University of Washington

November 29th, 2018

Re: 2019 RFP for the Data Collection Fund

Enclosed is the data collection proposal from the University of Washington ITE student chapter detailing a proposed study to take place at Green Lake Village, a mixed-use development located in the Green Lake neighborhood in Seattle, Washington. This project will collect data on trip generation and parking demand for this facility including the total number of trips by transportation mode and parking occupancy in 15 minute intervals for three days in February 2019. Data generated from this study will be invaluable to ITE given its unique land use (mixed-use developments) that was not adequately covered in previous editions of ITE's Trip Generation Manual. This development in particular includes apartments, many shops and services, a grocery market, and a parking garage.

This project will also support the professional development of future transportation engineers by involving students from CEE 327: Traffic Engineering Fundamentals, CET 412/512: Transportation Data Management, and ITE UW in the data collection process. Incorporating the data collection into these courses will introduce these students to basic traffic engineering tasks. The data collection, analysis, and reporting will be overseen by the ITE student chapter vice president Anthony Di Simone, treasurer Mayuree Binjolkar, and myself. Additional support will be provided by our faculty advisor Yinhai Wang and professional mentor Daniel Lai. In total, the data collection effort will entail approximately 80 hours of work. Funds from this proposal will be used to facilitate ITE student chapter activities over the upcoming academic year, including supporting the attendance of ITE members at ITE district events, including Traffic Bowl and the Student Leadership Summit.

ITE UW is excited about the opportunity to analyze the trip generation and parking occupancy at Green Lake Village in Seattle, WA. This study will provide an amazing opportunity for members and civil engineering students to learn about fundamental traffic engineering practice, and if selected, we are confident in our ability to provide quality data and reports to the Western District of ITE.

Thank you for considering our proposal for funding.

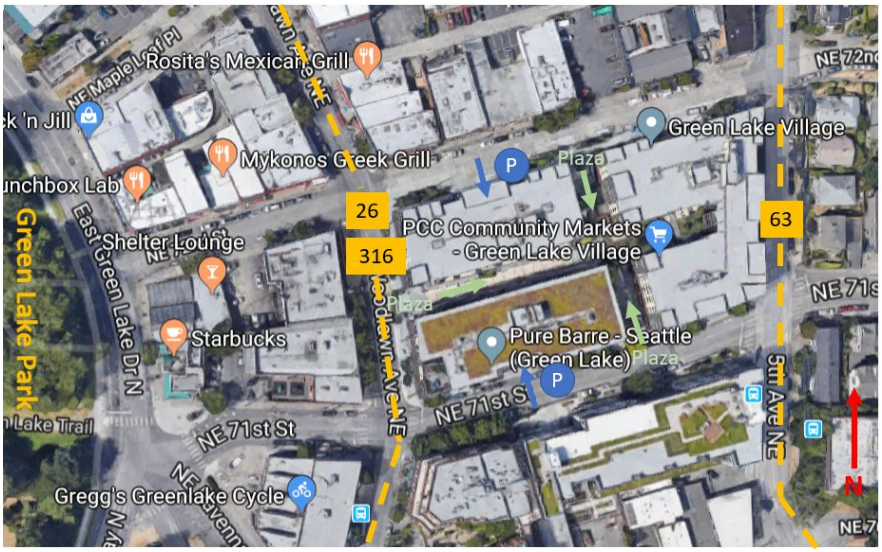
Sincerely,

Christopher Gottsacker
President
UW ITE Student Chapter

Project Scope

Green Lake Village is a mixed-use development located in its namesake neighborhood in Seattle, about 1.5 miles from the University of Washington campus. This site has been identified as the target for this 2019 data collection proposal. The property managers have granted permission for this data collection effort. UW undergraduate and graduate students in the fields of Civil Engineering and Urban Planning will provide approximately 80 hours of work on this data collection.

Green Lake Village is located at 427 NE 72nd St, Seattle, WA, 98115. The mixed-use complex, completed in 2014, comprises three buildings surrounding a shared public plaza. Four (and in some places, five) stories of 296 occupiable residential apartments sit above approximately 50,000 square feet of ground-floor retail, which include a bank, three restaurants, a grocery store, a salon, a physical therapy office, and a yoga studio. Five Metro Transit bus lines run within a block of Green Lake Village, and two of these lines stop directly alongside the development.



Additionally, the development is located one block from Green Lake Park, a highly popular year-round destination. The figure to the left shows the study site, transit facilities, and nearby amenities.

In addition to access via transit, Green Lake Village features an underground parking garage with approximately 300 parking stalls for residents and customers of the retail stores. Some of the retail stores located in the complex validate parking with a minimum purchase, appointment, or transaction. Limited street parking is also found on the surrounding blocks, including multiple load -unload zones. Finally, freight docks are located on the southeast side of the eastern building, providing truck access for unloading. The selection of this site is based on the RFP's stated preference for mixed-use buildings as well as recent critiques of ITE's trip generation manual not fully accounting for trips generated by this land use type.

Data will be collected in 12-hour shifts over the course of three days. This will include two weekdays and one weekend day between the hours of 7 AM and 7 PM. This is intended to cover both weekday and weekend traffic flows and patterns. The following data types will be collected in 15 minute increments on those days:

Trip Generation Data:

- Total trip count:
    - Truck, bike, pedestrian, transit, shared mobility (taxi, Uber, Lyft), and passenger auto trips
    - Total number of motor vehicles: passenger cars, shared mobility, trucks, and motorcycles

Parking Demand Data:

- Total parking occupancy in the underground lot for cars, bicycles, motorcycles, and truck occupancy in the freight loading dock. Entrances to the lot and loading dock can be seen in Figure 1.

The data will be collected by both ITE UW members and students from both *CEE 327: Traffic Engineering Fundamentals* and *CET412/512: Transportation Data Management.* Class credit will be awarded to students in these classes for participating in the data collection project at the proposed site. All data will be collected using standard ITE trip generation and parking demand forms as stated in the RFP.

Mentoring

Daniel Lai of the City of Bellevue will serve as the mentor for ITE UW's data collection efforts. Mr. Lai is a Senior Transportation Engineer at the City of Bellevue and has accrued over 11 years of industry experience in transportation engineering. Daniel is registered as a Professional Engineer and has prepared many traffic impact studies requiring the use of trip generation data, which makes him well suited to help students devise and implement their own data collection project. Additional resources will be provided by ITE UW's faculty advisor, Professor Yinhai Wang, an ITE member. If selected, these funds will provide ITE UW with the opportunity to support student travel to ITE conferences and events (*e.g.* Student Leadership Summit and Western District Meeting) in addition to sponsoring field trips and speakers for UW students. Once granted, funds should be sent to the UW ITE treasurer. (Payable to UW ITE, Box 352700, 101 More Hall, Univ. of Washington, Seattle WA 98195).

Schedule of Tasks	**Deadline Dates**
1. Develop Work Plan	Dec. 31, 2018 ~ Jan. 31, 2019
2. Collect Data	Feb. 1, 2019~ Feb. 28, 2019
3. Submit Draft Report, Summary Table, and Data Forms	Apr. 1, 2019
4. Submit Final Report, Summary Table, and Data Forms	May 1, 2018
5. Upload data to ITE's Online Data Submittal Portal	May 21, 2018

Level of Effort

		Hours* Person
Data Collection	UW CEE 327 Students/ ITE Student Members	68
Ground Supervision	Anthony De Simone, Chris Gottsacker, and Mayuree Binjolkar	2
Project Supervision	Daniel Lai	3
Data Processing	UW ITE Student Officers/Members	3
Documents Elaboration	Anthony De Simone, Chris Gottsacker, and Mayuree Binjolkar	4
	Total	80

Project Management

Faculty Member	Dr. Yinhai Wang, Professor	Box 352700, Dept. of Civil and Environmental Engineering, University of Washington, Seattle, WA 98195-2700 (206) 616-2696 yinhai@u.washington.edu
Student Coordinator	Chris Gottsacker, UW ITE President	Box 352700, Dept. of Civil and Environmental Engineering, University of Washington, Seattle, WA 98195-2700 (262) 353-1122 gottsc@uw.edu
Student Coordinator	Anthony De Simone, UW ITE Vice President	Box 352700, Dept. of Civil and Environmental Engineering, University of Washington, Seattle, WA 98195-2700 (206) 518-4962 agd3@uw.edu
Student Coordinator	Mayuree Binjolkar, UW ITE Treasurer	Box 352700, Dept. of Civil and Environmental Engineering, University of Washington, Seattle, WA 98195-2700 (210) 937-1060 mayureeb@uw.edu
Professional Mentor	Daniel Lai, P.E.	City of Bellevue 450 110th Ave NE, Bellevue, WA 98004 425-452-6178 dlai@bellevuewa.gov

Agreement to Hold Harmless

The UW ITE 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.