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## America is ready to invest seriously in transportation. Let's make sure we do it efficiently.

After a particularly divisive election season, it is heartening to see that *one* issue seems to be creating a potential point of unity among a broad range of political quarters: *investing in our nation's infrastructure*, namely our roads, bridges, airports and other transportation assets.

President-elect Donald Trump has vowed to invest as much as \$1 trillion dollars, spread out over 10 years, to restore or upgrade our crumbling infrastructure coast to coast. This is a promising development, especially since it comes as many states and municipalities have themselves recently committed to major transportation investments. In the November 8 election alone, voters in 22 states approved ballot measures that will provide \$203 billion in funding extensions and new revenue for state and local transportation projects.

With such a formidable one-two punch of federal and state/local dollars in the near term, America may have a once-in-a-lifetime opportunity to reposition its transportation infrastructure for the future. And, yet, there is one major challenge: spending money in the *right* ways.

No doubt, we first must repair hard-working transportation assets that are seriously deficient or dangerous. Public safety comes first, and organizations such as the American Society of Civil Engineers have routinely documented how our bridges, highways, transit systems and other assets are woefully in need of maintenance investments.

More broadly, however, we must make our infrastructure investments very *strategically* if we are to achieve gains - in jobs, economic growth,

global competitiveness, and quality of life - that Americans deserve. We must rethink our transportation priorities and approaches so that new spending allows us to leapfrog to a new level of performance, rather than merely catching up to where we should have been for decades.

Here are just a few ideas for ensuring that America achieves the greatest benefit from our transportation spending in the coming years:

- **Prioritize projects transparently** - When we're spending large amounts of public money on transportation, it's critical that we preserve taxpayers' trust. One way we do this is by removing politics from the equation when determining which projects to prioritize. Virginia's "Smart Scale" program is one example of how a data-driven scoring model can serve to standardize and rationalize the decision-making process. The program scores projects based on how well they ease congestion, improve economic development, provide access to jobs, enhance safety and environmental sustainability, and efficiently use land.
- **Deliver projects more efficiently** - Many states now allow the use of a design-build method for delivering large, complex transportation projects. Design-build brings together designers and contractors at a project's beginning, under a single contract, which can spur innovation, gain economies of scale, accelerate the timeline, and seize other opportunities to deliver the project at a significantly lower cost than offered by the traditional design-bid-build method. By adopting design-build for more projects, and even smaller projects, we can get more transportation improvements for the dollars we invest.

- ***Innovate before we construct*** - Before we take steps to widen highways to deal with congestion, we should consider other techniques that can be more cost efficient. For example, in urban areas where congestion builds quickly due to closely spaced on-ramps, planners can consider a technique called ramp metering, which uses traffic lights to adjust the flow of vehicles entering the highway. Another approach is to temporarily allow the use of breakdown lanes for travel, using signage to notify drivers when these lanes are open for traffic. The net effect of these techniques is to increase capacity during times of greatest demand, without building new lanes that are costly to construct and maintain - and which are often unnecessary beyond the rush hour.
- ***Advance user-centered mobility*** - Technology is revolutionizing virtually every aspect of travel, from digital maps for planning trips, to GPS guidance, to digital tickets for trains and subways, to ride sharing. We need to invest in strategies and technologies that erase the seams between modes, so travelers can assess and activate their mobility options easily. Ideally, a person should be able to plan a trip, see travel time and costs in real time, purchase relevant fares for public transportation, and hail a ride - all before heading for the shower.

These are just a few of many ideas and strategies that could help us improve our transportation system significantly, while also ensuring that each dollar is spent effectively. We can expect significant debate as our leaders seek agreement on a range of transportation-related policy issues surrounding rural-versus-urban project prioritization, public transit investments, regulatory issues and, of course, the best ways to fund the work at the federal level.

Hopefully, these debates will lead to more predictable and sustainable funding for our transportation infrastructure, not just for the next 10 years, but for the next 40. Only by making a long-term commitment can we build the infrastructure to compete on the global stage and deliver value every day for everyday Americans.

***About the author***

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