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Climate Change and Transit

PRESENTED TO:

Assembly Budget Subcommittee No. 3 on Resources and Transportation Hon. Richard Bloom, Chair

LEGISLATIVE ANALYST'S OFFICE

Transportation Is the Largest Source of GHG Emissions in California



- The California Air Resources Board estimates 39 percent of the 424 million tons of greenhouse gases (GHGs) emitted in California in 2017 came from transportation sources. (This does not include emissions associated with the extraction or production of gasoline or diesel products—also known as "upstream" emissions.)
- The vast majority of emissions from transportation come from on-road sources, specifically passenger vehicles and heavy-duty vehicles. Nearly 36 million on-road vehicles are registered in California.
- Other sources of emissions include rail services, ships, and airplanes.



Role of Transit in GHG Reduction



- Over 200 operators in California provide transit services, including bus, rail, paratransit, vanpool, and ferries.
- Transit has the potential to reduce congestion, be more fuel efficient, and to produce less GHG emissions than private vehicles. As shown in the above figure, various types of transit have been estimated on average to produce less GHG emissions per passenger mile than single-occupancy vehicles.
- Estimated emissions for both transit and private vehicles are dependent on capacity and the energy sources used. For example, the more occupants that are riding in a bus, train, or private vehicle, the lower the emissions per passenger mile. In addition, rail systems and electric vehicles that rely on electricity primarily sourced from renewable sources produce fewer GHGs than those powered by non-renewable fuels.



Funding for Transit



- In total, transit services in California were funded at \$12 billion in federal reporting year 2018.
- This funding came from various sources. Almost half came from local sources, including local sales tax revenues. Roughly one-third came from state and federal sources, and about one-fifth came from passenger fares and fees.





- State Transit Assistance (STA) is the largest state transit funding program. Funded by the state sales tax on diesel, STA allocated nearly \$1 billion directly to transit operators on a formula-basis in 2018-19.
- Other state programs that specifically fund transit include the Low Carbon Transit Operations Program and the State of Good Repair Program, which are disbursed on a formula basis, as well as the Transit and Intercity Rail Capital Program, a competitive fund. In 2018-19, these three programs provided a total of over \$400 million for transit.



State Provides Transit Funding Through Several Programs

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Transit may receive funding through other state programs—such as the Solutions for Congested Corridors and the State Transportation Improvement Program—that also support projects to expand or repair highways and local streets and roads. In addition, transit operators receive vouchers from the Clean Truck and Bus Voucher program, administered by CARB, to purchase low-emission buses.

