University of California of Los Angeles Student Chapter Institute of Transportation Engineers

Trip Distribution for Urban Residential Developments

Abstract

The ITE Student Chapter at UCLA conducted this data collection project in order to analyze trip generation and parking demand patterns in urban residential developments. Since current data in the ITE *Trip Generation*, Seventh Edition is reflective of residential developments primarily in a suburban environment, the data may not accurately represent trip generation levels for urban areas.

Before the study, the UCLA Student Chapter hypothesized that fewer trips will be generated within an urban environment due to the presence of alternate modes of transportation (i.e. public transit, walking, etc.). Since fewer automobile trips are made, there should be less parking and perhaps even lower automobile ownership.

In order to evaluate the above hypothesis, the inbound and outbound trips of three residential development (two condos and one apartment complex) parking structures were counted during a weekday. The counts were recorded every fifteen minutes during the AM and PM peak hours of 7:00am – 9:00am and 4:00pm – 6:00pm. Daily inbound and outbound traffic counts were also taken, as well as hourly traffic parking occupancy counts for the entire day.

The three residential complexes chosen were relatively new (less than five years old) but successful developments in that they were fully occupied. Two of the projects were four-storey condo/town house developments located in Playa Vista, a new urban infill project with on-site amenities and a relatively dense collection of mid-rise residential buildings. Playa Vista is served by bus lines from Culver City and Santa Monica. It has a limited number of on-site restaurants and retail shops (with more planned) and an on-site club house/recreation center.

One large apartment project was selected in downtown Long Beach. This 538-unit project is well served by transit with light rail service located within one block and multiple regional bus lines located right in front of the project.

The results of the data collection are summarized in the attached table. The results were, in fact, consistent with the initial hypothesis of a lower rate within an urban environment. The three sites did have lower overall trip generation rates, with the morning peak hours slightly lower than the ITE *Trip Generation, Seventh Edition* average rates for both mid-rise apartments and high-rise condos.

The afternoon peak hour rates for condo Sites 2 & 3 were substantially lower than the national average. These sites were recounted with similar results, indicating that perhaps these residents returned later than the evening peak hour or they stopped off at one of the restaurants, health clubs, or retail shops within the development or nearby area.

Parking accumulation counts and average daily traffic counts will be obtained within the next two weeks and will be submitted as soon as they are available.

TRIP GENERATION RATES URBAN MID-RISE APARTMENTS LU CODE 223 URBAN HIGH-RISE CONDO/TOWN HOUSES LU CODE 232

SITE	LAND USE	DWELLING	ADJ		OUR OF REET TRAI	FFIC	PEA	K HOUR O	F GENERA	TOR
	CODE	UNITS	Α	M	P	М	Α	М	P	М
			TRIPS	RATE	TRIPS	RATE	TRIPS	RATE	TRIPS	RATE
APARTMENT						***************************************				
ITE TRIP GENERATION	223			0.30		0.39		0.35		0.44
LONG BEACH	223	538	156	0.29	151	0.28	156	0.29	155	0.29
CONDO ITE TRIP GENERATION	232			0.34		0.38		0.34		0.38
PLAYA VISTA 1	232	135	32	0.24	22	0.16	37	0.27	22	0.16
PLAYA VISTA 2	232	129	27	0.21	21	0.16	31	0.24	21	0.16

Source: UCLA ITE Student Chapter Field Data Collection Results 2-Jun-08

Land Use/Building Type: 1 HID - PISE APARTMENTS

Name of Development: CAMPEN HAPBOR VIEW APARTMENTS

Source: FIELD OBSERVATIONS

Trip Generation Data Form (Part 1)

[SITE 1]

ITE Land Use Code: 223

Source No. ((TE upg profy):

Day of the Week: WEDNESDAY

	□ (3) Suburban (Non	er-based.				Metropolitan Area:			
ocation Within Area:	□ (3) Suburban (Non	er-based.							
□_(1) CBD									
					· colorina			Detailed Descriptio	n of Development: ³
(2) Urban (Non-CBD)	- (A) A I I ADD	n-CBD)	□ (5) Rur	al					
	☐ (4) Suburban CBD)	□ (6) Fred □ (7) Not	eway Interchange Area Given	a (Rural)				
dependent Variable: (include data for as m	any as possible) ²	Actual	Estimated			Actual	Estimated		
(1) Employees (#)				(10) Parkin	g Spaces (#)				
(2) Persons (#)				(11) Occupi	ied Beds (#)				
538 (3) Units (#)		$\boldsymbol{\varkappa}$		(12) Seats	(#)				
(4) Occupied Units (#)				(13) Servici	ing Positions/Vehicle F	ueling			
(5) Gross Floor Area (gross	sq. ft.)			Positio	ns				
(% of development occupion	ed)			(14) Shopp	ing Center % Out-pare	cels/pads 🗆			
(6) Net Rentable Area (sq.					eak Hour Volume of Adja				
(7) Gross Leasable Area (s	q. ft.)		<u>.</u> .	(16) р.м. Ре	eak Hour Volume of Adja	acent Street Traffic			
(8) Occupied Gross Leasab	le Area (sq. ft.)			(17) Other					
(9) Acres									
Definitions for several independent variables can be provide all pertinent information that helps ther Data:	•		essary, attach a detail	ion Demand Managem			trin gonorati	on characteristics of	this sita) undanuav?
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A.M. % P.M. %	_ 24-hour %			es, please check applo o quantify this impact. A			Divi program(s) and provide a soc	iloc for any studies the
Percent by Carpool/Vanpool:			1110,	y donard and impact.		·,,			
A.M. % P.M. %	_ 24-hour %		□ (4) T	nit Camulaa	☐ (5) Employer Su	anort Maseurae	□ (9) To	Ils and Congestion F	Pricina
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Start End			1 ' '	ool Programs cle/Pedestrian	☐ (8) Parking Supp	-	` '	•	
econd Shift: Time Time Start End	Employees (#)		1	ities and Site	Management		تار (۱۷) O		
Start End aird Shift: Time Time	Employees (#)			ovements	Management				
arking Cost on Site: Hourly	Daily		"""	Ovements					

Trip Generation Data Form (Part 2)

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

[DRNEWAY I]

	Average	Weekday (M-F)				Saturda	y					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	Truck
24-Hour Volume																		
A.m. Peak Hour of Adjacent ¹ Street Traffic (7 – 9)							•											
Time (ex.: 7:15 - 8:15):	ļ				_													
Р.м. Peak Hour of Adjacent ¹ Street Traffic (4 – 6)																		
Time:	l																	
A.M. Peak Hour Generator ² Time: 7:30 - 8:30	11		41		52													
D 141 0 12	46		8		54													
Peak Hour Generator³ Time (Weekend):				•														

- 1. Highest hourly volume between 7 AM and 9 AM (4 PM and 6 PM).
- 2. Highest hourly volume during the AM or PM period.
- 3. Highest hourly volume during the entire day.

Please refer to the Trip Generation User's Guide for full definition of the terms.

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	1	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
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7:15-8:15	10	<u> </u>	4D		50		12:15-1:15	1			1		1	4:15-5:15	33		7		40	
7:30-8:30	111		41	<u> </u>	52		12:30-1:30	1	1					4:30-5:30	42		8		50	
7:45-8:45	12		33		45		12:45-1:45	1		1				4:45-5:45	46		8	1	54	
8:00-9:00	16		31		47	•	1:00-2:00	Ī						5:00-6:00	40		8		48	

Check if Part 3 and/or additional information is attached.				
Survey conducted by: Name: AUDREY NAVAL			Please return to:	Institute of Transportation Engineers
Organization: ITE & UKLA				Technical Projects Division
Address:				1099 14th Street, NW, Suite 300 West
City/State/Zip:				Washington, DC 20005-3438 USA Telephone: +1 202-289-0222
Telephone #:	Fax #:	E-mail:		FAX: +1 202-289-7722
				ITE on the Web: www.ite.org

Trip Generation Data Form (Part 3)

Name/Organization: AUDREY NAVAL	ITE E UCLA	City/State:
Telephone Number: 562.547.8630		[Denemay 1]

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

Day of the week: WEDNES DAY	(All = All Vehicles Counted, Except Trucks; Trucks = Heavy Duty Trucks and Buses)
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A.M. Period	Enter		Exit		Total		All Trucks All Trucks				Total		
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Trip Generation Data Form (Part 2)

Summary of Driveway Volu	ımes				(All = Al	l Vehicles	Counted	, Including	Trucks; ?	frucks = H	eavy Duty	Trucks ar	d Buses)	U	DEIVI	LAM3	2]	
	Average	e Weekday (M-F)				Satur	iay					Sunday	1				
	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	Truck
24-Hour Volume							İ											
A.м. 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: 715 - 8:15	0		17		17													
P.M. Peak Hour Generator ² Time: 4 115 - 5 15	11		4		15													

Peak Hour Generator Time (Weekend):

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
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7:45-8:45	2		14		16		12:45-1:45							4:45-5:45	9		2		11	
8:00-9:00	2		15		17		1:00-2:00							5:00-6:00	Ś		1		6	

Check if Part 3 and	d/or additional information is attac	ched.			
	Name: ADRIAN KI Organization: ITE C UC	EITH LA		Please return to:	Institute of Transportation Engineers Technical Projects Division
	Address:			 	1099 14th Street, NW, Suite 300 West
	City/State/Zip:				Washington, DC 20005-3438 USA Telephone: +1 202-289-0222
	Telephone #:	Fax #:	E-mail:	<u>.</u>	FAX: +1 202-289-7722

^{1.} Highest hourly volume between 7 AM and 9 AM (4 PM and 6 PM).

^{2.} Highest hourly volume during the AM or PM period.

^{3.} Highest hourly volume during the entire day.

Please refer to the Trip Generation User's Guide for full definition of the terms.

Trip Generation Data Form (Part 3)

Name/Organization:	ADRIAN KE	TH / IT	TE C	UCLA	City/State: Los	Angeles,	<u>, Ca</u>
		000					

Telephone Number: 562.857.3288 [DRNEWAY 2]

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, Except 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
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8:00-8:15	0	1	5		15		8:00-8:15						
8:15-8:30	0		2		2		8:15-8:30						
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9:45-10:00		+	+	+	1		9:45-10:00		+	+		+	
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Trip Generation Data Form (Part 2)

Summary of Driveway Volumes

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

[DRIVEWAY 3]

	Average	Weekday (M-F)				Saturda	y					Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
· · · · ·	All	Trucks	All	Trucks	All	Trucks	All	Trucks	Ali	Trucks	All	Trucks	Ail	Trucks	All	Trucks	All	Truck
24-Hour Volume												:						
а.м. Peak Hour of Adjacent ¹ Street Traffic (7 — 9)																		
Time (ex.: 7:15 - 8:15):																		
P.м. Peak Hour of Adjacent ¹ Street Traffic (4 – 6)																		
Time:																		
A.M. Peak Hour Generator ² Time: 7:45 - 8:45	8		86		94													
P.M. Peak Hour Generator ² Time: 5:00 - 6:00	75		22		97													
Peak Hour Generator³ Time (Weekend):															i			

^{1.} Highest hourly volume between 7 AM and 9 AM (4 PM and 6 PM).

Please refer to the Trip Generation User's Guide for full definition of the terms.

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	Ali	Trucks
6:00-7:00							11:00-12:00							3:00-4:00			f			
6:15-7:15			1				11:15-12:15							3:15-4:15						
6:30-7:30		<u> </u>					11:30-12:30		1	1			1	3:30-4:30	1					
6:45-7:45				1			11:45-12:45							3:45-4:45						
7:00-8:00	7		द्रा	<u> </u>	15		12:00-1:00				1			4:00-5:00	49		17		66	
7:15-8:15	14		77		85		12:15-1:15	1	Î					4:15-5:15	58		19		77	
7:30-8:30	18		84		92		12:30-1:30							4:30-5:30	68		19		87	
7:45-8:45	1	1	\$10		94		12:45-1:45				Î			4:45-5:45	71		19		90	
8:00-9:00	9		78		87		1:00-2:00							5:00-6:00	75		22		97	

	nd/or additional information is attached. : Name: MITESH PATEL / JC	ONATHAN TID		Please return to:	Institute of Transportation Engineers
. ,	Organization: ITE CULLA				Technical Projects Division
	Address:				1099 14th Street, NW, Suite 300 West
	City/State/Zip:				Washington, DC 20005-3438 USA Telephone: +1 202-289-0222
	Telephone #:	Fax #:	E-mail:		FAX: +1 202-289-7722
					ITE on the Web: www.ite.org

^{2.} Highest hourly volume during the AM or PM period.

^{3.} Highest hourly volume during the entire day.

Trip Generation Data Form (Part 3)

Name/Organization: MITESH PATEL | JONATHAN TWO | LTE C UCLA City/State: LOS ANGELES, CA

Telephone Number: 714.552.7619 | 714.488.0649 [DRNEWAY 3]

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, Except 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
2:00-12:15							12:00-12:15						
2:15-12:30							12:15-12:30					1	
12:30-12:45		†	1		<u> </u>	<u>† </u>	12:30-12:45	1					†
12:45-1:00						<u> </u>	12:45-1:00				<u> </u>	-	1
1:00-1:15					1	 	1:00-1:15		•	†			
1:15-1:30	1		<u> </u>	<u> </u>	 	 	1:15-1:30						1
1:30-1:45			<u> </u>			1	1:30-1:45						1
1:45-2:00		-					1:45-2:00		1				
2:00-2:15			1	 	<u> </u>		2:00-2:15		-	1			
2:15-2:30	_		 	<u> </u>			2:15-2:30		†	1	†	1	
2:30-2:45	-	+	 	<u> </u>			2:30-2:45		 	1	1		
2:45-3:00	+	 	 	 		+	2:45-3:00		 	1			†
3:00-3:15		 	 	<u> </u>	 		3:00-3:15			 			+
3:15-3:30			+	 	 		3:15-3:30		+		 	+	
3:30-3:45	+	 	 	 	 	+	3:30-3:45		 	 	_		+
3:45-4:00			-	 	<u> </u>		3:45-4:00		 	<u> </u>		 	
			ļ	 	 	_	4:00-4:15			0.		15	┼
4:00-4:15				ļ	<u> </u>	_		10	1	5			
4:15-4:30					<u> </u>		4:15-4:30	13	<u> </u>	4		117	
4:30-4:45				ļ			4:30-4:45	12		5		<u> </u>	
1:45-5:00							4:45-5:00	112		3		17	-
5:00-5:15							5:00-5:15	19		17		26	
5:15-5:30							5:15-5:30	23		14		27	ļ
5:30-5:45				1			5:30-5:45	15		5		20	ļ
5:45-6:00							5:45-6:00	ોંહ		<u>v</u>		24	
6:00-6:15							6:00-6:15						
6:15-6:30							6:15-6:30						
6:30-6:45							6:30-6:45						
6:45-7:00							6:45-7:00						
7:00-7:15	7	*	21		23		7:00-7:15						
7:15-7:30			18		P		7:15-7:30						
7:30-7:45	2		18		2D		7:30-7:45						
7:45-8:00	2	· · · · · · · · · · · · · · · · · · ·	24		26		7:45-8:00						
8:00-8:15	1 3		17		20		8:00-8:15						
3:15-8:30	 		25		210	1	8:15-8:30						1
8:30-8:45	12	·	20		22		8:30-8:45			 			1
8:45-9:00	13	1	16		19	-	8:45-9:00		1	+	+	- 	
9:00-9:15	+ -		+ '-	+	+	+	9:00-9:15			1			
9:15-9:30		- 	1	 	 		9:15-9:30		 	+			+-
9:30-9:45		+	+	 		+	9:30-9:45			 	+	<u> </u>	
9:45-10:00		+	+	-	-	+	9:45-10:00			<u> </u>	-	1	
10:00-10:15		+	 	+	 	+	10:00-10:15		 	1		+	+
10:15-10:30	-}	+	+	 	┼	+	10:15-10:30	+	-	+	+	 	+
10:30-10:45		+	+	 	 	+	10:30-10:45		 	 	+	+	+-
10:30-10:45		+	+	-	 		10:45-11:00		+	 		+	+
11:00-11:15		 	+	 	 	+	11:00-11:15		+			+	╄
11:00-11:15 11:15-11:30	-	 	.	+	+	 	11:15-11:15		 	 	+	 	
11:15-11:30 11:30-11:45	+-		-	1	 	+	11:15-11:30		-	 	+	-	+
			1	1	1	1	■ 11.3U-11.43	ı	1	1	1	1	_L

Trip Generation Data Form (Part 1)

	rrip G	eneration Da	ata Form (F	all 1)			PLAYA VISTA 17
Land Use/Building Type: 1 HIGH - RISE COND) <u> </u>			ITE Land Use	Code:	232	
Source: FIELD OBSERVATIONS	<u> </u>			Source No. (IT			
Name of Development: WATER STONE CONDOS	<u> </u>			Day of the Wee	ek: T!	HURSDA'	4 FRIDAY
City: PLAYA VISTA State/Province		Zip/Postal Cod	le: 90094	Day: 27	20	Month	: MAR / MAN Year: 2008
Country: UNITED STATES	<u> </u>			Metropolitan A	ea:		
1. For fast-food land use, please specify if hamburger- or nonhamburger-	based.						
Location Within Area:							Detailed Description of Development:3
☐ (1) CBD ☐ (3) Suburban (Non-C (2) Urban (Non-CBD) ☐ (4) Suburban CBD	BD)	□ (5) Rural□ (6) Freeway Interchange A□ (7) Not Given	rea (Rural)				
Independent Variable: (include data for as many as possible) 2	Actual Estin	nated		-	Actual	Estimated	
(1) Employees (#)		(10) Pa	rking Spaces (#)				
(2) Persons (#)			•				
135 (3) Units (#)	×						
(4) Occupied Units (#)		-	rvicing Positions/Vehicle Fu	eling			
(5) Gross Floor Area (gross sq. ft.)		Pos	sitions				
(% of development occupied)		(14) Sh	opping Center % Out-parce	ls/pads			
(6) Net Rentable Area (sq. ft.)		(15) A.M	. Peak Hour Volume of Adjac	ent Street Traffic	. 🗆		
(7) Gross Leasable Area (sq. ft.)		(16) P.M	. Peak Hour Volume of Adjac	ent Street Traffic	. 🗆		
(8) Occupied Gross Leasable Area (sq. ft.)			ner				
(9) Acres	0 0		ner				
Definitions for several independent variables can be found in the <i>Trip Generation</i> Please provide all pertinent information that helps to describe the subject project.							
Other Data:		Transportation Demand Manag					
Vehicle Occupancy (#)			nere a TDM program (that n	nay have impad	ted the	trip generation	on characteristics of this site) underway?
A.M P.M 24-hour %		⊠ No					
Percent by Transit: A.M. % P.M. % 24-hour %					of the T	DM program((s) and provide a source for any studies that
Percent by Carpool/Vanpool:		may help quantify this impa-	ct. Attach additional sheets	it necessary)			
A.M. % P.M. % 24-hour %						- 41-	We and Occasion British
Employees by Shift:	i	☐ (1) Transit Service	☐ (5) Employer Supp				Ills and Congestion Pricing
Start End		☐ (2) Carpool Programs	(6) Preferential HC				ariable Work Hours/Compressed Work Weeks
First Shift: Time Time Employees (#)		☐ (3) Vanpool Programs	(7) Transit and Ric	•	tives	` '	elecommuting
Second Shift: Time Time Employees (#)	_	☐ (4) Bicycle/Pedestrian	□ (8) Parking Supply	and Pricing		□ (12) Ot	ther

Management

Facilities and Site

Improvements

Start

Time

Hourly

Employees (#)

Daily ____

Third Shift:

Parking Cost on Site:

Ites Institute of Transportation Engineers Trip Congretion Date Form (Part 2)

Trip Generation Data Form (Part 2)

Summary of	f Driveway	Vo	lumes
------------	------------	----	-------

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

	Average	Weekday (I	M-F)				Saturda	у					Sunday					
	Enter		Exit		Total		Enter		Exit		Total		Enter		Exit		Total	
	All	Trucks	Ali	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Trucks	A <u>ll</u>	Trucks	All	Trucks	All	Truck
24-Hour Volume						:												
а.м. Peak Hour of Adjacent¹ Street Traffic (7 – 9) Time (ех.: 7:15 - 8:15):							s.											
P.м. Peak Hour of Adjacent ¹ Street Traffic (4 – 6)																		
Time:																		
A.M. Peak Hour Generator ² Time: 7:45 - 8:45	-		36		37	:												
P.M. Peak Hour Generator ² Time: 4:4 5 - 5:4 5	17		3		20													
Peak Hour Generator ³ Time (Weekend):						:												

- 1. Highest hourly volume between 7 AM and 9 AM (4 PM and 6 PM).
- 2. Highest hourly volume during the AM or PM period.
- 3. Highest hourly volume during the entire day.

Please refer to the Trip Generation User's Guide for full definition of the terms.

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	T						3:00-4:00						
6:15-7:15			Ì				11:15-12:15							3:15-4:15						
6:30-7:30	1						11:30-12:30			T				3:30-4:30						
6:45-7:45	1						11:45-12:45	1						3:45-4:45						I
7:00-8:00	2		20		22	İ	12:00-1:00	 	†					4:00-5:00	4		3		7	
7:15-8:15	3		26		29		12:15-1:15							4:15-5:15	7		2		9	
7:30-8:30	13		29		32		12:30-1:30	<u> </u>		t —				4:30-5:30	19		Z		П	
7:45-8:45	17		36		37		12:45-1:45			1				4:45-5:45	10	(17)	Z	(3)	12	(20)
8:00-9:00	Ti		34		35		1:00-2:00							5:00-6:00	9	(12)	3	(4)	12	(16)

Check if Part 3 and/or addition	al information is	attached.				
Survey conducted by: Name: 1		YEVIN UCLA	CSUPAK	 		Institute of Transportation Engineers Technical Projects Division
Address:						1099 14th Street, NW, Suite 300 West Washington, DC 20005-3438 USA
City/State/Z	ip:			 		Telephone: +1 202-289-0222
Telephone #	:		Fax #:	 E-mail:		FAX: +1 202-289-7722
						ITE on the Web: www.ite.org

Trip Generation Data Form (Part 3)

Name/Organization: JEFF LII | KEVIN CSUPAK | ITE & UCLA City/State: LOS ANGELI
Telephone Number: 909.720.221 | 805.708.1116

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

Day of the week: THURSDAY FRIDAY (All = All Vehicles Counted, Except Trucks; Trucks = Heavy Duty Trucks and Buses)

12:00-12:15 12:15-12:30 12:30-12:45 12:45-1:00 1:00-1:15 1:15-1:30 1:30-1:45 1:45-2:00 2:00-2:15 2:15-2:30 2:30-2:45	All	Trucks	All	Trucks	All	Trucks	12:00-12:15	All	Trucks	All	Trucks	All	Trucks
12:15-12:30 12:30-12:45 12:45-1:00 1:00-1:15 1:15-1:30 1:30-1:45 1:45-2:00 2:00-2:15 2:15-2:30						ļ							
2:30-12:45 2:45-1:00 :00-1:15 :15-1:30 :30-1:45 :45-2:00 ::00-2:15 ::15-2:30						1	•						
2:45-1:00 :00-1:15 :15-1:30 :30-1:45 :45-2:00 ::00-2:15 ::15-2:30							12:15-12:30						\neg
:00-1:15 :15-1:30 :30-1:45 :45-2:00 ::00-2:15 ::15-2:30							12:30-12:45			1			
:00-1:15 ::15-1:30 ::30-1:45 ::45-2:00 2:00-2:15 2:15-2:30				+	1		12:45-1:00						
1:30-1:45 1:45-2:00 2:00-2:15 2:15-2:30		ļ					1:00-1:15					1	
1:30-1:45 1:45-2:00 2:00-2:15 2:15-2:30			1	1	1	1	1:15-1:30					†	
1:45-2:00 2:00-2:15 2:15-2:30			 		 	1	1:30-1:45		i e		<u> </u>	†	
2:00-2:15 2:15-2:30	†	†	 	-	<u> </u>	†	1:45-2:00		†	 		 	_
2:15-2:30	.	 		 	 		2:00-2:15		†	 	 	1	
		<u> </u>			 	 	2:15-2:30				†	 	
	 	 	 	† 	 	-	2:30-2:45	<u> </u>	 			1	+
2:45-3:00	 	 	1	 	 	 	2:45-3:00			 	 	+	_
3:00-3:15	 	 	+	 		+	3:00-3:15		ł	+	 	 	
3:15-3:30	 	+	 	 	1	 	3:15-3:30	1	1	 	 	1	+
3:30-3:45	1	†	1	 	†	 	3:30-3:45		 		1	1	
3:45-4:00		t	+	 	<u> </u>	 	3:45-4:00			 	†	1	+
1:00-4:15		 	+	1	 	+	4:00-4:15		 	ti		12	
1:15-4:30	1			 		 	4:15-4:30	0		2	 	10	
1:30-4:45	+	 	 	+		 	4:30-4:45	1 5	 	0	 	1	+
1:45-5:00		 	+	-	 	 	4:45-5:00	2 (3)		b (0	4	2 1	3
5:00-5:15	 		 	-	 	 	5:00-5:15	4 (3		lo m		4 (4)
5:15-5:30		1	+	-			5:15-5:30	2 3		2 (1)	1	4	1
5:30-5:45	+	 	 	 	 	+	5:30-5:45	2 (8		6 /1		2 (1
5:45-6:00	1	-	 	+	+	 	5:45-6:00	1 (4	 	17 1			5)
6:00-6:15	-	 	+	+		+	6:00-6:15		1	1	1	 - \	4-
6:15-6:30	 		+	1	+	+	6:15-6:30		 	1	 	 	+-
6:30-6:45	-	 	 			-	6:30-6:45		<u> </u>		 	 	+-
6:45-7:00	 	 	+	 		+	6:45-7:00		 	·	+	 	
7:00-7:15	0	 	3	 	3	 	7:00-7:15			+	 	 	
7:15-7:30		+	1 7	+	 	1	7:15-7:30		 	 	+	+	
7:30-7:45	0		<u> </u>				7:30-7:45	_	<u> </u>	+	+	+	
7:45-8:00	1	 	7	-	5	-	7:45-8:00		 	+	 	+	
7.45-8.00 8:00-8:15	0	- 			17		8:00-8:15		 	+	-		_
	+ 1		9	-	10	-	8:15-8:30					+	
8:15-8:30 8:30-8:45	Ö	 	110	+	115	+	8:30-8:45		-	+	1	+	
8:45-9:00	0		10		10	+	8:45-9:00			+	+	+-	
	0	-	+ -		5	+	9:00-9:15		 	 	<u> </u>	 	_
9:00-9:15	1	+	+	+	-		9:15-9:30		 	+	+	+	_
9:15-9:30	_		+	 	+		9:30-9:45		 	+	+	 	
9:30-9:45		_	-		+	 	9:45-10:00	-	 	 	+	+	
9:45-10:00	_		4	1	_	 	10:00-10:15		 	+		-	
10:00-10:15			_		 	-			-	-		+	
10:15-10:30		<u> </u>	-		_	+	10:15-10:30		 		+	+	+
10:30-10:45	1			1	+	 	10:30-10:45		 	4		+	
10:45-11:00	1				_	 	10:45-11:00		 	+	+	 	
11:00-11:15	4					 	11:00-11:15		 	+	_	+	
11:15-11:30	_	_	-		-		11:15-11:30		 	4	+	 	
11:30-11:45 11:45-12:00	1	ļ	1		 		11:30-11:45 11:45-12:00		 	-		-	

Land Use/Building Type: 1 HIGH PISE CONPOS Source: FIELD OBSERVATIONS

Trip Generation Data Form (Part 1)

[PLAYA VISTAZ]

FRIDAY

ITE Land Use Code: 232

Day of the Week: THURSDAY

Name of Development: CRESCEN	IT WALK CONDOS	Day of the Week: THURSDAY FRIDAY							
City: PLAYA VISTA	State/Province:	CA	Zip/Postal Code: 90094	Day: 27 / 30	Month	: MAR / MAN Year: 2008			
Country: UNITED STATES				Metropolitan Area:					
1. For fast-food land use, please specify if h	amburger- or nonhamburger-bas	ed.							
Location Within Area:						Detailed Description of Development: 3			
☐ (1) CBD ☐ (3) Suburban (N (2) Urban (Non-CBD) ☐ (4) Suburban Cl		´ .	(5) Rural (6) Freeway Interchange Area (Rural) (7) Not Given						
Independent Variable: (include data for a	as many as possible) 2 Act	tual Estima	ted	Actual	Estimated				
(1) Employees (#)			(10) Parking Spaces (#)						
(2) Persons (#)	C		(11) Occupied Beds (#)						
129 (3) Units (#)	>	< □	(12) Seats (#)						
(4) Occupied Units (#)			(13) Servicing Positions/Vehicle	e Fueling					
(5) Gross Floor Area (g	ross sq. ft.)		Positions	•					
(% of development occ	cupied)		(14) Shopping Center % Out-p	oarcels/pads					
(6) Net Rentable Area ((sq. ft.)		(15) A.M. Peak Hour Volume of A	Adjacent Street Traffic					
(7) Gross Leasable Are		B 0	(16) P.M. Peak Hour Volume of A	Adjacent Street Traffic					
(8) Occupied Gross Lea	· V· 1 /	0 0	(17) Other						
(9) Acres	, , ,		(18) Other						
7. Please provide all pertinent information that Other Data: Vehicle Occupancy (#) A.M. P.M. P.M. Percent by Transit: A.M. Percent by Carpool/Vanpool: A.M. P.M. P.M. %	24-hour %	Tr.	ansportation Demand Management (TDM) Informate the time of this study, was there a TDM program (to No Yes (If yes, please check appropriate box/boxes, or may help quantify this impact. Attach additional sh	hat may have impacted the lescribe the nature of the T					
A.M. % P.M. % 24-hour % mployees by Shift: Start End Irst Shift: Time Employees (#) econd Shift: Time Employees (#) Start End hird Shift: Time Employees (#) arking Cost on Site: Hourly Daily			(2) Carpool Programs ☐ (6) Preferential (3) Vanpool Programs ☐ (7) Transit an	Support Measures al HOV Treatments d Ridesharing Incentives upply and Pricing ent	□ (10) Va	olls and Congestion Pricing ariable Work Hours/Compressed Work Week elecommuting ther			

Trip Generation Data Form (Part 2)

Summary	of Drivey	vay 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		
	Ali	Trucks	All	Trucks	All	Trucks	All	Trucks	Ali	Trucks	All	Trucks	All	Trucks	All	Trucks	All	Truck	
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:					ŧ														
A.M. Peak Hour Generator ² Time: % ', W - 9:00	1		30		31														
P.M. Peak Hour Generator ² Time: 4:45 - 5:45	15		6		21														
Peak Hour Generator ³ Time (Weekend):						·													

- 1. Highest hourly volume between 7 AM and 9 AM (4 PM and 6 PM).
- 2. Highest hourly volume during the AM or PM period.
- 3. Highest hourly volume during the entire day.

Please refer to the Trip Generation User's Guide for full definition of the terms.

A.M. Period	Enter		Exit		Total		Mid-Day Period	Enter		Exit		Total		P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks	1 ,	All	Trucks	All	Trucks	All	Trucks		All	Trucks	All	Trucks	All	Trucks
6:00-7:00		†					11:00-12:00							3:00-4:00				1		I
6:15-7:15				1			11:15-12:15							3:15-4:15						I
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Check if Part 3 and	d/or additional information is a	attached.				
	Name: SHARON		PATEL		Please return to:	Institute of Transportation Engineers
	Organization: ITE & L	Jaa				Technical Projects Division 1099 14th Street, NW. Suite 300 West
	Address:					Washington, DC 20005-3438 USA
	City/State/Zip:	1447				Telephone: +1 202-289-0222
	Telephone #:	Fax #:		E-mail:		FAX: +1 202-289-7722
						ITE on the Web: www.ite.org

Trip Generation Data Form (Part 3)

Name/Organization: SHARON Liu / MITESH PATEL / ITE & UCLA City/State: Lox Angeles, Ca
Telephone Number: 714.872.3645 / 714.552 7619

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

Day of the week: THURSDAY | FRIDAY

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

A.M. Period 12:00-12:15	Enter		Exit		Total		P.M. Period	Enter		Exit		Total		
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