

ITE Data Collection Project

Trip Generation & Parking Demand

937 - Coffee Shop w/ Drive-Thru Window

Prepared for:



Prepared by:



May 5, 2023



May 5, 2023

Jeanne Acutanza
Technical Committee Chair
Western District ITE

SUBJECT: Letter of Submittal for OSU ITE Student Chapter Data Collection Report

Dear Jeanne,

On behalf of the OSU ITE Student Chapter, I am pleased to present our Trip Generation & Parking Demand Study. We collected and analyzed trips generated by land use 937, coffee shop with drive-thru window in Corvallis, OR on three separate days (Monday, Thursday, and Friday).

Attached is a summary of our data and results from this study. All trip generation & parking demand data forms are included in the appendix.

If you have any questions or concerns, please feel free to contact us at morenoel@oregonstate.edu.

Thank you,
Elsa Moreno Rangel
Community Service Chair | OSU ITE Student Chapter

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1. Purpose

The purpose of this project is to collect trip generation and parking data for the land use of a coffee shop with a drive-thru window (937). The project provided both graduate and undergraduate students with technical experience in the field of transportation.

1.1. Background

The OSU ITE Student Chapter collected detailed trip generation and parking demand data at a local coffee shop with drive-through service (land use code 937) located in Corvallis, Oregon as shown in Figure 1. The coffee shop is open 5 am – 9 pm Monday through Sunday. Data was collected on a Thursday, Friday, and Monday. Students kept a record of entering and exiting volumes for bicycles, passenger vehicles, motorcycles, vans, and trucks from 7 am to 7 pm to capture the hours of operation.



Figure 1 - Study Site

Table 1 represents specific land use information related to the study site.

Table 1: Land Use Information for Study Site

Site Name	Location	Access Points	Site Size	Facility Types	Parking Spaces
<i>Coffee Shop w/ Drive-Through Service</i>	Corvallis, OR	3 Automotive	2600 SF (0.060 acre)	Coffee Shop	36 + 2 ADA

2. Project Team

This project could not be possible without the support from many OSU ITE Student Chapter officers and student members who volunteered their time during the data collection and data reduction phases. This project was also possible thanks to the support and guidance from our professional mentor, Derek Moore, and our faculty advisor, Dr. David Hurwitz.

2.1. Student Team

The data collection team consisted of 9 student volunteers from the OSU ITE Student Chapter who contributed a total of 36 hours of data collection.



Elsa Moreno Rangel



Shoroq Alabdali



Sarah Carr



Matthew Prak



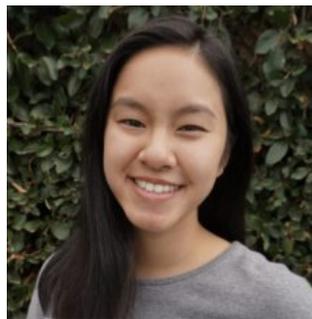
James Umphress



Emilio Calderon



Amy Wyman



Kezia Suwandhaputra



Helena Breuer

4. Methodology

The Google Maps data shown in Figure 2 indicates that the coffee shop experiences the highest usage during Monday, Thursday, and Friday. Therefore data was collected on Thursday (April 20, 2023), Friday (April 21, 2023), and Monday (April 24, 2023).



Figure 2 - Google Maps Usage Data

Student volunteers used a spreadsheet and notebooks to keep record of entering and exiting volumes for bicycles, pedestrians, passenger vehicles, motorcycles, and trucks from 7:00 AM to 7:00 PM. Each volunteer recorded vehicles, pedestrians, and bicyclists entering and exiting the site. Parking data was collected at 15-minute intervals from 7:00 AM until 7:00 PM. Additionally, drive-thru operations data was collected by recording the number of cars served from 7:00 AM to 7:00 PM, and queue length every 15-minute intervals. All trip generation and parking data collected for Thursday, Friday, and Monday was then transcribed into ITE's Trip Generation Data Forms and the Parking Demand Survey Form.

5. Results

5.1. Trip Generation Results

The trip generation data for Thursday, Friday, and Monday are summarized as shown in Table 3, 4, and 5 respectively. The tables include the trip totals for the passenger vehicles, the directional distribution, and trip rate for the 12-hour, AM peak, and PM peak periods.

Table 3: Trip Generation Summary for Thursday (Weekday)

Data Collection Summary (04/20/2023)			
Time Period	12-hr Volume	AM Peak Hour	PM Peak Hour
Peak Hour	N/A	7:15 - 8:15	3:45 - 4:45
Vehicles In	540	101	51
Vehicles Out	541	106	44
Total Vehicles	1081	207	95
Directional Distribution	N/A	IN: 49% OUT: 51%	IN: 54% OUT: 46%
Trip Rate (Trips/sq. ft.)	415.8	79.6	36.5

Table 4: Trip Generation Summary for Friday (Weekday)

Data Collection Summary (04/21/2023)			
Time Period	12-hr Volume	AM Peak Hour	PM Peak Hour
Peak Hour	N/A	7:30 - 8:30	3:00 - 4:00
Vehicles In	370	51	34
Vehicles Out	402	48	37
Total Vehicles	772	99	71
Directional Distribution	N/A	IN: 52% OUT: 48%	IN: 48% OUT: 52%
Trip Rate (Trips/Acre)	296.9	38.1	27.3

Table 5: Trip Generation Summary for Monday (Weekday)

Data Collection Summary (04/24/2023)			
Time Period	12-hr Volume	AM Peak Hour	PM Peak Hour
Peak Hour	N/A	7:30 - 8:30	3:00 - 4:00
Vehicles In	329	37	27
Vehicles Out	349	37	28
Total Vehicles	678	74	55
Directional Distribution	N/A	IN: 50% OUT: 50%	IN: 49% OUT: 51%
Trip Rate (Trips/Acre)	260.8	28.5	21.1

Table 6 summarizes the parking generation data. The parking peak hours and highest parking demand for each day are shown.

Table 6: Parking Generation Data Summary

Day	Thursday	Friday	Monday
Peak Hour	10:00 - 11:00	2:00 - 3:00	12:00 - 1:00
Peak Parking Demand	31	31	27
Parking Rate (Parking Demand/sq.ft)	11.9	11.9	10.4

5.2. ITE Trip Generation Comparison

Table 7 shows a comparison between the average trip rates from the 11th Edition ITE Trip Generation Manual and the trip rates at the coffee shop. The results presented in the table show that the trip rates generated by the coffee shop are approximately 50% of the trip rates given in the 11th Edition ITE Trip Generation Manual.

Table 7: Comparison Between Trip Rates on 11th Edition ITE Trip Generation Manual and Coffee Shop Data

Time Period	11th Edition ITE Average Trip Rate (Trips/1000 sq.ft)	Trip Rate Generated by the Coffee Shop
Weekday	533.57	-
Weekday AM (7-9 AM)	85.88	48.7
Weekday AM	101.27	48.7
Weekday PM (4-6 PM)	38.99	21.3
Weekday PM	43.65	28.3

5.3. ITE Parking Generation Comparison

The ITE Parking Generation Manual consists of daily peak (24-hour) parking demand rates only. However, the Coffee Shop data was collected from 7:00 AM to 7:00 PM (i.e., 12-hour period). Table 8 shows the comparison between parking rates from the ITE Parking Generation Manual and the Coffee Shop. It can be seen in Table 8 that the collected parking rates from the coffee shop are relatively similar to the parking rates in ITE Parking Generation Manual.

Table 8: Comparison Between Parking Rates on 4th Edition ITE Parking Generation Manual and the Coffee Shop Data

Time Period	4th Edition Daily Parking Rate (Parking Demand/Acre)	Peak Parking Rate at the Coffee Shop (Parking Demand/Acre)
Thursday	10.40	11.9
Friday		11.9
Monday		10.4

5.4. Drive-Thru Operations Results

Drive-thru operations were also collected during this study. **Table 6** summarizes the drive-thru operations data. Shown in table 6 are the number of cars served on Thursday, Friday, and Monday, the average number of cars served per hour, the peak number of cars served per hour, average queue length, and the peak queue length.

Table 9: Drive-Thru Operations Data Summary

Day	Thursday	Friday	Monday
Total # of Cars Served	529	627	524
Cars Served per Hour (Average)	44	52	44
Cars Served per Hour (Peak)	60 (12:45–1:45 PM)	70 (7:15–8:15 PM)	65 (8:45–9:45 PM)
Queue Length (Average)	6	7	5
Queue Length (Peak)	15 (10:30 AM)	16 (10:00 AM)	14 (11:00 AM)

6. Conclusion

This technical report describes data collected to support the development of trip generation and parking generation rates for the novel land use of a Coffee Shop. The site chosen for assessment was 2600 sq.ft. Coffee Shop with Drive-Thru Window in Corvallis, Oregon. Measured rates were compared against the pre-existing land use rates in the 11th Edition of the ITE Trip Generation Manual (code 937) and 4th Edition ITE Parking Generation Manual.

7. Acknowledgments

The OSU ITE Student Chapter would like to thank both of our mentors, Derek Moore, and Dr. David Hurwitz. We would also like to thank ITE Western District for patiently working with us as we selected our data collection site. Thank you!

8. Appendices

Appendix A

Trip Generation Data

Thursday's (April 20, 2023) Parking Data

Friday's (April 21, 2023) Parking Data

Monday's (April 24, 2023) Parking Data

Appendix B

Parking Demand Data

Thursday's (April 20, 2023) Parking Data

Friday's (April 21, 2023) Parking Data

Monday's (April 24, 2023) Parking Data

Appendix C

Field Data Sheets

Thursday's (April 20, 2023) Field Data Sheet

Friday's (April 21, 2023) Field Data Sheet

Monday's (April 24, 2023) Field Data Sheet

Appendix A

TRIP GENERATION DATA

THURSDAY

Trip Generation Data Form (Part 1)

Land Use/Building Type: ¹ Coffee Shop with Drive-Thru Window	ITE Land Use Code: 937		
Source:	Source No. (ITE use only):		
Name of Development:	Day of the Week: Thursday		
City: Corvallis	State/Province: Oregon	Zip/Postal Code: 97330	Day: 20 Month: 04 Year: 2023
Country: USA	Metropolitan Area:		

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

Location Within Area: <input type="checkbox"/> (1) CBD <input type="checkbox"/> (3) Suburban (Non-CBD) <input type="checkbox"/> (5) Rural <input type="checkbox"/> (2) Urban (Non-CBD) <input type="checkbox"/> (4) Suburban CBD <input type="checkbox"/> (6) Freeway Interchange Area (Rural) <input type="checkbox"/> (7) Not Given				Detailed Description of Development: ³ Coffee Shop with Drive-Thru Window			
Independent Variable: (include data for as many as possible) ² Actual Estimated Actual Estimated							
_____ (1) Employees (#)	<input type="checkbox"/>	<input type="checkbox"/>	38	(9) Parking Spaces (% occupied: _____)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
_____ (2) Persons (#)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (10) Beds (% occupied: _____)	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (3) Total Units (#) (indicate unit: _____)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (11) Seats (#)	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (4) Occupied Units (#) (indicate unit: _____)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (12) Servicing Positions/Vehicle Fueling Positions	<input type="checkbox"/>	<input type="checkbox"/>	
2600 (5) Gross Floor Area (gross sq. ft.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		_____ (13) Shopping Center % Out-parcels/pads	<input type="checkbox"/>	<input type="checkbox"/>	
(% of development occupied _____)				_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (6) Net Rentable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (7) Gross Leasable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (16) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
(% of development occupied _____)				_____ (17) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (8) Total Acres (% developed: _____)	<input type="checkbox"/>	<input type="checkbox"/>					

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 0 Daily 0	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 type="checkbox"/> No <input type="checkbox"/> 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) <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 _____
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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)

	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) 7:15 - 8:15 Time (ex.: 7:15 - 8:15): 8:15	101		106		207													
P.M. Peak Hour of Adjacent Street Traffic (4 – 6) Time: 4:00 - 5:00	50		37		87													
A.M. Peak Hour Generator ² Time: 7:15 - 8:15	101		106		207													
P.M. Peak Hour Generator ² Time: 3:45 - 4:45	51		44		95													
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	24		29		53	3:00-4:00	16		26		42		
6:15-7:15							11:15-12:15	24		32		56	3:15-4:15	28		32		60		
6:30-7:30							11:30-12:30	23		24		47	3:30-4:30	44		40		84		
6:45-7:45							11:45-12:45	16		21		37	3:45-4:45	51		44		95		
7:00-8:00	97		95		192		12:00-1:00	21		28		49	4:00-5:00	50		37		87		
7:15-8:15	101		106		207		12:15-1:15	20		25		45	4:15-5:15	42		33		75		
7:30-8:30	102		105		207		12:30-1:30	23		30		53	4:30-5:30	33		29		62		
7:45-8:45	95		99		194		12:45-1:45	23		29		52	4:45-5:45	34		29		63		
8:00-9:00	91		91		182		1:00-2:00	18		19		37	5:00-6:00	39		35		74		

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

Survey conducted by: Name: Shoroq, Emilio, Elsa, Sarah, James, Matthew, Amy
 Organization: OSU ITE Student Chapter
 Address: _____
 City/State/Zip: Corvallis, OR 97330
 Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 I ST NW, STE 550
 Washington, DC, 20006, USA
 Telephone: +1 202-289-0222

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Trip Generation Data Form (Part 3)

Name/Organization: OSU ITE Student Chapter City/State: Corvallis, OR

Telephone Number: _____

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	4	0	8	0	12	0
12:15-12:30							12:15-12:30	5	0	3	0	8	0
12:30-12:45							12:30-12:45	4	0	6	0	10	0
12:45-1:00							12:45-1:00	8	0	11	0	19	0
1:00-1:15							1:00-1:15	3	0	5	0	8	0
1:15-1:30							1:15-1:30	8	0	8	0	16	0
1:30-1:45							1:30-1:45	4	0	5	0	9	0
1:45-2:00							1:45-2:00	3	0	1	0	4	0
2:00-2:15							2:00-2:15	7	0	8	0	15	0
2:15-2:30							2:15-2:30	5	0	6	0	11	0
2:30-2:45							2:30-2:45	6	0	9	0	15	0
2:45-3:00							2:45-3:00	7	0	9	0	16	0
3:00-3:15							3:00-3:15	4	0	5	0	9	0
3:15-3:30							3:15-3:30	1	0	2	0	3	0
3:30-3:45							3:30-3:45	8	0	8	0	16	0
3:45-4:00							3:45-4:00	3	0	11	0	14	0
4:00-4:15							4:00-4:15	16	0	11	0	27	0
4:15-4:30							4:15-4:30	17	0	10	0	27	0
4:30-4:45							4:30-4:45	15	0	12	0	27	0
4:45-5:00							4:45-5:00	2	0	4	0	6	0
5:00-5:15							5:00-5:15	8	0	7	0	15	0
5:15-5:30							5:15-5:30	8	0	6	0	14	0
5:30-5:45							5:30-5:45	16	0	12	0	28	0
5:45-6:00							5:45-6:00	7	0	10	0	17	0
6:00-6:15							6:00-6:15	7	0	11	0	18	0
6:15-6:30							6:15-6:30	7	0	7	0	14	0
6:30-6:45							6:30-6:45	3	0	5	0	8	0
6:45-7:00							6:45-7:00	8	0	5	0	13	0
7:00-7:15	16	0	16	0	32	0	7:00-7:15						
7:15-7:30	28	0	26	0	54	0	7:15-7:30						
7:30-7:45	26	0	27	0	53	0	7:30-7:45						
7:45-8:00	27	0	26	0	53	0	7:45-8:00						
8:00-8:15	20	0	27	0	47	0	8:00-8:15						
8:15-8:30	29	0	25	0	54	0	8:15-8:30						
8:30-8:45	19	0	21	0	40	0	8:30-8:45						
8:45-9:00	23	0	18	0	41	0	8:45-9:00						
9:00-9:15	27	0	19	0	46	0	9:00-9:15						
9:15-9:30	31	0	24	0	55	0	9:15-9:30						
9:30-9:45	28	0	25	0	53	0	9:30-9:45						
9:45-10:00	20	0	22	0	42	0	9:45-10:00						
10:00-10:15	8	0	8	0	16	0	10:00-10:15						
10:15-10:30	4	0	3	0	7	0	10:15-10:30						
10:30-10:45	11	0	8	0	19	0	10:30-10:45						
10:45-11:00	5	0	12	0	17	0	10:45-11:00						
11:00-11:15	4	0	5	0	9	0	11:00-11:15						
11:15-11:30	6	0	11	0	17	0	11:15-11:30						
11:30-11:45	11	0	9	0	20	0	11:30-11:45						
11:45-12:00	3	0	4	0	7	0	11:45-12:00						

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Trip Generation Data Form (Part 4)

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 ¹ Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):	0	0	0						
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time:	0	0	0						
A.M. Peak Hour Generator ² Time:	0	0	0						
P.M. Peak Hour Generator ² Time:	0	0	0						
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.) 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 ¹ Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):	1	0	0						
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time:	0	0	0						
A.M. Peak Hour Generator ² Time: 9:00 - 10:00	5	4	9						
P.M. Peak Hour Generator ² Time:	0	0	0						
Peak Hour Generator ³ Time (Weekend):									

Survey conducted by: Name: Shoroq, Emilio, Elsa, Sarah, James, Matthew, Amy

Organization: OSU ITE Student Chapter

Address: _____

City/State/Zip: Corvallis, OR 97330

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

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 I ST NW, STE 550
 Washington, DC, 20006, USA
 Telephone: +1 202-289-0222

ITE on the Web: www.ite.org

TRIP GENERATION DATA

FRIDAY

Trip Generation Data Form (Part 1)

Land Use/Building Type: ¹ Coffee Shop with Drive-Thru Window	ITE Land Use Code: 937		
Source:	Source No. (ITE use only):		
Name of Development:	Day of the Week: Friday		
City: Corvallis	State/Province: Oregon	Zip/Postal Code: 97330	Day: 21 Month: 04 Year: 2023
Country: USA	Metropolitan Area:		

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

Location Within Area: <input type="checkbox"/> (1) CBD <input type="checkbox"/> (3) Suburban (Non-CBD) <input type="checkbox"/> (5) Rural <input type="checkbox"/> (2) Urban (Non-CBD) <input type="checkbox"/> (4) Suburban CBD <input type="checkbox"/> (6) Freeway Interchange Area (Rural) <input type="checkbox"/> (7) Not Given				Detailed Description of Development: ³ Coffee Shop with Drive-Thru Window			
Independent Variable: (include data for as many as possible) ² Actual Estimated Actual Estimated							
_____ (1) Employees (#)	<input type="checkbox"/>	<input type="checkbox"/>	<u>38</u>	(9) Parking Spaces (% occupied: _____)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
_____ (2) Persons (#)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (10) Beds (% occupied: _____)	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (3) Total Units (#) (indicate unit: _____)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (11) Seats (#)	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (4) Occupied Units (#) (indicate unit: _____)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (12) Servicing Positions/Vehicle Fueling Positions	<input type="checkbox"/>	<input type="checkbox"/>	
<u>2600</u> (5) Gross Floor Area (gross sq. ft.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		_____ (13) Shopping Center % Out-parcels/pads	<input type="checkbox"/>	<input type="checkbox"/>	
(% of development occupied _____)				_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (6) Net Rentable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (7) Gross Leasable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (16) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
(% of development occupied _____)				_____ (17) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (8) Total Acres (% developed: _____)	<input type="checkbox"/>	<input type="checkbox"/>					

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 <u>0</u> Daily <u>0</u>	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 type="checkbox"/> No <input type="checkbox"/> 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) <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)

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) 7:30 - 8:30 Time (ex.: 7:15 - 8:15): 8:30	51		48		99													
P.M. Peak Hour of Adjacent Street Traffic (4 – 6) Time: 4:00 - 5:00	19		23		42													
A.M. Peak Hour Generator ² Time: 7:30 - 8:30	51		48		99													
P.M. Peak Hour Generator ² Time: 3:00 - 4:00	34		37		71													
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	42		36		78		3:00-4:00	34		37		71	
6:15-7:15							11:15-12:15	34		39		73		3:15-4:15	28		31		58	
6:30-7:30							11:30-12:30	28		32		60		3:30-4:30	26		30		56	
6:45-7:45							11:45-12:45	23		27		50		3:45-4:45	21		31		52	
7:00-8:00	44		43		87		12:00-1:00	22		24		46		4:00-5:00	19		23		42	
7:15-8:15	48		44		92		12:15-1:15	23		22		45		4:15-5:15	17		18		35	
7:30-8:30	51		48		99		12:30-1:30	20		24		44		4:30-5:30	14		20		34	
7:45-8:45	49		48		97		12:45-1:45	26		25		51		4:45-5:45	10		15		25	
8:00-9:00	44		45		89		1:00-2:00	30		25		55		5:00-6:00	8		14		22	

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

Survey conducted by: Name: Matthew, Shoroq, Sarah, Elsa, Lena
 Organization: OSU ITE Student Chapter
 Address: _____
 City/State/Zip: Corvallis, OR 97330
 Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 I ST NW, STE 550
 Washington, DC, 20006, USA
 Telephone: +1 202-289-0222

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Trip Generation Data Form (Part 3)

Name/Organization: OSU ITE Student Chapter City/State: Corvallis, OR

Telephone Number: _____

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

Day of the week: Friday (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	0	8	0	14	0
12:15-12:30							12:15-12:30	8	0	5	0	13	0
12:30-12:45							12:30-12:45	3	0	5	0	8	0
12:45-1:00							12:45-1:00	5	0	6	0	11	0
1:00-1:15							1:00-1:15	7	0	6	0	13	0
1:15-1:30							1:15-1:30	5	0	7	0	12	0
1:30-1:45							1:30-1:45	9	0	6	0	15	0
1:45-2:00							1:45-2:00	9	0	6	0	15	0
2:00-2:15							2:00-2:15	12	0	7	0	19	0
2:15-2:30							2:15-2:30	4	0	14	0	18	0
2:30-2:45							2:30-2:45	6	0	8	0	14	0
2:45-3:00							2:45-3:00	13	0	15	0	28	0
3:00-3:15							3:00-3:15	11	0	13	0	24	0
3:15-3:30							3:15-3:30	6	0	7	0	13	0
3:30-3:45							3:30-3:45	10	0	6	0	16	0
3:45-4:00							3:45-4:00	7	0	11	0	18	0
4:00-4:15							4:00-4:15	5	0	7	0	12	0
4:15-4:30							4:15-4:30	4	0	6	0	10	0
4:30-4:45							4:30-4:45	5	0	7	0	12	0
4:45-5:00							4:45-5:00	5	0	3	0	8	0
5:00-5:15							5:00-5:15	3	0	2	0	5	0
5:15-5:30							5:15-5:30	1	0	8	0	9	0
5:30-5:45							5:30-5:45	1	0	2	0	3	0
5:45-6:00							5:45-6:00	4	0	2	0	6	0
6:00-6:15							6:00-6:15	2	0	4	0	6	0
6:15-6:30							6:15-6:30	2	0	3	0	5	0
6:30-6:45							6:30-6:45	8	0	9	0	17	0
6:45-7:00							6:45-7:00	1	0	2	0	3	0
7:00-7:15	9	0	11	0	20	0	7:00-7:15						
7:15-7:30	8	0	9	0	17	0	7:15-7:30						
7:30-7:45	11	0	9	0	20	0	7:30-7:45						
7:45-8:00	16	0	14	0	30	0	7:45-8:00						
8:00-8:15	13	0	12	0	25	0	8:00-8:15						
8:15-8:30	11	0	13	0	24	0	8:15-8:30						
8:30-8:45	9	0	9	0	18	0	8:30-8:45						
8:45-9:00	11	0	11	0	22	0	8:45-9:00						
9:00-9:15	11	0	10	0	21	0	9:00-9:15						
9:15-9:30	9	0	12	0	21	0	9:15-9:30						
9:30-9:45	14	0	15	0	29	0	9:30-9:45						
9:45-10:00	11	0	13	0	24	0	9:45-10:00						
10:00-10:15	12	0	16	0	28	0	10:00-10:15						
10:15-10:30	5	0	4	0	9	0	10:15-10:30						
10:30-10:45	13	0	13	0	26	0	10:30-10:45						
10:45-11:00	4	0	10	0	14	0	10:45-11:00						
11:00-11:15	14	0	5	0	19	0	11:00-11:15						
11:15-11:30	14	0	12	0	26	0	11:15-11:30						
11:30-11:45	8	0	10	0	18	0	11:30-11:45						
11:45-12:00	6	0	9	0	15	0	11:45-12:00						

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Trip Generation Data Form (Part 4)

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 ¹ Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):	0	0	0						
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time:	0	0	0						
A.M. Peak Hour Generator ² Time:	0	0	0						
P.M. Peak Hour Generator ² Time:	0	0	0						
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.) 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 ¹ Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):	0	0	0						
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time:	0	0	0						
A.M. Peak Hour Generator ² Time:	0	0	0						
P.M. Peak Hour Generator ² Time:	0	0	0						
Peak Hour Generator ³ Time (Weekend):									

Survey conducted by: Name: Matthew, Shoroq, Sarah, Elsa, Lena

Organization: OSU ITE Student Chapter

Address: _____

City/State/Zip: Corvallis, OR 97330

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

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 I ST NW, STE 550
 Washington, DC, 20006, USA
 Telephone: +1 202-289-0222

ITE on the Web: www.ite.org

TRIP GENERATION DATA

MONDAY

Trip Generation Data Form (Part 1)

Land Use/Building Type: ¹ Coffee Shop with Drive-Thru Window	ITE Land Use Code: 937		
Source:	Source No. (ITE use only):		
Name of Development:	Day of the Week: Monday		
City: Corvallis	State/Province: Oregon	Zip/Postal Code: 97330	Day: 24 Month: 04 Year: 2023
Country: USA	Metropolitan Area:		

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

Location Within Area: <input type="checkbox"/> (1) CBD <input type="checkbox"/> (3) Suburban (Non-CBD) <input type="checkbox"/> (5) Rural <input type="checkbox"/> (2) Urban (Non-CBD) <input type="checkbox"/> (4) Suburban CBD <input type="checkbox"/> (6) Freeway Interchange Area (Rural) <input type="checkbox"/> (7) Not Given				Detailed Description of Development: ³ Coffee Shop with Drive-Thru Window			
Independent Variable: (include data for as many as possible) ² Actual Estimated Actual Estimated							
_____ (1) Employees (#)	<input type="checkbox"/>	<input type="checkbox"/>	38	(9) Parking Spaces (% occupied: _____)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
_____ (2) Persons (#)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (10) Beds (% occupied: _____)	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (3) Total Units (#) (indicate unit: _____)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (11) Seats (#)	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (4) Occupied Units (#) (indicate unit: _____)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (12) Servicing Positions/Vehicle Fueling Positions	<input type="checkbox"/>	<input type="checkbox"/>	
2600 (5) Gross Floor Area (gross sq. ft.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>		_____ (13) Shopping Center % Out-parcels/pads	<input type="checkbox"/>	<input type="checkbox"/>	
(% of development occupied _____)				_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (6) Net Rentable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (7) Gross Leasable Area (sq. ft.)	<input type="checkbox"/>	<input type="checkbox"/>		_____ (16) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
(% of development occupied _____)				_____ (17) Other _____	<input type="checkbox"/>	<input type="checkbox"/>	
_____ (8) Total Acres (% developed: _____)	<input type="checkbox"/>	<input type="checkbox"/>					

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 0 Daily 0	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 type="checkbox"/> No <input type="checkbox"/> 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) <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

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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)

	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) 7:30 - 8:30 Time (ex.: 7:15 - 8:15): 8:30	37		37		74													
P.M. Peak Hour of Adjacent Street Traffic (4 – 6) Time: 4:15 - 5:15	18		19		37													
A.M. Peak Hour Generator ² Time: 7:30 - 8:30	37		37		74													
P.M. Peak Hour Generator ² Time: 3:00 - 4:00	27		28		55													
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	40		46		86		3:00-4:00	27		28		55	
6:15-7:15							11:15-12:15	38		39		77		3:15-4:15	23		27		50	
6:30-7:30							11:30-12:30	31		34		65		3:30-4:30	23		20		43	
6:45-7:45							11:45-12:45	30		33		63		3:45-4:45	19		16		35	
7:00-8:00	26		31		57		12:00-1:00	31		34		65		4:00-5:00	16		18		34	
7:15-8:15	31		35		66		12:15-1:15	28		34		62		4:15-5:15	18		19		37	
7:30-8:30	37		37		74		12:30-1:30	27		27		54		4:30-5:30	16		19		35	
7:45-8:45	35		35		70		12:45-1:45	25		26		51		4:45-5:45	11		18		29	
8:00-9:00	35		37		72		1:00-2:00	23		28		51		5:00-6:00	9		14		23	

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

Survey conducted by: Name: Emilio, Sarah, Matthew, Elsa, Kezia
 Organization: OSU ITE Student Chapter
 Address: _____
 City/State/Zip: Corvallis, OR 97330
 Telephone #: _____ Fax #: _____ E-mail: _____

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 I ST NW, STE 550
 Washington, DC, 20006, USA
 Telephone: +1 202-289-0222

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

Name/Organization: OSU ITE Student Chapter City/State: Corvallis, OR

Telephone Number: _____

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

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	9	0	7	0	16	0
12:15-12:30							12:15-12:30	9	0	13	0	22	0
12:30-12:45							12:30-12:45	9	0	11	0	20	0
12:45-1:00							12:45-1:00	4	0	3	0	7	0
1:00-1:15							1:00-1:15	6	0	7	0	13	0
1:15-1:30							1:15-1:30	8	0	6	0	14	0
1:30-1:45							1:30-1:45	7	0	10	0	17	0
1:45-2:00							1:45-2:00	2	0	5	0	7	0
2:00-2:15							2:00-2:15	3	0	6	0	9	0
2:15-2:30							2:15-2:30	5	0	6	0	11	0
2:30-2:45							2:30-2:45	6	0	4	0	10	0
2:45-3:00							2:45-3:00	2	0	1	0	3	0
3:00-3:15							3:00-3:15	4	0	5	0	9	0
3:15-3:30							3:15-3:30	5	0	10	0	15	0
3:30-3:45							3:30-3:45	11	0	9	0	20	0
3:45-4:00							3:45-4:00	7	0	4	0	11	0
4:00-4:15							4:00-4:15	0	0	4	0	4	0
4:15-4:30							4:15-4:30	5	0	3	0	8	0
4:30-4:45							4:30-4:45	7	0	5	0	12	0
4:45-5:00							4:45-5:00	4	0	6	0	10	0
5:00-5:15							5:00-5:15	2	0	5	0	7	0
5:15-5:30							5:15-5:30	3	0	3	0	6	0
5:30-5:45							5:30-5:45	2	0	4	0	6	0
5:45-6:00							5:45-6:00	2	0	2	0	4	0
6:00-6:15							6:00-6:15	4	0	2	0	6	0
6:15-6:30							6:15-6:30	3	0	5	0	8	0
6:30-6:45							6:30-6:45	2	0	3	0	5	0
6:45-7:00							6:45-7:00	1	0	2	0	3	0
7:00-7:15	4	0	5	0	9	0	7:00-7:15						
7:15-7:30	5	0	7	0	12	0	7:15-7:30						
7:30-7:45	10	0	10	0	20	0	7:30-7:45						
7:45-8:00	7	0	9	0	16	0	7:45-8:00						
8:00-8:15	9	0	9	0	18	0	8:00-8:15						
8:15-8:30	11	0	9	0	20	0	8:15-8:30						
8:30-8:45	8	0	8	0	16	0	8:30-8:45						
8:45-9:00	7	0	11	0	18	0	8:45-9:00						
9:00-9:15	10	0	6	0	16	0	9:00-9:15						
9:15-9:30	10	0	12	0	22	0	9:15-9:30						
9:30-9:45	6	0	10	0	16	0	9:30-9:45						
9:45-10:00	9	0	5	0	14	0	9:45-10:00						
10:00-10:15	16	1	8	0	24	1	10:00-10:15						
10:15-10:30	17	0	15	0	32	0	10:15-10:30						
10:30-10:45	12	0	15	0	27	0	10:30-10:45						
10:45-11:00	17	0	14	1	31	1	10:45-11:00						
11:00-11:15	11	0	14	0	25	0	11:00-11:15						
11:15-11:30	16	0	18	0	34	0	11:15-11:30						
11:30-11:45	10	0	12	0	22	0	11:30-11:45						
11:45-12:00	3	0	2	0	5	0	11:45-12:00						

ite Institute of Transportation Engineers
Trip Generation Data Form (Part 4)

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 ¹ Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):	0	0	0						
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time:	0	0	0						
A.M. Peak Hour Generator ² Time:	0	0	0						
P.M. Peak Hour Generator ² Time: 2:00 - 3:00	1	0	1						
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.) 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 ¹ Street Traffic (7 – 9) 7:30 - 8:30 Time (ex.: 7:15 - 8:15): 8:30	1	1	2						
P.M. Peak Hour of Adjacent ¹ Street Traffic (4 – 6) Time: 5:15 - 6:15	0	2	2						
A.M. Peak Hour Generator ² Time: 7:30 - 8:30	1	1	2						
P.M. Peak Hour Generator ² Time: 5:15 - 6:15	0	2	2						
Peak Hour Generator ³ Time (Weekend):									

Survey conducted by: Name: Emilio, Sarah, Matthew, Elsa, Kezia

Organization: OSU ITE Student Chapter

Address: _____

City/State/Zip: Corvallis, OR 97330

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

Please return to: Institute of Transportation Engineers
 Technical Projects Division
 1627 I ST NW, STE 550
 Washington, DC, 20006, USA
 Telephone: +1 202-289-0222

ITE on the Web: www.ite.org

Appendix B



Parking Demand Survey Form

Institute of Transportation Engineers

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

Land Use Code* **937**

Name of Site **Coffee Shop with Drive-Thru Window**

Brief Description of Site
Coffee Shop with Drive-Thru Window

Transit* **Yes**
 Area* **Non-CBD**
 TMP* **No**
 Parking Price* **0**

City **Corvallis**
 State **OR** Country **USA**
 Daily Rate **0** Hourly Rate

Site Size*	2600	Units*	sq. ft	Occupancy*	100%	Land Use
Site Size		Units		Occupancy		
Site Size		Units		Occupancy		
Site Size		Units		Occupancy		

Number of Parking Spaces Provided at Site **38**

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

Date	4/20/23	4/21/23	4/24/23			
Day	Thursday	Friday	Monday			
12 Mid						
1:00 AM						
2:00 AM						
3:00 AM						
4:00 AM						
5:00 AM						
6:00 AM						
7:00 AM	12	26	13			
8:00 AM	17	28	15			
9:00 AM	18	27	18			
10:00 AM	31	21	20			
11:00 AM	27	23	25			
12 Noon	26	19	27			
1:00 PM	20	22	22			
2:00 PM	24	31	17			
3:00 PM	19	27	17			
4:00 PM	14	24	19			
5:00 PM	18	20	20			
6:00 PM	15	11	18			
7:00 PM						
8:00 PM						
9:00 PM						
10:00 PM						
11:00 PM						

Person **Elsa Moreno Rangel & Matthew Prak** Organization **OSU ITE Student Chapter**
 Phone
 Fax
 Email **morenoel@oregonstate.edu**
 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:
 Institute of Transportation Engineers, 1627 Eye Street, NW Suite 600; Washington, DC 20006

Appendix C

FIELD DATA SHEET | THURSDAY (April 20, 2023)

TABLE #1 - TRIP GENERATION DATA

TIME	DRIVE-THRU	PARKING LOT							
	# OF CARS SERVED	CARS IN	CARS OUT	TRUCKS IN	TRUCKS OUT	BIKES IN	BIKES OUT	PEDS IN	PEDS OUT
7:00 AM - 7:15 AM	12	16	16	0	0	0	0	1	0
7:15 AM - 7:30 AM	11	28	26	0	0	0	0	0	0
7:30 AM - 7:45 AM	16	26	27	0	0	0	0	0	0
7:45 AM - 8:00 AM	16	27	26	0	0	0	0	0	0
8:00 AM - 8:15 AM	14	20	27	0	0	0	0	1	0
8:15 AM - 8:30 AM	13	29	25	0	0	0	0	0	0
8:30 AM - 8:45 AM	15	19	21	0	0	0	0	0	0
8:45 AM - 9:00 AM	12	23	18	0	0	0	0	0	0
9:00 AM - 9:15 AM	13	27	19	0	0	0	0	5	0
9:15 AM - 9:30 AM	14	31	24	0	0	0	0	1	4
9:30 AM - 9:45 AM	15	28	25	0	0	0	0	0	0
9:45 AM - 10:00 AM	13	20	22	0	0	0	0	0	0
10:00 AM - 10:15 AM	8	8	8	0	0	0	0	0	0
10:15 AM - 10:30 AM	10	4	3	0	0	0	0	0	0
10:30 AM - 10:45 AM	9	11	8	0	0	0	0	0	0
10:45 AM - 11:00 AM	10	5	12	0	0	0	0	0	0
11:00 AM - 11:15 AM	14	4	5	0	0	0	0	0	0
11:15 AM - 11:30 AM	11	6	11	0	0	0	0	0	0
11:30 AM - 11:45 AM	12	11	9	0	0	0	0	0	0
11:45 AM - 12:00 PM	12	3	4	0	0	0	0	0	0
12:00 PM - 12:15 PM	11	4	8	0	0	0	0	1	0
12:15 PM - 12:30 PM	11	5	3	0	0	0	0	0	0
12:30 PM - 12:45 PM	11	4	6	0	0	0	0	1	0
12:45 PM - 1:00 PM	16	8	11	0	0	0	0	0	0
1:00 PM - 1:15 PM	18	3	5	0	0	0	0	0	0
1:15 PM - 1:30 PM	10	8	8	0	0	0	0	0	0
1:30 PM - 1:45 PM	16	4	5	0	0	0	0	0	0
1:45 PM - 2:00 PM	13	3	1	0	0	0	0	0	0
2:00 PM - 2:15 PM	14	7	8	0	0	0	0	0	0
2:15 PM - 2:30 PM	10	5	6	0	0	0	0	0	0
2:30 PM - 2:45 PM	11	6	9	0	0	0	0	0	0
2:45 PM - 3:00 PM	12	7	9	0	0	0	0	0	0
3:00 PM - 3:15 PM	14	4	5	0	0	0	0	0	0
3:15 PM - 3:30 PM	10	1	2	0	0	0	0	0	0
3:30 PM - 3:45 PM	11	8	8	0	0	0	0	0	0
3:45 PM - 4:00 PM	11	3	11	0	0	0	0	0	0
4:00 PM - 4:15 PM	12	16	11	0	0	0	0	0	0
4:15 PM - 4:30 PM	9	17	10	0	0	0	0	0	0
4:30 PM - 4:45 PM	8	15	12	0	0	0	0	0	0
4:45 PM - 5:00 PM	5	2	4	0	0	0	0	0	0
5:00 PM - 5:15 PM	5	8	7	0	0	0	0	0	0
5:15 PM - 5:30 PM	6	8	6	0	0	0	0	0	0
5:30 PM - 5:45 PM	11	16	12	0	0	0	0	0	0
5:45 PM - 6:00 PM	4	7	10	0	0	0	0	0	0
6:00 PM - 6:15 PM	6	7	11	0	0	0	0	0	0
6:15 PM - 6:30 PM	5	7	7	0	0	0	0	0	0
6:30 PM - 6:45 PM	4	3	5	0	0	0	0	0	0
6:45 PM - 7:00 PM	5	8	5	0	0	0	0	0	0

TABLE #2 - PARKING DATA

TIME	PARKING LOT	DRIVE-THRU
	# OF CARS PARKED	# CARS IN QUEUE
7:00 AM	12	2
7:15 AM	11	5
7:30 AM	12	6
7:45 AM	11	7
8:00 AM	15	5
8:15 AM	17	6
8:30 AM	16	9
8:45 AM	10	9
9:00 AM	13	7
9:15 AM	17	11
9:30 AM	16	13
9:45 AM	18	14
10:00 AM	23	6
10:15 AM	25	13
10:30 AM	27	15
10:45 AM	31	10
11:00 AM	25	7
11:15 AM	27	4
11:30 AM	23	8
11:45 AM	22	7
12:00 PM	24	4
12:15 PM	20	13
12:30 PM	26	10
12:45 PM	23	11
1:00 PM	19	9
1:15 PM	18	2
1:30 PM	20	7
1:45 PM	19	11
2:00 PM	22	9
2:15 PM	24	8
2:30 PM	24	10
2:45 PM	22	6
3:00 PM	19	7
3:15 PM	18	5
3:30 PM	17	5
3:45 PM	18	9
4:00 PM	11	3
4:15 PM	13	1
4:30 PM	13	2
4:45 PM	14	4
5:00 PM	16	0
5:15 PM	14	3
5:30 PM	18	1
5:45 PM	15	0
6:00 PM	15	4
6:15 PM	13	0
6:30 PM	11	0
6:45 PM	12	0
7:00 PM	12	1

FIELD DATA SHEET | FRIDAY (April 21, 2023)

TABLE #1 - TRIP GENERATION DATA

TIME	DRIVE-THRU	PARKING LOT							
	# OF CARS SERVED	CARS IN	CARS OUT	TRUCKS IN	TRUCKS OUT	BIKES IN	BIKES OUT	PEDS IN	PEDS OUT
7:00 AM - 7:15 AM	11	9	11	0	0	0	0	0	0
7:15 AM - 7:30 AM	20	8	9	0	0	0	0	0	0
7:30 AM - 7:45 AM	16	11	9	0	0	0	0	0	0
7:45 AM - 8:00 AM	17	16	14	0	0	0	0	0	0
8:00 AM - 8:15 AM	17	13	12	0	0	0	0	0	0
8:15 AM - 8:30 AM	17	11	13	0	0	0	0	0	0
8:30 AM - 8:45 AM	13	9	9	0	0	0	0	0	0
8:45 AM - 9:00 AM	14	11	11	0	0	0	0	0	0
9:00 AM - 9:15 AM	14	11	10	0	0	0	0	0	0
9:15 AM - 9:30 AM	13	9	12	0	0	0	0	0	0
9:30 AM - 9:45 AM	20	14	15	0	0	0	0	0	0
9:45 AM - 10:00 AM	13	11	13	0	0	0	0	0	0
10:00 AM - 10:15 AM	19	12	16	0	0	0	0	0	0
10:15 AM - 10:30 AM	16	5	4	0	0	0	0	0	0
10:30 AM - 10:45 AM	18	13	13	0	0	0	0	0	0
10:45 AM - 11:00 AM	11	4	10	0	0	0	0	0	0
11:00 AM - 11:15 AM	17	14	5	0	0	0	0	0	0
11:15 AM - 11:30 AM	14	14	12	0	0	0	0	0	0
11:30 AM - 11:45 AM	16	8	10	0	0	0	0	0	0
11:45 AM - 12:00 PM	17	6	9	0	0	0	0	0	0
12:00 PM - 12:15 PM	17	6	8	0	0	0	0	0	0
12:15 PM - 12:30 PM	9	8	5	0	0	0	0	0	0
12:30 PM - 12:45 PM	13	3	5	0	0	0	0	0	0
12:45 PM - 1:00 PM	12	5	6	0	0	0	0	0	0
1:00 PM - 1:15 PM	11	7	6	0	0	0	0	0	0
1:15 PM - 1:30 PM	15	5	7	0	0	0	0	0	0
1:30 PM - 1:45 PM	13	9	6	0	0	0	0	0	0
1:45 PM - 2:00 PM	11	9	6	0	0	0	0	0	0
2:00 PM - 2:15 PM	8	12	7	0	0	0	0	0	0
2:15 PM - 2:30 PM	9	4	14	0	0	0	0	0	0
2:30 PM - 2:45 PM	18	6	8	0	0	0	0	0	0
2:45 PM - 3:00 PM	15	13	15	0	0	0	0	0	0
3:00 PM - 3:15 PM	17	11	13	0	0	0	0	0	0
3:15 PM - 3:30 PM	16	6	7	0	0	0	0	0	0
3:30 PM - 3:45 PM	11	10	6	0	0	0	0	0	0
3:45 PM - 4:00 PM	20	7	11	0	0	0	0	0	0
4:00 PM - 4:15 PM	8	5	7	0	0	0	0	0	0
4:15 PM - 4:30 PM	9	4	6	0	0	0	0	0	0
4:30 PM - 4:45 PM	12	5	7	0	0	0	0	0	0
4:45 PM - 5:00 PM	10	5	3	0	0	0	0	0	0
5:00 PM - 5:15 PM	12	3	2	0	0	0	0	0	0
5:15 PM - 5:30 PM	9	1	8	0	0	0	0	0	0
5:30 PM - 5:45 PM	7	1	2	0	0	0	0	0	0
5:45 PM - 6:00 PM	8	3	2	0	0	0	0	0	0
6:00 PM - 6:15 PM	8	2	4	0	0	0	0	0	0
6:15 PM - 6:30 PM	3	2	3	0	0	0	0	0	0
6:30 PM - 6:45 PM	11	8	9	0	0	0	0	0	0
6:45 PM - 7:00 PM	2	1	2	0	0	0	0	0	0

TABLE #2 - PARKING DATA

TIME	PARKING LOT	DRIVE-THRU
	# OF CARS PARKED	# CARS IN QUEUE
7:00 AM	26	6
7:15 AM	24	4
7:30 AM	23	7
7:45 AM	25	3
8:00 AM	27	2
8:15 AM	28	7
8:30 AM	26	7
8:45 AM	26	8
9:00 AM	26	3
9:15 AM	27	4
9:30 AM	24	9
9:45 AM	23	5
10:00 AM	21	16
10:15 AM	17	3
10:30 AM	18	10
10:45 AM	18	7
11:00 AM	12	10
11:15 AM	21	13
11:30 AM	23	11
11:45 AM	21	10
12:00 PM	18	6
12:15 PM	16	14
12:30 PM	19	6
12:45 PM	17	1
1:00 PM	20	10
1:15 PM	22	14
1:30 PM	21	12
1:45 PM	22	6
2:00 PM	24	11
2:15 PM	31	10
2:30 PM	28	9
2:45 PM	24	6
3:00 PM	26	11
3:15 PM	25	10
3:30 PM	24	13
3:45 PM	27	3
4:00 PM	24	1
4:15 PM	20	6
4:30 PM	21	0
4:45 PM	15	2
5:00 PM	20	6
5:15 PM	19	7
5:30 PM	12	4
5:45 PM	7	1
6:00 PM	7	2
6:15 PM	8	2
6:30 PM	11	5
6:45 PM	8	2
7:00 PM	6	2

FIELD DATA SHEET | MONDAY (April 24, 2023)

TABLE #1 - TRIP GENERATION DATA

TIME	DRIVE-THRU	PARKING LOT							
	# OF CARS SERVED	CARS IN	CARS OUT	TRUCKS IN	TRUCKS OUT	BIKES IN	BIKES OUT	PEDS IN	PEDS OUT
7:00 AM - 7:15 AM	12	4	5	0	0	0	0	0	0
7:15 AM - 7:30 AM	13	5	7	0	0	0	0	0	0
7:30 AM - 7:45 AM	15	10	10	0	0	0	0	1	1
7:45 AM - 8:00 AM	10	7	9	0	0	0	0	0	0
8:00 AM - 8:15 AM	14	9	9	0	0	0	0	0	1
8:15 AM - 8:30 AM	17	11	9	0	0	0	0	0	0
8:30 AM - 8:45 AM	14	8	8	0	0	0	0	0	0
8:45 AM - 9:00 AM	14	7	11	0	0	0	0	1	0
9:00 AM - 9:15 AM	19	10	6	0	0	0	0	0	1
9:15 AM - 9:30 AM	17	10	12	0	0	0	0	0	0
9:30 AM - 9:45 AM	15	6	10	0	0	0	0	0	0
9:45 AM - 10:00 AM	12	9	5	0	0	0	0	0	0
10:00 AM - 10:15 AM	8	15	8	1	0	0	0	0	0
10:15 AM - 10:30 AM	15	17	15	0	0	0	0	0	0
10:30 AM - 10:45 AM	15	12	15	0	0	0	0	0	0
10:45 AM - 11:00 AM	13	17	13	0	1	0	0	0	0
11:00 AM - 11:15 AM	14	11	14	0	0	0	0	0	0
11:15 AM - 11:30 AM	18	16	18	0	0	0	0	0	0
11:30 AM - 11:45 AM	12	10	12	0	0	0	0	0	0
11:45 AM - 12:00 PM	18	3	2	0	0	0	0	0	0
12:00 PM - 12:15 PM	11	9	7	0	0	0	0	0	0
12:15 PM - 12:30 PM	12	9	13	0	0	0	0	0	0
12:30 PM - 12:45 PM	12	9	11	0	0	0	0	0	0
12:45 PM - 1:00 PM	14	4	3	0	0	0	0	0	0
1:00 PM - 1:15 PM	8	6	7	0	0	0	0	0	0
1:15 PM - 1:30 PM	10	8	6	0	0	0	0	0	0
1:30 PM - 1:45 PM	11	7	10	0	0	0	0	0	0
1:45 PM - 2:00 PM	16	2	5	0	0	0	0	0	0
2:00 PM - 2:15 PM	12	3	6	0	0	1	0	0	1
2:15 PM - 2:30 PM	15	5	6	0	0	0	0	0	0
2:30 PM - 2:45 PM	4	6	4	0	0	0	1	0	0
2:45 PM - 3:00 PM	7	2	1	0	0	0	0	0	0
3:00 PM - 3:15 PM	6	4	5	0	0	0	0	0	0
3:15 PM - 3:30 PM	10	5	10	0	0	0	0	0	0
3:30 PM - 3:45 PM	8	11	9	0	0	0	0	0	0
3:45 PM - 4:00 PM	8	7	4	0	0	0	0	0	0
4:00 PM - 4:15 PM	10	0	4	0	0	0	0	0	0
4:15 PM - 4:30 PM	8	5	3	0	0	0	0	0	0
4:30 PM - 4:45 PM	12	7	5	0	0	0	0	0	0
4:45 PM - 5:00 PM	9	4	6	0	0	0	0	0	0
5:00 PM - 5:15 PM	6	2	5	0	0	0	0	0	0
5:15 PM - 5:30 PM	3	3	3	0	0	0	0	0	2
5:30 PM - 5:45 PM	6	2	4	0	0	0	0	0	0
5:45 PM - 6:00 PM	2	2	2	0	0	0	0	0	0
6:00 PM - 6:15 PM	1	4	2	0	0	0	0	0	0
6:15 PM - 6:30 PM	5	3	5	0	0	0	0	0	0
6:30 PM - 6:45 PM	2	2	3	0	0	0	0	0	0
6:45 PM - 7:00 PM	11	1	2	0	0	0	0	0	0

TABLE #2 - PARKING DATA

TIME	PARKING LOT	DRIVE-THRU
	# OF CARS PARKED	# CARS IN QUEUE
7:00 AM	13	4
7:15 AM	13	4
7:30 AM	11	3
7:45 AM	10	3
8:00 AM	9	5
8:15 AM	12	5
8:30 AM	15	7
8:45 AM	15	9
9:00 AM	14	8
9:15 AM	17	11
9:30 AM	18	8
9:45 AM	15	3
10:00 AM	18	2
10:15 AM	20	9
10:30 AM	19	11
10:45 AM	16	8
11:00 AM	23	14
11:15 AM	25	8
11:30 AM	24	9
11:45 AM	22	6
12:00 PM	23	4
12:15 PM	27	14
12:30 PM	20	12
12:45 PM	19	10
1:00 PM	21	2
1:15 PM	21	1
1:30 PM	22	11
1:45 PM	20	8
2:00 PM	17	5
2:15 PM	16	8
2:30 PM	10	0
2:45 PM	16	2
3:00 PM	16	2
3:15 PM	17	3
3:30 PM	16	2
3:45 PM	14	0
4:00 PM	16	5
4:15 PM	13	1
4:30 PM	15	4
4:45 PM	19	4
5:00 PM	20	1
5:15 PM	18	4
5:30 PM	16	5
5:45 PM	16	1
6:00 PM	18	0
6:15 PM	18	1
6:30 PM	16	0
6:45 PM	16	4
7:00 PM	14	0