CLIMATE CHANGE

State and Local Efforts to Reduce Greenhouse Gas Emissions from Vehicles

What GAO Found

According to the Federal Highway Administration (FHWA), state departments of transportation (state DOT) and metropolitan planning organizations (MPO) play a key role in implementing activities to reduce transportation-related greenhouse gas emissions, including on-road emissions from vehicles. GAO found examples of state DOTs and MPOs engaging in these activities, including estimating emissions, analyzing the effects of transportation investments, and using reduction targets.

- **Estimating emissions.** GAO found examples of state DOTs and MPOs estimating on-road greenhouse gas emissions using different types of data as the basis of those estimates. These entities more commonly used data on vehicle miles traveled (e.g., annual traffic count data), while others used fuel data (gallons of fuel taxed by the state). The selected state DOTs that do not currently estimate on-road greenhouse gas emissions cited a number of reasons. For example, Montana state DOT officials said the majority of roads in the state are rural with no congestion issues. Officials from selected MPOs provided examples of resource challenges they face, such as not having readily available data or staff with the right subject matter expertise.

- **Analyzing the effects of transportation investments.** GAO found examples of state DOTs and MPOs analyzing the effects of transportation investments on greenhouse gas emissions. For example, officials from an MPO in Massachusetts said that they estimate emissions changes for every project the MPO funds. However, selected state DOTs and MPOs reported challenges to reliably quantifying the effects of specific investments on greenhouse gas emissions.

- **Using reduction targets.** GAO found a few examples of selected state DOTs and MPOs that have targets for reducing on-road greenhouse gas emissions. For example, the MPO representing the Washington, D.C. metropolitan area set targets to reduce on-road greenhouse gas emissions by 50 percent from 2005 levels by 2030, and 80 percent by 2050. However, selected state DOT and MPO officials provided examples of challenges to meeting reduction targets, such as having few ways to incentivize consumers to adopt particular fuels or vehicles.

Vehicle Traffic Congestion and On-Road Emissions