



EXECUTIVE SUMMARY

Modernizing American roads and transit systems to drive public good

The White House infrastructure proposal – the American Jobs Plan (aka, “the Plan”) – offers a once-in-a-generation opportunity to modernize America’s highways, roads and city streets. But in addition to physical infrastructure investment, it must also provide the backend technology that will bring that infrastructure into the 21st century: to scale Internet-enabled communications and transportation technologies and place them strategically throughout metropolitan areas to pave the way for the functioning of America’s smart cities of the future.

Internet of Things (IoT)-based transportation, transit and public safety technology solutions have the potential to transform American cities by enhancing safety, delivering efficiencies – such as cost and time savings –, and reducing harmful pollutants, including greenhouse gas (GHG) emissions and conventional air pollutants.

This white paper urges transportation infrastructure influencers and decision-makers to commit to these six specific actions, designed to improve road infrastructure and transit systems, while prioritizing safety, health and equity:

- 1. Prioritize smart intersection connectivity:** Ensure that all *new* intersections are connected and achieve a 50 percent increase in connectivity of *existing* intersections by 2030.
- 2. Advance Vision Zero in communities across the country:** Take action to support President Biden’s goal to eliminate traffic deaths.
- 3. Promote accessibility and equity in public transit:** Call for 50 percent increased public transit ridership and greater access in disadvantaged communities.
- 4. Protect public health by reducing harmful emissions:** Call for a 75 percent reduction of emissions of harmful conventional pollutants and greenhouse gases (GHG) associated with the transportation sector.
- 5. Scale infrastructure with the power of software:** Unlock 50 percent more budget to pay for innovative services through subscription models.
- 6. Incorporate connectivity with intersections into all new vehicles:** Maximize efficiency and reduce congestion by incorporating connectivity with intersections into all new vehicles by 2035.

Collectively, these calls to action provide a new vision for the smart city of the future and the infrastructure needed to build it today. These innovations help to save lives, improve access to public transit for the vulnerable and disadvantaged, improve the environment through lower emissions and reduced congestion and expand the number of communities that will benefit from smart transportation technologies.

Smart intersections, subscription-based infrastructure projects and new vehicle connectivity are key aspects of modern transportation infrastructure and this white paper urges prompt action to invest in the future of American communities and roadways.