

Environmental Law & Policy Center ♦ Natural Resources Defense Council ♦  
Sierra Club ♦ Southern Environmental Law Center

July 11, 2016

The Honorable Anthony Foxx  
Secretary  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington, D.C. 20590

The Honorable Gina McCarthy  
Administrator  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW 1101A  
Washington, D.C. 20460

The Honorable Dr. Ernest Moniz  
Secretary  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, D.C. 20585

The Honorable Jeffrey Zients  
Director  
National Economic Council and  
Assistant to the President for Economic  
Policy  
1600 Pennsylvania Avenue, NW  
Washington, D.C. 20500

Dear Secretaries Foxx and Moniz, Administrator McCarthy, and Director Zients:

Autonomous vehicle technology is evolving rapidly, and these vehicles may well be a significant component of our transportation system soon. Car makers promise dramatic increases in automobile safety and improved transportation options for the elderly and the disabled. We write following a letter from the Environmental Law and Policy Center dated March 14, 2016, in which some of the issues below were raised.

While safety is the top priority in discussing the related technical and regulatory issues, we urge the U.S. Department of Transportation, in consultation with the U.S. Environmental Protection Agency and the National Economic Council, to also carefully consider the potential greenhouse gas emissions and other environmental impacts – both benefits and detriments – that result from accelerating autonomous vehicles.

Many potential impacts of autonomous vehicles are unclear, including impacts on vehicle miles travelled (VMT), vehicle emissions, public transit, and land use, which in turn can have significant positive or negative impacts upon our environment. Moreover, we are concerned that because the current efforts are focused primarily on traffic safety, housed within one subcabinet agency at the USDOT, that the Administration may be missing some of the bigger policy concerns that must be taken into account before any deployment of these technologies.

Autonomous cars offer the promise of dramatic safety improvements and reduced congestion by optimizing road use. Less congestion should result in less pollution. Likewise, optimizing driving efficiency to maximize miles per gallon actually obtained should result in less pollution. Moreover, autonomous vehicle might increase the attractiveness of car-pooling and ride-sharing that should result in less pollution. On the other hand, if driving trips become more attractive, that could

exacerbate sprawl, lead to less transit use, thereby resulting in more pollution. We urge USDOT to carefully consider the wide variety of potential impacts that can arise from this valuable new technology.

The USDOT's "Smart Cities" initiative is an important first step in addressing these and other anticipated and unanticipated consequences of a changing transportation system. This unique partnership between the USDOT and the City of Columbus should help us all identify more of the policy challenges and opportunities of autonomous vehicles.

The National Highway Traffic and Safety Administration's (NHTSA) process under the "Guidelines for the Safe Deployment and Operation of Automated Vehicle Safety Technologies" (Docket No. NHTSA-2016-0036) is a necessary step for addressing safety, but other important policy issues are not being addressed.

As a result, we request that the Administration convene an interagency work group and initiate a public participation process to begin to address the broad array of policy challenges and opportunities autonomous vehicles present.

First, we believe that the federal government must come up with mechanisms to ensure that the spread of autonomous vehicles reduces – and does not increase – carbon dioxide (CO<sub>2</sub>) emissions that cause adverse health, environmental, transportation and economic impacts. We recommend that USDOT and USEPA evaluate ways for autonomous vehicle fleets to accelerate the transition to zero emissions, electric-drive vehicles and allow for further integration of renewable electricity. While some autonomous vehicle pilot projects involve electric-drive vehicles, automakers will also deploy the technologies to vehicles that rely on fossil fuels. Exploring zero emission options for autonomous vehicles will help ensure that the technology reduces pollution.

Second, USDOT and USEPA should conduct an in-depth study of the potential impact of different levels and rate of deployment of autonomous vehicles on traffic congestion and determine, to the best extent possible, whether these vehicles will add to or replace the existing fleet of personal and commercial vehicles. A recent KPMG study, for example, concluded autonomous vehicles could increase dependence on motor vehicles by certain age groups and dramatically increase VMT overall.<sup>1</sup> Any major uptick in additional VMT will add stress to the existing system and could increase pollution, which must be weighed against the benefits this new technology may bring.

And third, the utilization of autonomous vehicles should factor into other policies, especially if such vehicles are to be used for commercial purposes. For example, an ongoing discussion about off-peak deliveries during non-rush hour travel periods could help with emission and traffic reduction by taking truck traffic off of main roads and highways during rush hour periods. We believe additional study of the potential role of autonomous vehicles in freight movement could prove useful as they begin to be deployed.

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<sup>1</sup> See "Self-Driving Cars: Are We Ready?" by KPMG available at: <http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/Documents/self-driving-cars-are-we-ready.pdf>

We urge the Administration to convene a comprehensive group of federal agencies, stakeholders and Members of Congress to discuss these issues. We stand ready to provide our technical expertise, ideas, and input as part of the process.

We appreciate the efforts of President Obama, as well as your agencies' initiative, and we look forward to working with you in the months ahead.

Sincerely,



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Howard Learner  
Executive Director  
Environmental Law and Policy Center



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Trip Pollard  
Director, Land and Community Program  
Southern Environmental Law Center



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Deron Lovaas  
State/Federal Policy & Practice Director  
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