

White Paper

Innovative Federal Infrastructure Package Needed

Compiled by: A-to-Be® | Mobility-Beyond

Abstract

For the economy to bounce back, **a national infrastructure package is imperative.** An infrastructure package would put money back into the economy, create much-needed jobs, and finally start a comprehensive program to repair our crumbling infrastructure. **The COVID-19 lockdown has deeply shaken the United States' economy, creating a radical decline in movement and a steep reduction in car travel.** Even if driving rebounded completely by the summer, 2020 would see the lowest nationwide vehicle miles traveled since 1998¹. Across the countries every metropolitan area saw a drop of traffic of at least 53%². The federal government must act quickly in conjunction with the states to enable economic recovery while supporting a modern transportation system led by companies such as A-to-Be.

COVID-19 has caused a disruption in almost every industry and transportation is no different. Elected officials and leaders now have the ability to disrupt and revamp a transportation system that was stuck in the 1990s into a modern offering. Perhaps some of the over-night changes that took place because of the virus will nudge the industry forward towards the future. For example, tolling authorities have taken aggressive steps and instituted cashless payments to slow the spread of the virus.

To maintain social distancing, corporations have implemented work from home policies which has eliminated traditional rush hours. The lack of commuting has further impacted depressed gasoline tax revenue, while nearly bankrupting public transit, as commuters have moved to demand better streetscapes for bikes, walking, and other non-auto uses.

Meanwhile, **fewer drivers are getting into accidents, resulting in lower premiums for auto insurers.** Even state motor vehicle departments are getting slammed as license and registration fees are down, and U.S. auto sales are falling due to closed dealerships and factories. **One of the few positive things that are down due to the outbreak is greenhouse gas emissions from cars, power plants, and other sources in the U.S. are forecast to decline** by a whopping 7.5% this year.³

Introduction

The Highway Trust Fund numbers in April's Treasury Statement showed that **fuel and truck taxes were down 14% compared to 2019**. This is not as big of an impact as expected, but experts predict that over the next few months the massive drop in mobility will be reflected even more.

However, at the state level, **states are losing billions**. California, for example, could lose up to \$20 billion in transportation revenue over the next 10 years – not just due to fuel taxes, but due to transit fares, tolls, and related sales taxes.⁴ Meanwhile, North Carolina has postponed over 100 projects worth \$2.2 billion⁵, Columbus Ohio has postponed its major interstate highway project⁶, Missouri has put on hold over \$40 million worth of projects,⁷ and San Francisco has postponed its planned \$1 billion capital raise for a total rail, bus, and ferry overhaul. An economic report from EBP U.S., Inc., showed decreased investment in public transit would cost the country 37,000 construction jobs in 2020 and 34,000 construction jobs in 2021.⁸

Both Republicans and Democrats know that an infrastructure package is needed, but greatly disagree about how to do it. The "Fixing America's Surface Transportation or FAST Act of 2015," expires at the end of 2020 and both sides have vowed reauthorization.

Last year, House Democrats and President Trump began to negotiate an infrastructure package until those talks collapsed due to political differences. A House transportation panel is likely to unveil a multiyear highway bill next month, almost a year after the Senate Environment and Public Works Committee approved their version. After Congress cleared its most recent nearly \$500 billion small-business assistance bill, the Trump White House intends to pursue funding for infrastructure projects in the next economic stimulus measure.

Recently, President Donald Trump has pointed to a desire to tackle infrastructure-centric concerns through a \$2 trillion package. He has insisted the package would be funded through long-term borrowing at 0% interest, and his administration has signaled that proceeding with big-scale transportation projects would help to facilitate an economic recovery across parts of the country.

House Democrats passed the Heroes Act on May 15th, a fifth stimulus package totaling approximately \$3 trillion. The piece of legislation also includes \$15.75 billion for the transit industry, in addition to the \$25 billion provided to U.S. transit agencies through the Coronavirus Aid, Relief and Economic Security (CARES) Act.

The Heroes Act would allocate \$15.75 billion for transit and would be split into an \$11.75 billion bucket for urbanized area formula funds for transit entities serving populations of more than three million that would be distributed using Fiscal Year 2020 formulas and \$4 billion in grants. **The act would also create relief funds for state and local governments to access through the Department of Treasury to support essential workers, including transit employees.** Now the legislation heads over to the Republican Senate where it is not expected to be taken under consideration.

Political Analysis

Money alone will not solve our infrastructure problem. A clear vision is needed by the federal government. Large scale national and regional projects, promoted by the Trump Administration's proposal, support state, local, and private partners who build, own, and operate the vast majority of U.S. surface transportation infrastructure.

While President Trump's plan also would implement billions of dollars in loans for 0% interest to incent infrastructure projects, this funding must be targeted toward developing and implementing new infrastructure technology. The U.S. is only ranked 13th globally for infrastructure, behind major European and Asian countries that are accustomed to public-private investment in development.⁹

The House Democratic plan includes significant investment in infrastructure like roads and bridges, that haven't been upgraded since 2009, leaving over 47,000 passages in disarray, it doesn't yet specify the technology needed to propel our systems into the 21st century. **Modern technology will create efficiencies and bring the overall cost down.**


Recommendations

While transportation technology is apolitical, use of it is not. **Road Usage Charging (RUC), or Vehicle Miles Traveled (VMT), has long been evaluated by states as an alternative to tolling, which is commonly considered the implementation of a new tax.** Currently, many blue states have already implemented RUC and over thirty states are evaluating this possibility. A-to-Be's Transportation Funding Series offer examples of studies, pilot programs and exploratory measures currently underway by state and federal government, exploring specifically experiences through pilots in Washington state, California, and Oregon. **Now is the perfect time to implement RUC nationwide, as vehicular travel is down in some areas over 70%.¹⁰ As drivers slowly return to the roads, RUC technology will fairly charge existing drivers.**

Railways are another major opportunity for improvement for the next infrastructure package. Right now, COVID-19 pointed out many inequities in the standard of living between the rich and poor. For example, the wealthy, who typically drive, can stay home and shelter in place, or commute into work riding in a car by themselves – compared to the poorer population, which has to continue to use a broken-down public transit system.

Although this system implemented COVID-19 policies, lower-income public transit commuters were left with no other option. **This is in stark contrast with Europe, where trains and public transit are commonly used.** In Europe, rail systems are commonly owned and financed by the government, frequently in public-private partnerships with the latest high-speed technologies. Meanwhile, in the U.S., rail systems are owned mostly by the private sector, although they are suffering economically, and are used primarily for freight transit. Currently, the plans on the Republican and Democratic sides both ignore additional funding to rail transit and developing new, high-speed technologies.

Along with upgrading America's basic surface infrastructure, **it is time for the United States to look at Mobility as a Service (MaaS) and find ways to interconnect the customer experience for all travelers nationwide.** Technology upgrades across the system would allow governments at the state, local, and federal levels to charge for transactions, prevent leakage in current systems, and empower a customer experience that seamless and automated – reducing the need for costly overhead. **In a recent article, A-to-Be further discusses how technology is capable of empowering Smart Cities, advising the United States to follow Europe in implementing MaaS in order to maintain social hygiene and distancing, create new jobs, and ensure the economic vitality of transportation network.**



Major disadvantages in today's mobility as a service infrastructure in the USA include the fact that fares are commonly too high or increase at rates that do not show complete cost savings from driving, routes are inadequate, and vehicles – trains or buses- are downright aged. Investing in new technology would solve all of this. **Enabling back-office systems that seamlessly integrate the customer experience would allow charges on each transaction, creating new revenue streams for America's highway fund.** Technology today can integrate every nation's roadways throughout the EU, so it should be possible to implement this across the United States, for example.

Using better technologies, public transit could reach outside of basic cities and into suburbs, which are often locked into the use of vehicles on aging roads. Meanwhile, evaluating international cities like Toronto, Hong Kong, and Lisbon, interoperability and MaaS extends far beyond the city limits, growing suburbs and improving safe transit throughout.

As the U.S. grapples perhaps with the greatest economic reset of our generation, we must evaluate new and improved ways of mobility. Traditional means of toll booths, and the gas tax for revenue will only keep our society behind – struggling with unreliable, overcrowded systems, and continuing to release harmful emissions on the environment.

About A-to-Be

A-to-Be is a Portuguese-based company powered by Brisa (its major shareholder) responsible for developing and delivering solutions to mobility service operators internationally. For over 40 years, the company has provided leading tolling, traffic management, smart city, and revenue assurance solutions across Europe and the United States.

A-to-Be processes over 1 billion tolling transactions and 25 million multi-service mobility transactions annually, managing more than 7 million customer accounts. A-to-Be provides a multitude of tolling solutions including self-service, electronic and satellite, as well as solutions connected directly to your smart device. Our solutions are vendor-independent, plug-and-pay and can be diversified to provide payment options for parking garages, public transport, fuel stations, and other MaaS value-added solutions.

For more information, please refer to a-to-be.com

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Works cited:

- 1 Geman, B. (2020, May 4). The push to keep traffic at bay after the coronavirus pandemic. Retrieved from <https://www.axios.com/traffic-coronavirus-economic-reopening-14508d62-7871-451f-912e-3e399bc2f5e1.html>
- 2 Tomer, A., & Fishbane, L. (2020, May 1). Coronavirus has shown us a world without traffic. Can we sustain it? Retrieved from <https://www.brookings.edu/research/coronavirus-has-shown-us-a-world-without-traffic-can-we-sustain-it/>
- 3 Storrow, B. (2020, April 17). PANDEMIC: Coronavirus is reducing CO2. Why that's worrisome. Retrieved from <https://www.eenews.net/stories/1062893583>
- 4 King, A. (2020, May 21). COVID-19 Pandemic Could Cost California Transportation Billions in Revenue. Retrieved from <https://luskin.ucla.edu/news/transportation>
- 5 Jansen, B. (2020, May 4). Coronavirus cuts transportation funding puts major road and bridge projects on hold. Retrieved from <https://www.usatoday.com/story/news/politics/2020/05/04/coronavirus-transportation-officials-urge-federal-aid-roads-bridges/3005467001/>
- 6 Ferencik, M. (2020, March 27). Downtown Columbus highway project delayed due to coronavirus. Retrieved from <https://www.dispatch.com/news/20200327/downtown-columbus-highway-project-delayed-due-to-coronavirus>
- 7 Stay-at-home orders imperil road funding for Missouri, other states. (2020, April 12). Retrieved from <https://www.ky3.com/content/news/Stay-at-home-orders-imperil-road-funding-for-Missouri-other-states-569578941.html>
- 8 Staff, M. E. T. (2020, May 8). APTA urges Congress to provide additional COVID-19 response funding. Retrieved from <https://www.metro-magazine.com/government-issues/news/738343/apta-urges-congress-to-provide-additional-covid-19-response-funding>
- 9 US ranks 13th in infrastructure quality. (2019, November 12). Retrieved from https://www.pgpf.org/chart-archive/0215_infrastructure-ranking-by-country-world-economic-forum
- 10 Dutzik, T. (2020, April 21). America on pause: Vehicle travel during COVID-19 and what comes next. Retrieved from <https://usp.org/blogs/blog/usp/america-pause-vehicle-travel-during-covid-19-and-what-comes-next>