AMS10(1) Subcommittee on Electrification & Future Mobility

Chair: John Davies (FHWA)

Vice Chair: Alex Bigazzi (UBC)

Summary of new subcommittee aims and scope

Aims & scope

- Advance AMS10 mission and strategic objectives (from new strategic plan):
 - Near-term focus to address GHG mitigation
 - Connect fundamental research & policy
 - Facilitate case study knowledge sharing
 - Research needs and dissemination
 - Diversify committee involvement
- Specifically in the areas of 2 Research Clusters:
 - Fleet electrification and lifecycle emissions GHG and air quality impacts
 - Behavior change, pricing, & future mobility: TNC, CAV, micromobility, etc.

Activities

- Organize subcommittee meeting @ Annual Meetings
- Collaborate with other AMS10 subcoms & members on:
 - Annual meeting workshops
 - Summer meeting events
 - Website resources
 - TRB articles/events: TRB News, e-Circulars, webinars
 - RNS
- Connect with related TRB committee work outside AMS10
 - Energy, travel behaviour/demand, new vehicles/tech, etc.

Priority areas/issues

- How to facilitate major changes in transport systems?
 - Transportation-energy nexus
 - "Disruptive" mobility
 - Implementation of strategies / policy in combination at the system level, in addition to individual projects
- Evidence base for near-term policy actions (next 2-5 years) that are critical to reduce emissions over the long term

Unique Role of Subcommittee

- Bridging gap between fundamental and applied research, particularly to support the decisions of transportation and air agencies
 - Understanding co-benefits / trade-offs of strategies
 - Understanding interactions among strategies (support consideration of pathways)
- Identifying methodological needs / advancing state of practice (such as LCA analysis, particularly for consideration of GHG emissions)
- Methodological resource for addressing GHG / AQ impacts to support research of other TRB committees

Questions

- Key committees/subcommittees to liaise with? Joint with...
 - AMS30, Transportation Energy
 - AMS40, Alternative Fuels
- Do we need to differentiate our work for other committees / subcommittees?
 - AMS30(1), Climate Change
 - AMS30(3), Energy and Demand Implications of Connected and Automated Vehicles
- Other/priority activities?