

Amit Kothari  
ITE Western District Technical Committee Chair  
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Re: ITE Western District 2018 Student Data Collection Proposal

Dear Evaluation Committee,

The Institute of Transportation Engineers at UC Berkeley (Cal ITE) is pleased to submit the attached proposal for the ITE Western District 2018 Student Data Collection Project. We recognize the need for technical data on new land types, so we have chosen a mega sporting goods store, Sports Basement, in downtown Berkeley that sees a variety of modes. We find this project a perfect opportunity to contribute back to the Institute, as our organization greatly benefits from Western ITE's support and guidance.

This project is a fantastic opportunity to provide members with hands-on transportation experience. UC Berkeley has a great transportation engineering program, but the overwhelming majority of opportunities and resources go toward the graduate program. Moreover, UC Berkeley only offers two undergraduate transportation engineering courses, one of which (CE155) is taught by our faculty advisor, Prof. Michael Cassidy, and focuses on the ITE trip generation manual and trip distribution. Cal ITE is planning on working with Prof. Cassidy to connect ideas from his course to the data collection project, in order to highlight the importance of exposing undergraduates to both conceptual and real-world transportation analysis. This data collection project would be an excellent opportunity for Cal ITE to gain experience in trip counts, trip generation, and technical report writing.

When preparing this proposal, we were pleased with the amount of interest expressed among members. This year Cal ITE has grown rapidly; we have established a student-led class, and have hosted an event every week during the fall semester. Recently we have held software trainings and workshops, guest lectures from professors, company info sessions and socials. We also held an incredibly successful mixer, hosting over 50 professionals, faculty, graduate students and undergraduates from around the Bay Area. Moreover, our chapter recently launched a sponsorship program, bringing in support from some of the Bay Area's top consulting firms. We have also increased Cal ITE's numbers at the Student Leadership Summit and the Western District Annual Meeting. At this January's Student Leadership Summit, we will have over 11 members present, the highest yet from our chapter. Furthermore, our chapter is applying to host the next SLS in 2019. Funds from the project would be used to subsidize attendance at conferences, subsidize transportation costs for field trips, and host more general meetings with transportation professionals. We plan on using the data collection project as a major aspect of next semester's activities, building it into the curriculum for our student-led class.

Conducting this data collection project would allow Cal ITE to contribute to ITE Western District and also provide us with a platform to continue to grow. We thank you for your consideration and your continued support of our chapter. Please feel free to contact me or any other Cal ITE officer or mentor with any questions or concerns.

Sincerely,  
Marissa Milam  
Cal ITE Officer, Treasurer

## 1. Data Collection Proposal Scope

The proposed data collection will provide trip generation and parking occupancy rates for the mega-sporting goods store Sports Basement at 2727 Milvia Street in downtown Berkeley, CA. Sports Basement is a 54,000 square foot sporting goods retailer, providing custom apparel and other sporting services. The property has 44 on-site parking spaces, and two driveways entrances and two exits, with one entrance and exit on Derby Street, and the other entrance and exit on Ward Street. The main entrance and pedestrian access point is located along Milvia Street. Sports Basement is located in Downtown Berkeley, along the southern Shattuck Avenue corridor, which is four blocks away from the Ashby BART station, and close to many transit routes. The store's location in a high-density, mixed-use neighborhood and its close proximity to transit, major employment, and education centers provide high proportions of transit, walking, and bicycling trips. Cal ITE has submitted a written proposal to the general manager of the Sports Basement development for his personal review, and received formal approval.

Cal ITE will perform physical counts of trucks, bicycles, pedestrians, passengers in vehicles, and total motor vehicles entering and exiting the property. Cal ITE will conduct a survey asking pedestrians whether they are planning to take transit or are walking to their destination. If approval is not received for a passive or active survey of pedestrians, the mode choice of pedestrians will be determined visually. The mode of travel used for other trips will be recorded visually. Cal ITE will additionally track parking occupancy of the Sports Basement parking lot throughout the day by performing a baseline count of all parking spots at 7AM, and then using this baseline and the observed driveway entries and exits to obtain hourly parking occupancy levels.

Data collection will take place one weekday a week over three weeks (three days of data will be collected in total). The chosen day will always be either a Tuesday, Wednesday, or Thursday and will not be in a week with a legal holiday. In the event of inclement weather or other unexpected events affecting travel patterns, data collection will be rescheduled. Data collection of both trip generation and parking occupancy will be conducted continuously for a 12 hour period from 7AM to 7PM on each weekday. The data will be broken down into 15 minute intervals by mode according to the ITE Trip Generation and Parking Occupancy Data Forms.

Figure 1: Sports Basement site layout and surrounding area



## 2. Mentoring

Ms. Kimberly Leung, PE, Associate Engineer at the San Francisco Municipal Transportation Agency, will act as our professional mentor for this project. Ms. Leung is an active member of ITE. She is the current

Student Endowment Fund Chair for Western ITE and a previous President of SF Bay ITE as well as SF Bay ITE's current liaison with Cal ITE. Ms. Leung will actively provide professional and logistical support for this project, including assisting with communications with the store's management and reviewing all deliverables. Professor Michael Cassidy, is the faculty advisor for Cal ITE and will be consulted.

### 3. Schedule

The following chart details our proposed schedule:

Cal ITE Collects Data*	January 23, 31, February 8, 2018
Cal ITE submits Draft Abstract, Summary Table, and Data Forms	February 28, 2018
Western ITE Technical Committee Completes Review of Draft Abstract and Data	March 21, 2018
Cal ITE submits Final Abstract, Summary Table, and Data Forms	April 4, 2018
Data Uploaded to ITE's online data submittal portal	April 18, 2018
District Payment to Student Chapters	May 2, 2018

\*The week of February 12 will be reserved in case of weather contingencies with data collection.

### 4. Level of Effort

The data collection process will require 2 volunteers to be on-site for 12 consecutive hours over 3 days, which amounts to 72 person-hours of work. Additionally, Cal ITE expects to spend 5 hours on "Grant Schedule" section above in this RFP, planning and coordinating the data collection, as well as 5 hours of data analysis and preparation of final deliverables, which amounts to a total of 82 person-hours.

Volunteers for this project will be pulled from the Cal ITE board, as well as the student-run decal class. We will work with Professor Cassidy to discuss options to connect this effort with his class, CE 155, which focuses on the ITE Trip generation manual and trip distribution. Funds acquired from the data collection project will be used in part to subsidize students' conference costs at the upcoming 2018 ITE Student Leadership Summit in Corvallis, Oregon, and the 2018 Western ITE Annual meeting in Keystone, Colorado.

### 5. Project Management

Student Coordinator	Professional Mentor	Faculty Advisor
Marissa Milam Cal ITE Apt 102, 2819 Derby St. Berkeley, CA 94705 (916) 832-6479 m.milam@berkeley.edu	Kimberly Leung, P.E. SFMTA 1 South Van Ness Ave., 7th Floor San Francisco, CA 94103 (415) 701-4653 kimberly.leung@sfmta.com	Prof. Michael Cassidy UC Berkeley Dept. of Civil and Environmental Engineering 416C McLaughlin Hall (510) 642-7702 cassidy@ce.berkeley.edu

### 6. Agreement to Hold Harmless

*The UC Berkeley student chapter of the Institute of Transportation Engineers 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.*