

November 29, 2017

Amit Kothari

ITE Western District Technical Committee Chair

AmitOneKothari@gmail.com



RE: 2018 ITE Western District Student Data Collection Project

Dear Mr. Kothari,

On behalf of the Montana State University chapter of the Institute of Transportation Engineers (ITE @ MSU), I am pleased to submit the attached proposal for the 2018 ITE Western District Student Data Collection Project. We are confident that our chosen location, a new student-oriented apartment complex near campus, will provide valuable information for the ITE Trip Generation Manual. As large student-oriented apartment complexes with an emphasis on multimodal transportation increase in popularity throughout the country, we believe that transportation engineers will benefit from additional data on this unique land use.

Although ITE @ MSU has a storied history, we have been fairly dormant over the last few years due to a high level of student turnover. However, the club currently has a strong base of students passionate in transportation engineering and we are excited for what our future holds. This semester, we hosted ITE International President-elect, Michael Sanderson, for a large transportation presentation. We also held an informational session by representatives from the design and planning firm, Kittelson & Associates.

For the first time in our club's history, we will be sending student members to the ITE Student Leadership Summit. We are also thrilled to be further involved with the upcoming annual conferences of the ITE Western District and the ITE Intermountain Section. With all the new knowledge our members will gain at these events, we plan on giving back to our university by supporting transportation initiatives such as bike safety, better parking, and additional public transportation.

One of our club's primary goals is to promote the field of transportation engineering throughout MSU. We believe this data collection project will give us an opportunity to reach out to students and give those who are interested a chance to participate in real-world data collection. We will work hard to involve as many students as we can with this project and hopefully foster a university-wide interest in transportation engineering.

With the passion of our student members and the guidance of our mentors, I am confident that ITE @ MSU can provide the ITE Western District with quality data and a thorough report. Feel free to contact me with any questions you may have. Thank you for your consideration.

Sincerely,

Matthew Campbell

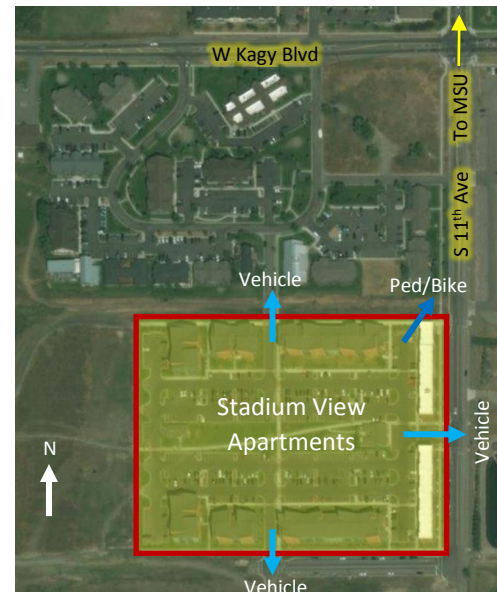
President, ITE @ MSU

matt.2112.campbell@gmail.com

(907) 321-8202

Data Collection

This proposal aims to collect trip generation and parking occupancy rates at the Stadium View Apartments located in Bozeman, MT. The complex is located a half mile south of the center of the MSU campus, southwest of the major intersection of W. Kagy Blvd. and S. 11th Ave. as shown to the right. This apartment complex was built in 2015 and serves primarily as off-campus student lodging. It currently houses over 500 residents and encompasses an area of six city blocks. Stadium View also has retail stores on the first floor located along S. 11th St., which provide public street parking. Our study will focus on the 515 private parking spaces available within the apartment complex. Although there are 10 bicycle racks scattered throughout the complex that can each hold approximately 10 bicycles, the number of bicycles leaving the complex will be related to the overall resident population. This site is of interest because MSU, and Bozeman in general, has a rising population trend. The city of Bozeman growing at a rate of 4.3%. New housing developments continue to be built around the city which creates new concentrations of trip generations. The data collected will be helpful to planners who seek to incorporate popular modes of transportation into new developments.



Stadium View Site Plan

Data will be collected on the number of vehicles, bicycles, and pedestrians entering and leaving the apartment complex. Along with volume and transportation mode, parking occupancy rates will be recorded on the same day for passenger vehicles and bicycles. If we can get enough student involvement, we will survey people to record their destination. The observer for trip generation will be located on the northeast corner of the property. From this location, the observer will be located at the end of the walking path that leaves the complex and in direct view of the eastern and northern driveways. Vehicles leaving the southern driveway will pass the observer; all traffic can be monitored by the observer. Student observers will collect three 11-hour observations of trip counts and parking occupancy on Wednesday, Thursday, and Saturday of the same week. These days of the week were chosen to capture alternating class schedules of MWF and TTh, as well as a weekend day with no school events to create a control. On the days of the study, occupancy rates and trip generation will be recorded in 15-minute intervals from 7am to 6pm. All data will be compiled and organized with the use of ITE's Trip Generation Data Form and ITE's Parking Demand Survey Form. Permission for data collection has been granted by the Stadium View management.

Level of Effort

As outlined in the above section, we will perform three full days of data collection. We plan to have at least two students on-site throughout all three days, for a minimum of 66 hours of data collection. Four hours will be spent preparing for data collection. The final 10 hours will be spent analyzing the data and writing the report.

We anticipate at least 8 ITE @ MSU members will be able to assist with the data collection project next semester. However, we hope to involve more students by reaching out to various engineering classes. We will ensure that any interested student will have the opportunity to contribute to the project in a meaningful way. Efforts will be made to integrate work on this project with students' relevant coursework, particularly within transportation classes.

Schedule

Our proposed schedule can be seen below. We anticipate completing all tasks outlined in the RFP and receiving payment in time to use the funds for fuel and travel expenses for the ITE Intermountain Section and ITE Western District annual conferences. All deliverables will be submitted by our mentor, Danae Giannetti.

Although data collection will only occur over three days, we are allotting a three-week window. This will allow us to choose ideal days with regular traffic activity. The window will also ensure that we don't fall behind if a day of data collection has to be canceled due to weather or other contingencies.

Activity	Date	January				February				March				April				May		
		8	15	22	29	5	12	19	26	5	12	19	26	2	9	16	23	30	7	14
Spring 2018 Semester Begins	Jan 10	★																		
Data Collection Preparation	Jan 10 - Feb 5	■																		
Perform Data Collection	Feb 6 - Feb 23	■																		
Write Report	Feb 24 - Mar 23	■																		
Submit Draft Report, Summary Table, and Data Form	Mar 23	★																		
ITE Committee Review	Mar 24 - Apr 6	■																		
Final Report Revisions	Apr 7 - Apr 13	■																		
Submit Final Report, Summary Table, and Data Form	Apr 13	★																		
Final Report Accepted by ITE Committee	Apr 20	★																		
Upload Data to ITE Online Data Submittal Portal	Apr 23	★																		
District Payment	May 7	★																		

Mentorship

Our mentor, Danae Giannetti, is a Civil Engineering Specialist at the Montana Department of Transportation and MSU Design Unit. She serves as both a design engineer and a supervisor to student design interns. Her professional skills will be helpful in providing assistance, oversight and mentoring to the students in ITE @ MSU throughout the project. She will also assist in determining the independent variable to develop a trip generation rate and parking generation rate. Dr. Ahmed Al-Kaisy, Ph.D., PE, is our faculty advisor. He is a transportation faculty member in the MSU Department of Civil Engineering. He will provide general oversight and guidance throughout the project.

Project Management

Our technical director (an officer position in ITE @ MSU), will hold the position of Project Manager, with assistance from other officers as needed. The president and vice-president will meet with the project manager regularly to ensure the project stays on-track. Both our mentor and faculty advisor will be consulted prior to every major project activity. The project manager will form small groups for specific tasks throughout the project. Groups will be formed for tasks relating to data analyzing and report writing. There will also be a group for every day of data collection.

If our student chapter is fortunate enough to receive a grant, we plan to use the funds to help cover travel and lodging expenses for the ITE Intermountain Section annual meeting in Jackson, WY, and the ITE Western District annual meeting in Keystone, CO. Any remaining funds will be used to support student recruitment and outreach efforts in the following semester.

Project Manager:
 Joey Beran
 1409 S Willson Ave Apt A
 Bozeman, MT 59715
 (612) 708-9932
 beran09@gmail.com

Mentor:
 Danae Giannetti
 2327 University Way Suite 5
 Bozeman, MT 59715
 (406) 994-1861
 dgiannetti@mt.gov

Faculty Advisor:
 Dr. Ahmed Al-Kaisy
 213 Cobleigh Hall
 Bozeman, MT 59715
 (406) 994-6116
 aalkaisy@montana.edu

Agreement to Hold Harmless

The Montana State University chapter of the Institute of Transportation Engineers (ITE @ MSU) 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.