

# IEMAC Annual Report

## Transportation

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Transportation sector emissions remain the largest source of GHGs in California and nationally. About 40 percent of the state's GHGs come from transportation sources, and passenger vehicles are the largest category of emissions within the transportation sector, comprising 28 percent of the state's emissions. Since 2013, the trajectory of GHG emissions from transportation has gone in the wrong direction, increasing every year rather than decreasing. Most of the increases are from light duty vehicles and much of the increase is from more driving, reflected in year over year increases in vehicle miles travelled (VMTs).

2020 will be different. Like every other sector of the economy, the pandemic and its economic outfall have affected the transportation sector in a number of ways and are very likely to result in a decline in GHGs for the first time in eight years. The pandemic and economic effects include the following:

Estimates are that auto sales in California will decline more than 22 percent in 2020 -- they declined almost 27 percent in the first half of the year and almost 50 percent in the second quarter;

Electric vehicles have to date increased their market share slightly, rising from 4.9 percent to 5.8 percent year over year. Tesla has completely dominated the California market, making up 89 percent of total EV sales for the year;

Californians have continued to purchase light trucks rather than passenger cars at huge rates: 62 percent of new sales in 2020 so far fall into the light truck category and light truck sales have declined less than new car sales;

Stay at home orders have resulted in huge declines in vehicle miles travelled, though the decreases were most dramatic during the early months of the pandemic. Nationally, fourth quarter VMT totals for 2020 are predicted to be only moderately lower than the 4<sup>th</sup> quarter of 2019. Nevertheless, the declines are noteworthy: in California's major counties, VMTs declined between 65 and 90 percent in April, though by mid-June they had rebounded to 30-75 percent below normal.

The pandemic has also resulted in huge declines in public transit usage, with national declines almost 70 percent lower in November, 2020, than in November, 2019.

Gasoline prices in California were 15 percent lower in September, 2020 than in September, 2019.

In addition to the pandemic and its effect on transportation in the state, the Presidential election will also obviously have a large effect on some of the state's transportation policies. Most directly, the incoming Biden Administration will almost certainly strengthen the state's ability to reduce GHGs and conventional pollutants from new vehicles, including both light and heavy-duty vehicles. The Trump Administration has revoked California's Clean Air Act waiver for its GHG and Zero-Emission Vehicle programs, a decision the Biden Administration is likely to reverse. And the state will very likely receive a waiver for its Advanced Clean Trucks rule, which for the first time will impose on truck manufacturers a zero-emission vehicle sales requirement.

In last year's IEMAC report on transportation emissions, we focused primarily on recommendations to evaluate how to accelerate the retirement of the internal combustion engine light duty fleet. We remain concerned that internal combustion engines will remain too dominant in California for too many years to allow the state to achieve its GHG goals, though changes in the auto market, including Ford's commitment to an all-electric fleet, GM's announcement of significant new investments in EVs, and the announcement of new policies like the Governor's 2035 target for the elimination of internal combustion engines are all positive developments. Indeed, it is possible that if EV prices remain high relative to traditional cars, the incentive to hold onto old cars may increase. We applaud new efforts by the state's public utilities and CARB to provide additional EV incentives funded with LCFS auction revenue but continue to believe that a focus on accelerating the turnover of the auto fleet is crucial to meeting long term GHG goals.

We also have concerns that, as the economy returns to normal and as the pandemic comes to an end, GHG transportation emissions will return to their pre-pandemic levels and even increase. It is difficult to know, however, what long-term effects the pandemic will have. Some could be positive and others negative. We think it important that the state not simply observe the state's rebound, but instead recommend that California consider responding to at least three potential effects of the pandemic as follows:

The state should determine:

Whether California can sustain decreases in VMTs by, for example, incentivizing employers to continue to allow employees to work from home at least part of the time;

What can be done to return public transportation ridership to at least pre-pandemic levels and ultimately to well above that levels – one possibility is to use GGRF proceeds to make public transit free, at least for a limited period of time as the pandemic eases;

Given that auto sales are down dramatically this year, whether there is a way to take advantage of an expected increase in 2021 sales to increase the number of zero emission vehicles purchased. Options include subsidizing or even making free electricity used to charge EVs at home through GGRF expenditures; expanding the joint CARB-public utility rebate program; and increasing the amount of money available to retire used cars if replaced with clean vehicles.

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