



# Beaver Crossing OSU ITE Newsletter

Oregon State University Institute of Transportation Engineers Student Chapter

Volume 1, Issue 4

Spring 2015

## Calendar of Events

**6/12/2015: OSU  
Commencement**

**7/19-22 ITE  
Western District  
Meeting**

**8/2-5 ITE Interna-  
tional Meeting**

**9/24  
Fall Term Starts**

## **ITE takes to the Streets: Data Collection**

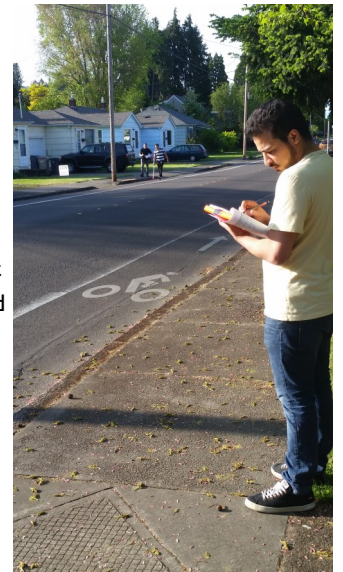
This Spring the OSU ITE Student Chapter undertook a large data collection project. This project focused on parking availability for the area surrounding the Oregon State University Campus. The total area was just under 2 square miles. Over a two week period the chapter used 25 volunteers to collect, process, and report the data collected. Volunteers used measurement wheels to walk along the curb face collecting all of the physical characteristics of roadway. This data was then inputted into a spreadsheet and reported. The chapter spent over 250 hours on the project with about 150 hours in the field.

The chapter was able to use this as an outreach activity as well. Officers went to transportation classes and recruited volunteers for the project. Many of the students that were volunteers for the project are

now members of ITE.

Many of the volunteers had never preformed this type of work. Now they appreciate all of the hard work that goes into data collection and were able to learn a great deal from the experience. Also, members learned about time and group management. The data was collected in groups and communication was key to the success of the project.

The chapter is thankful for the opportunity to work with industry for these types of projects. Thank you Quality Counts and Dr. Hurwitz for all of the help of this project.



ITE Members Collecting  
Data

## **David Evans and Associates comes to OSU!!!**



DEA Speaker Meeting

Speaking in front of over 30 excited students Jordan Henderson from David Evans and Associates gave a presentation. Jordan spoke for 20 minutes about DEA and the work the firm performs. This gave students insights on if DEA would be a good fit for them. The most exciting part of the meeting was when Jordan opened the floor to questions from the students. The questions ranged from technical transportation questions to engineering life questions. After the

meeting several members asked additional questions to Jordan about DEA and transportation engineering. Students learned a great deal from the session. We would like to thank Jordan and DEA for all the support over the years and taking the time to speak to our students!

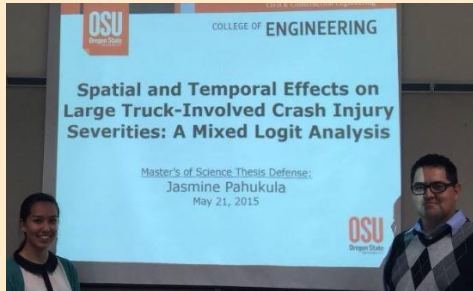
*The chapter likes to host at least one speaker meeting a term. If you or someone you know would like to speak please contact any officer.*

# Student Members Graduating

Many of the ITE Student Members are graduating this term! We are so excited and proud of them and all their accomplishments. Many of the students defended their Masters this term or finished their Undergraduate Senior Project.

## Graduate Students Members Graduating

For the past two years Oregon State has had the privilege of having some of the hardest working and dedicated graduate students and this term marks the end of there time at Oregon State. This spring the ITE Student Chapter has seen five members defend their graduate degrees.



Jasmine Pahukula and Dr. Sal Hernandez

The term started with the former ITE Social Media Coordinator, Allie Peters, defending her thesis on engineering education collaboration. She worked with university professors on creating tools for sharing lecture material with the goal of making learning experience better for students. She was Dr. Shane Brown's first graduate student to graduate since he started at Oregon State in fall 2013. Allie is currently working at Mackenzie Engineering in Vancouver, Washington.

Dylan Anderson was the next student to defend. He has spent the better part of a year working on a T.C.R.P. report of gaps at steel tire public transit stations. He worked with Dr. Katherine Hunter-Zaworski on finding industry best practices and performing site visits.

Dylan will be pursuing a career working in the freight rail industry as a Management Trainee for BNSF Railways in the fall. Next, James Darnell worked with Dr. Chris Bell and ODOT on a project for asphalt pavement. The focus of the project was on recycled asphalt pavement. James will start working at ODOT in the summer as part of the Graduate Engineering Program with his first rotation working on the Pioneer Mountain Eddyville Project.

Jasmine Pahukula's thesis researched large truck crash injury severity. Her work with Dr. Sal Hernandez has all ready been published. Jasmine started as an intern at DKS Engineering this winter and will continue as a full time employee after graduation. The last member to defend this spring was Jennifer Warner, former Vice President of the OSU ITE Chapter. Her work with Dr. David Hurwitz and ODOT used the OSU Driver Simulator to look at different intersection treatments for bicycle right hook crashes. Jennifer will start her post graduate school career at Stantec. We are extraordinary proud of all of our graduating graduate students and are looking forward to see of you them being successful in their careers.

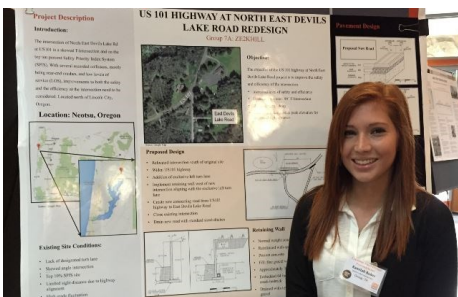


Dylan Anderson presenting his thesis



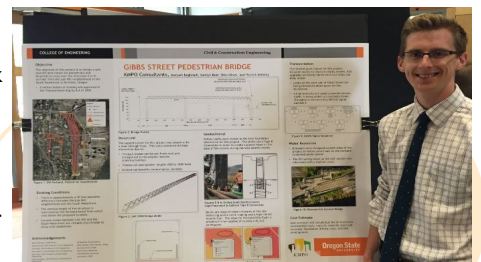
Jennifer Warner's simulation view

## Undergraduate Student Members Graduating



Kamilah Bunker with her project poster

The ITE Student Chapter is proud of our seniors graduating this June with their Bachelor's in Civil Engineering. Many of these students have been long time members and have volunteered a great deal during their time at Oregon State. At OSU every senior is required to complete a capstone project. Kamilah Bunker, OSU ITE Vice President, worked on a new intersection design on US 101. Her group took the ambitious approach of relocating the intersection and redesign both the roadways that connect to the intersection. Patrick Mahedy, OSU ITE Undergraduate Outreach, designed the transportation section of a pedestrian bridge project in Portland. Kamilah and Patrick are just some examples of the amazing undergraduate students we have at OSU. Many of the students are continuing their education at Oregon State by pursuing a Masters Degree in the fall. Congratulations on graduating!

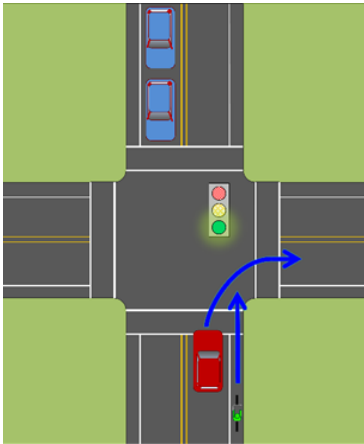


Patrick Mahedy and his project poster

# Student Research-

By Jennifer Warner

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Right-hook Crash Illustration

Below is the abstract from Jennifer Warner's thesis:

"A right-hook crash is a bicycle-motor vehicle crash between a right-turning motor vehicle and an adjacent through-moving bicycle. This study focuses on right-hook crashes that occur during the latter stage of the circular green indication at signalized intersections with shared right-turn and through lanes. The overall objective was to evaluate and identify engineering treatments that are effective in reducing the frequency and severity of right-hook crashes. The areas of engineering treatments that were considered are as follows: signage, pavement markings, curb radii, and protected intersections. The driver performance measures include visual attention, crash avoidance, and potential crash severity.



Screen Shot from Eye Tracking Device

The resulting analysis suggests that while these various driver performance metrics can be measured robustly, and all of the treatments had some positive effect on measured driver performance, it is not yet clear how to map the magnitudes of the differences to expected crash outcomes. Additional work is recommended to address the limitations of this study and to further consider the potential effects of the right-hook crash mitigation strategies from this research."

## Officer Elections

The chapter elected new officers in April. The new officers are President Andrea Mather, Vice President Kamilha Buker, Secretary David Covey, Treasure Dejan Dudich, Event Coordinator Alireza Mostafizi, Social Media Coordinator Shangjia Dong. We are very excited to have so many new officers. New biographies for each officer will be included in the summer edition of the newsletter.

### Current Members, Faculty, Alumni, and Friends:

First I would like to introduce myself, I am Andrea Mather, the newly elected OSU ITE Student Chapter President. I am just finishing my first year of my Masters Degree at Oregon State after graduating from OSU last spring my with my Bachelors in Civil Engineering.

Spring comes with flowers, sunshine, and good byes. This year has been on of the most productive, exciting, and fulfilling years the OSU ITE Student Chapter has ever had. A large part of that is because of the extraordinary students that are graduating this year. Seven current of former officers are graduating with two past presidents. They are go out into industry with a better engineering understanding and work ethic because of their time with the ITE Chapter. Many of them have work tirelessly on volunteer projects, organizing events, and participating in social activities. Each of them brought their own perspectives on issues and where active participants in discussions.

*"...we are excited to see the amazing things they will accomplish in their careers."*

## Officer's Corner

Even those who did not serve in officer positions were extremely active in the chapter. With many of them participating in Traffic Bowl and outreach events.

The remaining members and officers look to them as our role models and our guiding figures.

This last few month the chapter would not have been able to complete all of the projects and events without their help and guidance.

While we are all sad to see them leave the hallowed halls of Kearney we are excited to see the amazing things they will accomplish in their careers.

Please join me and the rest of the chapter in congratulating all of our amazing graduates. In the words of Professor Shultz "Draw a sketch and check your work!" Congratulations Class of 2015!!!

Andrea Mather, E.I.T.

OSU ITE President



## COE: Spring Carnival

This year the College of Engineering Spring Carnival was done in conjunction with the undergraduate Engineering Expo. This allowed the chapters to engage with a wider

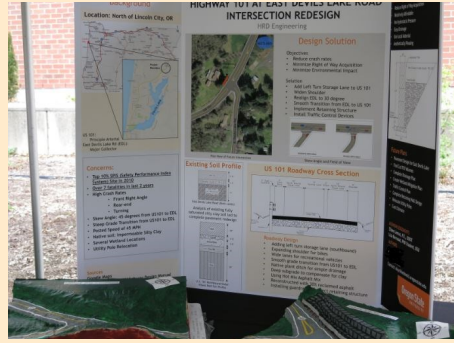


Children enjoying the

range of people. Middle School, High School, and College Students were in attendance and all the proceeds from the event went to the Linn Benton

Food Share. The chapter had the classic carnival game of LEGO car racers. Participants would build cars and race them down a track. Everyone who came by the booth had a great attitude and enjoyed racing their designs. This event was also a great time to practice talking to the public about transportation engineering and what ITE is all about.

## Engineering Expo



Student Poster at Expo

All of the senior projects from the OSU College of Engineering were on display at the Engineering Expo held at OSU in Spring. This included several of the members of the ITE Student Chapter. Students presented their work at the OSU community, industry members, and students. This is a wonderful event for both the students and the audience.

## USDOT Virtual Town hall

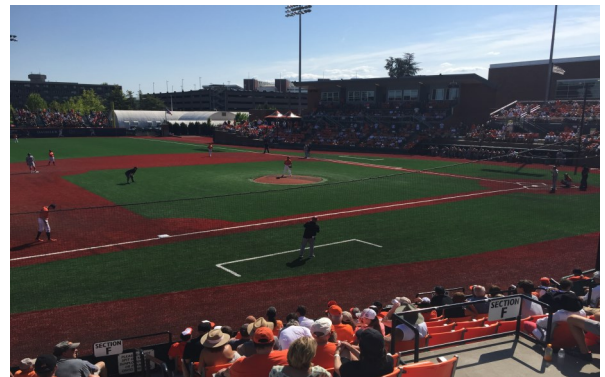
The OSU ITE Student Chapter hosted a viewing of the virtual town hall meeting for USDOT. The town hall contained students from around the county asking questions and USDOT officials discussing them. The report Beyond Traffic was the main point of discussion and USDOT officials wanted student perspectives on the report. While roadways and personal motor vehicles dominated the discussion other modes were discussed. About 10 members for the ITE chapter attended the meeting.



Student watching the Town Hall

## Spring Social Events

With the sun out and temperature rising the chapter has created more outdoor socials and events. The major spring social event was an OSU baseball game. Five members from the chapter saw Oregon State beat University of Utah in a thrilling game. For one of our members it was his first baseball game ever. Other members



Beaver Baseball Game



Bowling after the End of Year BBQ

had a great time explaining the wonderfully confusing game of baseball to him. The game ended with the pitcher's best friend, a double play. After the game many of the members went

to see Avengers: Age of Ultron. After the movie there was a lively discussion on the vehicles used in the movie. After the End of the Year BBQ (story to come in the summer newsletter) many of the students continued the fun and went Cosmic Bowling. It was a great time dancing to the music, eating fries, and knocking down pins. For several of the members it was their first time bowling.



Beaver Crossing is written and produced by Andrea Mather and David Covey for the OSU ITE Student Chapter. Comments and Questions about this publication can be sent to [mathera@onid.oregonstate.edu](mailto:mathera@onid.oregonstate.edu)

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**GO BEAVERS!**