

Future Mobility Workgroup Recommendations

June 9, 2021



Review: Our Scenario

- *In a world where the majority of people in the U.S. get from Point A to Point B using a transport mode other than a personally owned vehicle, describe EPA's work and role in reducing emissions transportation while maintaining mobility and accessibility.*
- Modes considered:
 - All forms of **Shared Mobility** (e.g., fixed and flexible transit, TNCs, carsharing and bikesharing, etc.)
 - **Active transport** (i.e., bike/pedestrian)
 - **Micromobility** (e.g., scooters, bikes)

Consider these modes in the context of increasingly smart and automated surface transport systems



“First Principles” to Guide Our Work

We want to:

- Reduce tailpipe and lifecycle GHG and criteria emissions via innovative personal mobility options (Note: not all modes reduce emissions, e.g., mitigate externalities)
- Integrate principles of environmental justice by reducing disproportionate health and other impacts, while increasing social equity, affordability, accessibility, and mobility to create economic opportunity
- Create an efficient transportation system that integrates safety and health concerns to holistically reduce risks to all people

Definitions

Social Equity focuses on fairness and justice. This means distributing resources to people in a just and impartial way. It does not give everyone the same thing (i.e., equality) but rather it focuses on giving everyone what they need today.

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies (US EPA website). See: <https://www.epa.gov/environmentaljustice>

Mobility Justice applies a wider lens than transportation equity. It calls for recognition, participation, deliberation, and procedural fairness discussions, adjustment, and repair. It goes beyond the traditional notion of accessibility by focusing on cultural meaning and the hierarchies surrounding mobility infrastructure by addressing power issues (e.g., valuation and who determines value). It focuses on intentional inclusion by putting underserved and historically marginalized groups at the center of mobility debates, data collection, and analysis (Sheller, 2018). See: <https://www.versobooks.com/books/2901-mobility-justice>



Questions the Group Wrestled With

- How to integrate social equity and mobility justice in EPA's work
- How to ensure a strong voice for EPA at the table with other federal (and state) agencies in crucial policy and program development related to innovative mobility options, electrification, vehicle automation, and safety concerns
- How EPA might adopt incentives or mandatory approaches to support more multi-modal transportation, electrification, higher occupancy levels, and mode shift to active transport
- How EPA could manage automated vehicles in terms of emissions and VMT growth
- How EPA should work to improve access to data, models, tools



We Recommend EPA Should:

- Prioritize social equity and mobility justice across personal mobility strategies moving forward in all agency actions
- Engage with federal and state partnerships and cross-agency task forces to ensure emission reductions, environmental justice, and other agency values are represented in the work, especially related to standard setting
- Continue vital work supporting tailpipe emission regulations within Clean Air Act's mobile source emission control framework, while also considering new regulatory processes
- Continue collecting best data available to estimate on-road vehicle populations and technologies and non-road equipment



We Recommend EPA Should:

- Encourage robust bus and rail public transit services (including microtransit, first and last mile connections, mobility wallets, Mobility on Demand, and Mobility as a Service)
- Encourage compact development patterns and policies favoring low-carbon motorized and non-motorized modes (bikes/scooters) and support related research/metrics/scenario work
- Adapt something similar to CARB's Clean Miles Standard (CA SB 1014) to promote multi-modal transport, electrification, higher motor vehicle occupancy, reduce deadheading, and shift to active transport modes, with credits, incentives, and new metrics



We Recommend EPA Should:

- Reinvent and update past work promoting sustainable communities and smart growth, building partnerships
- Work with DOT & HUD to provide incentives for EVs and shared EV services to improve access for underserved communities
- Shape rules so AVs are electric, programmed to comply with state and local traffic laws, and operated to minimize adverse impacts on health and environment
- Support access by relevant stakeholders to vehicle telematics data to support new methods of emission reductions and promote public health, social equity, and mobility justice goals



We Recommend EPA Should:

- Continue to improve MOVES model to account for ultra-fine particles and secondary organic aerosol precursors, brake and tire wear, etc.
- Foster widespread measurement and reporting on community and personal exposure to pollutants, with timely action to reduce near-roadway health and disparate impacts
- Work with NHTSA to advance vehicle traffic safety technologies (e.g. automated braking, ped/cyclist recognition systems, intelligent speed assistance) to reduce emissions and boost safety of zero-carbon or low-carbon active transport modes