



# HUMAN-CENTERED MOBILITY PRINCIPLES

---

**American communities are at a crossroads.** Transportation and related land use decisions are central to building healthy places for healthy people. The past decade has seen a notable rise in demand and opportunities for people to walk and bike, shared cars and bikes have quickly become a staple of metropolitan life, and many cities are now growing substantially around walkable neighborhoods and transit access. Small towns and rural communities are also seeking ways to increase walking and biking, largely for economic and health reasons. Auto-centric community design is still the norm, but we are seeing more exceptions to the rule and newfound willingness to address tough issues, like speed management and parking requirements. Further, communities are now beginning to grapple with potentially disruptive technologies, such as automated vehicles, which could support or undercut trends favoring human-centered mobility.

The **Partnership for Active Transportation** has developed these shared principles to guide our collective and individual work to shape mobility and community design choices facing our society by putting people and places first.

## 1. Safety

The Partnership supports a comprehensive strategy that incentivizes prioritizing traffic safety at all levels of government to systematically reduce and eliminate causes of serious injuries and fatalities. A *Vision Zero* strategy should include people traveling by all modes, with special attention to addressing rising fatalities among vulnerable pedestrians and bicyclists.

- Managing vehicle speed is a top, immediate priority, as evidenced by recent findings of the National Transportation Safety Board.
- Policies regarding the setting of speed limits should be updated to prioritize safety not only for vehicle occupants, but also pedestrians and bicyclists, as well as quality of life considerations for communities. Speed setting standards should be based on a Safe Systems approach and provide states and communities with more flexibility to ensure safe speeds.
- Provide low-stress walking and biking routes, including use of trails and other traffic separation techniques. Roads should be designed to encourage safe speeds and a low-stress environment for pedestrians and bicyclists.
- The National Highway Traffic Safety Administration (NHTSA) should receive additional resources and commit a greater share of its resources to ensure the safety of all roadway users, not just vehicle occupants. NHTSA should outline a Safe Systems approach and routinely look beyond technological solutions (e.g., brake systems) to multi-faceted traffic safety solutions measured by overall reductions in serious injuries and fatalities.

## 1. Safety (continued)

- Private sector vehicle manufacturers should prioritize safety of pedestrians and bicyclists in product development, including front end design, vehicle weight, external warnings when vehicles back up and open doors, and research and development of automated vehicle technologies (e.g., sensor and anti-crash system designs).
- The safety features of automated technologies should result in fundamental safety improvements rather than marginal gains. The risk of unintended safety outcomes (e.g., programming or design failures) should be transparent, reported and intentionally addressed.
- Safety features should consider the perception of safety as well as actual safety from physical harm by allowing adequate space for pedestrians and cyclists not to feel threatened by the close proximity of motor vehicles.

## 2. Streets are public space

Roads claim a large share of publicly-owned land in cities. Reclaiming street space for people, including active transportation, is one of the best ways to improve quality of life, including public health, safety, the environment and aesthetics.

- Policies and practices that reduce traffic congestion, miles travelled and parking demand, especially in urban cores, should be encouraged. Such actions include:
  - Connecting walking and bicycling routes into seamless, safe and convenient networks;
  - Locating mixed use development within walking distance of transit services; and
  - Using bicycle and vehicle sharing to provide alternatives to single occupant vehicles, especially in areas not served well by transit and to connect to existing transit facilities.
- Filling gaps in active transportation networks should be prioritized when reclaiming road space that is freed up by reduced parking or road diets.
- Planning for mobility and land use should be intertwined. Design guides can help communities thoughtfully reclaim space.
- Current pending federal legislation addresses the design of automated vehicles, but it does not address corresponding changes in community infrastructure. Both are necessary. Policy-makers should specify actions needed to ensure safe and convenient conditions for walking and bicycling, and to incentivize compact development and optimal use of street space from a human-centered mobility standpoint, as automated technologies are designed and deployed.
- Local government prerogatives should be preserved to regulate speed, and the time and place of vehicle use (e.g., car-free zones or size restrictions). Local governments should be given the freedom to experiment with public space in a way that allows it to be more accessible for bicyclists and pedestrians.

## 3. Public engagement and equity

How decisions are made matters greatly. Transportation decisions are among the most challenging issues communities face, and with good reason given the stakes for quality of life. Mobility and land use decisions create winners and losers, and historically have been used to divide and disadvantage certain neighborhoods. Governments should work with communities to alleviate discriminatory circumstances related to transportation and land use. Therefore, it is critical that:

- Mobility and land use decisions be made with robust input from all affected stakeholder groups and the public, and governments engage in genuine problem-solving that respects all points of view.
- Improving outcomes to promote equity for people of color, persons with disabilities, economically disadvantaged and historically marginalized groups become a core value. This includes attention to mobility needs, public health, economic vitality and neighborhood environments for all these populations.
- Active transportation interests have a seat at the table with governments, researchers and manufacturers to ensure that automated vehicles are developed with the right questions in mind and public trust is built. USDOT should lead in establishing this dialogue.
- Federal, state and local governments each play appropriate roles, from calibrating federal regulations and oversight to respond to rapidly changing technologies and set standards regarding equity and community investment, to the responsibilities of local governments to set community goals and manage infrastructure.

## 4. Data

Open data can help to ensure public benefits by providing accountability and enabling innovation. Yet, much data related to emerging mobility technologies is being treated as confidential business information; a matter for competition.

- Local governments need data to be able to plan for future conditions so that cities can grow in safe and desirable ways.
- The public has a right to know how their community may be impacted by mobility decisions to provide informed input to shape those decisions.
- The federal government and states should encourage companies developing emerging technologies to collaborate on use of data for planning and require them to share key data on matters of safety. For example, to grant exemptions from safety regulations for automated vehicles, the federal government should evaluate opportunities for companies to share information that could accelerate development of safer technologies.
- Transportation networks can impact both physical and behavioral health; public health partners can provide and interpret data to inform community planning to improve population health.

## 5. Affordability

Walking, bicycling, and public transit are affordable transportation options that provide essential mobility for low-income families. Absence of safe, connected walking and bicycling conditions and under-investment in public transit services force many low-income families to purchase and maintain a private vehicle to keep a job, attend school, and meet daily needs. The average cost of owning and operating a car in the U.S. is \$8,469/year [AAA]. In addition, local state, and federal governments spend several thousand dollars per household per year to construct, maintain, and operate roadways.

- Everyone should have equal access to mobility, irrespective of socio-economic status. Federal transportation funding should focus on improving conditions for walking, bicycling, and public transit so that low-income families can live well without owning a car.
- Local governments should calculate the total per capita costs of providing transportation infrastructure and services to its residents, and seek to maximize the benefit-to-cost ratio of these investments.
- Research should be conducted to determine the impact of new technologies on transportation equity, and encourage those measures that are likely to increase transportation equity (e.g., autonomous public transit shuttles).

July 2018

