

The National Academies of
SCIENCES • ENGINEERING • MEDICINE



Executive Committee Meeting Minutes

August 17-19, 2020

Online, Zoom

August 17, 2020, Monday

1:00 p.m.

Introductions and Announcements (Braceras) Information

- a. Braceras discussed how transportation research will need to evolve to meet the challenge of COVID-19 and will keep this week's discussion broad in light of the shortened, virtual timeframe of this summer's virtual meeting.
- b. Policy Statement on Preventing Discrimination, Harassment, and Bullying was noted.
- c. Bias/Conflict of Interest Discussion – There were no conflicts of interest reported.

1:32 p.m.

Discussion with Greg Symmes, NRC Chief Program Officer (CPO)

- Symmes introduced himself as a long-time Academies employee but began this year as the NRC CPO. His priorities are 1. The importance of increasing the work and reach of the organization 2. The importance of focusing on staff and empowering them. 3. The importance of making sure our work is effective.
- We have been conceptualizing the NRC Strategic Plan and plan to finalize it in February.
 - There were no negative or strong reactions to the plan, including the draft vision, mission, and values.
 - The NRC has a lot to learn from TRB as far as how to engage and partner. We are also looking for the Academies to be a leader on inclusion, equity, and diversity. We want technologies that allow us to leapfrog in terms of communications and other priorities.
 - The strategic goals focus on becoming a more proactive organization in anticipation of future challenges and opportunities; expanding influence and impact on the world; and strengthening the NRC's creativity, resilience, and sustainability.
- The NRC Transformation is focused on making the organization the first, go-to place that leaders look to for information and research.
- Our response to the pandemic has accelerated some of our efforts at being creative and nimble. We have resources online and hundreds of activities going on that are related to COVID-19. Among the activities are a Standing Committee on Infectious Disease, a Societal Experts Action Network, and various scenario planning exercises.
- There was a question regarding whether the rapid-response activities such as were called for by the crisis, but they are very different than studies and activities that take longer, are very staff and volunteer intensive.

2:15 p.m.

Approval of January 15-16, 2020 Minutes (Braceras) Action

- The minutes were approved.

2:16 p.m.

TRB Division Committee Report (Hendrickson) Information

- a. Conference approvals were made.
- b. Monitoring diversity. The improvement is slow but positive on increasing diversity throughout TRB's volunteer communities.

2:22 p.m.

Executive Director's Report (Pedersen) Information

- TRB has obviously done a lot on COVID-19, and has carried on our activities very effectively while going virtual. We have had major communications efforts, identified research needs, record-breaking attendance for rapid response webinars, among other successes.
- We have really addressed equity issues since George Floyd's death, including leadership statements and blogs, committee work, Critical Issues updating, planning of a major equity conference, among other work.
- We anticipate 2020 spending to be about \$5 million less than in 2019.
- We have a major effort in converting the TRBAM to a virtual format for 2021.
- We had a staff survey and 93% positive responses on being proud to work for TRB and 92% that the mission is important to them.

2:30 p.m.

TRB Annual Meeting plan (Brach) Information

- TRBAM 2020 set a record for attendance, with more than 14,000 attendees for the first time in the conference's history.
- We are trying to make the 2021 virtual meeting as much like a regular in-person meeting as possible. Marcia McNutt will be featured as the Chair's Plenary Session. Dorval Carter of the Chicago Transit Authority will be the Deen Lecturer and may also speak in another plenary.
- Registration fees will be about half the usual cost and we want to do more work on our value proposition on why people should attend.
- There was a question about whether some portions of the conference could be free, and the answer is that some events (committee meetings, exhibits, and the career fair) will be free.

2:42 p.m.

COVID-19-Related Transportation Issues

- Research Issues (Hedges) Information
 - AASHTO allocated \$1 million in funding for COVID-19 research, TRB held a brainstorming session on research needs, and ICF Consulting was hired to compile and refine the needs and problem statements. 38 problem statements in seven categories were identified and submitted by ICF for review, including things like applying stress tests on transportation agencies, providing safe environments for transportation passengers, getting goods delivered in a pandemic, impacts on low-income households, and understanding factors that influence decisions to resume travel.
- Critical Issues Supplement (Godwin) Information

- This supplement is part of the Executive Committee’s function, to bring the research questions needed. One of the most important questions, it has been determined through discussions so far, is whether COVID-19 is a tipping point for many transportation trends already underway. Some of these areas include mode usage, energy and sustainability, resilience and security, safety and public health, equity, system performance and asset management, funding and finance, goods movement, institutional and workforce capacity, and research and innovation.
- January 2021 Policy Session (Houston) Information
 - It is proposed that the topic be “Impacts of COVID-19 on Personal Mobility and Social Equity.” Some of the questions include employee policies for teleworking, how much tolerance people have for using modes that have extensive personal interaction, how auto ownership will change, and what factors should be considered for supporting vulnerable communities.
- Discussion of Experiences and Issues (All) Discussion
 - Nat Ford discussed Jacksonville’s Tuk’ n Ride service that helps with the first-mile-last-mile challenge and remains an important kind of planning service in a post-COVID world because of the intimacy, size, and open-air-ability of the vehicles.

3:40 p.m.

Adjournment (Braceras)

August 18, 2020, Tuesday

Policy Session on Urban Air Mobility

1 p.m.

Introduction (Shaheen) Information

- What roles could TRB have in researching UAM (Unmanned Aerial Systems and Urban Air Mobility)?

1:05 p.m.

TRB UAM Activities Update (Keidel-Adams) Information

- TRB has a new Standing Committee, entitled New Users of Shared Airspace, to go along with several other relevant aviation standing committees. There were 14 papers reviewed on UAM at the 2020 TRBAM, compared to one paper in 2019. More than 130 participants attended a Sunday workshop at TRBAM 2020. ACRP also has two active projects dealing with UAM. It is a growing topic for research need.

1:13 p.m.

UAM Presentations

- “Urban Air Mobility: History, Nuts and Bolts,” by Adam Cohen, Univ. of California, Berkeley: A history of UAM from the 1950s to the present day was detailed. With COVID-19, a number of new uses for the aviation marketplace are being considered for drones, such as deliveries of medicine. There are still a number of hurdles to further implementation of UAM in action, such as legal, safety, equity, weather, noise, privacy, and infrastructure. A series of industry developments were also detailed, including how COVID-19 may reduce the ability for companies and others to focus on research and development as they focus more on their core objectives.

- “Issues around Planning and implementation of UAM,” by Yu Zhang, Univ. of South Florida: A report from the Tampa Bay region was detailed with regard to how many vertiports are needed to transition to an effective network of UAMs. There are plenty of policy questions, such as who should own and regulate the network, how should people use or share the network, and the road network can be used to understand the hierarchy of the airspace for UAMs.
- “NAS Study: Advancing Aerial Mobility: A National Blueprint,” by Nicholas Lappos, Sikorsky: This report looks at a potential national vision for UAMs. An ultimate vision was developed and includes a number of key factors, including that it is safe, secure, shared for all, with a variety of types of vehicles, and environmentally responsible.

2 p.m.

Reactions (Davis Hackenberg, NASA) Information

- TRB could help across all these areas, and could really help NASA think about user systems and early-adopter areas, with Hawaii particularly coming to mind. Perhaps there’s a national database that can begin to share best practices. Vertiport locations and the infrastructure, with zoning and all the issues involved, are especially important. Public acceptance is something that needs a national strategy, and it needs to be way bigger than anything that can be done by NASA. There is a lot that needs to change over the next decade in regards to drones and weather.

2:05 p.m.

Plenary Session Discussion (Shaheen) Discussion

- There were questions and comments about:
 - Responsibilities
 - Data and changing movement patterns and demand as a result of UAMs (induced demand will not be huge)
 - A need for lots of real estate for drones at airports but they might not be early adopters
 - Energy and environmental impacts (there is a lot of transitioning to electric sources)
 - The movement of congestion from roads to the air
 - The differences in issues and policies for freight UAMs vs. passenger UAMs
 - What are the economic costs and benefits
 - Will this air mobility further divide society and create local NIMBY behavior
 - The importance of a multimodal understanding, which the TRB community brings in considering all perspectives
 - The benefits for different socioeconomic groups
 - Top topics TRB could study, which include how UAMs could be publicized to the public and community acceptance, can toll road models work for UAM in terms of equity impacts, noise research.

3:25 p.m.

Last Words (Alan Epstein of MIT) Information

- Decades ago, we thought we would be ready for UAMs by now. What can TRB do? Navigation and control issues have largely been solved, but someone needs to think through the response to the first time a UAV crashes into a building or something else. Innovations like this are gravely affected when something goes just a little wrong.

3:40 p.m.

Adjournment (Shaheen)

August 19, 2020, Wednesday

1 p.m.

Introduction (Braceras) Information

- We made the right decision to move these meetings back to August and hold them virtually.

1:07 p.m.

Rapid Fire Consent Agenda Item Presentations (Multiple) Information

- There is a lot of progress being made on the Technical Activities strategic realignment of the committee structure (Park/Brach).
- Virtual work has not affected CRP's production, and everything has transitioned well. There was an update on recent reports and new staff (Hedges).
- The Marine Board Spring Meeting transitioned rapidly to how COVID-19 was affecting the sector (Comstock/Brotemarkle).
- We want to continue meeting with partners internationally so we are aware what is happening in relation to COVID-19 and transportation throughout the world. Many key events have been postponed to next year, although TRB webinars are one way to have some of these conversations virtually without as much delay. There are many engagement activities still happening throughout 2020 (Ford).
- There is a new name as part of the strategic realignment; it is now titled the Young Members Coordinating Council. The group is working on lessons learned, how information is shared, mentoring programs, and communications with the key audiences who may be out there and interested in participating in the YMCC (Ivanov).
- The SPPR meeting was among the first to take place at the beginning of the pandemic (Turnbull).
- The 100th Centennial is November 11, 2020 and it continues despite the pandemic. TRB is trying to think of ways to make the planned event, panel discussion, and dinner in Washington D.C. and make them either virtual or postponed until next year. The "Your Future in Transportation" video is among the many products created as part of the Centennial and has been effective and is useful for attracting a viable transportation workforce (Houston).
- The Communications Strategic Plan is progressing well and there should be a document to share in the next several months. It incorporates many different elements from the NRC, OCCO, staff and volunteer feedback, and the newsletter audience survey conducted in March (Mackie).

1:48 p.m.

Approval of Consent Agenda (Braceras) Action

- The agenda was approved.

1:53 p.m.

Diversity, Equity, and Inclusion Update (Multiple) Information

- The many diversity activities ongoing and planned of the Inclusion and Diversity Committee were detailed. Resources and strategies for committees and panels were also listed (Lewis).
- The USDOT Accessibility Strategic Plan was detailed. It includes a \$5 million Inclusivity Design Challenge, nearly \$5 million to fund four new University Transportation Centers, among much else (Furchtgott-Roth).

- The TRB Minority Student Fellows Program went well in this past year, its 11th year, with 25 students from 17 schools. This year we have the biggest diversity of majors ever. The 2021 TRBAM will have an opening meeting and work is ongoing to develop guidance for participation (Febey).
- The previous discussion on the Critical Issues Update on Equity and Research Issues on Equity was continued with a call for the transportation community to be part of the solution to society's challenges for addressing equity. Then there was a rundown of the issues that have been researched and the research needs (Pedersen/Godwin).

2:45 p.m.

Discuss Diversity, Equity, and Inclusion (All) Discussion

- Redlining has been a notable cause in spatial mismatch. Now gentrification is playing a new role in this trend.
- We need more research on linkage to affordable housing and job access.
- There are significant impacts with unsheltered encampments along transportation corridors and it seems to be growing rapidly during COVID-19.
- If DOE required some research to be partnerships between HBCU and other universities, would that work?
- There can be more analysis of the relationship between transportation pollution exposures (NOx, PM, ozone) and respiratory and other health issues too - especially near bus terminals, highways, ports, and airports.
- Would a focus on QOZ (qualified opportunity zones) help get dollars to needed areas or are there other better designations?
- The time of day of ridership is important to examine.
- There are psychological issues that could be examined, for example, "informal car sharing:" how could transit ever compete against a car that can be used by many members of extended families? There must be a formula to compare those kinds of customers against those who have transit passes.
- We could study the language around equity and how the transportation community can communicate more equitably and more welcomingly.
- We could look at equity issues in more holistic ways.

3:10 p.m.

Consensus and Advisory Studies (Menzie) Information/Discussion

- The study committees appear to be benefiting from short, virtual meetings. For CAAS, there are five studies nearing completion, three that are new, and one that is mid-stage. The self-initiated mobility study is winding down and we would like to consider a new one to start, possibly on the topic of post-COVID-19 travel behavior and decision-making in a time of uncertainty. Does this seem like a topic for a symposium and a study?
- There was enthusiastic support for this self-initiated study, including bringing in teleworking, shopping, recreational travel, real estate trends, freight movement, climate, health, funding, how people psychologically process information when times are so disruptive, and other factors.

3:25 p.m.

Reflections on the Virtual Meeting Format (All) Discussion

- The virtual format seems to have gone well, it was good to spread it out over three days, three hours each days seems like a good maximum time, and people think the packet being available for reading ahead made the balance of TRB reports and substantial topical discussion work well.
- The virtual TRBAM format should work well.

3:36 p.m.

Adjournment (Braceras/Shahen)