



Oregon

Kate Brown, Governor

Oregon Transportation Commission


Office of the Director, MS 11

355 Capitol St NE

Salem, OR 97301-3871

DATE: November 3, 2022

TO: Oregon Transportation Commission



FROM: Kristopher W. Strickler
Director

SUBJECT: **Agenda Item G** – Climate Office Update

Requested Action:

Receive an update from the ODOT Climate Office.

Background:

The ODOT Climate Office works on sustainability, reducing GHG emissions from transportation, and adapting to the impacts of climate change. Current work includes building out electric vehicle charging infrastructure on highway corridors and in communities; applying a climate lens to ODOT capital investments; reducing ODOT's carbon footprint in operations and materials; and preparing transportation systems for more extreme weather. The November Oregon Transportation Commission update will focus on two major bodies of work that will be completed by the end of this year: 1) Medium and Heavy Duty Vehicle Charging Infrastructure Report, and 2) Climate Adaptation and Resilience Roadmap.

Medium and Heavy Duty Vehicle Charging Infrastructure

In 2022, the Oregon Legislature directed the Oregon Departments of Environmental Quality (DEQ) and ODOT to complete an analysis of existing zero emission vehicle and infrastructure incentive programs for medium- and heavy-duty (MHD) fleets to support the transition from gasoline or diesel fuels to electricity or hydrogen. DEQ and ODOT have compiled existing state and federal programs and funding mechanisms; reviewed best practice design recommendations from national organizations (such as Northeast States for Coordinated Air Management (NESCAUM)) and hosted two listening sessions with industry stakeholders.

Gaps preventing MHD zero-emission vehicle adoption include vehicle and fueling infrastructure costs, technology limitations in certain sectors, and awareness of fleet owners, as noted in DEQ's [MHD Alternative Fuels Study](#). As such, many existing incentive programs focus on reducing these barriers. The study outlines Oregon's context, needs, and opportunities. While no dedicated MHD zero-emission vehicle infrastructure program exists in Oregon, the report describes other states' models for Oregon to consider in developing a program. The study also found that Oregon stakeholders, including commercial fleets, manufacturers, and non-profits, are supportive of incentive programs to support the MHD

transition to zero-emission vehicles. A [draft report](#) is available online and the final report and recommendations are due to the Joint Committee on Transportation by December 1, 2022.

Climate Adaptation and Resilience Roadmap

Flooding, landslides, excess heat, drought, and wildfires are only a few signs that Oregon's climate is changing. Impacts to the transportation system cost the state millions each year and are far reaching to the traveling public and state economy. ODOT is creating a Climate Adaptation and Resilience Roadmap to target problem areas and identify strategies and actions to address changing weather. As part of the Adaptation Roadmap, the Climate Office first completed a desktop Climate Hazard Risk Assessment. This assessment improved the agency's understanding of current and future potential climate impacts on the State Highway System by combining ODOT state Transportation Operation Centers (TOCs) emergency response and related data, cost data, social disparity data, historical climate data and climate change projections. Preliminary findings, supplemented with input from ODOT leadership and region staff, is informing a multifaceted Roadmap approach with flexible adaptation strategies that allow for regional variation of climate risk.

The Roadmap, to be presented for the Commission in January 2023, outlines the recommended ODOT strategies and actions to institutionalize resilience as an agency priority, adopt data-driven decision-making and practices, maximize funding for resilience investments and ultimately, build resilient infrastructure. Climate Office staff have been working with Delivery and Operations to use early data results to stand-up the Infrastructure Investment and Jobs Act PROTECT program for improving transportation system resilience. The Adaptation Roadmap, once finalized, will serve as the agency's resilience plan, satisfying the PROTECT statutory condition to reduce federal match requirements by 7-10% for projects under this program.

As a parallel effort, the Climate Office adaptation team developed online Climate Hazard Risk Maps, identifying state highway corridors with the highest risk factors, including historical hazard events and projected multi-hazard risks, economic priority, and high social disparity. These maps can be used to prioritize resilience investments; focusing first on climate hazard risk and social and economic disparity that reduces community ability to respond to and recover from events.