**METRANS on the Move:**
our weekly newsletter by students

Interested in commenting on Open Restaurants or Open Streets?
Please fill out this USC ITE questionnaire [here](#).

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**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.

**UC Davis’ Jesus Barajas Looks at Transportation Safety through the Lens of Equity**

“Safe for Whom: Transportation Safety in the Context of Planning and Infrastructure Equities” showcased how identity shapes the way cyclists experience the streetscape, how safety has multiple meanings particularly for people of color, and how inequity in the distribution of infrastructure compounds police injustice in Black Communities.

[Read more here.](#)

**‘March madness’ at LA port amid ‘once in a lifetime’ surge**

The flood of imports into the Port of Los Angeles is relentless. More records were set in March. And volumes are expected to remain at peak levels — with container ships to remain stuck at anchor — until June.

[Read the American Shipper feature here.](#)

**“Ask the Expert” Instagram Live with METRANS Associate Director Marlon Boarnet!**

Click [here](#) to learn more about how urban economics, urban growth patterns, and transportation is effecting the health of our planet!

**How Chicago Could Build Equity Into Transportation**

“This finding highlights the need to focus on making sure we have a connected transit system,” said Hollander, “and the need to help households with lower income lower their costs.”

[Read the Next City feature here.](#)

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**Webinars & Online Events**

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<table>
<thead>
<tr>
<th>Event Title</th>
<th>Date and Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICR Webinar: WSDOT’s Telework Transformation: Worker-Centered Change</td>
<td>Thursday, April 22nd at 9:00 am PDT</td>
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<tr>
<td>ABC-UTC &amp; Florida International University Present: Precast Culverts Flood Mitigation &amp; Pedestrian Safety Solution – Allen Creek Railroad Berm Project</td>
<td>Thursday, April 22nd at 10:00 am PDT</td>
</tr>
<tr>
<td>C2 Smart Webinar: AI-based Navigation for Accessible Cities: Challenges and Opportunities</td>
<td>Thursday, April 22nd at 10:00 am PDT</td>
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<tr>
<td>TRB Webinar: The Day of the Drones - Airports and Unmanned Aircraft Systems, Part 2</td>
<td>Thursday, April 22nd at 11:00 am PDT</td>
</tr>
<tr>
<td>TOMNET UTC Presents: The Impact of COVID-19 Travel Restrictions on Phoenix Air Quality</td>
<td>Friday, April 23rd at 12:00 pm PDT</td>
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<td>Climate and Health Series Webinar- Happiness, Health and the Bicycle</td>
<td>Friday, April 23rd at 1:00 pm PDT</td>
</tr>
<tr>
<td>CARTEEH Webinar: 14 Pathways Between Urban Transportation and Health</td>
<td>Tuesday, April 27th at 10:00 am PDT</td>
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<tr>
<td>NCST Webinar: Cost of Ownership and Discontinuance in the California Electric Vehicle Market</td>
<td>Tuesday, April 27th at 10:00 am PDT</td>
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Looking for more events occurring this week and next? Check out our "Additional Events" section below!
Fast Facts
Created for Students, by Students

Deep-Learning Traffic Flow Prediction for Forecasting
Performance Measurement of Public Transportation Systems

Authors: Cyrus Shahabi, Yao Yi Chiang, Min Mun, Luan Tran
Year: 2020
Keywords: public transit, congestion, urban mobility, performance reliability

What's going on?
Traffic congestion in urban areas across the U.S. has resulted in considerable social and economic detriment, which has raised serious concerns for drivers and transportation agencies. Los Angeles is ranked as one of the most congested cities in the U.S., with significantly longer commutes during morning and evening peaks. These traffic concerns have prompted transportation agencies and policymakers to prioritize measures to increase public transit ridership to help reduce traffic congestion. To address these challenges, this study used a data-driven Deep Learning approach to assess traffic congestion and develop regional public transportation vehicle forecasts.

What were the findings?
This study used transportation sensor datasets from several transportation authorities in Southern California, including historical and real-time data. Researchers used this data to develop a reliability analysis system using Deep Learning techniques to model and forecast traffic flows at various spatial resolutions. The research team also developed a framework to model bus Estimated Time of Arrival (ETA) by incorporating traffic flow obtained by their initial model and forecast. This project showed that the researchers’ ETA model is more accurate than the existing method in estimating bus travel times. However, modeling future Deep Learning performance techniques for public transportation systems for the entire Los Angeles Metro Area in the long-term remains a challenge.

What's next?
The data obtained for this project serves as a unique big traffic dataset that can be used to understand factors causing traffic congestion and help forecast public transportation vehicles’ performance reliability. Both models developed for this project were launched as a web application where users can access traffic prediction data and check bus arrival times to a destination location from a start point.

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

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RASC
Apply by 05/14/2021
[See more info](#)

I-NUF 2021 Call for Abstracts
METRANS 2021 I-NUF
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Broward MPO
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Traffic Design Engineer
Arizona Department of Transportation
Phoenix, AZ
Apply by 04/27/2021
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