



## 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.



**WTS-LA Board of Directors' Scholarship in Memory of Sharon Yates**

**WTS** Advancing women Advancing transportation Advancing communities

**Congratulations Samikchhya Bhusal!**

### 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 ALUMNI SPOTLIGHT**

**Justin Porter**

Executive Master of Urban Planning

### USC Price Alumni 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.

[More Info](#)**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 . . .

[More Info](#)**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 . . .

[More Info](#)**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.

[More Info](#)**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 . . .

[More Info](#)**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 . . .

[More Info](#)**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 . . .

[More Info](#)**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.

[More Info](#)

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

[Take me to more Events](#)

## Fast Facts

Created for Students, by Students



Pacific  
Southwest  
Region UTC  
University Transportation Center

### Fast Facts

Cutting edge transportation research summaries  
Created for students, by students

#### Cost-Sharing Mechanisms for Ridesharing

**Authors:** Maged M. Dessouky, Phebe 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-saving, 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 analyzed 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:

[https://www.metrans.org/assets/research/psr-18-02\\_dessouky\\_final-report.pdf](https://www.metrans.org/assets/research/psr-18-02_dessouky_final-report.pdf)

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!

[Take me to Fast Facts](#)

## 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](#)

[More Internships and Scholarships Here](#)

### 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 Job Opportunities Here](#)

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