METRANS on the Move: our weekly newsletter by students

Last week to submit an abstract for the I-NUF Conference! Click here if interested.

In the News

The articles in this newsletter are prepared or accomplished by others in their personal capacity. The opinions expressed are the author's own and do not necessarily reflect the views of METRANS or its partners.

Congratulations to Samikchhya Bhusal, 2020 WTS-LA Board of Directors/Sharon Yates Memorial Scholarship Winner

Looking to advance mobility justice by working with community-based organizations, Bhusal wants to upend transportation planning that prioritizes buses, trains, and bike lanes over people.

Read the WTS-LA feature here.

USC Price Alumi Spotlight: Justin Porter

Meet Online Executive Master of Urban Planning From USC Price '20 alum, Justin Porter!

Read the full Q&A on USC Price's Facebook Page here.

More Stations in Southeast Running Out of Gas

Drivers waited in long lines at gas stations in the Southeast on May 12th after a hack of the nation's largest fuel pipeline led to distribution problems and panic buying, draining supplies at thousands of gas stations.

Read the Transit Topics feature here.

Webinars & Online Events
Eno Webinar: A Budding Model: Los Angeles’s Flower Street Bus Lane
Thursday, May 13th at 11:00 am PDT
As transit agencies consider building and operating bus lanes, lessons from Los Angeles’s Flower Street pilot provide important insights for agencies and planners.

C2SMART Center Distinguished Speaker Webinar: A Data-driven Optimization-based Control Model for Cooperative Adaptive Cruise Control Under Uncertainty
Thursday, May 13th at 11:00 am PDT
Motivated by connected and automated vehicle (CAV) technologies, Professor Kuilin Zhang presents a data-driven optimization-based Model Predictive Control (MPC) model for cooperative adaptive . . .

WTS-LA Virtual Job Fair
Thursday, May 13th at 4:00 pm PDT
Join WTS-LA in this virtual job fair for an opportunity to network with a variety of different employers in the transportation industry. Participating employers include both private and public agencies, such as. . .

ITS-Davis Friday Seminar: Hurricanes, Earthquakes, Pandemics, and Urban Mobility Data-Driven Modeling and Analysis of Transportation Systems under the Threat of Major Disruptive Events
Friday, May 14th at 1:40 pm PDT
One of the major goals of transportation agencies is to ensure that the affected transportation systems continue to operate at an acceptable level of service even in the aftermath of such events.

The MTI Research Snaps presents: Curb Chaos: Managing the Curb After COVID
Tuesday, May 18th at 10:00 am PDT
This webinar, featuring findings from MTI funded research, Curbspace Management, will highlight policies, best practices, and lessons learned for managing curbspace in complex built environments and . . .

STRIDE Webinar: Combining Emerging Data Collection and Modeling Strategies in Support of Signal Control Optimization
Wednesday, May 19th at 9:00 am PDT
The webinar will start with a review of current signal timing practices of operating agencies responsible for traffic signal control in small, medium, and large size cities in the Southeast United States based on . . .

UH NDPTC Special 3rd Thursday Event: Adaptation Urbanism and Resilient Community with Prof Billy Fields and Prof John Renne
Thursday, May 20th at 9:00 am PDT
Prof Billy Fields and Prof John Renne talk about their new book Adaptation Urbanism and Resilient Communities: Transforming Streets to Address Climate Change (Earthscan/Routledge) in a . . .

Transportation Research Board (TRB) Standing Committee on Women and Gender in Transportation (AME20) Webinar Series: Young Scholars Transportation Research Webinar
Thursday, May 27th at 9:00 am PDT
Join the TRB Women and Gender in Transportation Committee for a webinar series that highlights the intersection of women and gender-related topics with other transportation topics.

Looking for more events occurring this week and next?
Check out our “Additional Events” section below!

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https://mailchi.mp/usc/metrans-student-weekly-news-events-7abd38n6e-1078104
Fast Facts
Created for Students, by Students

Cost-Sharing Mechanisms for Ridesharing

Authors: Maged M. Dessouky, Phoebe Vayanos, Shichun Hu
Year: 2020
Keywords: Public transit, land use, and urban mobility vehicles and infrastructure

What’s going on?
With many different players within the transportation network, each with their own objectives, it is challenging to come to a system-optimal solution to address congestion. Transportation planners must look for ways to improve transportation conditions in a cost-efficient manner. This raises the question: how do we use collaboration to reduce transportation costs and improve efficiency? Dynamic cost-sharing transportation systems, such as ride-sharing, could improve these conditions by tapping into unused vehicular capacity. In this report, researchers look to provide a method for the ride-sharing industry to determine how to allocate cost to further incentivize the use of this environmentally friendly type of service. Without a model to allocate costs and/or savings to each participant in the ride-share, drivers have no basis for allocating their costs to other passengers, thus having less incentive to participate.

What were the findings?
The researchers developed mechanisms to allocate the cost of ride-sharing to passengers and discuss the trade-offs among them. These mechanisms are intended to be used by ride-sharing systems focused on cost-savings, distinct from profit-maximizing systems like Uber and Lyft. In the scenarios analyzed by the researchers, the drivers have their own origins and destinations, as well as time constraints. The mechanisms were used in both a static setting, where all passenger requests are received before the driver starts the trip, and in a dynamic setting, where passengers request rides during the trip. The researchers used simulations to analyze the performance of the proposed mechanisms.

What’s next?
Future research can focus on understanding how the different mechanisms impact the traffic system, what would be an ideal vehicle capacity, and how to incorporate dynamic pricing when the system experiences high demand.

Read the full report on our website:

The Pacific Southwest Region UTC conducts an integrated, multidisciplinary program of research, education and technology transfer aimed at improving the mobility of people and goods throughout the region.

Check this week’s featured Fast Facts here.
Looking for more Fast Facts? Check out the Fast Facts Page on Metrans.org!

Pathways to Opportunity

Clean Cities University Workforce Development Program
Shared Use Mobility Center
Apply by 05/17/2021
See more info

RASC Scholarships
Railway Association of Southern California
Apply by 05/14/2021
See more info

Acoustical Engineer
RK&K
Raleigh, NC
Apply by ASAP
See more info

Climate Office Director
ODOT
Salem, OR
Apply by 05/27/2021
See more info

More Internships and Scholarships Here
More Job Opportunities Here