

# Richmond Times-Dispatch

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## **Phyllis J. Randall, David F. Snyder and Cathy McGhee column: Using technology to assess demand on Va.'s infrastructure after COVID-19**

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By Phyllis J. Randall, David F. Snyder and Cathy McGhee

While the pandemic has presented challenges over the past year, technology allowed us to connect with family, friends, colleagues and businesses from afar, and offered the ability to work from home and keep critical government services operating.

Yet, despite all the benefits of technology, eyebrows tend to raise when the idea of meshing technology with transportation is discussed.

But, like it or not, technology already is disrupting our lives. So, let's embrace it. In fact, during his recent trip just outside of Detroit, President Joe Biden called for the United States to become the world leader in electric vehicle production as part of his \$174 billion electric-vehicle proposal.

Just last month, the CEO and co-founder of Virgin Hyperloop, Josh Giegel, spoke to the U.S. House Transportation and Infrastructure Committee about emerging mass transportation technology as an investment in a cleaner and more efficient system.

Some of us in the public sector also are exploring transportation innovation to position Northern Virginia for the months and decades ahead, while aiming for a more equitable, sustainable and safe future — criteria that can be used as a guide for considering clean mobility and transportation technology solutions.

Examining a new normal in a post-pandemic world will be essential. The pandemic has proven that when societal needs becomes paramount, we can adjust, endure and even thrive.

One of the few positive outcomes of the pandemic was its impact on the environment. With transportation emissions being a significant source of greenhouse gases, less travel meant cleaner air and clear views not seen in years in places like Los Angeles.

If we are to prevent, or at least delay, the worst effects of climate change, we must rethink how and when we travel, invest wisely in sustainable travel options and optimize how we operate our transportation systems, all the while ensuring the vitality of the economy across the Washington, D.C., region.

In short, we must reduce — and preferably reverse — our dependency on driving alone, adopting this approach as the new normal.

While the Biden administration is preparing to make a big investment in our nation's infrastructure, and Big Tech and the automotive industry already are making significant investments in transportation technologies including electric and autonomous vehicles, we in state, local and regional governments need to act as well and not get left behind.

In Northern Virginia, we have recently taken our first proactive step towards this new normal with a strategic plan for transportation technology.

A collaborative approach to development of a transportation technology strategic plan — involving transportation, technology and policy experts from across the region who could guide us through uncharted waters — was key.

Equally important was listening to the pragmatists and skeptics along the way. As we face increasing demands on our infrastructure and as technologies continue to rapidly evolve, it is critical we work as a region, looking beyond jurisdictional lines.

It also is important to avoid reinventing any wheels where there are separate initiatives already underway. Collaborating between the public and private sectors, while eliminating siloed conversations, might lead to a common goal.

Proactively planning how to use evolving technologies to address travel demand on infrastructure has been a transportation priority for Virginia for some time.

In early 2018, Gov. Ralph Northam approved a request from Virginia Secretary of Transportation Shannon Valentine to create the Office of Transportation Research and Innovation.

The administration saw the importance of integrating innovation and technology across Virginia's multimodal transportation network, in coordination with regional and local partners.

Focusing on data and analytics, automated vehicles and systems, fiber and communications, and cybersecurity, the office is partnering with entities across the commonwealth to improve mobility in ways that use the infrastructure we have more efficiently across all modes and provide travelers throughout Virginia with meaningful choices.

As we plan strategically for the future of mobility and invest in an infrastructure that can support new technologies — while embracing the values of safety, equity and sustainability — it is critical we address congestion reduction, accessibility to jobs, cybersecurity and privacy, autonomous vehicles (especially zero-occupant passenger vehicles), incentive and pricing mechanisms, communications infrastructure, regional interoperability, and infrastructure to decarbonize the transportation system.

Growth in the commonwealth brings opportunity, but also challenges. We can accommodate growth if we are smart, but this necessitates a new technology-infused way to proactively plan for transportation needs that will increasingly complement traditional multimodal approaches to improving and expanding transportation infrastructure. It doesn't have to be an either-or situation.

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