



PacTrans

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University Transportation Center Newsletter

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PacTrans Students Achieve Great Success in Spring Student Competitions

Each spring, regional and national competitions offer students the opportunity to compete with other universities in a broad range of engineering disciplines. These competitions provide invaluable hands on experiences that many of classroom courses simply cannot replicate. Freshman team member Shane Ohms on the University of Alaska Fairbanks (UAF) Steel Bridge team had this to say about his experience at one such competition, "Steel Bridge has been the highlight of my freshman year. Without hands on engineering projects like steel bridge, it would be difficult for me to stay motivated in the classroom. We put in a lot of time and hard work, we didn't take short cuts, and in the end we built a bridge that took 6th at nationals. I'm very proud of the success we've had this year and I hope we can continue with our momentum and build an even better bridge next year." Highlights from this year's competitions at our consortium universities include:



UAF's Steel Bridge team took 6th place overall at the 2016 National Student Steel Bridge Competition (NSSBC) hosted by Brigham Young University this past May 27 & 28. The event, hosted by the American Society of Civil Engineers (ASCE) and the American Institute of Steel Construction (AISC), features forty-eight-student teams from across the United States, Canada, Mexico and China, competing in areas of steel design, steel fabrication, and teamwork.



The University of Washington concrete canoe team competed at the National Concrete Canoe Competition at the University of Texas at Tyler, this past June 9 - 11. The Huskies claimed 10th place out of 21 teams from the United States, Canada, and Middle/South America, in this ASCE hosted event. Teams competed in categories of design papers, oral presentations, and a series of races in their respective canoes.

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NEWS AND EVENTS

Council of University Transportation Centers Summer Meeting

This past June 6 through June 8, 2016, the University of Southern California hosted University Transportation Centers from around the country for the Council of University Transportation Centers (CUTC) Annual Summer Meeting.

Each day the meeting was packed with great and engaging keynotes, panels, discussions, and presentations; and each evening the hosting UTC provided opportunities to experience different components of the their city. Content within the meeting ranged from managing and marketing your UTC, to upcoming changes to public access of research data, to parallel efforts happening within the Department of Energy. Extracurricular activities included a tour of the Space Shuttle Endeavor

located at the California Science Center on USC's campus, a hosted tour of Hyperloop, and an LA Metro Tour of downtown LA followed by a dinner on the top floor of City Hall.



PacTrans and Southern Plains Transportation Center Host a Tech Transfer Session at ASCE T&DI Conference



This past June, the 26 through the 29, 2016, the American Society of Civil Engineers (ASCE) held their 2016 annual International Conference on Transportation and Development. The four-day conference, co-sponsored by PacTrans, was held in Houston, Texas, and featured dozens of great sessions ranging from rail to public

transportation to innovations in pavement to system management and operations to emerging technologies.

Dr. Wang had the privilege of moderating and presenting in one such session. He, along with Dr. Musharraf Zaman, professor at University of Oklahoma and director of the Southern Plains Transportation Center, hosted a session on Technology Transfer. They were joined by Waseem Fazal, of the Federal Highway Administration. Dr. Wang shared about recent successes with our Center's development of Bluetooth and WiFi mobile sensing technology. He also presented the challenges and obstacles that still stand in the way of these technologies being fully implemented to collect more robust data sets on peoples' movements.

PacTrans Students Achieve ... Student Competitions (CONTINUED FROM PAGE 1)

The University of Idaho's clean snowmobile team took 7th place overall in the Internal Combustion Class at the SAE International Clean Snowmobile Challenge this past March in Warrendale, PA. The UI team won in the areas of best fuel economy, most likely to be manufactured, most sportsmanlike winners, CAN-DO-E-Controls, and most innovative emissions design.



Billy Connor Speaks at Sea-Level Rise Summit

The Center for Environmental Studies at Florida Atlantic University convened its third Sea-Level Rise Summit in Fort Lauderdale this past May 3-5, 2016. PacTrans associate director and representative to the University of Alaska, Billy Connor, travelled to Fort Lauderdale to speak at the event, which brought together private sector sustainability and climate change professionals, public policy decision-makers and implementation managers, and researchers informing public policy and private adaptation efforts for a series lectures, breakout sessions, exhibits, and poster presentations.

Connor, part of the Alaska contingent of the summit, was there to present his work on Climate Change and

Transportation from the perspective of engineers. He spoke about the challenges facing our transportation systems as climate change reaches more advanced stages. Connor made several overarching suggestions such as: designing for a wider range of climates, planning for extreme events, budget for things like greater

snow and ice control (snow removal, etc.), and more care in monitoring critical structures such as hospitals and schools. With PacTrans' topic focus of safety, Connor and his work on climate change and our transportation system will continue to become more and more vital.



UW Yinhai Wang Speaks at Giga City Summit



This past May 17, 2016, Dr. Yinhai Wang, representing the IEEE Smart Cities as one of the co-chairs of their first conference held in Guadalajara Mexico this past October, traveled to Kansas City to speak at the second annual Gigabit City Summit. The summit is a three-day learning and networking opportunity exclusively designed for leaders in current and

emerging Gigabit Cities. A Gigabit City is a city with gigabit internet. "...what is gigabit internet? It's a fiber-optic cable internet connection offering speeds of 1,000 megabits per second. That kind of connectivity, according to Google, allows for the downloading of a high-definition movie in about 30 seconds. Or streaming five HD movies at once

without so much as a hiccup. Or transferring data over the web faster than is possible over a thumb drive."

As vehicle to vehicle (v2v) and vehicle to infrastructure (v2i) communication technologies advance, as larger and larger amounts of data are collected and processed in real time, and as our transportation systems get smarter, gigabit internet will play a crucial role. Kansas City is a great venue to discuss these subjects as they are a gigabit city, they are one of only a handful of IEEE's designated smart cities, and they were a finalist for the USDOT smart cities challenge grant.

NEWS AND EVENTS



Congratulations!

ASCE 2015 Outstanding Reviewer

ASCE Journal of Surveying Engineering

OSU Dan Gillins Wins ASCE Researcher of the Year

“The judgment of independent peer-reviewers and their willingness to share their time and expertise help ASCE to publish engineering journals of the highest caliber.” Each year the American Society of Civil Engineers (ASCE) recognizes the nation’s best reviewers with the Outstanding Reviewer award. This past year (2015), Oregon State University Assistant Professor Dan Gillins earned this prestigious badge for his review work in the Journal of Surveying Engineering. PacTrans would like to extend a huge congratulations to one of our consortium’s hardest working transportation professors!

OSU Prof Haizhong Wang Lectures at Tongji University

Dr. Haizhong Wang presented at the, International workshop on Resilient and Sustainable Transportation (i-RESTRA) at Tongji University in Shanghai, China from May 30 – 31, 2016. The conference was sponsored by the National Natural Science Foundation of China, the Shanghai Education Commission, and the Office of Science and Technology at Tongji University. Dr. Wang’s lecture was entitled, “Emergent Human Mobility and Network Resilience: An Agent-based Modeling Approach.”



STEM Knowledge Exchange

This past June 15, 2016, PacTrans representative, Cole Kopca, attended a STEM Knowledge Exchange in Alexandria, VA. This knowledge exchange was an effort to broaden the conversation and bring all relevant parties to the table with regard to STEM education and workforce development.

In the “Research Experiences Engineering and Technology and 4-year Institutions” breakout session, a group of representatives from University Transportation Centers from around the country shared with one another as well as representatives from federal agencies. Subjects discussed included the opportunities and challenges of mentoring undergraduate students, as well as creative ways that UTCs can engage undergraduate students in research.

Members of the Committee on STEM Education



OSU Short Course on Resiliency



As our communities face growing threats of earthquakes and tsunamis posed by the Cascadia Subduction Zone, community resilience is key to survival and rapid reconstruction. The Oregon State School of Civil and Construction Engineering is pleased to announce a new short course, “Cascadia Resilience,” to be offered July 14, 2016 in Corvallis, Oregon. The purpose of the short course is to provide engineering practitioners and related professionals with an in-depth understanding of hazards posed by the Cascadia Subduction Zone and identify effective solution technologies to build more resilient communities.

- **Dates:** July 14, 2016
- **Location:** Oregon State University, Corvallis, Oregon
- **Who should attend:** engineers and related professionals concerned with solutions to the threat of Cascadia Subduction Zone earthquakes and tsunamis.

More Information regarding registration, professional development hours, schedule, topics and speakers, and keynote presentation will be posted soon. To be added to the mailing list for the two-day short course, email kiewit.center@oregonstate.edu with “Cascadia Resilience” in the subject line.

PacTrans Hosts Research Workshops

As PacTrans updates its strategic plan as a regional university transportation center for the coming years, this spring director Dr. Yin Hai Wang invested efforts in communicating with transportation professionals at each of the five consortium universities and their partners. These workshops are meant to keep faculty and researchers apprised of the direction the center is headed and gain knowledge of researchers’ expertise in new and emerging research areas.

The first such meeting happened in-person on Oregon State University’s campus in Corvallis, Oregon on Friday, April 15, 2016. Dr. Wang and University of Washington faculty member Don MacKenzie hosted a small, informal workshop with current and potential PacTrans PIs in CCE concerning transportation engineering topics of regional importance. Dr. Wang also visited in-person



with the University of Idaho and Washington State University on the WSU campus in Pullman, WA, and with the University of Alaska via teleconference.

RESEARCH HIGHLIGHTS

An Evaluation of Safety Impacts of Seattle's Commercial Delivery Parking Pricing Project

The City of Seattle Department of Transportation (SDOT) has received Federal Highway Administration Value Pricing funding to conduct a project titled, "Commercial Vehicle Pricing Project." The goals of the project are to:

1. Improve commercial vehicle load zone access and efficiency in downtown Seattle
2. Provide real-time availability data for those using load zones
3. Complement other on-street management pricing programs with new technology and innovation.

Currently, commercial vehicle operators can obtain an annual permit for loading activities in designated commercial vehicle load zones (CVLZs), of which there are about 150 in downtown Seattle. A recent study of downtown load zone activity observed that 54 percent of vehicles counted using such zones were commercial vehicles, and 40 percent were passenger vehicles, taxis, and government exempt vehicles (none of which are eligible for zone use). The study documented a high level of turnover and also abuse of the zones by passenger vehicles (source: SDOT staff).

SDOT's Value Pricing grant is being used to acquire in-pavement vehicle sensors so that SDOT can measure occupancy and turnover activity in CVLZs and also broadcast real-time availability information for load zone users. The study area will be the commercial core and Pioneer Square, roughly Stewart / Olive Way, Interstate-5, and S Royal Brougham.



SDOT expects to install equipment in early 2015. It will evaluate any improved efficiency and access after the year-long pilot project in order to consider and adopt legislative changes to the Commercial Vehicle Load Zone permit program for the 2016/2017 annual permit cycles.

The SDOT project is designed to explore how to locate commercial delivery load zones so that they are used as intended, provide commercial vehicles with access to their destinations, and most efficiently utilizing commercial load zone capacity. Although sensors will measure vehicle activity only at the CVLZs, there is an interest in understanding commercial delivery activity along the rest of the curb lane and within travel lanes. It would be helpful to understand the extent to which commercial vehicles circle while looking for available load zones or use parking areas outside of designated load zones.

While important and of interest to the federal sponsors, the SDOT project will not directly evaluate the safety impacts of the project's technology, urban design, and policy changes. Such impacts might include changes in collision rates involving

commercial vehicles circling while looking for parking, reductions in illegal parking due to better management of curb space, and changes in utilization rates of CVLZ capacity.

Thus, the objective of this PacTrans sponsored research (executed by University of Washington researchers Dr. Anne Goodchild and Dr. Ed McCormack) study the gaps in safety research associated with projects such as Seattle's "Commercial Vehicle Pricing Project. Dr. Goodchild and Dr. McCormack will attempt to identify conditions that correlate highly with collisions, including operational, infrastructure, or other conditions, as well as to discuss the extent to which urban design contributes to these collisions will be provided. In doing so, the results will inform SDOTs revised strategies for Commercial Vehicle Load Zone location, pricing, and design, supporting the design of a safe and commercially accessible urban core.

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RESEARCH HIGHLIGHTS

Deployment and Validation of Low-Cost Wireless Sensors for Real-Time Lifeline Condition Assessment

The Cascadia Subduction Zone along the coast of Oregon and Washington and the Circum-Pacific seismic belt near Alaska present significant seismic and tsunami risks to the Pacific Northwest. These natural hazards are capable of crippling the transportation lifeline infrastructure, particularly bridges, following a major event. Deployment of wireless sensors on transportation lifeline infrastructure would enable rapid evaluation of the condition and effective deployment of first responders and increase the community resilience and safety of the transportation network.

In 2015 PacTrans sponsored Dr. Daniel Borello of Oregon State University in a phase one project called, "Deployment of Low-Cost Wireless Sensors for Real-Time lifeline Condition Assessment", in which a

sensor was developed to assess the condition of bridges following a natural hazard. Off-the-shelf hardware was adopted to minimize initial investment and increase ease of installation for long-term deployments. However, a test bed deployment on a representative structure is necessary prior to wide-spread use.

Thus PacTrans is now sponsoring Dr. Borello in phase two of his crucial work. The goal of this phase is to prepare the sensor for real-world deployment, select an appropriate bridge, and evaluate the performance under realistic conditions. Look for Dr. Borello's final report on this work early next year on our website.

CONTACT:

Dr. Daniel Borello

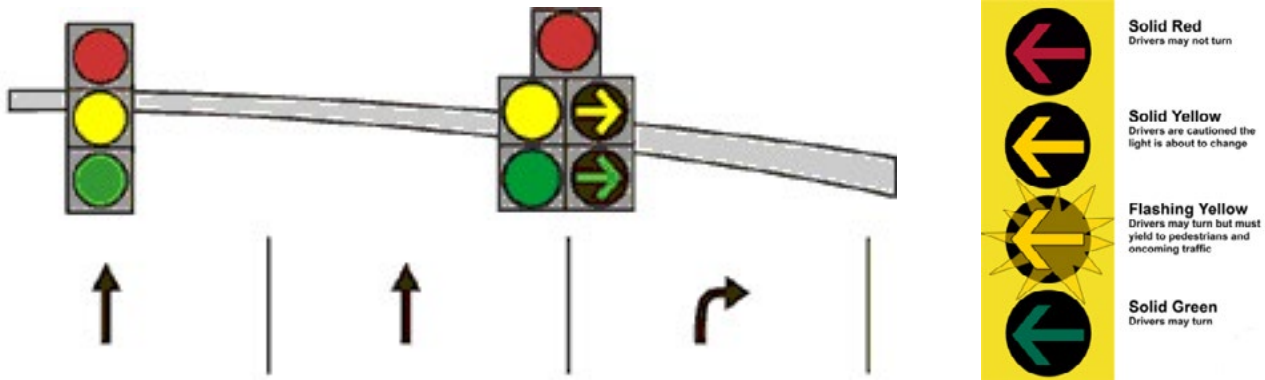
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“Deployment of wireless sensors on transportation lifeline infrastructure would enable rapid evaluation of the condition and effective deployment of first responders and increase the community resilience and safety of the transportation network.”



RESEARCH HIGHLIGHTS

Improved Safety and Efficiency of Protected/Permitted Right Turns for Bicycles in the Pacific Northwest



The design of phasing schemes at signalized intersections are complex multifaceted transportation engineering problems. Right-turn operations place a significant challenge to engineers attempting to develop optimal phasing solutions for safety and efficiency. There is a surprising absence of specific guidance at the national and state level on how phasing alternatives should be selected, and how they compare in terms of operational and safety performance. Available documents such as the Traffic Signal Timing Manual (FHWA, 2008) or the ODOT Traffic Signal Policy and Guidelines (ODOT, 2013) are excellent resources, but critical questions remain with regard to what in-situ conditions: turning volumes (vehicles, bicycles, and pedestrians), vehicle classifications, lane configurations (single receiving lane for both right turns and conflicting lefts), and gap profiles warrant Protected/Permitted Right Turn (PPRT). Turning vehicles are the primary collision risk for non-motorized users and when these turning movements need to be controlled directly, proper driver response to traffic control is critical.

The challenge of designing the phasing schemes for PPRTs in Oregon has been widely identified by local traffic signal experts, presenting an opportunity for a research-based solution. Staff members from ODOT, Washington County, Clackamas County, the City of Salem, and several other agencies have been participating in an ad hoc collaboration to identify and document issues, and have determined that the gaps in the existing knowledge necessitate new research. This need has intensified with the recent allowance of the Flashing Yellow Arrow (FYA) to indicate a permitted right turn.

While traffic engineers have a good understanding of driver comprehension and response to the circular green ball or a solid green arrow for right turning movements, significant questions remain regarding the FYA for right turn movements, specifically what the implications will be on pedestrian and bicycle traffic.

Thus PacTrans has sponsored research out of Oregon State University by Dr. David Hurwitz titled, "Improved Safety and Efficiency of Protected/Permitted Right Turns for Bicycles in the Pacific Northwest." The goal of the research is to develop an understanding of the safety and operational implications of using the FYA to indicate a permitted right turn, and to provide general guidance as to when PPRT phasing should be used to maximize the safety of non-motorized road users and the overall efficiency of signalized intersections in the Pacific Northwest.

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STUDENTS

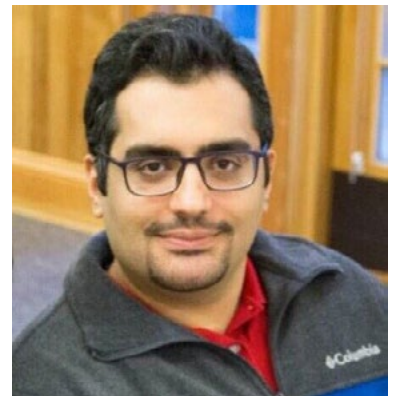
Two OSU Students Appointed to TRB Committees

The Transportation Research Board (TRB) has groups called standing committees that are tasked with a range of services including: identifying research needs; providing information to the transportation community on research priorities and procedures; reviewing papers for presentation at the TRB Annual Meeting and for publication; encouraging the incorporation of appropriate research findings into practice; and developing special programs, conferences, and workshops. Standing committee members may serve up to three consecutive three-year terms and are considered experts in their field. Standing committees are overseen by TRB's Technical Activities Division.

This year, two PacTrans consortium student researchers (both from Oregon State University) have been awarded spots on TRB committees:

Masoud Ghodrat Abadi, Second year PhD student, Younger Member, TRB Committee on Education and Training (ABG20), 2016

Zach Barlow, First year MS student, Younger Member, TRB Committee on Transportation Engineering (ABG50), 2016



Anna Bovbjerg Wins ITE Graduate Scholarship

Each year the Washington State Chapter of the Institute of Transportation Engineers (ITE) recognizes one undergraduate and one graduate student for their outstanding efforts and achievements in pursuing a degree in transportation engineering. This year the graduate level recipient of this prestigious award went to none other than our very own Anna Bovbjerg. PacTrans would like to extend a huge congratulations to Anna for all the hard work!

UW Discovery Days



Each year in the early spring, the University of Washington hosts a large, two-day event called Engineering Discovery Days. At Engineering Discovery Days, students and faculty from all UW engineering departments share their work with students, teachers, families and the community.

This year the event was hosted in Friday, April 22, and Saturday, April 23. PacTrans hosted an informational booth outside where our staff representatives gave out PacTrans swag and generated interest among young students for transportation engineering.

Then in the STAR lab, several of our researchers offered students the additional opportunity of experiencing some of the technologies we work with first hand. PhD candidates Ruimin Ke, Kris Henrickson, and John Ash showcased automated vehicle detection with UAVs, automated pedestrian identification technology, and stoplight technologies.

Seminar: Dr. Tarek Sayed



“There are two main transportation engineering approaches to improving road safety: reactive and proactive,” reflected Dr. Tarek Sayed during his seminar on June 2, 2016. Dr. Sayed is a professor at the University of British Columbia, “The traditional reactive approach consists of implementing the necessary improvements to existing hazardous (black-spot) sites in order to improve safety at these sites. The proactive approach is a collision prevention

approach that attempts to prevent unsafe road conditions from occurring in the first place. While the traditional reactive approach has proven to be very successful, it requires that a significant collision history exist before any action is taken to address the road safety problem. Moreover, retrofitting countermeasures in reaction to problems in existing road networks can be costly.”

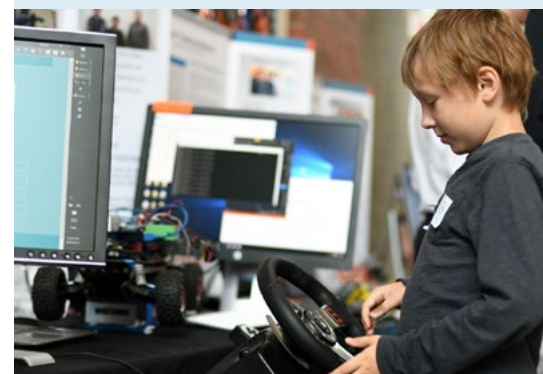
Therefore, Dr. Sayed suggested, there is a need for transportation professionals to take a proactive approach that addresses road safety problems before they are allowed to emerge. There is a growing appreciation in the road safety community for the need to implement a more proactive approach to road safety. The focus of this paper is on proactive engineering initiatives that can be employed to improve road safety. An overview of emerging trends in proactive road safety management will be

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OSU Undergraduate Engineering Expo

With the huge domestic shortfalls in interested, engaged, and suitably trained STEM sector professionals, one of the most significant tasks of a University Transportation Center is to help cultivate enthusiasm in the transportation engineering field. This happens at all levels from primary school age children all the way up to undergraduate college students.

A very effective method of cultivating such interests are to expose young children to the many great accomplishments an engineer can aspire to. For example, each year Oregon State University hosts an undergraduate engineering expo. This past May 20, 2016, nearly 200 projects were on display at Oregon State University’s Kelley Engineering Center during the 17th annual Undergraduate Engineering Expo. The event, which this year was included as part of the revived da Vinci Days festival, gives engineering students a chance to share their senior capstone projects with hundreds of visitors, including local high school students.



CONTINUED FROM 10

provided. These emerging trends include: the use of safety conscious planning models, the explicit evaluation of safety in road design, and the video-based automated road safety analysis using computer vision techniques. Case studies from proactive safety management projects undertaken in several countries will be presented.

Seminar: Dr. Daniel Sperling

“Car-centric monoculture is expensive and resource-intensive,” echoed Dr. Daniel Sperling, Professor of Civil Engineer at University of California Davis and founding Director of the Institute of Transportation Studies, in the fully-packed and standing-room only auditorium of William Gates Law School building during his seminar on April 14, 2016. He continued on by placing emphasis on transportation revolutions such as energy efficiency of hybrid vehicles, vehicle electrification (Nissan Leaf, Tesla Model S, Chevy Volt, and Toyota Mirai), and new propulsion technologies using electricity and hydrogen. Single occupant vehicles dominate the streets, but with new mobility services such as Uber and



Lyft, and fast-changing digital technologies for automation of vehicles, the transportation modes will shift.

Dr. Sperling has put significant value on the reduction of vehicle use; shifting away from high carbon fossil fuels; and creation of transport systems that are cheaper, better, more sustainable, less expensive, less resource, less carbon, and more accessible. The carbon released since the industrial revolution is 1400 gigatons. Travel keeps peaking in rich countries, and there is a need to shift away from high carbon fossil fuels. Plug-in Electric Vehicle (PEV) sales have increased around the world, with China hitting the highest in investing, followed by Canada.

New mobility services (Uber and Lyft) are proliferating, capturing 30% of passenger travel; fast-changing digital technology has birthed the creation of vehicle automation; and the electrification of vehicles continues to advance. With all these new mobility mode options (car sharing, conventional transit, and smart para transit), there is an emerging public benefit; there are less vehicles in use but more passengers. Dr. Sperling said that researchers, policy makers, and industry need to understand and motivate consumers and travelers. This vehicle revolution poses leadership challenge, he added, and policy leaders must embrace clever and more effective regulations.



Enhancing Public Support for Wireless MAC Address Sensing in Transport Data Collection Tech Transfer Update

In our fall newsletter, we presented each of the seven success stories that we identified to receive additional PacTrans funding for Technology Transfer. One such success story was a PacTrans project titled, “Data Collection and Spatial Interpolation of Bicycle and Pedestrian Data.” The project focused on leveraging current data collection efforts to obtain more complete travel demand information, and introduced new

methods that have the potential to reduce cost and improve the quality and coverage of transportation data. The new technology was wireless MAC address sensing.

This project showed considerable promise and has been receiving great interest from entities home and abroad. Thus PacTrans saw fit to provide additional funds for the investigators of this project to

produce a short film explaining this unique data collection paradigm to the non-engineering public, with the aim of addressing common complaints regarding privacy and safety.

This film has recently been completed and can be found via the link below:

<https://youtu.be/Fi07GCRvRM0>

PacTrans at BMW Reach Now Carsharing Event

As BMW geared up to launch its new car sharing program (Reach Now) here in Seattle, BMW Vice President for Government and External Affairs, Frank Breust (who is also PacTrans newest external advisory board member), met with our director Dr. Yin Hai Wang. The meeting, which

also included Vikram Jandhyala, UW Vice Provost for Innovation, happened at the car-sharing event on Friday, April 8, 2016.

This meeting marks the beginning of what promises to be a strong relationship between PacTrans and BMW. Mr. Breust and Dr. Wang sought

ways we can collaborate in terms of research interests in transportation and workforce development. There will be more meetings planned ahead as we talk about BMW’s participation in our workshops and our Annual Regional Transportation Conference.



PACCAR visits PacTrans' STAR Lab

On April 18, 2016 PACCAR engineers and managers met with PacTrans Director Dr. Yin Hai Wang and PacTrans Assistant Director Ms. Maria Bayya to discuss student internship opportunities and learn more about faculty research of interest to the company with the purpose of gaining more understanding on partnership opportunities. The visit was made possible by UW College of Engineering with the purpose of building current relationship and expanding collaboration with PACCAR, especially on research.

Valerie Overlan, Associate Director of CFR gave an overview of PACCAR. PACCAR's Technical Centers in Europe and North America are equipped with state-of-the-art product development and validation capabilities and staffed with experts in powertrain and vehicle development. The advanced engineering

tools in the technical centers are utilized to innovate and accelerate the launch of new products. New 3-D prototype machines were introduced in 2013 to accelerate the design process from concept to production. Digitally controlled, proprietary hydraulic road simulators enhance product validation by replicating millions of road miles in weeks, instead of years. Sophisticated computer simulations and advanced analysis of engine and vehicle control systems operate on powerful supercomputers to optimize vehicle efficiency. Tech Center GM, Phil Stephenson, identified several areas of need where he would like to work with UW COE faculty for their expertise. They would like to discuss student internships/recruiting, and learn more about faculty research with the following areas of interest:

1. Controls
2. Combustion; specifically After Treatment
3. Materials processing; lighter in plating & painting
4. Performance; wind tunnel and aerodynamics
5. Electrical Systems; verification
6. Advanced automated driver systems

Dr. Wang talked about PacTrans and our mission as a UTC and presented the DRIVENET. Graduate student Ruimin Ke explained ongoing research on collision avoidance systems. This will be the first of many visits as we forge relationship and explore ideas that have potential for increased collaboration.



TECHNOLOGY TRANSFER

Washington State Traffic Safety Commission visits the PacTrans STAR Lab



PacTrans STAR Lab was privileged to be paid a visit by Dr. Staci Hoff and her group of researchers and program managers from Washington Traffic Safety Commission (WTSC) on April 13, 2016. This was another opportunity for PacTrans STAR Lab and WTSC to collaborate on ongoing research, workforce development, and technology transfer activities. Director Yinhai Wang and our graduate students introduced the folks to our Digital Roadway Interactive Visualization and Evaluation Network (DRIVENet) which is an on-line transportation platform aimed at data sharing, integration, visualization and analysis.

The presentation generated great interest on PacTrans research and also in working together on traffic data, crash data, sensing technology and systems. WTSC shared a summary of projects for the coming year namely:

- Annual Seat Belt Use Observation Survey – conducted every year in July, report released in February/March 2017
- Colville Reservation Seat Belt Use Observation Survey – Applying the annual SB methodology to derive belt use estimates on the Colville reservation within the four districts of the reservation. Data collection in August 2016, report expected March/April 2017
- Cell Phone Use Observation Survey – Cell phone use and general distraction captured at intersections, sampled in order to also derive county-level estimates. Data Collection in May 2016, Report expected by end of 2016. In 2017 we are applying this method to all road types (not just intersections).
- Update Fatal Crash THC extracts to include 2015 data and possibly 2008-2009 data – perform time series analysis in Joinpoint, updated marijuana report expected by end of 2016
- Spokane DUI court process evaluation, outcomes evaluation, and cost analysis – the formal evaluations are being conducted by WSU, however the WTSC will issue a recommendations report to the court on how to improve operations and outcomes.
- Traffic Records Data Integration – Link Crash with Toxicology, Crash with Health (Trauma, Inpatient), Link Crash with Licensing

This is just a start as we join networking and collaboration efforts on planned events for the 2016 Fall and Winter Quarter.

PacTrans Board of Directors



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 Strategic Analysis
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Frank Breust
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Jerry Whitehead
 President & Owner
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SAVE THE DATE

Regional Transportation Conference

October 14, 2016 @ UW Campus pactransconference.com

Student Transportation Conference

October 15, 2016 @ UW Campus

About Pacific NW Transportation Consortium

The Pacific Northwest Transportation Consortium (PacTrans) is the Region 10 University Transportation Center (UTC) established in January 2012 with funding from the US Department of Transportation (USDOT).

PacTrans is a coalition of transportation professionals and educators from Oregon State University (OSU), the University of Alaska Fairbanks (UAF), University of Idaho (UI), University of Washington (UW), and Washington State University (WSU). With dual themes of safety and sustainability, PacTrans serves as an engine and showcase for research, education, and workforce development in the Pacific Northwest.

The goal of PacTrans is to create an environment where consortium universities and transportation agencies within Region 10 work together synergistically. The solutions that we develop will meet the needs of the region and provide direction for the five strategic goals of the U.S. Department of Transportation.

- Safety
- State of good repair
- Livable communities
- Environmental sustainability
- Economic competitiveness

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 and bicyclists. This diversity makes the Pacific Northwest a natural laboratory in which to investigate transportation solutions that are applicable both locally and nationally.

PacTrans is dedicated to collaborating with transportation agencies, companies, and research institutions to jointly develop safe and sustain-able solutions for the diverse transportation needs of the Pacific Northwest.

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