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TRANSPORTATION RESEARCH BOARD

**National Academies/TRB Forum**  
**PREPARING FOR AUTOMATED VEHICLES AND SHARED MOBILITY**  
**- Conference Call-**

Tuesday, November 13, 2018

Noon-2:00 pm (Eastern)

**Suggested Script/Action Items for Co-Chair & TRB Staff**

**I. WELCOME & AGENDA OVERVIEW (Steudle) (12:00-12:10 pm)**

*Today's agenda consists of two parts: 1) a presentation and discussion on changing consumer preferences and mobility behaviors in the context of a modal revolution, and 2) short updates on the Forum status, activities, and next steps.*

- Adrienne will run webinar software, advance slides, and transfer screens (if necessary)
- Katherine will monitor questions entered in the "Questions" box and read these aloud for response by the co-Chairs, presenter(s), or other TRB staff

[Show slide 1 as the welcoming slide as participants call in](#)




**A. Welcome to Forum Participants (Slide 2; Attachment: 4 pp.)**


*The roster of Forum participants is attached.*

[Show slide 2](#)


## Forum Cochairs



Gregory Winfree  
Agency Director, Texas A&M  
Transportation Institute




Peter Sweatman  
Principal, CAVita



Kirk Steudle  
(Former) Director, Michigan DOT

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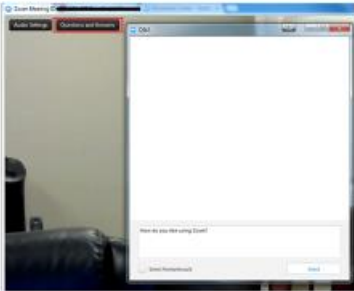


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## Questions and Comments

- You are automatically muted and cannot verbally ask questions
- Please type your questions into the “Questions” box in your control panel
- TRB staff will read questions out loud and direct to the presenters



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### ***B. Welcome to New Forum Participants***

*Since our last meeting in July, Waymo has joined as a sponsoring organization of the Forum.*

- Mark/Katherine: Check on U.S. DOE as new sponsor
- Mark/Adrienne: Determine organization represented by Matt Daus

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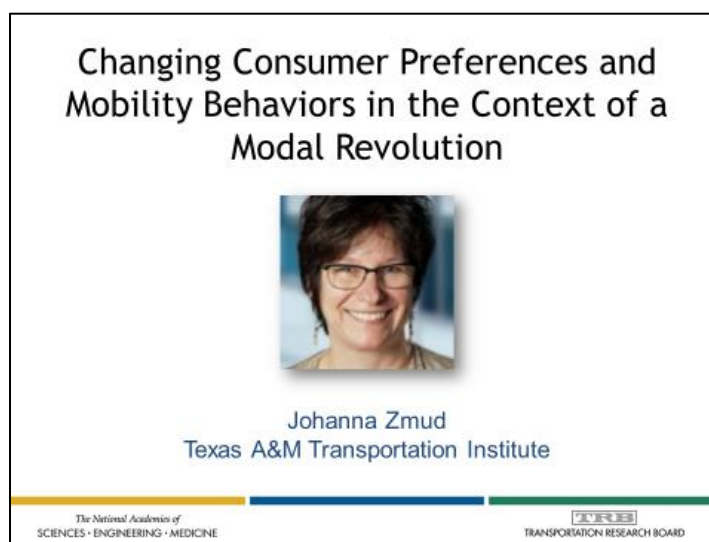


## II. FEATURE PRESENTATION: CHANGING CONSUMER PREFERENCES AND MOBILITY BEHAVIORS IN THE CONTEXT OF A MODAL REVOLUTION (12:10-1:00 pm)

*This topic has consistently been ranked by Forum participants as one of the most critical research issues impacting the Forum's mission. This agenda item includes a presentation and discussion to deepen understanding of the availability, consumer preferences, and expectations for four revolutionary transportation developments and what they might mean for future mobility behaviors. These transportation developments are: vehicles with connectivity, on-demand ride services, shared mobility, and vehicle automation.*

- Patrice coordinate with Johanna. Get slides in advance, or arrange to show her screen.
- Adrienne enable Johanna as a presenter

 [Show Slide 5](#)



#### **A. Presentation (Zmud) (Attachment)**

*The research that is the basis for this presentation and discussion was originally prepared by Johanna Zmud of TTI for the August 29, 2018 Emerging Trends Workshop sponsored by the FHWA's Office of Policy and TRB. The paper was provided to Forum participants on September 24<sup>th</sup> via the Forum e-Group.*

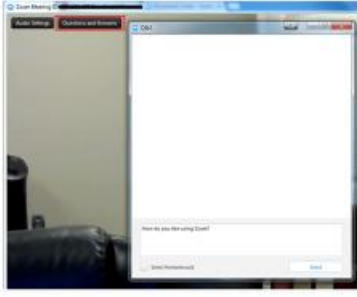
- 30 minute presentation, plus Q&A

#### **B. Discussion**

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### **III. FORUM STATUS, ACTIVITIES, & NEXT STEPS (1:00 pm – 1:45 pm)**

#### **A. Forum Participants Survey (Norman) (Attachment, 5 pp.)**


*The responses to the September 2018 survey of Forum participants are attached. The responses are being used to guide the priorities, agendas, and activities of the Forum for the remainder of 2018 and into 2019. These will be discussed in the following agenda items.*

 [Show slides 7 & 8](#)




### Forum Participants September 2018 Survey Summary of Ratings

- Overall value, success in carrying out mission, products rated as “Good”
  - Directory of Information Resources and Forum website rated as most valuable products to date
- Almost all responding organizations “likely” or “very likely” to continue participation in 2019

### Forum Participants September 2018 Survey Key Takeaways

- Strong support for continued focus on identified research needs, and for addressing longer term cross-cutting issues
  - Refine “Top Ten” critical issues and provide detailed information on each
  - Do more to address the five cross-cutting issues identified at San Francisco meeting



#### **B. Forum Top Ten Critical Issues (Kortum, Attachment)**

*At its July 2018 meeting, Forum participants ranked their Top Ten critical issues. The attachment summarizes the proposed next steps to share information the information that currently exists for each of these issues, and to encourage needed additional research.*

- Katherine provide attachment and summary slides
- Katherine determine who will populate and maintain briefing sheets (UC?)
- Make it clear what the role of the Forum is in addressing these, especially vis-à-vis NCHRP


 [Show slide\(s\)](#)

#### **C. NCHRP 20-102 Research Roadmap and Projects (Derr) (Attachment New Tasks Announcement 5 pp)**

*A report on the status of this series of projects, including the project that updates the previous NCHRP research roadmap. Many of the projects now being completed*

*address research needs identified by the Forum. In addition, funding is being allocated for new projects that will address a number of the Forum's "Top Ten" critical issues. Nominations for individuals to serve on panels for these new projects are due by November 20<sup>th</sup>.*


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## New NCHRP 20-102 Tasks

- Workforce Capability Strategies for State and Local Agencies [NCHRP 20-102(20)]
- Infrastructure Modifications to improve the Operational Domain of Automated Vehicles [NCHRP 20-102(21)] **Forum Top Ten #4**
- State and Local Impacts of Automated Freight Transportation Systems [NCHRP 20-102(22)]
- Potential impacts of Highly Automated Vehicles and Shared Mobility on Traveler Behavior [NCHRP 20-102(23)] **Forum Top Ten #7, #8**
  - Combined with Mobility Inclusion for Un(der)served Populations with the Emerging Technologies [TCRP B-47] **Forum Top Ten #6**
- Infrastructure Enablers for Connected and Automated Vehicles and Shared Mobility—Near-Term and Mid-Term [NCHRP 20-102(24)] **Forum Top Ten #4**


Panel nominations (with résumé) due to rderr@nas.edu by Nov 20

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## Other NCHRP 20-102 Stuff


- Implications of Connected and Automated Driving Systems* [NCHRP Web-Only Document 253] released
- Review of old research roadmap and recommendations for new tasks are available on the NCHRP 20-102(19) webpage (<http://apps.trb.org/cmsfeed/TRBNetProjectDisplay.asp?ProjectID=4476>)
- Dedicating Lanes for Priority or Exclusive Use by Connected and Automated Vehicles* [NCHRP Report 891] and *Updating Regional Transportation Planning and Modeling Tools to Address Impacts of Connected and Automated Vehicles* [NCHRP Report 896] available this year
- White paper being prepared on uses of the DSRC band (current and projected uses, benefits, value) and alternative communications channels (expected in 2019 Q1)

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#### ***D. Exploring Forum's Strategic Cross-Cutting Issues (Norman) (Attachment)***

*At its July meeting, Forum participants identified five strategic cross-cutting issues that the Forum should pursue in more detail. Forum working groups are being formed to develop mini-workshops on each of these issues as part of Forum convening activities in 2019. More information is attached.*

- Mark confirm with remaining WG lead individuals/organizations; update attachment & summary slides

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Forum Strategic Issues Mini-Workshops		
Issue	Leads	Date
* Vision(s) for a “fully evolved future”	Shaheen, Papandreou	Feb.
* Importance and role of connectivity	ITE, SAE	Feb.
* Potential impacts on roles of different levels of government & private sector	I-95, AAM	July
* Financing and funding implications of AVs & shared mobility	AASHTO, APTA	July
* Impacts on traditional research processes & programs	ITSA, TRB, Mohaddes	Spring call

**E. 2019 TRB Annual Meeting: Forum Session, Gathering, & Sessions of Interest (Kortum, Cunard) (Attachments)**

*The 2019 TRB Annual Meeting will be held January 13-17 in Washington, DC. The Forum will sponsor a session on “Automated Vehicles and Shared Mobility-Addressing the BIG Questions” on Wednesday morning. In addition, a gathering of Forum participants will be scheduled for Sunday afternoon. The Annual Meeting program includes scores of workshops and sessions on connected/automated vehicles and shared mobility.*

- Katherine & Rich monitor responses from speakers invited for Forum session
- Patrice finalize day/time for Sunday gathering
  - Patrice/Katherine consider some type of F&B or other “hook”
- Rich get AV-SM session topic summary sheet to provide to Forum participants

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**TRB ANNUAL MEETING**  
CONVENING THE TRANSPORTATION COMMUNITY FOR 80 YEARS  
January 13-17, 2019 • Washington, D.C.

- Forum Participants Gathering
  - Sunday, Time TBD, Convention Center, Exhibit Hall
- Session 1651: TRB Research on Automated and Connected Vehicle Technologies (NCHRP 20-102)
  - Tuesday, 6:00 PM- 7:30 PM, Convention Center, Salon B
- Session 1679: Automated Vehicles and Shared Mobility: Addressing the BIG Questions (Forum Sponsored)
  - Wednesday, 8:00 AM- 9:45 AM, Convention Center, Salon A

**Scores of sessions on connected & automated vehicles  
& shared mobility!**

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**F. Forum White Paper (Steudle) (Attachment, 1 page)**

*The white paper prepared on behalf of the Forum on Preparing for Automated Vehicles and Shared Mobility is now available as TRB e-Circular 236. Prepared by TRB staff and peer reviewed by Forum members, the e-circular summarizes the deliberations of the TRB forum to facilitate evidence-based research needed to deploy automated vehicle technologies in a manner and timeframe that informs policy to meet long-term goals. The paper has been added to the Forum's Directory of Information Resources, and was also provided via the Forum e-Group online community.*

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**CIRCULAR**  
November 2018

National Academies-TRB  
Forum on Preparing for  
Automated Vehicles and  
Shared Mobility

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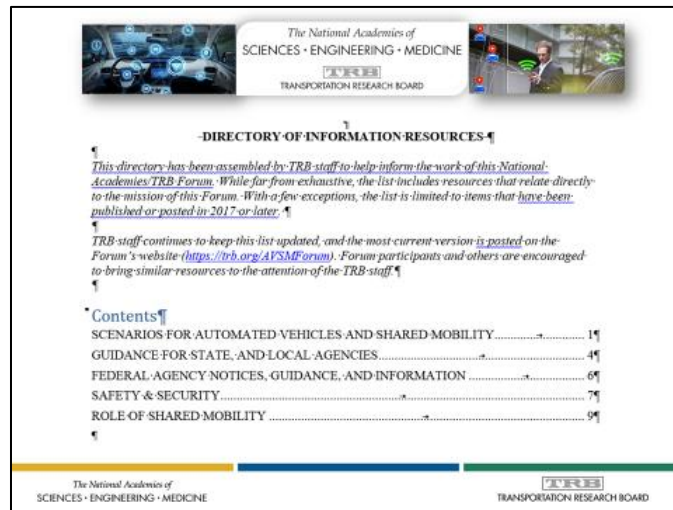
**G. Forum Directory of Information Resources (Steudle)**

*More than a dozen new reports and publications have been added to this directory since the Forum's meeting in July. New items are also being announced via the*

Forum's e-Group online community as they become available. The updated directory can be accessed anytime via the Forum's website.

- Mark update slide
  - Add attachment listing newly added resources?

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## H. Forum e-Group Online Community (Steudle)

New reports and other news of interest are being posted by staff on this online community. Forum participants are encouraged to use this tool to post items, raise issues for discussion, and to otherwise communicate with each other between Forum meetings.

- Mark update slide
- Mark ask Brie about steps Forum participants must take to access

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## I. Forum Website (Steudle)

*Forum participants are reminded that virtually all of the items that we have discussed here can be accessed on the Forum's website (<https://trb.org/AVSMForum>)*

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**J. Forum Meeting #3: February 13-14 in Washington, DC (Steudle)**

*The next face-to-face meeting for the Forum will be conducted on February 13-14, 2019 at the National Academies' Keck Center in Washington, DC.*

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**IV. OTHER BUSINESS (Steudle)**

**A. FHWA's Cooperative Automation Research Mobility Applications (CARMA) Platform (Taylor Lochrane or Brian Cronin) Attachment 1 page**

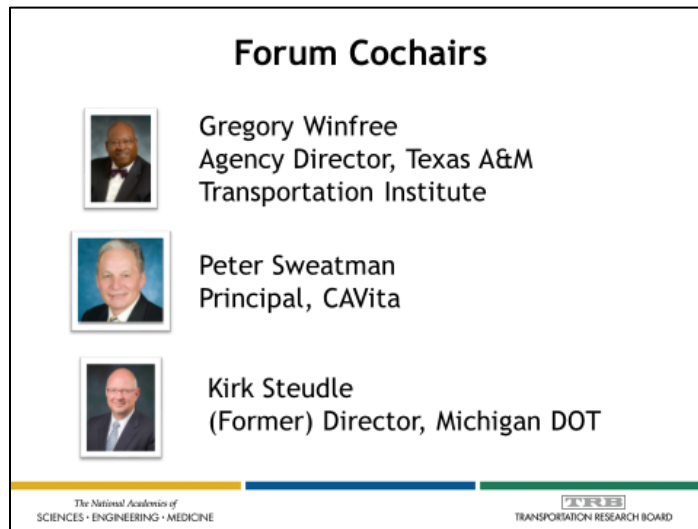
- Mark confirm if FHWA will be able to report, & who will present
- Adrienne enable presenter to show speak and/or show slides

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## ***B. Final Comments from Our Co-Chairs***

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## ***C. Observations from TRB Executive Director (Pedersen)***

- Mark check w/Neil so that he is aware

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#### ***D. Other Business?***

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#### **V. ADJOURN**

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FORUM WEBINAR #2: NOVEMBER 13, 2018

# Forum on Preparing for Automated Vehicles & Shared Mobility



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