Vision for a National Electric Vehicle Charging Network

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Background/Objectives. Electrifying transportation has potential to significantly reduce our nation's greenhouse gas emissions, improve air quality, and reduce noise. Electric vehicles (EVs) also have the potential to provide an ownership experience that is superior to conventionally fueled vehicles. However, the lack of public infrastructure necessary to charge electric vehicles (EVs) has long been cited as a major barrier to mass consumer adoption of EVs. To address this barrier, the Infrastructure Investment and Jobs Acts (IIJA) recently appropriated up to \$7.5B to fund the build-out of public charging infrastructure in U.S. states, territories, and tribal nations.

Approach/Activities. IIJA also created the Joint Office of Energy and Transportation to oversee the creation of the national charging network. This newly formed office collaborated with the White House, U.S. Department of Energy, U.S. Department of Transportation, other Federal and State government agencies, industry experts, and other stakeholders to establish a vision for a national EV charging network. The Joint Office issued guidance to States to help them administer programs to fund charging infrastructure deployment over a 5-year period.

Results/Lessons Learned. In this presentation, I will share the vision for a national EV charging network that is convenient, affordable, reliable, and equitable. I will present the principles and technology that will be used to design and operate the national network. I will also describe strategies for EV/grid integration and to ensure transportation resilience.