2014 Data Collection Project

ITE Western District

Project Completed By:

Oregon State University

OSU ITE Student Chapter

101 Kearney Hall

Corvallis, OR 97331

Student Coordinator: Sarah McCrea (OSU ITE Student Chapter)

Faculty Advisor: Dr. David Hurwitz (OSU ITE Student Chapter)

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Submitted: May 5, 2014

The Oregon State University student chapter of the Institute of Transportation Engineers (OSU ITE) is pleased to submit the trip generation and parking study conducted for city parks within Corvallis, Oregon. This study was performed on April 5th and 6th of 2014 for three city parks representing Land Use 411 (LU 411) within the ITE Trip Generation Manuals. Thirteen members of the OSU ITE Student Chapter manually collected weekend entering and exiting movement counts and parking utilization counts from 7AM to 7PM. Adjacent street traffic volumes were also collected using automatic counters during the same 12-hour periods. Table 1 presents the site characteristics for each of the three parks and site descriptions and graphical site depictions are included in Appendix A.
The average temperature during the data collection effort was between 55 and 65 degrees Fahrenheit with an intermittent, light rain on Saturday afternoon. The data presented for Pioneer Park and Crystal Lake in this study represent baseline trip generation rates which do not include additional trips generated by sport field use.

Trip Generation
OSU ITE used JAMAR count boards to count vehicular entering and exiting movements and pedestrian and bicycle trips. Final trip generation numbers are presented in Table 2. The weekend that the trip data was collected was cloudy and rainy intermittently throughout the weekend. Two of our sites were counted on Saturday and one site was counted on Sunday. In version nine of the ITE Trip Generation Manual, the City Park land use only includes data on weekdays and on Sunday. Collected trip data is included in Appendix B. The generation rates produced from this study were lower than existing data points presented in the 9th edition ITE Trip Generation Manual. Also, note that the existing data comes from small parks (4-15 acres) whereas the study data comes from parks ranging from 17 to 287 acres.

Parking Generation
OSU ITE recorded parking usage in 15-minute intervals and calculated hourly parking demand using the highest recorded parking usage of the four 15-minute intervals. Parking generation data is presented numerically in Table 3 and graphically in Appendix C.

Adjacent Street Traffic
Nu-metrics Hi-Star portable counters were used to collect adjacent street traffic during the same 12-hour periods of trip and parking data collection. The nearest perpendicular street from which traffic accessed the parking lot was designated the adjacent street. To estimate the Average Daily Traffic (ADT) shown in Table 1, OSU ITE assumed a factor of 1.14 when converting the 12 hour volume into the ADT. The adjacent street traffic volumes are provided in Appendix D.

Summary
The OSU ITE Student Chapter collected parking utilization and trip generation data for three parks over two days. Data was collected at Crystal Lake Park and Willamette Park on Saturday, April 5th, 2014, and at Pioneer Park on Sunday, April 6th, 2014. The data collection project was a valuable activity for our chapter by providing a real-world parking utilization and trip generation collection opportunity to our student members. In total, 13 students participated in the data collection effort for an average of five to 6 hours of participation.

Summary Tables

Table 1. City Park Site Characteristics

Site Name	Data Collection Day	Site Size (Acres)	Parking Spaces	Facility Types	Adjacent Street ADT
Pioneer Park	April 6, 2014	17.72	178	1 Softball Field, Open Playing Field	10,737
Crystal Lake Sports Fields & Kendall Natural Area	April 5, 2014	125 & 80	135 + Gravel Lot	8-10 Soccer Fields, 9 Baseball Diamonds, 1 Boat Ramp	1,495
Willamette Park & Natural Area	April 5, 2014	287	60 + Gravel Lot	2 Soccer Fields, 1 Disk Golf Course	10,765

Table 2. Trip Generation Data

Time Period	Peak Hour	Vehicles In	Vehicles Out	Total Vehicles	Bikes & Peds	Total Trips	% Bike/Ped	Trips /Acre
Pioneer Park								
Sunday	-	19	16	35	264	299	79.8%	1.98
AM Peak	10:00-11:00	2	2	4	12	16	75.0%	0.23
PM Peak	3:15-4:15	4	6	10	35	45	77.8%	0.56
Crystal Lake Sports Fields & Kendall Natural Area								
Saturday	-	169	166	335	225	560	40.2%	1.63
AM Peak	9:00-10:00	39	19	58	26	84	31.0%	0.28
PM Peak	2:30-3:30	18	13	31	21	52	40.4%	0.15
Willamette Park & Natural Area								
Saturday	-	190	176	366	135	501	26.9%	1.28
AM Peak	10:30-11:30	20	17	37	14	51	27.5%	0.13
PM Peak	12:00-1:00	42	18	60	15	75	20.0%	0.21

Table 3. Parking Generation Data

Site Name	Peak Period	Filled Spots	Empty Spots	Parked Cars	Parked Cars /Acre
Pioneer Park	3:00 – 4:00 PM	6	172	6	0.34
Crystal Lake	9:00 – 10:00 AM	35	100	35	0.17
Willamette Park	2:00 – 3:00 PM	60	0	61	0.21

Appendix A

City Park Site Descriptions and Graphical Depictions

Pioneer Park

Pioneer Park contains one softball field and one rectangular empty playing field. The park also has a mixed-use path which runs through it, connecting neighborhoods to the west with Downtown Corvallis. The mixed use path is also used by many joggers and cyclists. There are no playground or picnic facilities at this location. Pioneer Park is not adjacent to any neighborhoods but high pedestrian and bicycle volumes pass though the park due to the mixed-use path.

On the day of data collection, there were no organized sporting events utilizing the fields.

Crystal Lake Sports Fields and Kendall Natural Area

The Crystal Lake Park contains eight to ten soccer fields, nine baseball diamonds, and one boat ramp. There are numerous well-maintained unpaved trails throughout the park. There is not a playground or picnic facilities at this location. Crystal Lake Park is adjacent to neighborhoods.

On the day of data collection, a group of volunteers completed maintenance on some of the fields in the Crystal Lake Park. There were no organized sporting events utilizing the fields on this day. Crystal Lake does host Soccer Tournaments and Baseball Jamborees throughout the year which results in much higher trip generation rate.

Willamette Park and Natural Area

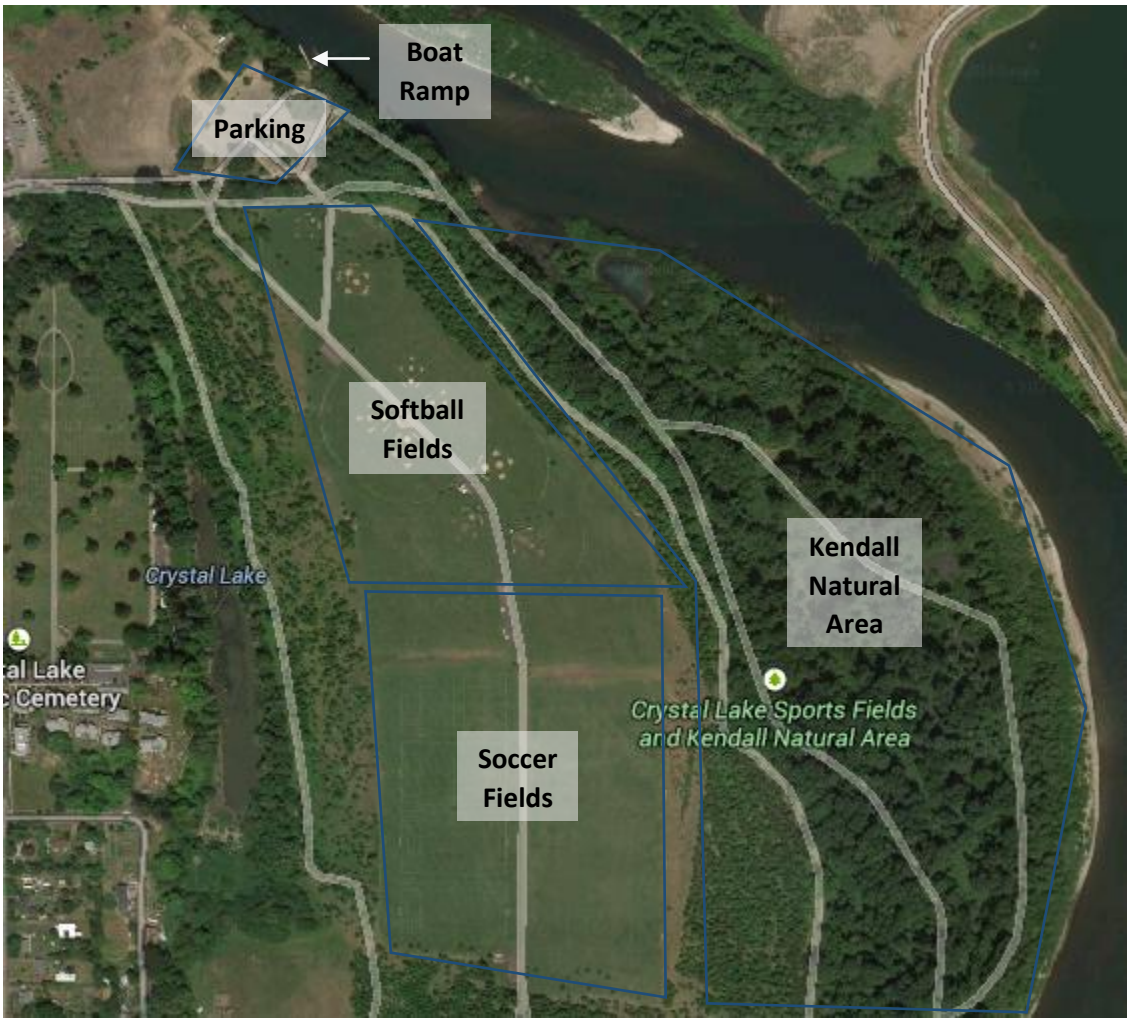
Willamette Park includes two soccer fields and one disk golf course. There is one well-maintained paved trail through Willamette Park and there are numerous unpaved trails throughout the natural area. There is a playground and uncovered and covered picnic facilities. Willamette Park is adjacent to neighborhoods.

On the day of data collection, there was a rugby event which resulted in the lower parking lot reaching capacity.

Pioneer Park Parking Layout

Pioneer Park as seen in Google Maps

Crystal Lake Park Parking Layout



Crystal Lake Park as seen in Google Maps

Willamette Park Parking Layout

Willamette Park as seen from Google Maps

Appendix B

Trip Generation Data

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Trip Generation Data Form (Part 1)

Land Use/Building Type:[1] City Park	ITE Land Use Code: 411
Source:	Source No. (*ITE use only*):
Name of Development: Pioneer Park	Day of the Week: Sunday
City: Corvallis State/Province: OR Zip/Postal Code: 97333	Day: 6 Month: April Year: 2014
Country: USA	Metropolitan Area: Corvallis

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

Location Within Area:

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

Detailed Description of Development:[3]

City Park in urban area (pop ≈ 50,000) Bike and Ped friendly area, 1 softball field, Open playing field, multi-use path, fitness station.

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated
_____ (1) Employees (#)	☐	☐
_____ (2) Persons (#)	☐	☐
_____ (3) Total Units (#) (indicate unit: _____)	☐	☐
_____ (4) Occupied Units (#) (indicate unit: _____)	☐	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐
~~305~~ 17.72 (8) Total Acres (% developed: 40)	☒	☐
178 (9) Parking Spaces (% occupied: 3)	☐	☒
_____ (10) Beds (% occupied: _____)	☐	☐
_____ (11) Seats (#)	☐	☐
_____ (12) Servicing Positions/Vehicle Fueling Positions	☐	☐
_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (16) Other _____	☐	☐
_____ (17) Other _____	☐	☐

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

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

Other Data:

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

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

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

Employees by Shift:

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

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

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

☒ No

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

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

Please Complete Form on Other Side

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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~~ 12 Hour Volume													19	Ø	16	Ø	35	Ø
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:																		
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:																		
A.M. Peak Hour Generator[2] Time: 10:00 - 11:00													2	Ø	2	Ø	4	Ø
P.M. Peak Hour Generator[2] Time: 3:15 - 4:15													4	Ø	6	Ø	10	Ø
Peak Hour Generator[3] Time (Weekend): 3:15-4:15													4	Ø	6	Ø	10	Ø

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)~~ ~~Saturday~~ Sunday

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	1		0		1		3:00-4:00	3		4		7	
6:15-7:15							11:15-12:15	1		0		1		3:15-4:15	4		6		10	
6:30-7:30							11:30-12:30	2		0		2		3:30-4:30	2		8		10	
6:45-7:45							11:45-12:45	1		0		1		3:45-4:45	2		6		8	
7:00-8:00	0		0		0		12:00-1:00	1		0		1		4:00-5:00	3		5		8	
7:15-8:15	0		0		0		12:15-1:15	4		0		4		4:15-5:15	1		2		3	
7:30-8:30	0		0		0		12:30-1:30	4		1		5		4:30-5:30	1		0		1	
7:45-8:45	0		0		0		12:45-1:45	5		2		7		4:45-5:45	1		0		1	
8:00-9:00	0		0		0		1:00-2:00	5		2		7		5:00-6:00	0		0		0	

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

Survey conducted by: Name: Sarah McCrea

Organization: OSU-ITE

Address: 101 Kearney Hall, Oregon State University

City/State/Zip: Corvallis, OR, 97331

Telephone #: _____ Fax #: _____ E-mail: osuite@engr.orst.edu

Please return to: Institute of Transportation Engineers
Technical Projects Division
1627 Eye Street, NW, Suite 600
Washington, DC 20006 USA
Telephone: +1 202-785-0060
Fax: +1 202-785-0609
ITE on the Web: www.ite.org

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Trip Generation Data Form (Part 3)

Name/Organization: OSU - ITE **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: Sunday *(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	0		0		0	
12:15-12:30							12:15-12:30	1		0		1	
12:30-12:45							12:30-12:45	0		0		0	
12:45-1:00							12:45-1:00	0		0		0	
1:00-1:15							1:00-1:15	3		0		3	
1:15-1:30							1:15-1:30	1		1		2	
1:30-1:45							1:30-1:45	1		1		2	
1:45-2:00							1:45-2:00	0		0		0	
2:00-2:15							2:00-2:15	0		1		1	
2:15-2:30							2:15-2:30	0		0		0	
2:30-2:45							2:30-2:45	0		1		1	
2:45-3:00							2:45-3:00	2		0		2	
3:00-3:15							3:00-3:15	1		1		2	
3:15-3:30							3:15-3:30	2		0		2	
3:30-3:45							3:30-3:45	0		2		2	
3:45-4:00							3:45-4:00	0		1		1	
4:00-4:15							4:00-4:15	2		3		5	
4:15-4:30							4:15-4:30	0		2		2	
4:30-4:45							4:30-4:45	0		0		0	
4:45-5:00							4:45-5:00	1		0		1	
5:00-5:15							5:00-5:15	0		0		0	
5:15-5:30							5:15-5:30	0		0		0	
5:30-5:45							5:30-5:45	0		0		0	
5:45-6:00							5:45-6:00	0		0		0	
6:00-6:15							6:00-6:15	1		0		1	
6:15-6:30							6:15-6:30	1		0		1	
6:30-6:45							6:30-6:45	0		1		1	
6:45-7:00							6:45-7:00	0		0		0	
7:00-7:15	0		0		0		7:00-7:15						
7:15-7:30	0		0		0		7:15-7:30						
7:30-7:45	0		0		0		7:30-7:45						
7:45-8:00	0		0		0		7:45-8:00						
8:00-8:15	0		0		0		8:00-8:15						
8:15-8:30	0		0		0		8:15-8:30						
8:30-8:45	0		0		0		8:30-8:45						
8:45-9:00	0		0		0		8:45-9:00						
9:00-9:15	0		0		0		9:00-9:15						
9:15-9:30	0		0		0		9:15-9:30						
9:30-9:45	0		0		0		9:30-9:45						
9:45-10:00	0		0		0		9:45-10:00						
10:00-10:15	0		0		0		10:00-10:15						
10:15-10:30	0		0		0		10:15-10:30						
10:30-10:45	1		0		1		10:30-10:45						
10:45-11:00	1		2		3		10:45-11:00						
11:00-11:15	0		0		0		11:00-11:15						
11:15-11:30	0		0		0		11:15-11:30						
11:30-11:45	1		0		1		11:30-11:45						
11:45-12:00	0		0		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
12 ~~24~~-Hour Volume							71	61	132
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time: 11:30a - 12:30p							4	5	9
P.M. Peak Hour Generator[2] Time: 5:15 - 6:15							17	14	31
Peak Hour Generator[3] Time (Weekend): 5:15 - 6:15							17	14	31

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
12 ~~24~~-Hour Volume							67	65	132
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time: 11:30a - 12:30p							8	11	19
P.M. Peak Hour Generator[2] Time: 5:00p - 6:00p							12	11	23
Peak Hour Generator[3] Time (Weekend): 5:00 - 6:00							12	11	23

Survey conducted by: Name: Sarah McCrea

Organization: OSU - ITE

Address: 101 Kearney Hall, Oregon State University

City/State/Zip: Corvallis, OR 97331

Telephone #: _____ Fax #: _____ E-mail: osuite@engr.orst.edu

Please return to: Institute of Transportation Engineers
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Washington, DC 20006 USA
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Fax: +1 202-785-0609
ITE on the Web: www.ite.org

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Trip Generation Data Form (Part 1)

Land Use/Building Type:[1] City Park	ITE Land Use Code: 411
Source:	Source No. (ITE use only):
Name of Development: Crystal Lake Sports Fields & Kendall Natural Area	Day of the Week: Saturday
City: Corvallis State/Province: OR Zip/Postal Code: 97333	Day: 5 Month: April Year: 2014
Country: USA	Metropolitan Area: Corvallis

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

Location Within Area:

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

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated
_____ (1) Employees (#)	☐	☐
_____ (2) Persons (#)	☐	☐
_____ (3) Total Units (#) (indicate unit:_____)	☐	☐
_____ (4) Occupied Units (#) (indicate unit:_____)	☐	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐
205 (8) Total Acres (% developed: 20)	☒	☐
135 (9) Parking Spaces (% occupied: 26)	☒	☐
_____ (10) Beds (% occupied: _____)	☐	☐
_____ (11) Seats (#)	☐	☐
_____ (12) Servicing Positions/Vehicle Fueling Positions	☐	☐
_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (16) Other _____	☐	☐
_____ (17) Other _____	☐	☐

Detailed Description of Development:[3]
City Park in urban area (pop ~50,000) Bike and Ped friendly area. 8-10 Soccer Fields, 9 Baseball Diamonds, 1 Boat Ramp, informal trails, and multi-modal path

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

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

Other Data:

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

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

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

Employees by Shift:

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

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

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

☒ No

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

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

Please Complete Form on Other Side

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Trip Generation Data Form (Part 2)

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
12 24-Hour Volume							169	Ø	166	Ø	335	Ø						
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) 8:00a Time (ex.: 7:15 - 8:15): 9:00a							18	Ø	1	Ø	19	Ø						
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time: 4:00p - 5:00p							6	Ø	13	Ø	19	Ø						
A.M. Peak Hour Generator[2] Time: 9a - 10a							39	Ø	19	Ø	58	Ø						
P.M. Peak Hour Generator[2] Time: 2:30p - 3:30p							18	Ø	13	Ø	31	Ø						
Peak Hour Generator[3] 9:00a - Time (Weekend): 10:00a							39	Ø	19	Ø	58	Ø						

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)~~ Saturday

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	14		40		54		3:00-4:00	14		12		26	
6:15-7:15							11:15-12:15	11		42		53		3:15-4:15	11		13		24	
6:30-7:30							11:30-12:30	15		36		51		3:30-4:30	9		14		23	
6:45-7:45							11:45-12:45	11		33		44		3:45-4:45	6		12		18	
7:00-8:00	3		3		6		12:00-1:00	11		18		29		4:00-5:00	6		13		19	
7:15-8:15	3		3		6		12:15-1:15	11		13		24		4:15-5:15	8		10		18	
7:30-8:30	3		4		7		12:30-1:30	11		12		23		4:30-5:30	7		6		13	
7:45-8:45	5		3		8		12:45-1:45	12		13		25		4:45-5:45	11		11		22	
8:00-9:00	18		1		19		1:00-2:00	14		13		27		5:00-6:00	11		8		19	

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

Survey conducted by: Name: Sarah McCrea

Organization: OSU-ITE

Address: 101 Kearney Hall, Oregon State University

City/State/Zip: Corvallis OR 97331

Telephone #: _____ Fax #: _____ E-mail: osuite@engr.orst.edu

Please return to: Institute of Transportation Engineers
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ITE on the Web: www.ite.org

Institute of Transportation Engineers

Trip Generation Data Form (Part 3)

Name/Organization: OSU - ITE **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: Saturday **(All = All Vehicles Counted, Including Trucks; Trucks = Heavy Duty Trucks and Buses)**

A.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks
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						
2:45-3:00						
3:00-3:15						
3:15-3:30						
3:30-3:45						
3:45-4:00						
4:00-4:15						
4:15-4:30						
4:30-4:45						
4:45-5:00						
5:00-5:15						
5:15-5:30						
5:30-5:45						
5:45-6:00						
6:00-6:15						
6:15-6:30						
6:30-6:45						
6:45-7:00						
7:00-7:15	0		0		0	
7:15-7:30	3		0		3	
7:30-7:45	0		1		1	
7:45-8:00	0		2		2	
8:00-8:15	0		0		0	
8:15-8:30	3		1		4	
8:30-8:45	2		0		2	
8:45-9:00	13		0		13	
9:00-9:15	21		3		24	
9:15-9:30	4		4		~~25~~ 8	
9:30-9:45	7		4		11	
9:45-10:00	7		8		15	
10:00-10:15	8		5		13	
10:15-10:30	5		4		9	
10:30-10:45	6		9		15	
10:45-11:00	3		2		5	
11:00-11:15	7		6		13	
11:15-11:30	0		10		10	
11:30-11:45	5		7		12	
11:45-12:00	2		17		19	

P.M. Period	Enter		Exit		Total	
	All	Trucks	All	Trucks	All	Trucks
12:00-12:15	4		8		12	
12:15-12:30	4		4		8	
12:30-12:45	1		4		5	
12:45-1:00	2		2		4	
1:00-1:15	4		3		7	
1:15-1:30	4		3		7	
1:30-1:45	2		5		7	
1:45-2:00	4		2		6	
2:00-2:15	2		4		6	
2:15-2:30	1		2		3	
2:30-2:45	5		4		9	
2:45-3:00	5		3		8	
3:00-3:15	3		3		6	
3:15-3:30	5		3		8	
3:30-3:45	3		4		7	
3:45-4:00	3		2		5	
4:00-4:15	0		4		4	
4:15-4:30	3		4		7	
4:30-4:45	0		2		2	
4:45-5:00	3		3		6	
5:00-5:15	2		1		3	
5:15-5:30	2		0		2	
5:30-5:45	4		7		11	
5:45-6:00	3		0		3	
6:00-6:15	1		2		3	
6:15-6:30	1		2		3	
6:30-6:45	1		0		1	
6:45-7:00	1		2		3	
7:00-7:15						
7:15-7:30						
7:30-7:45						
7:45-8:00						
8:00-8:15						
8:15-8:30						
8:30-8:45						
8:45-9:00						
9:00-9:15						
9:15-9:30						
9:30-9:45						
9:45-10:00						
10:00-10:15						
10:15-10:30						
10:30-10:45						
10:45-11:00						
11:00-11:15						
11:15-11:30						
11:30-11:45						
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
12 24-Hour Volume				24	21	45			
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time: 8:30a - 9:30a				7	2	9			
P.M. Peak Hour Generator[2] Time: 11:45a - 12:45p				3	8	11			
Peak Hour Generator[3] Time (Weekend): 11:45 - 12:45				3	8	11			

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
12 24-Hour Volume				95	85	180			
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15):									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time: 10:30 - 11:30a				23	17	40			
P.M. Peak Hour Generator[2] Time: 2:30p - 3:30p				11	10	21			
Peak Hour Generator[3] Time (Weekend): 10:30 - 11:30				23	17	40			

Survey conducted by: Name: Sarah McCrea

Organization: OSU-ITE

Address: 101 Kearney Hall, Oregon State University

City/State/Zip: Corvallis, OR, 97331

Telephone #: _____ Fax #: _____ E-mail: osuite@engr.orst.edu

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Trip Generation Data Form (Part 1)

Land Use/Building Type:[1] City Park	ITE Land Use Code: 411
Source:	Source No. (*ITE use only*):
Name of Development: Willamette Park & Natural Area	Day of the Week: Saturday
City: Corvallis State/Province: OR Zip/Postal Code: 97333	Day: 5 Month: April Year: 2014
Country: USA	Metropolitan Area: Corvallis

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

Location Within Area:

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

Independent Variable: (include data for as many as possible)[2]	Actual	Estimated
_____ (1) Employees (#)	☐	☐
_____ (2) Persons (#)	☐	☐
_____ (3) Total Units (#) (indicate unit:_____)	☐	☐
_____ (4) Occupied Units (#) (indicate unit:_____)	☐	☐
_____ (5) Gross Floor Area (gross sq. ft.) (% of development occupied _____)	☐	☐
_____ (6) Net Rentable Area (sq. ft.)	☐	☐
_____ (7) Gross Leasable Area (sq. ft.) (% of development occupied _____)	☐	☐
287 (8) Total Acres (% developed: 10)	☒	☐
60 (9) Parking Spaces (% occupied: 100)	☒	☒
_____ (10) Beds (% occupied: _____)	☐	☐
_____ (11) Seats (#)	☐	☐
_____ (12) Servicing Positions/Vehicle Fueling Positions	☐	☐
_____ (13) Shopping Center % Out-parcels/pads	☐	☐
_____ (14) A.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (15) P.M. Peak Hour Volume of Adjacent Street Traffic	☐	☐
_____ (16) Other _____	☐	☐
_____ (17) Other _____	☐	☐

Detailed Description of Development:[3]

City Park in Urban area (pop ≥ 50,000) Bike and Ped friendly area. 2 Soccer fields, 1 disk golf course, playground, picnic shelter, biking/jogging trails, and multi-modal path.

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

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

Other Data:

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

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

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

Employees by Shift:

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

Parking Cost on Site: Hourly _____ Daily _____

Transportation Demand Management (TDM) Information:

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

☒ No

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

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

Please Complete Form on Other Side

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Trip Generation Data Form (Part 2)

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
12 24-Hour Volume							190	Ø	176	Ø	366	Ø						
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time (ex.: 7:15 - 8:15): 8:00a-9:00a							3	Ø	1	Ø	4	Ø						
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time: 4:00p-5:00p							8	Ø	31	Ø	39	Ø						
A.M. Peak Hour Generator[2] Time: 10:30a-11:30a							20	Ø	17	Ø	37	Ø						
P.M. Peak Hour Generator[2] Time: 12:00p-1:00p							42	Ø	18	Ø	60	Ø						
Peak Hour Generator[3] Time (Weekend): 12:00p-1:00p							42	Ø	18	Ø	60	Ø						

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)~~ Saturday

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	20		17		37		3:00-4:00	17		26		43	
6:15-7:15							11:15-12:15	29		13		42		3:15-4:15	16		25		41	
6:30-7:30							11:30-12:30	33		13		46		3:30-4:30	16		26		42	
6:45-7:45							11:45-12:45	39		15		54		3:45-4:45	12		29		41	
7:00-8:00	2		2		4		12:00-1:00	42		18		60		4:00-5:00	8		31		39	
7:15-8:15	3		2		5		12:15-1:15	38		20		58		4:15-5:15	7		29		36	
7:30-8:30	2		2		4		12:30-1:30	37		20		57		4:30-5:30	5		25		30	
7:45-8:45	2		1		3		12:45-1:45	36		17		53		4:45-5:45	6		15		21	
8:00-9:00	3		1		4		1:00-2:00	30		12		42		5:00-6:00	6		8		14	

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

Survey conducted by: Name: Sarah McCrea

Organization: OSU - ITE

Address: 101 Kearney Hall, Oregon State University

City/State/Zip: Corvallis, OR 97331

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Trip Generation Data Form (Part 3)

Name/Organization: OSU-ITE **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: Saturday ***(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	17		0		17	
12:15-12:30							12:15-12:30	8		5		13	
12:30-12:45							12:30-12:45	8		6		14	
12:45-1:00							12:45-1:00	9		7		16	
1:00-1:15							1:00-1:15	13		2		15	
1:15-1:30							1:15-1:30	7		5		12	
1:30-1:45							1:30-1:45	7		3		10	
1:45-2:00							1:45-2:00	3		2		5	
2:00-2:15							2:00-2:15	5		6		11	
2:15-2:30							2:15-2:30	4		6		10	
2:30-2:45							2:30-2:45	4		7		11	
2:45-3:00							2:45-3:00	7		15		22	
3:00-3:15							3:00-3:15	3		5		8	
3:15-3:30							3:15-3:30	2		6		8	
3:30-3:45							3:30-3:45	7		8		15	
3:45-4:00							3:45-4:00	5		7		12	
4:00-4:15							4:00-4:15	2		4		6	
4:15-4:30							4:15-4:30	2		7		9	
4:30-4:45							4:30-4:45	3		11		14	
4:45-5:00							4:45-5:00	1		9		10	
5:00-5:15							5:00-5:15	1		2		3	
5:15-5:30							5:15-5:30	0		3		3	
5:30-5:45							5:30-5:45	4		1		5	
5:45-6:00							5:45-6:00	1		2		3	
6:00-6:15							6:00-6:15	6		1		7	
6:15-6:30							6:15-6:30	5		3		8	
6:30-6:45							6:30-6:45	3		6		9	
6:45-7:00							6:45-7:00	1		2		3	
7:00-7:15	1		0		1		7:00-7:15						
7:15-7:30	1		1		2		7:15-7:30						
7:30-7:45	0		1		1		7:30-7:45						
7:45-8:00	0		0		0		7:45-8:00						
8:00-8:15	2		0		2		8:00-8:15						
8:15-8:30	0		1		1		8:15-8:30						
8:30-8:45	0		0		0		8:30-8:45						
8:45-9:00	1		0		1		8:45-9:00						
9:00-9:15	3		1		4		9:00-9:15						
9:15-9:30	2		1		3		9:15-9:30						
9:30-9:45	1		2		3		9:30-9:45						
9:45-10:00	3		0		3		9:45-10:00						
10:00-10:15	5		2		7		10:00-10:15						
10:15-10:30	5		1		6		10:15-10:30						
10:30-10:45	5		5		10		10:30-10:45						
10:45-11:00	3		3		6		10:45-11:00						
11:00-11:15	8		4		12		11:00-11:15						
11:15-11:30	4		5		9		11:15-11:30						
11:30-11:45	2		4		6		11:30-11:45						
11:45-12:00	6		4		10		11:45-12:00						

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
12 ~~24~~-Hour Volume				22	18	40			
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time: 11:30a - 12:30p				3	7	10			~~10~~
P.M. Peak Hour Generator[2] Time: 3:30p-4:30p				2	5	7			
Peak Hour Generator[3] Time (Weekend): 11:30 - 12:30				3	7	10			

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
12 ~~24~~-Hour Volume				38	57	95			
A.M. Peak Hour of Adjacent[1] Street Traffic (7 – 9) Time *(ex.: 7:15 - 8:15)*:									
P.M. Peak Hour of Adjacent[1] Street Traffic (4 – 6) Time:									
A.M. Peak Hour Generator[2] Time: 11:15a - 12:15a				7	12	19			
P.M. Peak Hour Generator[2] Time: 12:45p - 1:45p				3	10	13			
Peak Hour Generator[3] Time (Weekend): 11:15 - 12:15				7	12	19			

Survey conducted by: Name: Sarah McCrea

Organization: OSU-ITE

Address: 101 Kearney Hall, Oregon State University

City/State/Zip: Corvallis, OR 97331

Telephone #: _____ Fax #: _____ E-mail: oswite@engr.orst.edu

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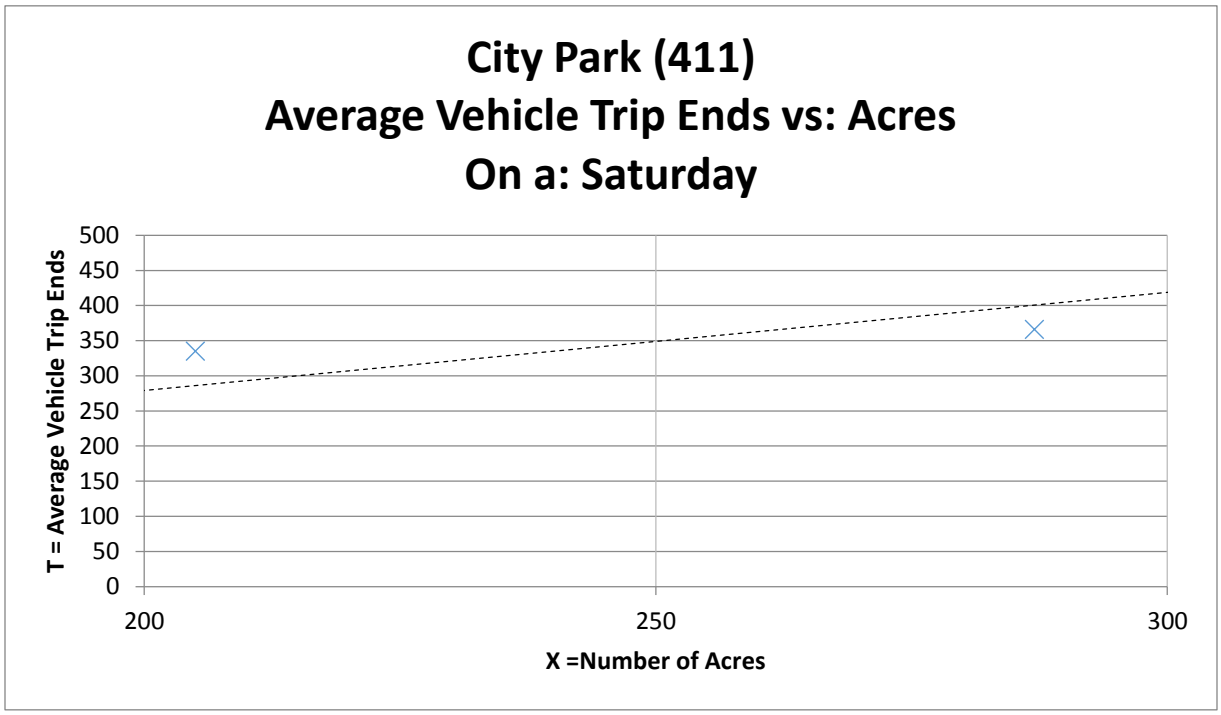
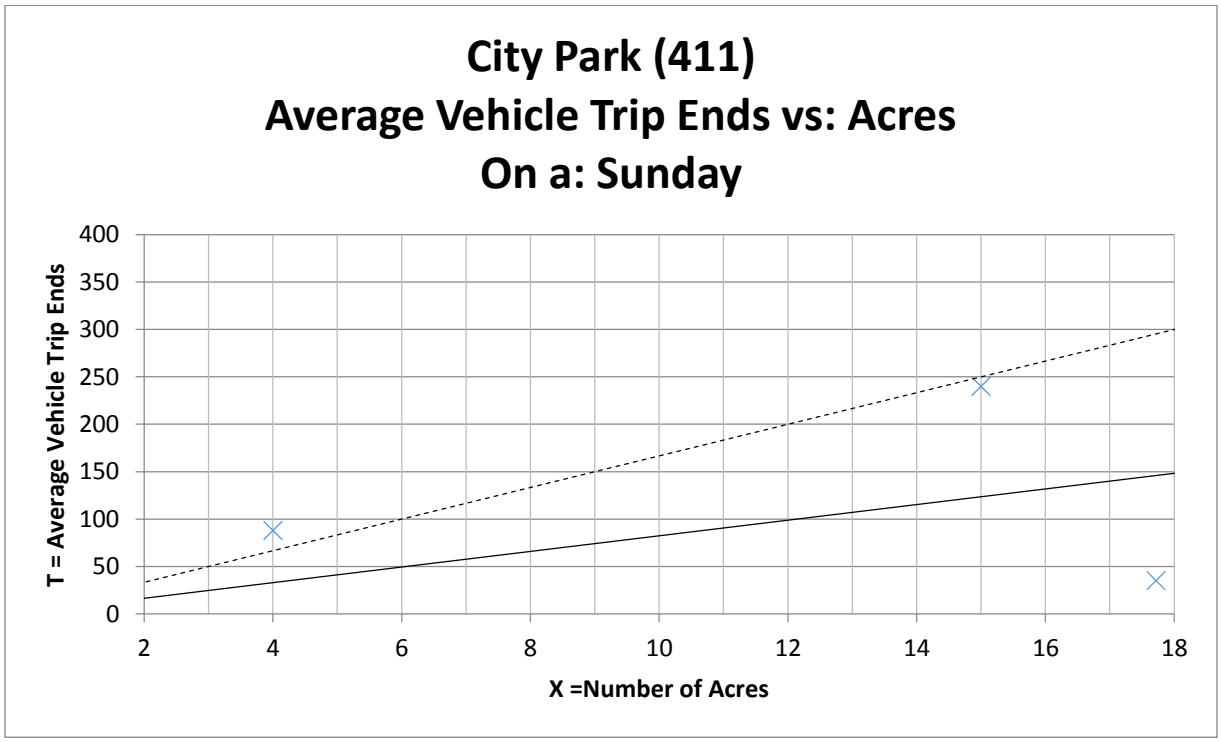

City Park (411)
Average Vehicle Trip Ends vs: Acres
On a: Saturday
T = Average Vehicle Trip Ends
500
450
400
350
300
250
200
150
100
50
0
200
250
300
X =Number of Acres


City Park (411)
Average Vehicle Trip Ends vs: Acres
On a: Sunday
T = Average Vehicle Trip Ends
400
350
300
250
200
150
100
50
0
2
4
6
8
10
12
14
16
18
X =Number of Acres

Appendix C

Parking Generation Data

Parking Demand Survey Form

Institute of Transportation Engineers

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

			Land Use Code*	411			
			Name of Site	Pioneer Park			
			Brief Description of Site				
Transit*	y		City Park in Urban Area (pop. 50,000)				
Area*	cnd		**City**	Corvallis			
TMP*	n		**State**	OR	**Country**	USA	
Parking Price*		$0	Daily Rate	$0	Hourly Rate		

Site Size*	**18**	**Units***	Acres	**Occupancy***	100%	**Land Use**	
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			

Number of Parking Spaces Provided at Site 178

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

Date	4/6/2014						
Day	Sunday						
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	0						
8:00 AM	0						
9:00 AM	0						
10:00 AM	1						
11:00 AM	1						
12 Noon	2						
1:00 PM	5						
2:00 PM	5						
3:00 PM	6						
4:00 PM	3						
5:00 PM	1						
6:00 PM	3						
7:00 PM							
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person	Sarah McCrea	**Organization**	Oregon State University ITE
Phone			
Fax			
Email	osuite@engr.orst.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

Form version 1.4

Parking Demand Survey Form

Institute of Transportation Engineers

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

			Land Use Code*	411			
			Name of Site	Crystal Lake Sports Fields & Kendall Natural Area			
			Brief Description of Site				
Transit*	y		City Park in Urban Area (pop. 50,000)				
Area*	cnd		**City**	Corvallis			
TMP*	n		**State**	OR	**Country**	USA	
Parking Price*		$0	Daily Rate	$0	Hourly Rate		

Site Size*	**205**	**Units***	Acres	**Occupancy***	100	**Land Use**	
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			

Number of Parking Spaces Provided at Site 135

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

Date	4/5/2014						
Day	Saturday						
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	4						
8:00 AM	3						
9:00 AM	35						
10:00 AM	33						
11:00 AM	33						
12 Noon	9						
1:00 PM	8						
2:00 PM	8						
3:00 PM	9						
4:00 PM	6						
5:00 PM	4						
6:00 PM	4						
7:00 PM							
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person	Sarah McCrea	**Organization**	Oregon State University ITE
Phone			
Fax			
Email	osuite@engr.orst.edu		
Notes			

Enter data on the web at www.ite.org

Comments to: ite_staff@ite.org

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Form version 1.4

Parking Demand Survey Form

Institute of Transportation Engineers

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

			Land Use Code*	411			
			Name of Site	Willamette Park and Natural Area			
			Brief Description of Site				
Transit*	y		City Park in Urban Area (pop.50,000)				
Area*	cnd		**City**	Corvallis			
TMP*	n		**State**	OR	**Country**	USA	
Parking Price*		$0	Daily Rate	$0	Hourly Rate		

Site Size*	**287**	**Units***	Acres	**Occupancy***	100%	**Land Use**	
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			
Site Size		**Units**		**Occupancy**			

Number of Parking Spaces Provided at Site 60

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

Date	4/5/2014						
Day	Saturday						
12 Mid							
1:00 AM							
2:00 AM							
3:00 AM							
4:00 AM							
5:00 AM							
6:00 AM							
7:00 AM	3						
8:00 AM	4						
9:00 AM	5						
10:00 AM	15						
11:00 AM	19						
12 Noon	37						
1:00 PM	60						
2:00 PM	61						
3:00 PM	46						
4:00 PM	36						
5:00 PM	14						
6:00 PM	19						
7:00 PM							
8:00 PM							
9:00 PM							
10:00 PM							
11:00 PM							

Person	Sarah McCrea	**Organization**	Oregon State University ITE
Phone			
Fax			
Email	osuite@engr.orst.edu		
Notes			

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Appendix D

Adjacent Street Volume Data

Pioneer Park Adjacent Road Volumes

Newport Hwy (OR 34/US20)

Time	WB	EB	Total	Time	WB	EB	Total
6:52 AM	22	12	34	1:07 PM	104	137	241
7:07 AM	18	27	45	1:22 PM	119	142	261
7:22 AM	22	24	46	1:37 PM	92	141	233
7:37 AM	18	34	52	1:52 PM	112	157	269
7:52 AM	47	50	97	2:07 PM	105	126	231
8:07 AM	57	57	114	2:22 PM	122	132	254
8:22 AM	50	58	108	2:37 PM	100	140	240
8:37 AM	56	48	104	2:52 PM	111	132	243
8:52 AM	50	58	108	3:07 PM	113	134	247
9:07 AM	58	82	140	3:22 PM	96	162	258
9:22 AM	88	78	166	3:37 PM	117	133	250
9:37 AM	67	74	141	3:52 PM	139	139	278
9:52 AM	80	88	168	4:07 PM	110	158	268
10:07 AM	68	95	163	4:22 PM	98	133	231
10:22 AM	80	102	182	4:37 PM	131	110	241
10:37 AM	95	107	202	4:52 PM	120	122	242
10:52 AM	123	140	263	5:07 PM	130	149	279
11:07 AM	89	127	216	5:22 PM	121	116	237
11:22 AM	85	100	185	5:37 PM	110	112	222
11:37 AM	93	129	222	5:52 PM	102	87	189
11:52 AM	100	145	245	6:07 PM	94	100	194
12:07 PM	91	131	222	6:22 PM	107	101	208
12:22 PM	114	185	299	6:37 PM	81	63	144
12:37 PM	122	142	264	6:52 PM	94	78	172

12 hour volume 9418

ADT 10737

Crystal Lake Park Adjacent Road Volumes

SE Crystal Lake Drive

Time	NB	SB	Total	Time	NB	SB	Total
7:00	7	3	10	13:00	12	17	29
7:15	7	7	14	13:15	7	13	20
7:30	6	11	17	13:30	20	7	27
7:45	7	4	11	13:45	12	16	28
8:00	13	3	16	14:00	15	21	36
8:15	14	3	17	14:15	17	7	24
8:30	12	6	18	14:30	13	18	31
8:45	19	18	37	14:45	16	17	33
9:00	7	22	29	15:00	15	15	30
9:15	7	6	13	15:15	10	21	31
9:30	17	9	26	15:30	10	20	30
9:45	22	12	34	15:45	14	13	27
10:00	15	14	29	16:00	27	14	41
10:15	6	18	24	16:15	10	11	21
10:30	22	21	43	16:30	8	10	18
10:45	19	17	36	16:45	14	17	31
11:00	15	13	28	17:00	10	18	28
11:15	21	12	33	17:15	7	10	17
11:30	21	10	31	17:30	15	14	29
11:45	30	18	48	17:45	8	16	24
12:00	22	16	38	18:00	18	14	32
12:15	24	15	39	18:15	15	12	27
12:30	19	9	28	18:30	9	11	20
12:45	15	14	29	18:45	14	12	26

12 hour volume 1308

ADT 1495

Willamette Park Adjacent Road Volumes

SW 3rd Street

Time	NB	SB	Total	Time	NB	SB	Total
7:00	35	22	57	13:00	118	105	223
7:15	41	32	73	13:15	106	135	241
7:30	68	43	111	13:30	98	123	221
7:45	59	44	103	13:45	106	113	219
8:00	59	42	101	14:00	118	110	228
8:15	64	69	133	14:15	86	107	193
8:30	102	52	154	14:30	100	108	208
8:45	122	43	165	14:45	120	125	245
9:00	90	63	153	15:00	101	136	237
9:15	79	73	152	15:15	93	112	205
9:30	101	78	179	15:30	120	116	236
9:45	104	78	182	15:45	124	112	236
10:00	106	90	196	16:00	115	115	230
10:15	130	73	203	16:15	133	123	256
10:30	97	92	189	16:30	128	144	272
10:45	118	104	222	16:45	123	112	235
11:00	119	106	225	17:00	94	125	219
11:15	96	104	200	17:15	104	148	252
11:30	99	118	217	17:30	103	109	212
11:45	127	116	243	17:45	110	99	209
12:00	109	105	214	18:00	89	112	201
12:15	106	120	226	18:15	87	105	192
12:30	116	116	232	18:30	84	73	157
12:45	106	118	224	18:45	83	75	158

12 hour volume 9439

ADT 10765