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Submitted December 9, 2022

Revised April 18, 2023

Jeanne Acutanza
Technical Committee Chair
Western District ITE

Dear Jeanne,

The Oregon State University (OSU) Institute of Transportation Engineers (ITE) Student Chapter is pleased to submit this proposal for the 2023 Data Collection Projects. OSU ITE is an active student chapter with approximately 70 members, with graduate students making up nearly half of our active membership. OSU ITE has performed several data collection projects, including a Western District ITE Trip Generation Project, a Parking Data Collection Project for Group McKenzie, Traffic Counts (vehicle, pedestrian, and bicycle) for the Oregon Department of Transportation, and Corvallis Fenced Dog Park parking data collection project for the City of Corvallis.

Our team is proposing to collect trip generation and parking data for the land use of a 937, **coffee shop with drive-thru window**. This land use was selected because of its novelty and availability.

Our professional mentor, Derek Moore, is willing to provide expertise and guidance to ensure the project is a success. Our faculty advisor, Dr. David Hurwitz, is available for technical support and the provision of count equipment. Elsa Moreno Rangel, OSU ITE's Community Service Chair, will serve as the primary point of contact with Western District ITE.

OSU ITE has the capacity, equipment, and experience to successfully complete this project on a novel land use type while providing our student members with technical skill development through the data collection effort. Grant funding will be used to offset travel costs for students to travel to ITE meetings and conferences, including the Annual Western District Meeting. We appreciate your consideration and look forward to working with you.

Thank you,

Elsa Moreno Rangel
2023-2024 OSU ITE Community Service Chair

Data Collection Proposal Scope

The OSU ITE Student Chapter proposes to collect detailed trip generation and parking demand data at a local coffee shop with drive-through service located in Corvallis, Oregon as shown in **Figure 1**.

Table 1 presents specific land use information related to the study site. The Google Maps data shown in **Figure 2** indicates that the coffee shop experiences the highest usage during Monday, Thursday, and Friday. The coffee shop is open 5 am – 9 pm Monday through Sunday. Data will be collected on a Thursday, Friday, and Monday.



Figure 1: Study Site

Data will be collected during OSU’s spring term, which generally has the most favorable weather. Students will use the parking data collection sheet to keep 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. Similarly, parking usage will be collected at 15-minute intervals from 7 am until 7 pm for both vehicle and bicycle parking. Video equipment will not be used due to privacy concerns. A team of two students will observe the number of vehicles entering and exiting the parking lot. Student teams will work in 3-hour shifts; one student will temporarily cover for the others if breaks are needed within the 3-hour shift. All data will be summarized using Trip Generation Data Forms & Parking Generation Data Forms.

Table 1: Land Use Information for Study Site

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

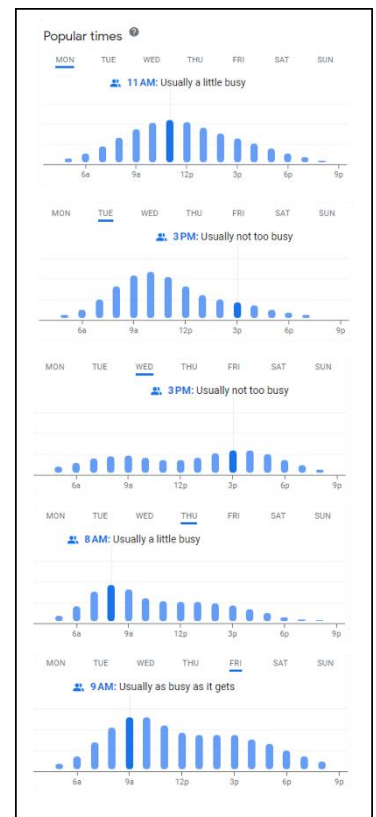


Figure 2: Google Maps Usage Data

Mentoring

Dr. David Hurwitz, OSU ITE Faculty Advisor, will provide QA/QC, support for student recruitment, and equipment used for data collection. Our professional mentor, Derek Moore of ODOT, will provide technical guidance regarding data collection procedures and QA/QC of the data and final report.

Schedule

An anticipated timeline for this project is proposed in **Table 2**. The project will be advertised to ITE students starting mid-January and students will be allowed to sign up until April 1st, after which data collection training will occur.

Table 2: Project Schedule

Task	April 20- 24	April 22 - 28	April 28	Apr 28 - May 2	May 2 - 4	May 5	May 26	May 26 - 28	May 29	June 1
Data Collection										
Synthesis, Analysis & Writing										
Submit Draft to Mentors			◇							
Draft Report Mentor QA/QC										
Address QA/QC Comments										
Submit Draft Report						◇				
Receive Review Comments							◇			
Address Review Comments										
Submit Final Report									◇	
Upload data to ITE										◇

Level of Effort

The data collection effort will require an anticipated 80 student-hours for data collection, data reduction and report writing. **Table 3** presents the tasks and corresponding time requirements. ITE student members will be asked to sign up for 3-hour blocks during the targeted days with the last block of time for the day consisting of only 2 hours. Data reduction will be accelerated by using count boards. Student recruitment will use the incentive of funding for attending ITE meetings or events.

Table 3: Task Breakdown and Estimated Time Requirements

Task	Students Needed	Total Student Hours
Data Collection (3 days x 12 hours x 2 students)	12	72
Data Reduction	1	2
Synthesis & Writing (3 hours x 2 students)	2	6
Total Effort		80

Project Management

The name and contact information of the student coordinator, professional mentor, and faculty advisor for this project effort are shown in **Table 4**. Professional and faculty mentors will provide QA/QC of the draft report as incorporated in the proposed schedule. Students who sign up to participate will be trained on data collection before going into the field. Grant money will be used to support ITE student travel to ITE-related events, such as the 2023 ITE Western District Annual Meeting.

Table 4: Project Management Personnel

Student Coordinator	Professional Mentor	Faculty Advisor
Elsa Moreno Rangel	Derek Moore, P.E.	David Hurwitz, Ph.D.
Oregon State University 101 Kearney Hall Corvallis, OR 97330	Oregon Department of Transportation 455 Airport Rd SE - Bldg. B Salem, OR 97301	Oregon State University 101 Kearney Hall Corvallis, OR 97330
(541)974-4219	(971)273-3055	(541)737-9242
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Agreement to Hold Harmless

The Oregon State University ITE Student Chapter holds harmless and indemnifies the ITE Western District from any and all liability associated with the conduct and completion of this proposal, data collection and associated activity.