# BUILDING THE FOUNDATION FOR 50X50

A POLICY PROPOSAL FOR INFRASTRUCTURE AND SURFACE TRANSPORTATION AUTHORIZATION

The Alliance 50x50 Commission is a diverse group of leaders in the transportation sector that has articulated a vision to cut energy use in transportation by half by 2050 ("50x50") while making transportation more productive, more efficient, cleaner, and more accessible for all. In 2018, the Commission published a report of general policy recommendations in support of the 50x50 goal, titled "50x50: Reinventing U.S. Mobility." The recommendations in this policy proposal go one step further, identifying specific programs and opportunities for federal policymakers to act on the 50x50 objectives through infrastructure or surface transportion reauthorization legislation.

It is well-established that strong, well-designed transportation infrastructure is the foundation of our economy and an investment that delivers returns. It empowers economic growth and improves our international competitiveness, environmental sustainability, and quality of life.

The urgency for infrastructure investment is building. Emerging technologies are poised to optimize the transportation system and reach new levels of efficiency. But these opportunities create new questions: how our vehicles of the future will fuel; how to facilitate the movement of freight and people without increasing traffic congestion; how to leverage U.S. innovation in transportation industries to create jobs; how to design transit for the future; how to move more people in fewer vehicles and lower emissions in the era of new business models for ridesharing and automation; and how to do all of this while making transportation more productive, more efficient, cleaner, and more accessible for all.

We cannot approach this challenge with the same thinking as in the past. In recent years, infrastructure development has been repeatedly delayed, minimized, or pursued sporadically in response to fiscal constraints. However, this is the significantly more expensive path. A far better option is to consider the sector's needs holistically and pursue those investments that will deliver the best outcome by utilizing advanced technologies and new business models.

#### **EXAMPLES OF 50X50 TRANSPORTATION INNOVATION**



Electric buses can result in fuel cost savings of more than 80 percent and efficiency improvements of 25 miles per gallon (equivalent) compared to diesel buses at 3.6 miles per gallon. Adoption is growing rapidly, and federal grant funds can support the purchase or lease of electric transit vehicles, battery systems and charging infrastructure.



In the city of Pittsburgh, traffic idling dropped by 40 percent and emissions were reduced by 21 percent when 50 intersections were equipped with smart traffic signals.



Carsharing, an example of Mobility On Demand (MOD), demonstrates the benefits of projects that use smartphone apps, open data platforms, and other advanced technologies to better deliver citizens to their destinations. A UC Berkley study concluded that, per household, one-way car sharing reduced vehicle miles traveled 6-16 percent and greenhouse gas emissions 4-18 percent.

## **ROADMAP TO 50X50 INFRASTRUCTURE**

The policy proposals would ensure the main tools of transportation infrastructure development will create a robust marketplace for private investment. They focus on the myriad policies and programs that can enhance the productivity and efficiency of energy use by empowering regional, state, and local policymakers to optimize decision-making on behalf of their constituents. To move toward the 50x50 vision, we need to ensure these programs are sufficiently funded and modernized to match our future needs. The following policy recommendations can help get us there:

### PREPARING FOR A 50X50 FUTURE

- ✓ Establish a sustainable resource base for infrastructure development by identifying a sustainable and energy-efficient path forward for the Highway Trust Fund.
- Stimulate the development of electric vehicle charging infrastructure through new programs and adjustments to existing tax credits.
- Build in flexibility for technological innovation in the future.

### **BALANCED INFRASTRUCTURE DEVELOPMENT**

- ✓ Pursue a well-balanced approach that looks beyond roads, bridges, and new builds.
- Empower state and local stakeholders to develop system-level solutions.
- ✓ Ensure a level playing field for energy-efficient transportation options.
- Utilize fair labor practices with the consistent application of the Davis-Bacon Act.

#### MODERNIZED INFRASTRUCTURE PROGRAMS

- Modernize broad programs that support efficiency, such as Better Utilizing Investment to Leverage Development (BUILD) Grants, Surface Transportation Block Grants, Congestion Mitigation and Air Quality Improvement (CMAQ), and Diesel Emissions Reduction Act (DERA).
- Boost financing resources such as the Transportation Infrastructure Finance and Innovation Act, Build America Bonds, Municipal Bonds, and Private Activity Bonds.
- Ensure specific programs for transit, ports, and airports invigorate efficiency through the Airport Improvement Program, federal transit programs; Capital Investment Grants, and Port Modernization programs.

