



Beaver Crossing OSU ITE Newsletter

Oregon State University Institute of Transportation
Engineers Student Chapter

Volume 2, Issue 1

Summer 2015

Viva Las Vegas!!!

This summer the ITE Student Chapter traveled to Las Vegas for the Western District Meeting. President Andrea Mather, Vice President Kamilah Buker, Secretary David Covey, and Treasurer Dejan Dudich represented the Chapter. During the conference members attended technical sessions, workshops, keynote speeches, volunteered, and competed in Collegiate Traffic Bowl (see story below). The conference

attracts professionals and students primarily from the western states, but there was also many ITE members from other districts who attended the conference. This diverse group of people helped create a collaborative and interactive environment. All of the members learned a great deal and were able to make connections with other students and professionals. After the end of the conference the members were able to travel to Hoover Dam! We can't wait to see everyone in Albuquerque next summer! Also, check out our website to see the rest of the conference pictures!



Calendar of Events

9/24/2015: Fall Term Start

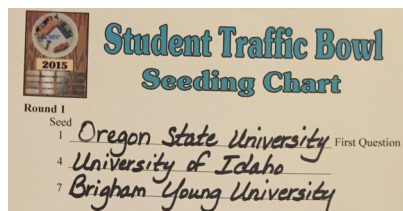
11/11/2015: Veteran's Day (OSU Closed)

11/19/2015: Oregon Section Traffic Bowl

12/11/2015: Last day of Fall Term

Silver Metal in Traffic Bowl

The team motto this year for the OSU ITE Collegiate Traffic Bowl Team was "have fun and don't worry." With this thought the team entered the preliminary quiz round. After a nervous hour OSU found out that they were seeded first! After a few additional hours of studying OSU entered the second round and escaped with a victory by answering four of the last five questions correctly. In the final round OSU faced Oregon Tech and Cal Poly SLO. Cal Poly SLO proved to be the most dominating team in this final round. They placed first and won the Western District Collegiate Traffic Bowl with OSU second and Oregon Tech third. We are so proud of our team and their hard work!!! We are excited for Oregon Section Traffic Bowl this fall!!!!



New ITE Officer Board

President: Andrea Mather

Andrea is a second year Master of Science student in Civil Engineering, with a focus in Transportation Engineering.



She loves all modes of transportation from trains to bikes. She completed her undergraduate degree at Oregon State University in 2014 and has interned at ODOT for four summers. Andrea loves Starbucks, Birkenstocks, and hiking; a true Oregonian

Vice President: Kamila Buker

Kamilah is a first year Master of Science student in Civil Engineering, with a focus in Transportation Engineering. She earned her B.S. in Civil Engineering from Oregon State University in 2015. Her interests



are in human factors, education, and transportation safety. In her free time Kamilah enjoys running, hiking, and spending time with her friends and family.

Secretary: David Covey

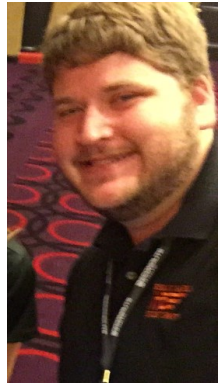
David is a second year Master of Science student, with a focus in Transportation Engineering. He completed his undergraduate degree at Oregon State University in 2014.



His research is focused primarily on asphalt pavement materials and bond strengths of layers. David is from the Salem/Keizer area and enjoys cycling, bowling, and travel.

Treasurer: Dejan Dudich

Dejan is a second year Master of Science student in Civil Engineering, with a focus in Transportation Engineering. He is originally from Bosnia but has been in the US for many years. His undergraduate degree was received in 2013 from Northern Arizona University. His research interests focus on transportation safety and the application. In his free time Dejan enjoys hiking, reading, and spending time with family and friends.



Activities Coordinator

Alireza is a second year Ph.D student in Civil Engineering, with a focus in Transportation Engineering. His research includes Tsunami evacuation strategies, and connected-autonomous vehicles. He finished his BS degree in Civil Engineering in Iran, and is very good at using programs to solve problems. In his spare time, he enjoys rock climbing and hiking.



Social Media Corridor: David Covey

Shangjia is a third year Ph.D student in Civil Engineering, with a focus in Transportation Engineering. He is from China and enjoys everything there is to do with the outdoors.



While studying in the United States, Shangjia hopes to be able to travel, hike, tennis and explore as many different places as possible. He really enjoys spending time with his fellow graduate students and making new friends whenever possible.

Faculty Advisor: Prof. David Hurwitz Dr. Hurwitz began teaching at Oregon State in the late 2000's and has been a huge supporter of the OSU ITE Student Chapter helping the chapter grow and progress each year.

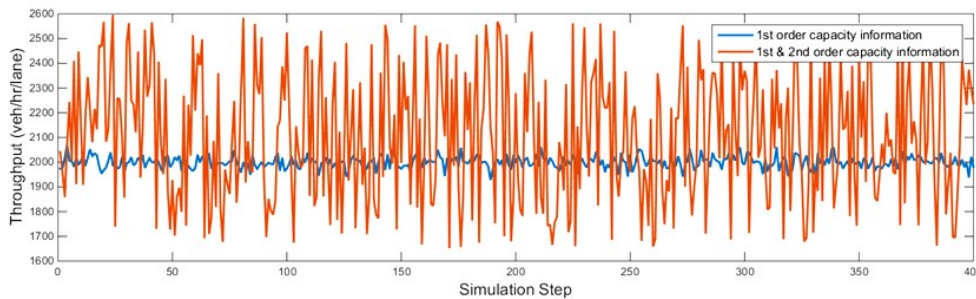
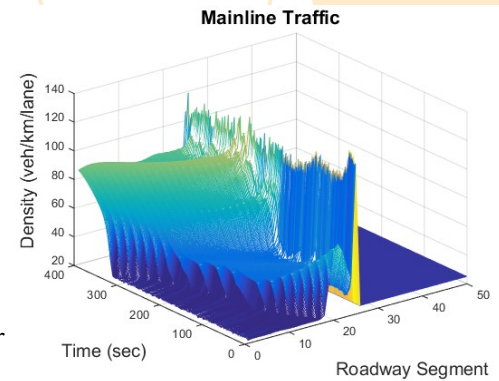
Student Research-

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By Shangjia Dong

Below is the abstract from Shangjia's thesis:

This research presents a stochastic characterization of highway capacity and explores its implications on ramp metering control at the corridor level. The stochastic variation of highway capacity is captured through a space-time ARIMA (STARIMA) model. It is identified following a Seasonal STARIMA model $(0, 0, 2_3) \times (0, 1, 0_2)$, which indicates that the capacities of adjacent locations are spatially-temporally correlated. The implication of the stochastic capacity is investigated through a ramp metering case study. A mean-standard deviation formulation of capacity is proposed to achieve the trade-off between traffic operation efficiency and robustness. Following that, the modified stochastic capacity-constraint ZONE ramp metering scheme embedded cell transmission model (CTM) algorithm is introduced. The numerical experiment suggests that considering the second order information (i.e. capacity variation) would alleviate the bottleneck effect and improve the throughput.



Adopt-A-Highway

The Chapter is excited to announce the addition of another community service project, Adopt-A-Highway! We have adopted a section of OR-34 just east of Corvallis through ODOT. The chapter will be responsible for picking up litter along the highway four times a year. This is a great way to help beautify one of the main roadways leading into Corvallis and help educate members on safety around an active roadway. We plan on combining the clean up with social activities, such as a trip to American Dream or the Beanery. The chapter will also have a recognition sign on OR 34 sometime next year.

Current Members, Faculty, Alumni, and Friends:

What a summer!!! The chapter had an amazing summer from graduation to welcoming new students to Oregon State. The summer started bittersweet with the saying good bye to many chapter members at graduation. With graduation we saw our members start amazing careers from coast to coast. I am personally proud of all our alumni and hope that they can all stay connected with the student chapter.

The summer included many of our members in industry on internships. When I was at ODOT Intern Day we had many at least 5 of our members serving. We also had members working in private firms and other public agencies. Members are able to bring skills learned in internships back to the university and better their education. Many of our members also stayed at Oregon State and completed valuable research. This research ranged from traffic operations, transportation modeling, and education.

"I am personally proud of all our alumni and hope that they can all stay connected with the student chapter."

Officer's Corner

The summer also included the annual ITE Western District Meeting. This meeting is one of the best conferences I have attended. The mix of technical sessions, workshops, key notes, and social activities was amazing! As a student I was able to connect with other students as well as professionals. I highly encourage people to attend the conferences.

The summer concluded with welcoming the new class of undergraduates and graduate students to campus. This is always exciting and fun time for everyone. Seeing the youth and excitement in the students reminds all of us why we chose to attend Oregon State!

I am excited for this year and I think it can be one of our best yet!!!

Thank you all for your support and GO BEAVS!!

Andrea Mather, E.I.T.

OSU ITE President

Graduation!!!



End of the Year BBQ

Back in June the OSU ITE Student Chapter celebrated an amazing 2014-2015 school year at Avery Park. The celebration was an unofficial graduation party for all the graduates and a chance for all the members with their families to relax. With over 30 people in attendance the BBQ was a huge success. The BBQ included great food and games. It also included a surprise water balloon fight! The fight was a perfect ending to the party and was a perfect start to a very HOT summer. Some of the members continued the party by going bowling after the BBQ. This event is always one of the highlights of the year and thank you again for everyone who helped out.



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

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GO BEAVERS!