MSTRS Evaluation for the 2024 Spring Meeting

Consumer Information Metrics for Electric Vehicles

Objective: EPA would benefit from detailed feedback from the MSTRS subcommittee about information metrics for light duty electric vehicles (EV) that are useful for consumers, not limited to information on the fuel economy label, but also including other mechanisms, such as government websites. EPA is asking the MSTRS to develop recommendations for topics such as (but not limited to) EV range, fuel economy, vehicle refueling data, and charging performance in terms of testing and consumer information, as described in more detail below.

MSTRS Charge:

Develop recommendations for EV consumer information and EPA or manufacturer testing that address the following questions:

What information is useful to consumers contemplating an EV purchase?

What information is not currently available?

What existing information could be improved?

What information is needed for understanding EV efficiency across BEVs and PHEVs?

What data and testing does EPA need to collect or conduct to provide the consumer information above?

Does all the information need to be derived from testing of individual vehicles, or can data be collected and used to estimate effects (like the effect of temperature on EV range)?

Potential Timeframe and Structure:

Spring 2024 (May 30th) MSTRS Meeting

MSTRS members will self-select leads, a committee, and plans to explore Evaluation #1.

Fall 2024 MSTRS Meeting

The MSTRS members are encouraged to report their findings to Evaluation #1, providing insight on consumer metrics for EVs, including suggestions for how and where to display this information.

Members can also make plans outlining outstanding work and how to coordinate Evaluation #1 and Evaluation #2.

Format TBD by the subcommittee

OTAQ will plan to present an overview of current testing related to EV metrics.

MSTRS members will self-select leads and a committee for Evaluation #2, building upon the initial findings for Evaluation #1.

Spring 2025 MSTRS Meeting

MSTRS members are encouraged to report initial findings for Evaluation #2 (which builds upon Evaluation #1) and a summary of work that may be outstanding. Develop a process and teams within the subcommittee to complete both Evaluation #1 and Evaluation #2.

Fall 2025 MSTRS Meeting

Deliver report of findings from Evaluation #1 and Evaluation #2.

Additional Questions to Consider:

What EV metrics resonate with consumers?

What metrics allow consumers to make accurate comparisons among vehicles?

What information/metrics can help prioritize decarbonization?

How important is it to be able to compare across vehicle technologies for various metrics (e.g., compare the fuel economy of a gas vehicle and an EV)?

What are the challenges we see in this area?

What could EPA do in the space within the next 5 years, in terms of potential solutions to this area?

Are there specific areas of research or additional work needed?

Considering how consumers currently purchase new and used vehicles, what is the best mechanism to get the appropriate information out to the public?

Are there testing procedures or information presentation options at the state or foreign country level that EPA should contemplate emulating?

2022 MSTRS Future of Mobility Report Recommendations of Interest

EPA should help promote the combination of connectivity and automation rather than a purely autonomous vehicle approach, since vehicle communication will promote better coordination with other vehicles and infrastructure, leading to greater improvements in fuel economy and reduced emissions.

There is already significant market incentive to improve vehicle efficiency as a means of providing adequate range without undue cost associated with the need for additional batteries. In considering whether there is a need for EV efficiency standards, EPA should evaluate the impact of this key market driver [range and battery cost]. "*Evaluate*

whether there is a need for EV efficiency standards. In doing so, the agency should consider the impact of existing market drivers, including consumers' demand for adequate vehicle range, as well as the role of continued customer choice in furthering zero emission technology adoption."

EPA should also evaluate the potential for emissions performance standards in transportation fuels to drive innovation toward the lowest emissions sources.

EPA should leverage its tremendous influence on consumer adoption of ZEVs and play a convening or educating role by continuing to gather and synthesize data on the impact of financial incentives on ZEV sales. This could be accomplished through its own studies, formal literature reviews, or even consumer focus groups or other means of collecting primary data from vehicle buyers themselves. EPA's regional offices could play unique additional roles here by considering the distinct policies and adoption trends evident in the states in their regions.