

Congested HOV Lanes Becoming Common

Caltrans Report Finds Two-Thirds of State Network Fails Standard for Traffic Flow

One of Caltrans' strategies for battling highway congestion and reducing air pollution, high-occupancy vehicle (HOV) lanes are steadily losing their effectiveness as more drivers — eligible and not — crowd into them.

A Caltrans report to the Legislature details how much of Caltrans' network of HOV lanes have become as congested as mixed-use lanes.

Federal and state laws permit certain classes of vehicles to use HOV lanes without meeting occupancy requirements. Zero-emission vehicles and certain low-emission vehicles can access the lanes if they have a decal issued by the Department of Motor Vehicles. Certain HOV lanes around the state also may admit toll-paying vehicles. States must monitor and report on the performance of the HOV lanes that are open to vehicles not meeting occupancy requirements.

Caltrans maintains 1,765 HOV lane-miles in the state's more urbanized areas. The annual HOV report used traffic data such as speeds and vehicle volumes measured along many of those corridors to determine whether conditions met a standard defined as "degraded" — an average of 45 mph or less on peak hour weekdays, or a percentage of slowdowns in a given period.

Not surprisingly, the report concluded about two-thirds of the HOV lanes statewide monitored in 2016 had fallen into degraded status. About 1,322 lane-miles of the state HOV system (about 75 percent) were surveyed, covering two reporting periods in 2016.

The 2016 results continued a recent pattern of increasing congestion along the once easier-flowing HOV lanes. In 2015, HOV lane degradation was 65.5 percent, up from 61 percent in 2014.

It's clear that HOV lane traffic demand is exceeding capacity, the report says. Contributing to the lane degradation are traffic incidents, motorists not carrying the required number of riders or driving uncertified vehicles, lane change conflicts, or gaps in regional HOV lane networks.



Interstate 580 near Livermore is part of the Bay Area's HOV network. This photo must have been taken during off-commute hours.

Caltrans could adopt mitigation measures to improve traffic flow in HOV lanes, the report said. Possible actions could include raising vehicle occupancy requirements, adding more HOV lanes, or varying toll fees to reduce use, to name a few options.

California's HOV lanes were initially considered an innovative strategy when a bus-only lane was set up during the reconstruction of the San Francisco-Oakland Bay Bridge in 1962. Caltrans and its regional partners have expanded the statewide HOV system from 260 lane-miles in 1990 to 1,765 lane-miles as of 2016.

HOV lanes are open to vehicles that meet the minimum occupancy requirements (usually two people), transit buses and motorcycles. Some HOV lanes operate 24 hours a day, seven days a week. Others only limit access during morning and afternoon peak periods and allow use by all vehicles outside of those hours. Certain HOV lanes may be striped to allow access only at designated locations, while others allow access at any point. **MM**

Source: 2016 California HOV Degradation Report