Date	3/11/10					
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	12					
8:00 AM	13					
9:00 AM	15					
10:00 AM	15					
11:00 AM	13					
12 Noon	16					
1:00 PM	15					
2:00 PM	17					
3:00 PM	16					
4:00 PM	19					
5:00 PM	19					
6:00 PM	10					
7:00 PM						
8:00 PM						
9:00 PM						
10:00 PM						
11:00 PM						

Person Danny Gandasetiawan

Organization ITE @ UCLA

Phone (714) 251-4448

Fax

Email dannyganda@gmail.com

Notes

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or rsm@dksassociates.com

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Parking Demand Survey Form

Institute of Transportation Engineers

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

Land Use Code*

Name of Site

Brief Description of Site

Transit*

Area*

TMP*

City

State Country

Parking Price* \$

Daily Rate \$ Hourly Rate

Site Size*

Units*

Occupancy*

Land Use

Site Size

Units

Occupancy

Land Use

Site Size

Units

Occupancy

Land Use

Site Size

Units

Occupancy

Land Use

Number of Parking Spaces Provided at Site

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

Date	3/17/10					
Day	Wednesday					
12 Mid						
1:00 AM						
2:00 AM						
3:00 AM						
4:00 AM						
5:00 AM						
6:00 AM						
7:00 AM	15					
8:00 AM	13					
9:00 AM	8					
10:00 AM	8					
11:00 AM	9					
12 Noon	13					
1:00 PM	12					
2:00 PM	8					
3:00 PM	10					
4:00 PM	13					
5:00 PM	11					
6:00 PM	4					
7:00 PM						
8:00 PM						
9:00 PM						
10:00 PM						
11:00 PM						

Person

Organization

Phone

Fax

Email

Notes

Enter data on the web at www.ite.org

Comments to: ite_staff@ite.org

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or rsm@dksassociates.com

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ITIE Institute of Transportation Engineers
Trip Generation Data Form (Part 1)

Land Use/Building Type: <u>Coffee Shops with Drive Through</u>	ITE Land Use Code: <u>937</u>
Source: _____	Source No. (ITE use only) _____
Name of Development: <u>Starbucks</u>	Day of the Week: <u>Wednesday</u>
City: <u>Santa Monica</u>	Day: <u>24</u>
State/Province: <u>CA</u>	Month: <u>7</u>
Zip/Postal Code: <u>90405</u>	Year: <u>2010</u>
Country: <u>USA</u>	Metropolitan Area: _____

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

Location Within Area: <input type="checkbox"/> (1) CBD <input checked="" type="checkbox"/> (2) Urban (Non-CBD) <input type="checkbox"/> (3) Suburban (Non-CBD) <input type="checkbox"/> (4) Suburban CBD <input type="checkbox"/> (5) Rural <input type="checkbox"/> (6) Freeway Interchange Area (Rural) <input type="checkbox"/> (7) Not Given	Independent Variable: (include data for as many as possible)? Actual Estimated (1) Employees (#) <input type="checkbox"/> <input type="checkbox"/> _____ (2) Persons (#) <input type="checkbox"/> <input type="checkbox"/> _____ (3) Total Units (#) (indicate unit: _____) <input type="checkbox"/> <input type="checkbox"/> _____ (4) Occupied Units (#) (indicate unit: _____) <input type="checkbox"/> <input type="checkbox"/> _____ (5) Gross Floor Area (gross sq ft) <input checked="" type="checkbox"/> <input type="checkbox"/> <u>1570.4</u> (% of development occupied _____) (6) Net Rentable Area (sq. ft.) <input type="checkbox"/> <input type="checkbox"/> _____ (7) Gross Leasable Area (sq. ft.) <input type="checkbox"/> <input type="checkbox"/> _____ (% of development occupied _____) (8) Total Acres (% developed: _____) <input type="checkbox"/> <input type="checkbox"/> _____	Actual Estimated (9) Parking Spaces (% occupied: _____) <input type="checkbox"/> <input type="checkbox"/> <u>11</u> <u>20</u> (10) Beds (% occupied: _____) <input type="checkbox"/> <input type="checkbox"/> _____ (11) Seats (#) <input type="checkbox"/> <input type="checkbox"/> _____ (12) Servicing Positions/Vehicle Fueling Positions <input type="checkbox"/> <input type="checkbox"/> _____ (13) Shopping Center % Out-parcels/pads <input type="checkbox"/> <input type="checkbox"/> _____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic <input type="checkbox"/> <input type="checkbox"/> _____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic <input type="checkbox"/> <input type="checkbox"/> _____ (16) Other _____ <input type="checkbox"/> <input type="checkbox"/> _____ (17) Other _____ <input type="checkbox"/> <input type="checkbox"/> _____	Detailed Description of Development? • one-way parking lot • Inside Seating • Used Street Parking and walked to location • Near Santa Monica College
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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 (#): _____ 24-hour % A.M. _____ P.M. _____ Percent by Transit: _____ 24-hour % A.M. _____ P.M. _____ Percent by Carpool/Vanpool: _____ 24-hour % A.M. _____ P.M. _____	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? <input checked="" type="checkbox"/> Yes (If yes, please check appropriate box(es); 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.) <input type="checkbox"/> No
Employees by Shift: First Shift: Start _____ End _____ Employees (#) _____ Second Shift: Start _____ End _____ Employees (#) _____ Third Shift: Start _____ End _____ Employees (#) _____ Parking Cost on Site: Hourly _____ Daily _____	<input type="checkbox"/> (1) Transit Service <input type="checkbox"/> (2) Carpool Programs <input type="checkbox"/> (3) Vanpool Programs <input type="checkbox"/> (4) Bicycle/Pedestrian Facilities and Site Improvements <input type="checkbox"/> (5) Employer Support Measures <input type="checkbox"/> (6) Preferential HOV Treatments <input type="checkbox"/> (7) Transit and Ridesharing Incentives <input type="checkbox"/> (8) Parking Supply and Pricing Management <input type="checkbox"/> (9) Tolls and Congestion Pricing <input type="checkbox"/> (10) Variable Work Hours/Compressed Work Weeks <input type="checkbox"/> (11) Telecommuting <input type="checkbox"/> (12) Other _____

Please Complete Form on Other Side

 Institute of Transportation Engineers
Trip Generation Data Form (Part 2) Santa Monica Location

Summary of Driveway Volumes

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

24-Hour Volume	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time (ex.: 7:15-8:15): 7-8	84	0	77	0	0	0			
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 4:15-5:15	41	0	40	0	0	0			
A.M. Peak Hour Generator ¹ Time: 7:00-8:00	84	0	77	0	0	0			
P.M. Peak Hour Generator ² Time: 1430-1530	51	0	43	0	0	0			
Peak Hour Generator ³ Time (Weekend):									

- Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.
- Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
- Highest hourly volume during the entire day. Please specify the peak hour.

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	33		28		61	3:00-4:00	39		34		73		
6:15-7:15							11:15-12:15	32		28		60	3:15-4:15	37		36		73		
6:30-7:30							11:30-12:30	33		30		63	3:30-4:30	37		31		72		
6:45-7:45							11:45-12:45	29		27		56	3:45-4:45	39		37		76		
7:00-8:00	84		77		161		12:00-1:00	30		28		58	4:00-5:00	37		40		77		
7:15-8:15	85		72		157		12:15-1:15	30		27		57	4:15-5:15	41		40		81		
7:30-8:30	84		72		156		12:30-1:30	32		27		59	4:30-5:30	33		36		69		
7:45-8:45	75		64		139		12:45-1:45	33		29		62	4:45-5:45	32		34		66		
8:00-9:00	68		59		127		1:00-2:00	37		32		70	5:00-6:00	31		32		63		

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

Survey conducted by: Name: Danny Gradscheyan
 Organization: UCA ITE Student Chapter
 Address: 940 Tiverton Ave Apt 202
 City/State/Zip: Los Angeles, CA 90024
 Telephone #: (714) 251-4448 Fax #: _____
 E-mail: danny.grads@gmail.com

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: UCLA ITE Student Chapter City/State: Santa Monica, CA
 Telephone Number: (714) 251-4448

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

Day of the week: Wednesday (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	10		10		20	
12:15-12:30							12:15-12:30	8		8		16	
12:30-12:45							12:30-12:45	5		4		9	
12:45-1:00							12:45-1:00	7		6		13	
1:00-1:15							1:00-1:15	10		9		19	
1:15-1:30							1:15-1:30	10		8		18	
1:30-1:45							1:30-1:45	6		6		12	
1:45-2:00							1:45-2:00	11		10		21	
2:00-2:15							2:00-2:15	11		11		22	
2:15-2:30							2:15-2:30	10		11		21	
2:30-2:45							2:30-2:45	14		13		27	
2:45-3:00							2:45-3:00	14		9		23	
3:00-3:15							3:00-3:15	8		7		15	
3:15-3:30							3:15-3:30	15		14		29	
3:30-3:45							3:30-3:45	8		7		15	
3:45-4:00							3:45-4:00	8		6		14	
4:00-4:15							4:00-4:15	6		9		15	
4:15-4:30							4:15-4:30	15		14		29	
4:30-4:45							4:30-4:45	10		8		18	
4:45-5:00							4:45-5:00	6		9		15	
5:00-5:15							5:00-5:15	10		9		19	
5:15-5:30							5:15-5:30	7		10		17	
5:30-5:45							5:30-5:45	9		8		15	
5:45-6:00							5:45-6:00	5		5		10	
6:00-6:15							6:00-6:15	9		5		14	
6:15-6:30							6:15-6:30	6		5		11	
6:30-6:45							6:30-6:45	8		4		12	
6:45-7:00							6:45-7:00	6		3		9	
7:00-7:15	19		18		37		7:00-7:15						
7:15-7:30	23		22		45		7:15-7:30						
7:30-7:45	20		18		38		7:30-7:45						
7:45-8:00	22		19		41		7:45-8:00						
8:00-8:15	20		13		33		8:00-8:15						
8:15-8:30	22		22		44		8:15-8:30						
8:30-8:45	11		10		21		8:30-8:45						
8:45-9:00	15		14		29		8:45-9:00						
9:00-9:15	13		14		27		9:00-9:15						
9:15-9:30	15		17		32		9:15-9:30						
9:30-9:45	12		10		22		9:30-9:45						
9:45-10:00	16		15		31		9:45-10:00						
10:00-10:15	13		13		26		10:00-10:15						
10:15-10:30	15		16		31		10:15-10:30						
10:30-10:45	12		10		22		10:30-10:45						
10:45-11:00	9		10		19		10:45-11:00						
11:00-11:15	11		10		21		11:00-11:15						
11:15-11:30	7		6		13		11:15-11:30						
11:30-11:45	9		7		16		11:30-11:45						
11:45-12:00	6		5		11		11:45-12:00						

 Institute of Transportation Engineers
Trip Generation Data Form (Part 4) Santa Monica location

Summary of Bicycle Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
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 Time:	0	0	0						
P.M. Peak Hour Generator Time:	0	0	0						
Peak Hour Generator Time (Weekend):									

- Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.) as defined in Trip Generation Data Form (Part 2). Please specify the peak hour.
- Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
- Highest hourly volume during the entire day. Please specify the peak hour. Please attach supplemental hourly volumes. Please refer to the Trip Generation User's Guide for full definition of terms.

Summary of Pedestrian Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
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 Time: 08:30 - 09:30	44	N/A	44						
P.M. Peak Hour Generator Time: 12:00 - 1:00	23	N/A	23						
Peak Hour Generator Time (Weekend):									

Survey conducted by: Name: Danny Gandasekaran

Organization: UCLA ITE Student Chapter

Address: 940 Tiverton Ave Apt 202

City/State/Zip: Los Angeles, CA 90024

Telephone #: (714) 251-4448

Fax #: _____

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Technical Projects Division

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ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 1)

Land Use/Building Type: <u>Coffee Shops with Drive Thru's</u>	ITE Land Use Code: <u>Shared Land Use</u>
Source: _____	Source No. (ITE use only): _____
Name of Development: <u>Starbucks</u>	Day of the Week: <u>Thursday</u>
City: <u>North Hollywood</u>	State/Province: <u>CA</u>
Country: <u>USA</u>	Zip/Postal Code: <u>91602</u>
	Day: <u>Thursday, 11</u> Month: <u>March</u> Year: <u>2010</u>
	Metropolitan Area: _____

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

Location Within Area:		<input type="checkbox"/> (1) CBD <input checked="" type="checkbox"/> (2) Urban (Non-CBD) <input type="checkbox"/> (3) Suburban (Non-CBD) <input type="checkbox"/> (4) Suburban CBD <input type="checkbox"/> (5) Rural <input type="checkbox"/> (6) Freeway Interchange Area (Rural) <input type="checkbox"/> (7) Not Given	
Independent Variable: (include data for as many as possible) ²			
	Actual	Estimated	
(1) Employees (#)	□	□	(9) Parking Spaces (% occupied: _____) <input checked="" type="checkbox"/> Actual <input type="checkbox"/> Estimated
(2) Persons (#)	□	□	(10) Beds (% occupied: _____) <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
(3) Total Units (#) (indicate unit: _____)	□	□	(11) Seats (#) <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
(4) Occupied Units (#) (indicate unit: _____)	□	□	(12) Servicing Positions/Vehicle Fueling Positions <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
(5) Gross Floor Area (gross sq. ft.)	□	□	(13) Shopping Center % Out-parcels/pads <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
(6) Net Rentable Area (sq. ft.)	□	□	(14) A.M. Peak Hour Volume of Adjacent Street Traffic <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
(7) Gross Leasable Area (sq. ft.)	□	□	(15) P.M. Peak Hour Volume of Adjacent Street Traffic <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
(8) Total Acres (% developed: _____)	□	□	(16) Other _____ <input type="checkbox"/> Actual <input type="checkbox"/> Estimated
	□	□	(17) Other _____ <input type="checkbox"/> Actual <input type="checkbox"/> Estimated

Detailed Description of Development:³

Starbucks Coffee with Drive Thru's Service.
 Inside Seating
 Shared lot with California Credit Bank
 located near freeways

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 presence of bicycle/pedestrian facilities. To report bicycle/pedestrian volumes, please refer to Part 4 of this data form.

<p>Other Data:</p> <p>Vehicle Occupancy (#): _____ 24-hour %</p> <p>A.M. _____ P.M. _____</p> <p>Percent by Transit: _____ 24-hour %</p> <p>A.M. % _____ P.M. % _____</p> <p>Percent by Carpool/Vanpool: _____ 24-hour %</p> <p>A.M. % _____ P.M. % _____</p> <p>Employees by Shift:</p> <p>First Shift: Start _____ End _____ Employees (#) _____</p> <p>Second Shift: Start _____ End _____ Employees (#) _____</p> <p>Third Shift: Start _____ End _____ Employees (#) _____</p> <p>Parking Cost on Site: _____ Hourly _____ Daily _____</p>	<p>Transportation Demand Management (TDM) Information:</p> <p>At the time of this study, was there a TDM program (that may have impacted the trip generation characteristics of this site) underway? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (If yes, please check appropriate checkboxes, 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)</p> <table style="width: 100%;"> <tr> <td><input type="checkbox"/> (1) Transit Service</td> <td><input type="checkbox"/> (5) Employer Support Measures</td> <td><input type="checkbox"/> (9) Tolls and Congestion Pricing</td> </tr> <tr> <td><input type="checkbox"/> (2) Carpool Programs</td> <td><input type="checkbox"/> (6) Preferential HOV Treatments</td> <td><input type="checkbox"/> (10) Variable Work Hours/Compressed Work Weeks</td> </tr> <tr> <td><input type="checkbox"/> (3) Vanpool Programs</td> <td><input type="checkbox"/> (7) Transit and Ridesharing Incentives</td> <td><input type="checkbox"/> (11) Telecommuting</td> </tr> <tr> <td><input type="checkbox"/> (4) Bicycle/Pedestrian Facilities and Site Improvements</td> <td><input type="checkbox"/> (8) Parking Supply and Pricing Management</td> <td><input type="checkbox"/> (12) Other _____</td> </tr> </table>	<input type="checkbox"/> (1) Transit Service	<input type="checkbox"/> (5) Employer Support Measures	<input type="checkbox"/> (9) Tolls and Congestion Pricing	<input type="checkbox"/> (2) Carpool Programs	<input type="checkbox"/> (6) Preferential HOV Treatments	<input type="checkbox"/> (10) Variable Work Hours/Compressed Work Weeks	<input type="checkbox"/> (3) Vanpool Programs	<input type="checkbox"/> (7) Transit and Ridesharing Incentives	<input type="checkbox"/> (11) Telecommuting	<input type="checkbox"/> (4) Bicycle/Pedestrian Facilities and Site Improvements	<input type="checkbox"/> (8) Parking Supply and Pricing Management	<input type="checkbox"/> (12) Other _____
<input type="checkbox"/> (1) Transit Service	<input type="checkbox"/> (5) Employer Support Measures	<input type="checkbox"/> (9) Tolls and Congestion Pricing											
<input type="checkbox"/> (2) Carpool Programs	<input type="checkbox"/> (6) Preferential HOV Treatments	<input type="checkbox"/> (10) Variable Work Hours/Compressed Work Weeks											
<input type="checkbox"/> (3) Vanpool Programs	<input type="checkbox"/> (7) Transit and Ridesharing Incentives	<input type="checkbox"/> (11) Telecommuting											
<input type="checkbox"/> (4) Bicycle/Pedestrian Facilities and Site Improvements	<input type="checkbox"/> (8) Parking Supply and Pricing Management	<input type="checkbox"/> (12) Other _____											

Please Complete Form on Other Side

ITE Institute of Transportation Engineers
Trip Generation Data Form (Part 2) North Hollywood location

Summary of Driveway Volumes

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

	Average Weekday (All-F)			Saturday			Sunday		
	Enter	Trucks	Total	Enter	Trucks	Total	Enter	Trucks	Total
24-Hour Volume									
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time (ex.: 7:15-8:15): 7:45-8:45	157	0	124	0	281	0			
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 4-5	95	0	96	0	191	0			
A.M. Peak Hour Generator* Time: 0745-0845	157	0	124	0	281	0			
P.M. Peak Hour Generator Time: 1315-1415	133	0	120	0	253	0			
Peak Hour Generator Time (Weekend):									

- Highest hourly volume between 7 a.m. and 8 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.
 - Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
 - 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 (All-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	
6:00-7:00						11:00-12:00	110		107		212		3:00-4:00	107		96		203	
6:15-7:15						11:15-12:15	172		106		218		3:15-4:15	101		102		203	
6:30-7:30						11:30-12:30	116		110		226		3:30-4:30	105		99		204	
6:45-7:45						11:45-12:45	118		110		228		3:45-4:45	105		94		199	
7:00-8:00	104		93		197	12:00-1:00	128		118		246		4:00-5:00	95		91		186	
7:15-8:15	128		113		241	12:15-1:15	133		120		253		4:15-5:15	94		81		175	
7:30-8:30	151		121		272	12:30-1:30	123		110		233		4:30-5:30	79		71		150	
7:45-8:45	157		124		281	12:45-1:45	120		108		228		4:45-5:45	75		64		139	
8:00-9:00	138		108		246	1:00-2:00	111		97		208		5:00-6:00	63		48		111	

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

Survey conducted by: Name: Danny Grandsehrman

Organization: UCLA ITE Student Chapter

Address: 940 Tiverton Ave Apt 202

City/State/Zip: Los Angeles, CA 90024

Telephone #: (714) 251-4448 Fax #: _____

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ITE on the Web: www.ite.org


Institute of Transportation Engineers
Trip Generation Data Form (Part 3)

North Hollywood
~~Los Angeles~~, CA

Name/Organization: UCLA ITE Student Chapter

City/State: Los Angeles, CA

Telephone Number: (714) 251-4448

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

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	28		25		53	
12:15-12:30							12:15-12:30	25		25		50	
12:30-12:45							12:30-12:45	31		28		59	
12:45-1:00							12:45-1:00	26		24		50	
1:00-1:15							1:00-1:15	30		29		59	
1:15-1:30							1:15-1:30	29		29		58	
1:30-1:45							1:30-1:45	33		28		61	
1:45-2:00							1:45-2:00	26		32		68	
2:00-2:15							2:00-2:15	35		31		66	
2:15-2:30							2:15-2:30	39		19		38	
2:30-2:45							2:30-2:45	30		26		56	
2:45-3:00							2:45-3:00	27		21		48	
3:00-3:15							3:00-3:15	28		24		52	
3:15-3:30							3:15-3:30	21		22		43	
3:30-3:45							3:30-3:45	26		23		49	
3:45-4:00							3:45-4:00	32		27		59	
4:00-4:15							4:00-4:15	22		30		52	
4:15-4:30							4:15-4:30	25		19		44	
4:30-4:45							4:30-4:45	26		18		44	
4:45-5:00							4:45-5:00	22		29		51	
5:00-5:15							5:00-5:15	21		15		36	
5:15-5:30							5:15-5:30	10		9		19	
5:30-5:45							5:30-5:45	22		11		33	
5:45-6:00							5:45-6:00	10		13		23	
6:00-6:15							6:00-6:15	15		14		29	
6:15-6:30							6:15-6:30	13		11		24	
6:30-6:45							6:30-6:45	8		9		17	
6:45-7:00							6:45-7:00	9		10		19	
7:00-7:15	16		13		29		7:00-7:15						
7:15-7:30	20		19		39		7:15-7:30						
7:30-7:45	28		28		56		7:30-7:45						
7:45-8:00	40		33		73		7:45-8:00						
8:00-8:15	40		33		73		8:00-8:15						
8:15-8:30	43		27		70		8:15-8:30						
8:30-8:45	34		31		65		8:30-8:45						
8:45-9:00	21		17		38		8:45-9:00						
9:00-9:15	36		19		55		9:00-9:15						
9:15-9:30	23		28		51		9:15-9:30						
9:30-9:45	26		25		51		9:30-9:45						
9:45-10:00	25		25		50		9:45-10:00						
10:00-10:15	20		21		41		10:00-10:15						
10:15-10:30	27		25		52		10:15-10:30						
10:30-10:45	22		19		41		10:30-10:45						
10:45-11:00	19		16		35		10:45-11:00						
11:00-11:15	20		19		39		11:00-11:15						
11:15-11:30	26		21		47		11:15-11:30						
11:30-11:45	27		28		55		11:30-11:45						
11:45-12:00	25		23		48		11:45-12:00						

 Institute of Transportation Engineers
Trip Generation Data Form (Part 4) North Hollywood location

Summary of Bicycle Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
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 ¹ Time:	0	0	0						
P.M. Peak Hour Generator Time:	0	0	0						
Peak Hour Generator Time (Weekend):									

1. Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.) as defined in Trip Generation Data Form (Part 2). 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 attach supplemental hourly volumes.
- Please refer to the Trip Generation User's Guide for full definition of terms.

Summary of Pedestrian Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
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 ¹ Time: 1000 - 1100	55	N/A	55						
P.M. Peak Hour Generator Time: 1645 - 1745	72	N/A	72						
Peak Hour Generator Time (Weekend):									

Survey conducted by Name: Danny Gaudesetian

Organization: UCLA ITE Student Chapter

Address: 940 Tiverton Ave Apt 202

City/State/Zip: Los Angeles, CA 90024

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ITE Institute of Transportation Engineers
Trip Generation Data Form (Part 2) North Hollywood location

Summary of Driveway Volumes

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

	Average Weekday (All-F)			Saturday			Sunday		
	Enter	Trucks	Total	Enter	Trucks	Total	Enter	Trucks	Total
24-Hour Volume									
A.M. Peak Hour of Adjacent Street Traffic (7-9) Time (ex.: 7:15-8:15): 7:45-8:45	157	0	124	0	281	0			
P.M. Peak Hour of Adjacent Street Traffic (4-6) Time: 4-5	95	0	96	0	191	0			
A.M. Peak Hour Generator* Time: 0745-0845	157	0	124	0	281	0			
P.M. Peak Hour Generator Time: 1315-1415	133	0	120	0	253	0			
Peak Hour Generator Time (Weekend):									

- Highest hourly volume between 7 a.m. and 8 a.m. (4 p.m. and 6 p.m.). Please specify the peak hour.
 - Highest hourly volume during the a.m. or p.m. period. Please specify the peak hour.
 - 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 (All-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	
6:00-7:00						11:00-12:00	110		107		212		3:00-4:00	107		96		203	
6:15-7:15						11:15-12:15	172		106		218		3:15-4:15	101		102		203	
6:30-7:30						11:30-12:30	116		110		226		3:30-4:30	105		99		204	
6:45-7:45						11:45-12:45	118		110		228		3:45-4:45	105		94		199	
7:00-8:00	104		93		197	12:00-1:00	128		118		246		4:00-5:00	95		91		186	
7:15-8:15	128		113		241	12:15-1:15	133		120		253		4:15-5:15	94		81		175	
7:30-8:30	151		121		272	12:30-1:30	123		110		233		4:30-5:30	79		71		150	
7:45-8:45	157		124		281	12:45-1:45	120		108		228		4:45-5:45	75		64		139	
8:00-9:00	138		108		246	1:00-2:00	111		97		208		5:00-6:00	63		48		111	

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

Survey conducted by: Name: Danny Gaudeschiawan

Organization: UCLA ITE Student Chapter

Address: 940 Tiverton Ave Apt 202

City/State/Zip: Los Angeles, CA 90024

Telephone #: (714) 251-4448 Fax #: _____

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ITE on the Web: www.ite.org

Trip Generation Data Form (Part 3)

Name/Organization: UCLA ITE Student Chapter City/State: Los Angeles, CA

Telephone Number: (714) 251-4448

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

Day of the week: Wednesday (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	24		15		39	
12:15-12:30							12:15-12:30	17		22		39	
12:30-12:45							12:30-12:45	21		19		40	
12:45-1:00							12:45-1:00	24		20		44	
1:00-1:15							1:00-1:15	23		25		48	
1:15-1:30							1:15-1:30	14		4		18	
1:30-1:45							1:30-1:45	10		18		28	
1:45-2:00							1:45-2:00	14		10		24	
2:00-2:15							2:00-2:15	8		5		13	
2:15-2:30							2:15-2:30	10		15		25	
2:30-2:45							2:30-2:45	12		15		27	
2:45-3:00							2:45-3:00	15		15		30	
3:00-3:15							3:00-3:15	20		14		34	
3:15-3:30							3:15-3:30	15		10		25	
3:30-3:45							3:30-3:45	6		9		15	
3:45-4:00							3:45-4:00	16		13		29	
4:00-4:15							4:00-4:15	15		9		24	
4:15-4:30							4:15-4:30	16		12		28	
4:30-4:45							4:30-4:45	12		13		25	
4:45-5:00							4:45-5:00	12		10		22	
5:00-5:15							5:00-5:15	17		11		28	
5:15-5:30							5:15-5:30	15		7		22	
5:30-5:45							5:30-5:45	12		9		21	
5:45-6:00							5:45-6:00	4		3		7	
6:00-6:15							6:00-6:15	2		4		6	
6:15-6:30							6:15-6:30	1		2		3	
6:30-6:45							6:30-6:45	4		4		8	
6:45-7:00							6:45-7:00	3		0		3	
7:00-7:15	22		16		38		7:00-7:15						
7:15-7:30	21		18		39		7:15-7:30						
7:30-7:45	18		22		40		7:30-7:45						
7:45-8:00	25		20		45		7:45-8:00						
8:00-8:15	28		19		47		8:00-8:15						
8:15-8:30	33		25		58		8:15-8:30						
8:30-8:45	35		18		53		8:30-8:45						
8:45-9:00	26		30		56		8:45-9:00						
9:00-9:15	20		27		47		9:00-9:15						
9:15-9:30	16		21		37		9:15-9:30						
9:30-9:45	22		19		41		9:30-9:45						
9:45-10:00	17		10		27		9:45-10:00						
10:00-10:15	15		16		31		10:00-10:15						
10:15-10:30	8		10		18		10:15-10:30						
10:30-10:45	5		7		12		10:30-10:45						
10:45-11:00	9		5		14		10:45-11:00						
11:00-11:15	11		10		21		11:00-11:15						
11:15-11:30	14		13		27		11:15-11:30						
11:30-11:45	20		18		38		11:30-11:45						
11:45-12:00	16		20		36		11:45-12:00						

 Institute of Transportation Engineers
Trip Generation Data Form (Part 4) Los Angeles location

Summary of Bicycle Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
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 ¹ Time:	0	0	0						
P.M. Peak Hour Generator Time:	0	0	0						
Peak Hour Generator Time (Weekend):									

1. Highest hourly volume between 7 a.m. and 9 a.m. (4 p.m. and 6 p.m.) as defined in Trip Generation Data Form (Part 2). 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 attach supplemental hourly volumes. Please refer to the Trip Generation User's Guide for full definition of terms.

Summary of Pedestrian Volumes

	Average Weekday (M-F)			Saturday			Sunday		
	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
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 ¹ Time: 08:00 - 09:00	34	N/A	34						
P.M. Peak Hour Generator ² Time: 14:45 - 15:45	17	N/A	17						
Peak Hour Generator Time (Weekend):									

Survey conducted by: Name: Danny Gumbacattavan

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