516 HART SENATE OFFICE BUILDING WASHINGTON, DC 20510 (202) 224–3542 CortezMasto, Senate, Gov

# United States Senate

BANKING, HOUSING, AND URBAN AFFAIRS ENERGY AND NATURAL RESOURCES INDIAN AFFAIRS

COMMITTEES:

**FINANCE** 

RULES AND ADMINISTRATION

January 13, 2020

Patrick McKenna AASHTO President; Director, Missouri DOT American Association of State Highway Transportation Officials 444 North Capitol Street, NW, Suite 249 Washington, DC 20001

Jim Tymon
AASHTO Executive Director
American Association of State Highway Transportation Officials
444 North Capitol Street, NW, Suite 249
Washington, DC 20001

Paul P. Skoutelas President & CEO American Public Transportation Association 1300 I Street, NW, Suite 1200 East Washington, DC 20005 Nuria I. Fernandez Chair American Public Transportation Association 1300 I Street, NW, Suite 1200 East Washington, DC 20005

Dear Mr. McKenna, Mr. Tymon, Mr. Skoutelas, & Ms. Fernandez:

I am writing regarding the role of state departments of transportation (DOTs) and public transportation operations in lowering emissions in our nation's transportation system. As Congress considers reauthorization of the surface transportation bill, I look forward to working with you and your members to develop policies that encourage the adoption and use of zero-emissions vehicles (ZEVs).

As you know, the transportation sector has become the largest contributor of greenhouse gas emissions in the United States, surpassing electricity generation, industrial use, and agriculture, and all other sectors. If we are to solve the pressing challenge of climate change, part of the solution must be to transition private vehicle use away from traditional fuels into more sustainable options. That is why I have made this a priority in the Senate and proposed multiple bills aimed at decreasing transportation emissions including legislation to create a national commission and strategy on electrification and bills to support incorporating zero emission vehicle technology into all areas of transportation, including schools, transit operations, and our federal lands.

Highways and transit will play a leading role in this effort. Given the diversity of our nation's geography, infrastructure, and populations, federal policy alone is not capable of solving these challenges and instead must empower state and local governments, as well as transit operations, to adopt the solutions that best fit their communities.

<sup>&</sup>lt;sup>1</sup> https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

Continued collaboration is also vital to maintain our global competitiveness. China has rapidly expanded its research, development, manufacture, and sales of electric vehicles. Nearly 580,000 electric cars were sold in China in 2017, more than double the number sold in the United States.<sup>2</sup> If the United States fails to move quickly, our nation's automotive and clean energy manufacturing base will be at risk.

Our national and state policies must be effectively coordinated to best support the transition to electric and other zero-emissions vehicles (ZEV). For these reasons, I am looking forward to working with you on this issues going forward, and would appreciate your feedback on the following:

- How can federal policy best support efforts by state DOTs and transit operators in ensuring adequate infrastructure for ZEVs exists?
- What challenges do state DOTs or transit operators face when coordinating efforts across state lines?
- How are your member departments and operators working with local utilities, energy providers, and charging companies to address these challenges?
- Are there federally imposed direct, or indirect, barriers to building out charging and refueling infrastructure that would be useful to reexamine?
- Would an overarching federal strategy be useful for departments in setting ZEV attainment goals?

I appreciate your attention on this matter and look forward to working with you during consideration of an upcoming transportation reauthorization bill to ensure federal policy best supports reducing emissions in the transportation sector. Please do not hesitate to reach out to my staff (Trevor Dean@cortezmasto.senate.gov) with any questions.

Sincerely,

United States Senator

<sup>&</sup>lt;sup>2</sup> https://news.transportation.org/Pages/060118.aspx

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COMMITTEES:

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Mr. Tim Cook CEO Apple Inc. 1 Apple Park Way Cupertino, CA 95014

Dear Mr. Cook:

I am writing to you regarding the adoption of electric vehicles (EV) and zero-emissions vehicles (ZEV) into the nation's transportation network. As innovation in infrastructure systems are critical to the success of mitigating climate change and promoting public health, I hope we can work together on policy solutions that will meet these goals.

The transportation sector has become the largest contributor of greenhouse gas emissions in the United States, surpassing electricity generation, industrial use, and agriculture, and all other sectors. If we are to solve the pressing challenge of climate change, part of the solution must be to transition private vehicle use away from traditional fuels into more sustainable options. That is why I have made this a priority in the Senate and proposed multiple bills aimed at decreasing transportation emissions including legislation to create a national commission and strategy on electrification and bills to support incorporating zero emission vehicle technology into all areas of transportation, including schools, transit operations, and our federal lands.

EVs are also becoming far more popular among American consumers. There were 208,000 new registrations for electric vehicles in the U.S. last year, more than double the previous year. By 2025, EVs are projected to rise to 7% of all vehicles sold, with exponential growth projected well into the future.<sup>2</sup> In order to continue this positive trend, consumers need competitive prices, long ranges, and a seamless charging experience. As you well know, Apple maps has partnered with ChargePoint to show where stations are located, their pricing, and times of operation.

Thank you for your work integrating this infrastructure into Apple's widely popular mapping services. To better inform federal efforts to promote ZEV adoption, I would appreciate your feedback on the following:

- How can the federal government better facilitate public-private collaboration with companies like Apple as it relates to zero-emissions infrastructure?
- Can federal policy better coordinate with private companies and local governments, utilities, or other public entities to include publically owned charging infrastructure on your services?
- How can federal policy support better mapping services zero-emissions infrastructure, including hydrogen fueling stations?

<sup>&</sup>lt;sup>1</sup> https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

<sup>&</sup>lt;sup>2</sup> New registrations for electric vehicles doubled in US since last year. TechCrunch. <a href="https://techcrunch.com/2019/04/15/new-registrations-for-electric-vehicles-doubled-in-u-s-since-last-year/">https://techcrunch.com/2019/04/15/new-registrations-for-electric-vehicles-doubled-in-u-s-since-last-year/</a>

• What other priorities should Congress focus on during the development of the transportation reauthorization bill that will better assist Apple in providing services that help consumers purchase and operate zero-emissions vehicles?

Thank you, again, for the work your company has done to help integrate our nation's emerging ZEV infrastructure into your mapping services. I appreciate your attention to this matter and look forward to working with you during consideration of the upcoming transportation reauthorization bill to ensure federal policy best supports reducing emissions in the transportation sector. Please do not hesitate to reach out to my staff (Trevor\_Dean@cortezmasto.senate.gov) with any questions.

Sincerely,

Catherine Cortez Masto United States Senator

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COMMITTEES:

January 13, 2020

Mr. Sundar Pichai CEO Google LLC 1600 Amphitheatre Parkway Mountain View, CA 94043

Dear Mr. Pichai:

I am writing to you regarding the adoption of electric vehicles (EV) and zero-emissions vehicles (ZEV) into the nation's transportation network. As innovation in infrastructure systems are critical to the success of mitigating climate change and promoting public health, I hope we can work together on policy solutions that will meet these goals.

The transportation sector has become the largest contributor of greenhouse gas emissions in the United States, surpassing electricity generation, industrial use, and agriculture, and all other sectors. If we are to solve the pressing challenge of climate change, part of the solution must be to transition private vehicle use away from traditional fuels into more sustainable options. That is why I have made this a priority in the Senate and proposed multiple bills aimed at decreasing transportation emissions including legislation to create a national commission and strategy on electrification and bills to support incorporating zero emission vehicle technology into all areas of transportation, including schools, transit operations, and our federal lands.

As you well know, Google Maps now shows the location and real time availability of electric vehicles charging stations with the help of Chargemaster, EVgo, and SemaConnect networks. Consumers can type in "EV charging stations" in the search bar to access locations, availability, charge types and charge speeds for nearby stations.

EVs are becoming far more popular among American consumers. There were 208,000 new registrations for electric vehicles in the U.S. last year, more than double the previous year. By 2025, EVs are projected to rise to 7% of all vehicles sold, with exponential growth projected well into the future.<sup>2</sup> In order to continue this positive trend, consumers need competitive prices, long ranges, and a seamless charging experience.

Thank you for your work on integrating this infrastructure into your widely popular mapping services. To better inform federal efforts to promote ZEV adoption, I would appreciate your feedback on the following:

• How can the federal government better facilitate public-private collaboration with companies like Google as it relates to zero-emissions infrastructure?

<sup>&</sup>lt;sup>1</sup> https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

<sup>&</sup>lt;sup>2</sup> New registrations for electric vehicles doubled in US since last year. TechCrunch. <a href="https://techcrunch.com/2019/04/15/new-registrations-for-electric-vehicles-doubled-in-u-s-since-last-year/">https://techcrunch.com/2019/04/15/new-registrations-for-electric-vehicles-doubled-in-u-s-since-last-year/</a>

- Can federal policy better coordinate with private companies and local governments, utilities, or other public entities to include publically owned charging infrastructure on your services?
- How can federal policy support better mapping services zero-emissions infrastructure, including hydrogen fueling stations?
- What other priorities should Congress focus on during the development of the transportation reauthorization bill that will better assist Google in providing services that help consumers purchase and operate zero-emissions vehicles?

Thank you, again, for the work Google has done to help integrate our nation's emerging EV infrastructure into your mapping services. I appreciate your attention to this matter and look forward to working with you during consideration of the upcoming transportation reauthorization bill to ensure federal policy best supports reducing emissions in the transportation sector. Please do not hesitate to reach out to my staff (Trevor\_Dean@cortezmasto.senate.gov) with any questions.

Sincerely,

Catherine Cortez Masto United States Senator

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Logan Green Chief Executive Officer Lyft, INC 548 Market Street Suite 68514 San Francisco, CA 94104

Dear Mr. Green:

I am writing regarding the importance of transitioning vehicles used to drive for transportation network companies (TNCs) to zero-emission vehicle (ZEV) technology. It is vital we advance the adoption of electric or zero-emission vehicles (EV or ZEV) into our overall transportation network as quickly as possible to reduce emissions and promote the health of our nation's residents. I hope to work with you to better inform federal policy as Congress considers reauthorization of the surface transportation bill.

As you know, the transportation sector has become the largest contributor of greenhouse gas emissions in the United States, surpassing electricity generation, industrial use, and agriculture, and all other sectors. If we are to solve the pressing challenge of climate change, part of the solution must be to transition private vehicle use away from traditional fuels into more sustainable options. That is why I have made this a priority in the Senate and proposed multiple bills aimed at decreasing transportation emissions including legislation to create a national commission and strategy on electrification and bills to support incorporating zero emission vehicle technology into all areas of transportation, including schools, transit operations, and our federal lands.

Given the rapid growth of TNCs in recent years, Lyft presents a unique opportunity to jumpstart this transition. While personal and commercial vehicles still widely outpace vehicle miles traveled (VMT) by TNCs, TNCs have contributed to increased congestion in major cities.<sup>2</sup> Because TNC vehicles accumulate far more VMT than most personal uses, the benefits of transitioning to zero-emission technology are immense. In fact, research has found that an electric vehicle used to drive for a TNC delivers three times the benefit of one used for personal travel alone.<sup>3</sup>

It is clear that our national policy for encouraging the adoption of electric and other zeroemissions technologies for personal and commercial vehicle use must be updated. A lack of charging and refueling infrastructure as well as other issues continue to stand in the way of widespread adoption.

However, because TNC vehicles are used in ways that are different than a typical personal vehicle, federal policy must also consider how to best accommodate these new modes of

<sup>&</sup>lt;sup>1</sup> https://www.epa.gov/greenvehicles/fast-facts-transportation-greenhouse-gas-emissions

<sup>&</sup>lt;sup>2</sup> https://drive.google.com/file/d/1FIUskVkj9lsAnWJQ6kLhAhNoVLjfFdx3/view

<sup>&</sup>lt;sup>3</sup> https://escholarship.org/uc/item/15s1h1kn

transportation. For these reasons, I hope to work with you on this issue and respectfully request your feedback on the following:

- Can federal policy better leverage information, data collection, or other research of barriers to adoption of ZEVs by drivers?
- What steps does Lyft currently take to encourage drivers to adopt ZEVs and do federal incentives help?
- What federal policies do you believe would be helpful in encouraging ZEV adoption?
- What types, models, and systems of charging and refueling infrastructure are most useful for TNC drivers and does federal policy encourage this type of infrastructure?

I appreciate your attention on this matter and look forward to working with you during consideration of the upcoming transportation reauthorization bill to ensure federal policy best supports reducing emissions in the transportation sector. Please do not hesitate to reach out to my staff (Trevor Dean@cortezmasto.senate.gov) with any questions.

Sincerely,

Catherine Cortez Maste

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RULES AND ADMINISTRATION

COMMITTEES:

January 13, 2020

Dara Khosrowshahi Chief Executive Officer Uber Technologies, Inc. 1455 Market St San Francisco, CA 94103

Dear Mr. Khosrowshahi:

I am writing regarding the importance of transitioning vehicles used to drive for transportation network companies (TNCs) to zero-emission vehicle (ZEV) technology. It is vital we advance the adoption of electric or zero-emission vehicles (EV or ZEV) into our overall transportation network as quickly as possible to reduce emissions and promote the health of our nation's residents. I hope to work with you to better inform federal policy as Congress considers reauthorization of the surface transportation bill.

As you know, the transportation sector has become the largest contributor of greenhouse gas emissions in the United States, surpassing electricity generation, industrial use, and agriculture, and all other sectors. If we are to solve the pressing challenge of climate change, part of the solution must be to transition private vehicle use away from traditional fuels into more sustainable options. That is why I have made this a priority in the Senate and proposed multiple bills aimed at decreasing transportation emissions including legislation to create a national commission and strategy on electrification and bills to support incorporating zero emission vehicle technology into all areas of transportation, including schools, transit operations, and our federal lands.

Given the rapid growth of TNCs in recent years, Uber presents a unique opportunity to jumpstart this transition. While personal and commercial vehicles still widely outpace vehicle miles traveled (VMT) by TNCs, TNCs have contributed to increased congestion in major cities.<sup>2</sup> Because TNC vehicles accumulate far more VMT than most personal uses, the benefits of transitioning to zero-emission technology are immense. In fact, research has found that an electric vehicle used to drive for a TNC delivers three times the benefit of one used for personal travel alone.<sup>3</sup>

It is clear that our national policy for encouraging the adoption of electric and other zeroemissions technologies for personal and commercial vehicle use must be updated. A lack of charging and refueling infrastructure as well as other issues continue to stand in the way of widespread adoption.

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However, because TNC vehicles are used in ways that are different than a typical personal vehicle, federal policy must also consider how to best accommodate these new modes of transportation. For these reasons, I hope to work with you on this issue and respectfully request your feedback on the following:

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