



University Transportation Center Newsletter

SPECIAL ISSUE FEBRUARY 2020

IN THIS ISSUE

- 01 2020 Transportation Research Board (TRB) Annual Meeting
- **02** CUTC Award Banquet
- 03 PacTrans Reception
- 05 PacTrans Student Experiences at TRB
- 10 Save the Date

 About Pacific NW
 Transportation
 Consortium

2020 Transportation Research Board (TRB) Annual Meeting

The Transportation Research Board (TRB) 99th Annual Meeting was held this past January 12-16, 2020, at the Walter E. Washington Convention Center in Washington, D.C. The event attracted more than 13,000 transportation professionals from across the country. Those professionals hosted more than 5,000 presentations in nearly 800 sessions and workshops, addressing topics of interest to policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions. This year's meeting was themed *A Century of Progress: A Foundation for the Future*.

With policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions in attendance, the TRB annual meeting continues to be an amazing platform for PacTrans to demonstrate our abilities, expertise, innovation, and research as one of the country's leading regional University Transportation Centers (UTCs).

PacTrans student and faculty researchers were in attendance from all seven of our consortium institutions: Boise State University, Gonzaga University, Oregon State University, University of Alaska, Fairbanks, University of Idaho, University of Washington, and Washington State University. In total, PacTrans universities participated in over 100 lectures, poster sessions, workshops, committees, and subcommittees, and submitted over 90 papers to the meeting.

This special edition newsletter will highlight the PacTrans researchers and research that was presented during the five-day conference.



CUTC AWARD BANQUET

Each year, on the Saturday before the TRB Annual Meeting, the Council of University Transportation Centers (CUTC) hosts an annual awards banquet to honor students and faculty across the transportation field. This year, the 2020 Annual Awards Banquet was held on January 11, 2020 at the Marriott Marquis in Washington, D.C.



Attendees were honored to hear a keynote talk delivered by the USDOT Deputy Assistant Secretary for Research and Technology (OST-R), Diana Furchtgott-Roth. The awards portion of the evening included the CUTC Lifetime Achievement Award for

Transportation Education and Research which went to Carnegie Mellon University Professor, Chris Hendrickson, the CUTC Lifetime Achievement Award for Transportation Professional and Public Service which went to San Francisco Bay Area Rapid Transit General Manager, Grace Crunican, and over thirty awards to outstanding students doing UTC research. This year the PacTrans Outstanding Student of the Year Award went to Cole Kopca from the University of Washington.

CUTC, established in 1979, works to advance the state-of-the-art in all modes and disciplines of transportation. Its membership consists of 87 universities from across the nation.



PACTRANS RECEPTION

2020 Annual Region 10 PacTrans Reception

With 13,000 transportation professionals from every corner of the industry, all converging in Washington D.C. for the TRB Annual Meeting, this is an excellent opportunity for labs, universities, companies, and UTCs from around the world to host receptions with their respective communities.





These events serve as a great chance to establish new partnerships, grow existing partnerships, and have frank conversations that often lead to new ideas for research, technology transfer, and collaboration. For UTCs specifically, we are consortiums of institutions, many times, from all across the country, and have minimal opportunities to get together throughout the year. This happens to be one of those opportunities. Each reception is slightly different than the other, but the one thing they all have in common is the goal to bring students, staff, faculty, researchers, and professionals in the transportation industry together for a night of networking and socializing. This is an evening dedicated to celebrating achievements, sharing ideas, and discussing future partnerships.

This year, on Tuesday, January 14, 2020, PacTrans organized the Region 10 Reception with the Center for Safety Equity in Transportation (CSET), University of Washington, Oregon State University, Washington State University, University of Idaho, University of Alaska, Fairbanks, Boise State University, and the University of Hawaii. The event had over 200 attendees representing our agency and industry partners, as well as faculty, staff, and student researchers from all seven consortium partners.

This fun event is an amazing way for students pursuing careers in transportation and civil engineering to get together and celebrate their own achievements in the industry, as well as the role PacTrans has played in their lives. This year, PacTrans provided financial support to over 50 students from our consortium partner institutions to attend the TRB Annual Meeting. PacTrans offers travel support to any student whose work is highlighted at the conference, and to any first year PhD students. We believe that this experience is a great way to expose students to a broad sample of contemporary research.

Each year, the Michael Kyte Region 10 Outstanding Student of the Year Award is awarded to a student in recognition of their outstanding research, academic achievement, and professional leadership in transportation. The recipient of this year's award was Ruimin Ke, a PhD student in transportation engineering at the University of Washington. He was presented the award by PacTrans director, Yinhai Wang, and Michael Kyte representative from the University of Idaho, Mike Lowry.

RXTC BREAKFAST



Region X Transportation Consortium (RXTC) Breakfast

Each year during the TRB Annual Meeting PacTrans organizes and hosts a Region 10 Transportation Consortium breakfast meeting where we invite a representative from each of the UTCs that have a consortium partner institution operating in Region 10, as well as the research directors of each of the state DOTs in region 10. This breakfast meeting serves as an annual chance for all of the UTCs and state DOT research managers in the region to get together, share what's going on, identify areas of redundancy, and seek opportunities for collaboration.

This year ten people participated in the breakfast including: Yinhai Wang, director of the Pacific Northwest

Transportation Consortium, Jennifer Dill, director of the National Institute for Transportation and Communities, Billy Connor, director of the Center for Safety Equity in Transportation, Xianming Shi, director of the National Center for Transportation Infrastructure Durability and Life-Extension, Anne Freeman, Administrator of Research & Library Services at the Washington State Department of Transportation, Michael Bufalino, Research Manager at the Oregon Department of Transportation, Ned Parrish, Research Program Manager at the Idaho Transportation Department, Jeff Ban, Associate Director of Connected Cities for

Smart Mobility towards Accessible and Resilient Transportation, David Hurwitz, Associate Director of the Pacific Northwest Transportation Consortium, and Cole Kopca, Assistant Director of the Pacific Northwest Transportation Consortium.

This year's meeting mainly revolved around two areas of focus. The first included seasoned UTCs sharing best practices with Xianming Shi of the newly funded National Center for Transportation Infrastructure Durability and Life-Extension. The second was discussion of collaboration opportunities having to do with our workforce development efforts in the region.

PacTrans considers the public presentation of research to be a top priority for our graduate students. The TRB Annual Meeting remains one of the most influential opportunities each year. This year, PacTrans funded about 50 students to travel to Washington D.C. for the meeting and present their works. Below are several examples including photos and student write-ups of their experiences.



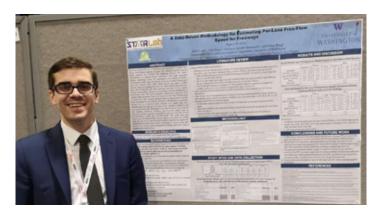


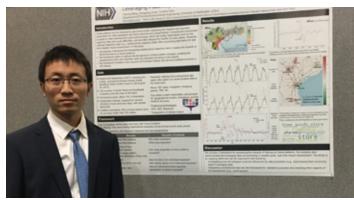
Katherine Idziorek

Attending this year's TRB conference was a very productive and inspirational experience for me. I presented my current research on integrating social factors into transportation-focused disaster preparedness planning at a poster session, which proved to be an excellent networking opportunity. At the poster session, I made connections with people who offered to help put me in touch with stakeholders in one of my prospective research communities. I also met people engaged in various aspects of hazard planning who were specifically interested in the integration of social factors into this type of research. I had the opportunity to make a face-to-face connection with another researcher whose work I have been following. Beyond the poster session, attending TRB provided a great opportunity to meet and talk with peers from other institutions who are working on related research. Engaging with them person-toperson helped me to learn from their experiences, exchange ideas for moving this research forward, and develop relationships that could lead to future research collaboration. The conference sessions provided an opportunity to learn about the latest in transportation research, and there were many sessions relevant to my areas of research interest. I very much appreciate the support of PacTrans for making this experience possible.

Jingxing Wang

It was my great honor to attend the Transportation Research Board 2020 Annual Meeting this year in Washington D.C. under the sponsorship of PacTrans. During this meeting, I presented our research paper (Exploring Insignificant OD Pairs: A Compressed Sensing Model for OD Estimation) in a lecture session. After the oral presentation, I discussed with peer graduate students and professors topics related to my presentation and gained a lot from learning about their research interests and methods. This meeting not only offers me an opportunity to improve presentation skills, but also with a networking platform to make more contacts in my area. I would like to thank PacTrans for its sponsorship.





John Ash

This year's TRB was a great experience, as usual, full of learning and great opportunities to network with new and old colleagues in the field. My main priority was presenting some recently completed highway capacity-related work in a poster session and a subcommittee meeting. Specifically, the paper was about a new data-driven approach to estimate free flow speed for freeways. In both the poster session and meeting I talked to several people about the work and was provided with many great comments that will help me further improve it. Besides presenting this work, I attended several activities for the Highway Traffic Monitoring committee, of which I am a member. Getting involved with this committee in various capacities such as reviewing papers and research needs statements has been a great way to learn more about the TRB organizational structure, to see how research ideas turn into funded projects, and to meet a lot of great people from agencies, industry, and academia. In addition to these activities, I went to many different lectern and poster sessions at which I saw a lot of innovative and exciting research projects presented. Specifically, I saw a lot of work on connected vehicle applications in safety and operations that were quite interesting. The support PacTrans provides for students to go to TRB is something for which I am extremely thankful. The chance to present, hear about, and discuss research with experts in the field is an essential component of the research process, and I feel lucky to have a chance to be a part of it.

Feilong Wang

This was my fourth time attending the TRB annual meeting. My experience there this year was quite different from previous years. Most importantly, my time as a student is coming to a close and it was time to begin preparing for the next stage of my career. Thus I spent a lot of time talking with colleagues and alumni about suggestions of career design and job searching. I received suggestions for many different positions and types, including tenure track faculty positions, research scientist positions (from both industry and research institutes), as well as engineering positions. I really appreciate the travel funding from PacTrans!



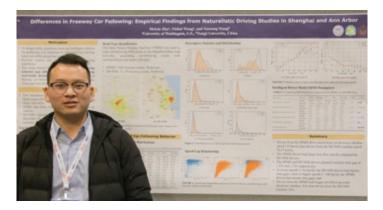


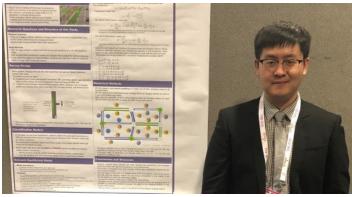
Parastoo Jabbari

I mostly attended the workshops, lectures, and poster sessions related to travel behavior in the context of automated vehicles (AVs) and mobility services during my attendance at the TRB Annual Meeting this year. I talked to several researchers who are active in areas similar to my own research and they inspired me with new ideas. I also attended a workshop on PhD dissertation writing which was extremely helpful for learning about the work of PhD students who are further along in their programs. I presented my recent paper on Tuesday, January 14th, 2020, and received positive feedback from the audience and co-panelists. I also attended several receptions such as Uber, PacTrans, and the Ford Mobility receptions where I met several old and new colleagues and expanded my network of people.

Ziyuan Pu

This is the fifth year I traveled to Washington D.C. to attend the TRB annual meeting under PacTrans support. I really appreciate the funding and other support from PacTrans and its staff. This year I presented a paper titled "Mining Public Transit Ridership Flow from Wi-Fi and Bluetooth Sensing Data" in a poster session as the first author. During the presentation, I received lots of valuable suggestions for the improvements and future research ideas along the same direction. It was encouraging to see that people were really interested in this paper, especially the potential implementations of the research products for managing transit systems. This year I also had the distinct opportunity to chair a poster session of the TRB Standing Committee on Transit Capacity and Quality of Service (AP015). Finally, I participated in several receptions held by universities and academic organizations. Those activities help me to build connections with the experts and professors in both academic and industry areas, which benefit me a lot for future researching and career development.



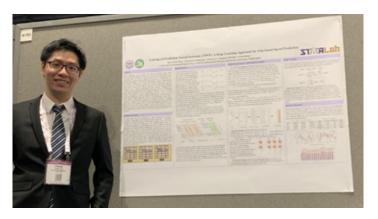


Meixin Zhu

I was glad to be able to attend the 99th TRB annual meeting. I have been to the TRB meeting three times before, but this year was the busiest for me so far. I spent almost three whole days listening to the lecture sessions and reading research posters. Connected and autonomous vehicles continue to be a hot topic. One thing that needs to be mentioned is that interacting with poster presenters seems to be more efficient for research communication than listening to lectures. With posters, you can ask as many questions as you like for the details of the research, which is not possible with lecture sessions. To sum up, I think this year's TRB was a wonderful experience, and I gained lots of new ideas for my future research. Thanks for PacTrans's great support.

Xiasen Wang

My experience at TRB included three sections: attending the lecture sections, attending the poster sections and attending receptions. The lecture sections I attended included work related to charging station deployment and planning, and autonomous vehicles. These studies are my research interests. The poster section I attended included work on optimization and also work on free-floating bikeshare programs. I also presented a poster at one of the poster sessions. Lastly, I attended the receptions of PacTrans and my undergraduate university, Tongji University. I would like to thank PacTrans and others for their support that allowed me to have such a productive trip to Washington D.C.





Chenxi Liu

I have to say that attending the TRB Annual Meeting this year was a wonderful experience for me, and I learned a lot from the experience. During the five days I spent in Washington D.C., I not only had the opportunity to better understand the knowledge area of my interests, but also met a lot of professors and students who had the same interests as me. During the meeting, I generally focused on work surrounding Connected and Autonomous Vehicle (CAV) technologies. I attended about seven podium presentations as well as several poster sessions where I learned a lot and made connections with several new colleagues. One of my most interesting observations was that, for the same research problem, different people had varying opinions and thoughts. After interacting with professors and students, I gained a much wider perspective for the problems I've been working to address and came up with other interesting solutions. I believe that I will keep in touch with many of the people I met, and I think this continued dialogue will lead to more robust research efforts for me.

I also presented a poster with my colleague Hao Yang in the *application of artificial intelligence (AI) in traffic engineering* poster session. Our poster was titled, "Cell Speed Prediction Neural Network (CPNN): Deep Learning Approach based on Prediction of Moving Speed." This poster attracted many people from many different institutions, including MIT, UIUC, Purdue University, Google Maps and WAZE. Everyone seemed very enthusiastic and interested in our work. It must be said that this is a wonderful experience. The trip to Washington D.C. is an unforgettable experience for me that brought many new ideas and professional connections. Thanks to PacTrans for the travel funding. I am excited to continue attending this academic conference in the future.

Chintan Pathak

My TRB experience was very fruitful and enriching. Due to rigorous planning with my lab group prior to the conference, I had a shortlist of the lectern, poster sessions, etc. to attend and report back on to my labmates. This helped me navigate the enormous conference with over 15,000 attendees rather effectively. I also made several contacts and talked to several transportation professionals that could lead to potential research collaborations. The poster sessions gave an opportunity to talk to the researchers in detail about the work they were doing, whereas the lectern sessions gave a more in depth overview of the research areas that the people in the field are working on. I would like to take this opportunity to thank my advisor for encouraging me to attend the TRB and for PacTrans for supporting the travel. The poster I presented was well received and can probably lead to more projects and/or collaborations. I also felt very welcome in all the sessions, especially the subcommittee meeting that I attended for the first time.



UNIVERSITY OF IDAHO CAMPUS MOSCOW, ID

OCTOBER 16, 2020

Annual Region 10 Transportation Conference

Email questions to pactrans@uw.edu





About Pacific NW Transportation Consortium

The Pacific Northwest Transportation Consortium (PacTrans) is the University Transportation Center (UTC) in Federal Region 10 for the US Department of Transportation (USDOT). Established in 2012 with funding from the Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA-LU), PacTrans has been reselected to continue representing Region 10 twice since, with funding from Moving Ahead for Progress in the 21st Century (MAP-21) and Fixing America's Surface Transportation Act (FAST Act).

PacTrans is a coalition of transportation professionals and educators from the University of Washington (UW), Oregon State University (OSU), the University of Alaska Fairbanks (UAF), the University of Idaho (UI), Washington State University (WSU), Boise State University (BSU), and Gonzaga University (GU). Our mission is to provide data-driven solutions for the diverse mobility challenges of people and goods in the Pacific Northwest. PacTrans serves as the region 10 research engine, technology transfer showcase, education leader, and the workforce

development base in the Pacific Northwest. The goal of PacTrans is to create an environment where consortium universities, transportation agencies, and private industry within Region 10 work together synergistically.

The Pacific Northwest offers a unique blend of opportunities to examine a variety of transportation issues, including those related to urban centers, rural communities, diverse geographic features (e.g., coastal plains, mountain ranges), and a growing population of pedestrians, bicyclists, and new mobility options. This diversity makes the Pacific Northwest a natural laboratory in which to investigate transportation solutions that are applicable both locally and nationally.