



Beaver Crossing

Oregon State University Institute of Transportation
Engineers Student Chapter

Volume 2, Issue 2

Fall 2015

Calendar of Events

Jan. 4th:
Winter Term Begins

Jan. 10th-14th:
95th TRB Conference
in Washington D.C.

Jan. 22nd-24th :
Student Leadership
Summit in Pomona,
CA

TBD:
GOITE Meeting, at
OSU Campus

Traffic Bowl

This year's annual William C. Kloos Traffic Bowl was held at the Embassy Suites Hotel in downtown Portland on November 19th. Oregon State was eager for another chance to compete after a strong 2nd place performance at the Western District meeting

over the summer. While the team remained the same, the strategy did not. OSU battled with University of Washington and Oregon Tech in the second round. The team was two questions away from



Visiting the ODOT office in downtown Portland

being the third team into the final round. Overall, the night was a success. Thank you to Oregon ITE for hosting and congratulations to University of Washington for taking 1st place!



Traffic Bowl Team: Dejan Dudich, Kamilah Buker, Andrea Mather, and David Covey

As part of this event, the next day members from Oregon ITE gave students a behind the scenes look at several transportation companies in the area. This field trip consisted of visits to Kittleson and Associates, ODOT Region I office, and HDR. Students were exposed to the respective companies' day-to-day operations and given some insights about career paths.



Students gather for a joint meeting from ZRF Architects

ITE and ASCE join forces

Every now and again, student organizations at Oregon State collaborate to provide an even more beneficial and exciting event for their members. That is exactly what ITE and the American Society for Civil Engineers (ASCE) did on November 2nd. Paddy Tillet from Zimmer Gunsul Frasca (ZGF) Architects was the guest

speaker. His presentation was titled "Urban Cities and how they have developed, with a spotlight on Portland". Paddy presented many historical photos and facts about how Portland came to be. He talked about the layout of the city, its street design, building height, and freeway network. Thank you to Mr. Tillet and OSU ASCE!

Beaver Graduate Returns



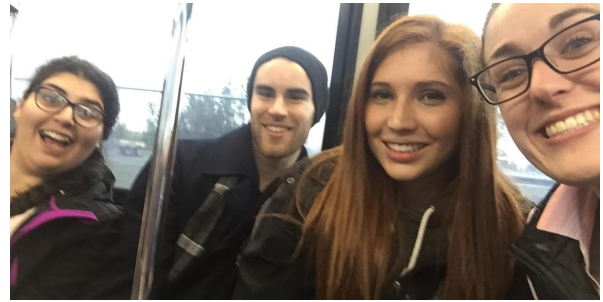
Pat Marnell addresses a crowd of OSU students

November was a busy time for the Chapter. This event was the second of the week following the joint meeting with ASCE. Pat Marnell, a recent graduate from OSU, returned to address students about Kittleson and Associates. Pat covered Transportation Connections, Career Opportunities, the KAI intern program, and finished with some project examples.

Thank you, KAI, for the great meeting and for your continued support of the Chapter!!!

Come fly with me! OSU at PDX

The Airport Design Course visited Portland International Airport in November. Students were able to tour the airfield, ticketing center, and the baggage checking area. On the airfield the Port of Portland employees discussed everything from pavement design and snow removal to water treatment. In the ticketing area, the students learned about the airport master plan. One of the highlights of the tour was the behind the scenes look at the baggage check area. It was exactly like the end of Toy Story 2! Overall the trip was a great learning experience for all who attended. Thank you to the Port of Portland for taking the time to give an awesome tour!



ITE members visiting the Portland International Airport



Knife River Speaker Meeting with AREMA

Knife River came to OSU in late October and the AREMA and AGC Student Chapters hosted speaker meeting with them. Topics covered were the rail industry, construction, and transportation materials. The event was a huge success with more than 50 people in attendance. Meetings like this help diversify the companies that our students are exposed to. Thank you Knife River and the other student chapters for opening events to all students!

Adopt-a-Highway Fall Clean-up

Over the summer came the announcement of the Chapter's involvement in a community service project. This term that was put into action! Members, officers, and the Chapter's faculty advisor all volunteered several hours of their time to make the inaugural event a huge success. In total, 15 people were on site to walk the two mile stretch of roadway and fill ODOT approved bags with a variety of findings. The portion of roadway is just past the Van Buren Bridge at NW Monroe Ave along Highway 34 to NE Colorado Lake Dr. Being that this was



Portion of Clean-up crew upon completion

the first clean-up, and there was construction all along this stretch, bags were filled quickly. At the end of the day, 21 bags in total were collected by the group.

Just as the rain started, the group had finished and made their way to American Dream Pizza for lunch. A huge thank you to all the volunteers for this event and recognition to ODOT for supplying the equipment. Clean-up events will happen once a term, so join us in the Winter!



Jason Pascoe taking out the trash



ITE members during Fall Clean-up

Student Research– Evaluating Large-Truck Crashes

By Dejan Dudich

Volume 2, Issue 2

Below is the abstract:

While there have been several efforts to understand large-truck crashes, the relationship between crash factors, crash severity and collision type is not clearly understood. Past studies have utilized different statistical or econometric models to predict the manner of collision at intersections, yet not much attention has been paid to the factors that lead to injury severity by different types of collisions on state and interstate highways. Studying collision types is crucial when identifying potential safety improvements for state and interstate systems. In this study six collision types are explored they are: angled collisions, fixed object collisions, rear end collision both vehicles moving forward, rear end collisions on moving vehicle, sideswipe collision same direction and sideswipe collisions different directions. With these in mind, the aim of this research is to perform exploratory analyses of large truck-

involved crashes through the use of advanced econometric techniques that can shed insights on the factors influencing crashes by collision type. Namely, this research utilizes the

mixed multinomial logit model to uncover the effects of unobservable factors (unobserved heterogeneity) across crash observations underlying the data generating process. The results of this thesis indicate that complex interactions of various human, vehicle, and road–environment factors due in fact contribute and that some of the model variables varied across observations, validating the choice of the mixed multinomial logit model and separation of data by collision type.



Student Spotlight!



Andrea Mather

- ◇ **PacTrans Outstanding Student of the Year**
- ◇ **Leadership Legacy Scholarship winner**

Andrea is a second year MS student studying Transportation Engineering. She loves all modes of transportation from trains to bikes. Her undergraduate degree was completed at Oregon State University in 2014. Andrea loves Starbucks, Birkenstocks, and hiking.



Elizabeth Rios

- ◇ **Helene M Overly Scholarship winner**
- ◇ **Portland Chapter candidate for the International Helene M Overly Scholarship**

Elizabeth is a first year MS student studying Transportation Engineering with a focus in improving safety of multi-modal infrastructure. Her undergraduate degree was completed at Oregon State University in 2015. In her free time Elizabeth enjoys fishing and hiking.

Current Members, Faculty, Alumni, and Friends:

The beginning of December marks the end of the Fall term and that means several things. 1) Thanksgiving is over and it is time to hang holiday decorations and play related music all day long, 2) Brace yourselves...finals are coming!, and 3) Another issue of the OSU ITE newsletter.

Briefly, I am David Covey and I am the current Secretary of the ITE Chapter. I have been a member of ITE for many years, but this is my first as an officer. In 2014, I graduated with a Bachelor's in Civil Engineering and am currently a second-year graduate student pursuing a Master of Science focusing on Transportation Engineering.

I am proud to be part of such a great student organization and surrounded by such a diverse, dedicated, and hard-working group of individuals. I have had so many opportunities for professional development, from conference trips, competing in traffic bowl, and guest speakers. On a more personal level, I have been grateful enough to make long lasting relationships with fellow grad-

“The Chapter gained many new memberships, many international and first year graduate students”

Officer's Corner

uate students, especially our international student members. I want to thank ITE and its members for making this Fall a very memorable one and look forward to what the rest of the year brings.

This term, the Chapter hosted three speaker meetings, traveled to Seattle for the PacTrans conference, traveled to Portland for Traffic Bowl, and as always celebrated student achievements and supported their research. The Chapter gained many new memberships, many international and first year graduate students, and launched our Adopt-a-Highway project.

The remainder of this year is going to be one of the best yet, so do not hesitate to join us during our events, become a member, offer support, or volunteer (free food provided!).

David Covey

David Covey

OSU ITE Student Chapter Secretary

Sleepless in Seattle!

PacTrans Region X Conference and Student Conference 2015

This year Oregon State ITE sent 15 students to the PacTrans professional and student conferences. The conference was held at the University of Washington in Seattle. It was themed “Smarter Transportation Safety and Technology. Keynote address were given by Roger Millar, Deputy Secretary of WSDOT and Brooke Steger, General Manager at Uber Seattle. Brooke discussed the importance of standardized regulations across the

region for Uber and gave insights on how the company insures driver screening and vehicle inspections. ”. It consisted of three sessions, which included Technology Transfer, Workforce Development, and Research for Safer Infrastructure. For several students, it was their first time attending this event.



Poster design winners at Student Conference



OSU student group on Day 1 at PacTrans

The following day students from several universities gathered for the Student Conference. Keynote speakers for this event include Michael Kyte, professor at the University of Idaho, and Bruce Haldors, president of Transpo Group. A crowd favorite, was the panel of young professionals comprised of recent UW graduates working in transportation. The main focus of this event was the student poster competition. Four students from OSU competed for cash prizes, including Shangjia Dong who received 2nd place and Masoud Ghodrat Abadi who received 3rd place. Congratulations to this two for proudly representing Oregon State ITE with their great posters!

Fall Social Events

OSU ITE goes courtside!

October 23rd the Women’s Volleyball hosted the No. 1 USC Trojans at Gill Coliseum. Oregon State had a match free of service errors, but still lost in four sets. A small group of ITE members were at the game to cheer on the Beavers. It has become a tradition for the ITE Chapter to regularly attend sporting events on campus, so feel free to come with us!



ITE members at OSU Volleyball game

Midterm Munchies

The end of October for many meant that midterms ceased to exist and for others, well, the Chapter wished them good luck. A long enduring week should not go unnoticed and OSU ITE agreed. Several students gathered in the graduate offices to celebrate the completion of midterms, because who can turn down free food? A giant 26” pizza was devoured in a matter of minutes.



Pizza celebration following midterms

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@oregonstate.edu

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GO BEAVERS!