### Draft Program at a Glance

#### Thursday, November 2, 2017

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 a.m.</td>
<td><strong>Registration and Buffet Breakfast</strong></td>
</tr>
</tbody>
</table>
| 8:30–10:15 a.m. | **Welcome**
Laurie McGinnis, Director, Center for Transportation Studies, University of Minnesota

**Keynote Presentation: How We Pay for Transportation Infrastructure—What’s the Value Proposition?**

**Speaker** Joung Lee, Policy Director, American Association of State Highway and Transportation Officials (AASHTO)

**Panelists**
- Tracy Hatch, Deputy Commissioner, MnDOT
- Jerry Zhao, Associate Professor, Humphrey School of Public Affairs, University of Minnesota
- Jim McDonough, Commissioner, Ramsey County

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:15–10:30 a.m.</td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>10:30–11:45 a.m.</td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td>1</td>
<td>Issues in Multimodal Travel Behavior and Accessibility</td>
</tr>
<tr>
<td>2</td>
<td>Engaging the Public and Stakeholders on Transportation Issues</td>
</tr>
<tr>
<td>3</td>
<td>Maximizing the Efficiency of Minnesota’s Freight Network</td>
</tr>
<tr>
<td>4</td>
<td>Opportunities and Innovations from the Sharing Economy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:45 a.m.–1:30 p.m.</td>
<td><strong>Luncheon and Presentation</strong></td>
</tr>
</tbody>
</table>
|               | **Moderator**
Laurie McGinnis, Director, Center for Transportation Studies, University of Minnesota

**Keynote Presentation: Transportation Policy Innovation—LA Metro’s Experience**

**Speaker** Joshua Schank, Chief Innovation Officer, Los Angeles County Metropolitan Transportation Authority

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30–1:45 p.m.</td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>1:45–3:00 p.m.</td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td>5</td>
<td>Transportation Innovation in Minnesota: Panel Discussion</td>
</tr>
<tr>
<td>6</td>
<td>Roadsides and Pollinators</td>
</tr>
<tr>
<td>7</td>
<td>Technologies for Making Work Zones Safer</td>
</tr>
<tr>
<td>8</td>
<td>Bike Shares, Multimodal Parks, and Self-Driving Vehicles: Who Is Being Left Out?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00–3:15 p.m.</td>
<td><strong>Break</strong></td>
</tr>
<tr>
<td>3:15–4:30 p.m.</td>
<td><strong>Concurrent Sessions</strong></td>
</tr>
<tr>
<td>9</td>
<td>Transportation Funding: Planning, Distribution, and Value</td>
</tr>
<tr>
<td>10</td>
<td>Design and Maintenance of Transportation Infrastructure in Minnesota</td>
</tr>
<tr>
<td>11</td>
<td>Trends in Transit Ridership Behavior</td>
</tr>
<tr>
<td>12</td>
<td>Roadway Safety Now and Into the Future</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30–5:30 p.m.</td>
<td><strong>Reception with Hors d’Oeuvres and Cash Bar</strong></td>
</tr>
</tbody>
</table>
### Keynote Presentation: How We Pay for Transportation Infrastructure—What’s the Value Proposition?

**Speaker** Joung Lee, Policy Director, American Association of State Highway and Transportation Officials (AASHTO)

The public generally supports investing in transportation infrastructure, yet it fiercely opposes increases in user fees or taxes to support this investment. The opaqueness of transportation revenue mechanisms like the gas tax makes it difficult for the traveling public to easily discern how much they pay for infrastructure and what value they derive from it.

In the conference opening session, Joung Lee, policy director at the American Association of State Highway and Transportation Officials, will examine the latest direction in infrastructure funding at the federal level. He will also offer examples of innovation happening in states all around the country and discuss policy and political considerations when it comes to transportation revenue and financing tools.

Following Lee’s presentation, a panel of Minnesota leaders and experts will share their perspectives on transportation infrastructure funding.

---

### Concurrent Sessions

#### Issues in Multimodal Travel Behavior and Accessibility

**Moderator** Jim Henricksen, MnDOT

**Time Series Data Clustering of Minnesota Bike Sharing System and Operation Strategy**

Yufeng Zhang, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

**Intraurban Accessibility and Employment Density: Evidence from the Twin Cities**

Michael Iacono, MnDOT

**Evaluating Transit Route Choice in the Twin Cities**

Jacqueline Nowak, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

**Full-Day Accessibility Evaluation of Transit Systems Using GPS-Based Location Data**

Ying Song, Department of Geography, Environment, and Society, University of Minnesota

#### Engaging the Public and Stakeholders on Transportation Issues

**Moderator** Steve Gentry, Metropolitan Airports Commission

**Status of and Strategies for Social Media Use in Minnesota’s Transportation Planning and Policy**

Ingrid Schneider and Melissa Peck, College of Food, Agricultural and Natural Resource Sciences, University of Minnesota

**Addressing Citizens’ Requests for Traffic Safety Solutions**

Renae Kuehl, SRF Consulting Group

**More Than a Bridge: The Challenges in Developing an International Border Crossing Project**

Dale Grove, Stantec
Maximizing the Efficiency of Minnesota’s Freight Network

**Moderator:** Lee Munnich, Humphrey School of Public Affairs, University of Minnesota

**Connecting Small and Medium-Sized Farms to Wholesale Markets Through Backhauling from Rural Grocery Stores**
*Kathryn Draeger and Naomi Olive, Regional Sustainable Development Partnerships, University of Minnesota*

**Evolving Supply Chains and Local Commodity Flows: A GIS Road Network Analysis of Minnesota Cereal Grain Movement**
*Travis Fried, Humphrey School of Public Affairs, University of Minnesota*

**Components of an Attractive Minnesota Freight Market**
*Matt Schmit, Humphrey School of Public Affairs, University of Minnesota*

Opportunities and Innovations from the Sharing Economy

**Moderator:** Saif Benjaafar, Department of Industrial and Systems Engineering, University of Minnesota

**Do New Bike Share Stations Increase Member Use: A Quasi-Experimental Study and Spatial-Temporal Models of Bike Share Trips in the Twin Cities**
*Jueyu Wang, Humphrey School of Public Affairs, University of Minnesota*

**Shared Rides for Everyone: Transportation Network Companies (TNCs) at MSP Airport**
*Atif Saeed, Metropolitan Airports Commission*

**Considering a User-Based Fee that Funds Infrastructure in the Sharing Economy**
*Ken Buckeye and Chris Berrens, MnDOT*

Luncheon and Presentation

**Keynote Presentation: Transportation Policy Innovation—LA Metro’s Experience**

**Moderator:** Laurie McGinnis, Director, Center for Transportation Studies, University of Minnesota;

**Speaker:** Joshua Schank, Chief Innovation Officer, Los Angeles County Metropolitan Transportation Authority

In August 2015, the Los Angeles County Metropolitan Transportation Authority (LA Metro) embarked on an ambitious experiment. Could a new department with an extraordinary name bring about dramatic changes in transportation policy and innovation to a large government agency in a short period of time?

LA Metro’s chief innovation officer Joshua Schank will describe the creation of the Office of Extraordinary Innovation (OEI), designed to manage public-private partnerships (P3) and strategic planning for the agency. For P3s, this included overseeing a new unsolicited proposal process designed to encourage private-sector ideas for delivering Metro projects and services. OEI was also charged with developing the Metro Strategic Plan, which would clearly define the mission, vision, and goals for the agency and create a culture of innovation.

Schank’s presentation will look back on the successes and failures of the first two years of this experiment in transportation policy innovation at LA Metro and explore the path forward. This will include a discussion of the challenges faced—including fierce resistance to innovative approaches and intense demands on OEI to deliver quickly—as well as the new ideas brought to the agency.

1:30–1:45 p.m. Break
**Concurrent Sessions**

### Transportation Innovation in Minnesota: Panel Discussion

**Moderator** Gina Baas, Center for Transportation Studies, University of Minnesota

**Panelists** Frank Douma, Humphrey School of Public Affairs, University of Minnesota; Jenifer Hager, City of Minneapolis; John Levin, Metro Transit; Brendan Murphy, Accessibility Observatory, Center for Transportation Studies, University of Minnesota

This session will build on the theme of innovation presented during the luncheon keynote. Panelists will offer their insights on how innovative technologies and policy approaches may impact the transportation network, now and in the future. Audience members will be encouraged to ask questions and offer their own ideas as well.

### Roadsides and Pollinators

**Moderator** Doug Snyder, Mississippi Watershed Management Organization

**Importance and Concerns of Roadsides for Pollinators**
Daniel Cariveau, Department of Entomology, University of Minnesota

**MnDOT’s Roadside Management Practices**
Tina Markeson, MnDOT

### Technologies for Making Work Zones Safer

**Moderator** Nichole Morris, HumanFIRST Laboratory, University of Minnesota

**Development of a Work Zone Intrusion Reporting System**
Curtis Craig, HumanFIRST Laboratory, University of Minnesota

**Mitigating Risk in Work Zones: Informing Drivers Using In-Vehicle Technology**
Jacob Achtemeier, HumanFIRST Laboratory, University of Minnesota

**Using Bluetooth Low-Energy Technology to Trigger In-Vehicle Messages at Work Zones**
Chen-Fu Liao, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

### Bike Shares, Multimodal Parks, and Self-Driving Vehicles: Who is Being Left Out?

**Moderator** Virajita Singh, Equity and Diversity/College of Design, University of Minnesota

**Equity Analysis of Access to Bike Share: A Case Study in the Twin Cities, MN**
Jueyu Wang and Greg Lindsey, Humphrey School of Public Affairs, University of Minnesota

**Equity Implications of Multimodal Park Access in the Twin Cities**
Jacqueline Nowak and Kristin Carlson, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

**Equity Considerations in the Deployment and Design of Self-Driving Vehicles**
Adeel Lari, Humphrey School of Public Affairs, University of Minnesota

### Transportation Funding: Planning, Distribution, and Value

**Moderator** Mark Nelson, MnDOT

**ABC Ramps Transportation Operations Study**
Lisa Austin, MnDOT; Kevin Kamera, Humphrey School of Public Affairs, University of Minnesota

**Minnesota Transportation Funding Redistribution**
Jerry Zhao, Humphrey School of Public Affairs, University of Minnesota

**Estimating the Economic Value of Bicycling in Minnesota**
Xinyi Qian, Tourism Center, University of Minnesota
3:15–4:30 p.m. Concurrent Sessions (Continued)

10 Design and Maintenance of Transportation Infrastructure in Minnesota

Moderator Al Forsberg, Blue Earth County (retired)

Design of Structure Service Life
Kevin MacDonald, Beton Consulting Engineers

Base Stabilization Additives for Pavement Design
Renae Kuehl, SRF Consulting Group

Planning for Better Bikeway Maintenance
Jordan Kocak, Hennepin County

11 Trends in Transit Ridership Behavior

Moderator Jonathan Ehrlich, Metropolitan Council

Findings from the 2016 Transit Onboard Survey
Jonathan Ehrlich, Metropolitan Council

Analyzing U-Pass Ridership Trends
Pramesh Kumar, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

The Impact of Weather and Socioeconomic Factors on Transit Ridership
Alireza Khani, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

Using the Three-Factor Theory to Examine the Transit Preferences of Riders from Different Income Levels
Xinyi Wu, Humphrey School of Public Affairs, University of Minnesota

12 Roadway Safety Now and Into the Future

Moderator Tom Sohrweide, SEH Inc.

Examining the Relationship Between Speed Enforcement Laws and Traffic Safety
Frank Alarcon, Humphrey School of Public Affairs, University of Minnesota

The Effectiveness of an Intelligent Rural Intersection Conflict Warning System in Promoting Drivers’ Gap Acceptance and Safety at Rural Thru-stop Controlled Intersections
Disi Tian, HumanFIRST Laboratory, University of Minnesota

Gary Davis, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota

Edward Shwalb, MSC Software

4:30–5:30 p.m. Reception—Hors d’Oeuvres and Cash Bar

Disability accommodations will be provided upon request. This publication is available in alternative formats. Please call 612-624-3708.

The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, color, creed, religion, national origin, sex, age, marital status, disability, public assistance status, veteran status, or sexual orientation.

© 2017 Regents of the University of Minnesota. All rights reserved.