

# California Transportation Plan 2040



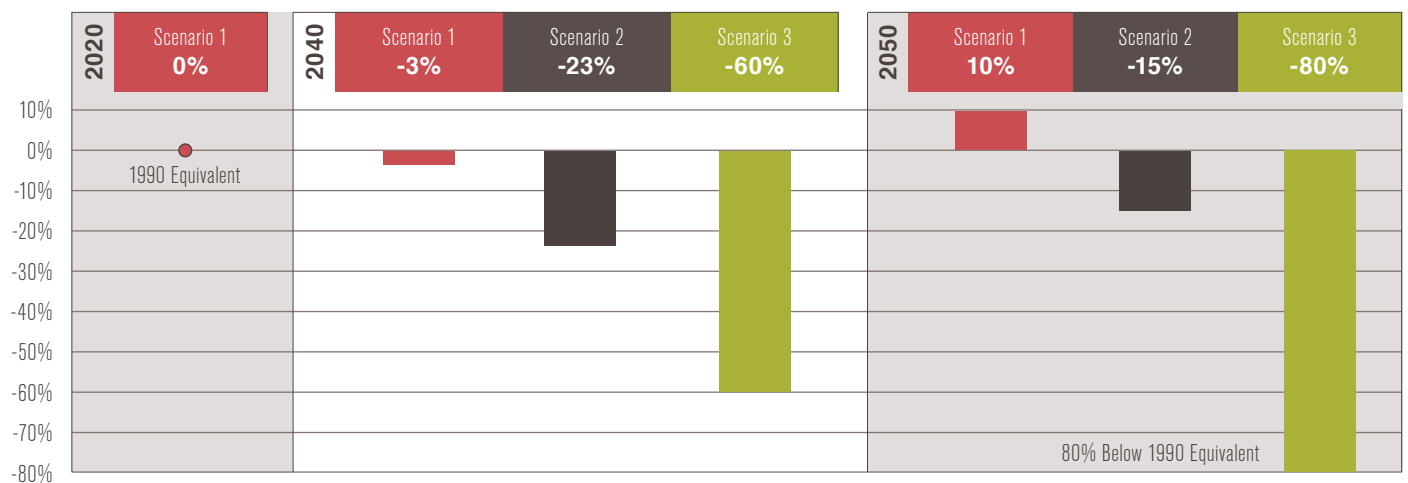
Caltrans photo by Steven Hellon

The California Transportation Plan (CTP) 2040 lays out a vision with a set of supporting goals, policies and recommendations for a transportation future in which more people and more products get where they need to go using only a fraction of the greenhouse gas-producing energy we use today.

Like prior plans, the CTP 2040 shows how the state's transportation system can be improved to deliv-

er mobility and safety, as well as economic, accessibility and environmental objectives. But for the first time, the CTP adds strategies to achieve the greenhouse gas (GHG) reduction targets set by the state. The CTP 2040 complies with a 2009 law requiring a description of the steps needed to reduce greenhouse gas emissions to 1990 levels by 2020, and 80 percent below that by 2050. Publication of the plan in July culminated five

## California Greenhouse Gas Emissions Change



Three transportation scenarios were analyzed cumulatively, with Scenario 3 designed to meet the GHG reduction goals through a combination of existing state and regional plans, new statewide transportation strategies and new vehicle and fuel technologies. While Transportation Scenario 3 achieves the GHG reduction goals, it also shows improvements to transportation access through significant reductions in vehicle miles traveled and vehicle hours of delay.


years of work with residents, local and regional leaders, stakeholder groups and government agencies. The plan must be updated every five years. Work on the California Transportation Plan 2045 already has begun.

The CTP 2040 is — by law — restricted from recommending specific projects. So Caltrans offers a menu of general actions needed to meet all the goals by 2040 and beyond.

The plan describes how California could fare if it adopts one of three scenarios:

- **Scenario 1** Follows current plans by the state and metropolitan planning organizations — including those by Caltrans — and assume the current mix of fuel efficiency and vehicle technology as determined by the Air Resources Board (ARB). That would yield a relative gain of 10 percent by 2050, not an 80 percent reduction.
- **Scenario 2** adds in a package of 15 transportation GHG reduction strategies such as increas-

ing carpooling and high-occupancy-vehicle HOV lanes, improving transit services and connectivity, expanding bike and pedestrian facilities, implementing Intelligent Transportation System (ITS) strategies. It also assumes the benefits of an integrated high-speed rail system. This scenario would lead to a relative 23 percent reduction by 2040 and 15 percent by 2050.

- **Scenario 3** bundles together the first two scenarios and banks on new vehicle technologies, alternative fuels, and tailpipe emission reductions. Expected results are derived from ARB's measuring tool called Vision for Clean Air, which helps ARB evaluate hypothetical vehicle and fuel sector changes beyond current program timeframes. This scenario shows the state meeting the required 80 percent reduction in greenhouse gas emissions. The CTP 2040 is available at [www.californiatransportationplan2040.org](http://www.californiatransportationplan2040.org). 

## Implementation Highlights by 2040

1. Improve transit
2. Reduce long-run repair and maintenance costs
3. Improve highways and roads
4. Improve freight efficiency and the economy
5. Improve communities
6. Reduce transportation-system deaths and injuries
7. Expand the use and safety of bike and pedestrian facilities
8. Make our vehicles and transportation fuels cleaner
9. Improve public health and achieve climate and other environmental goals
10. Secure permanent, stable, and sufficient transportation revenue

These highlights, along with coordinated efforts with Caltrans' transportation partners, stakeholders and the public, will be needed to achieve the six goals of the CTP 2040: improve multimodal mobility and accessibility for all people; preserve the multimodal transportation system, support a vibrant economy; improve public safety and security; foster livable and healthy communities and promote social equity; and practice environmental stewardship.

## From the Secretary



“With approved Sustainable Communities Strategies, our regional partners are already leading the way towards transportation and land use patterns that will provide cost-effective transportation solutions and also improve livability in our communities. The plans value efficient land use by locating more housing closer to job centers, and they recognize consumer demand by proposing to invest in multiple modes. This CTP 2040 is an expression of how the state will reinforce these efforts and take conforming action for the interregional transportation system.”

— California State Transportation Agency Secretary **Brian P. Kelly**.

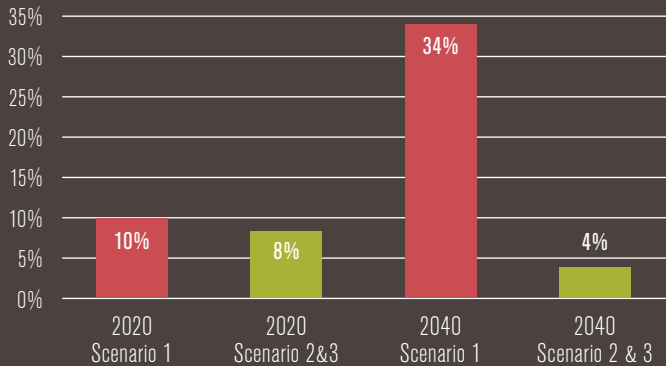
## Calling for the Plan — Senate Bill 391 (2009, Liu)

“In developing the California Transportation Plan ... the department shall address how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of greenhouse gas emissions to 1990 levels by 2020 ... and 80 percent below 1990 levels by 2050, taking into consideration the use of alter-

native fuels, new vehicle technology, tailpipe emissions reductions, and expansion of public transit, commuter rail, intercity rail, bicycling, and walking.... The department shall update the California Transportation Plan ... by Dec. 31, 2015. The plan shall be updated every five years thereafter.”

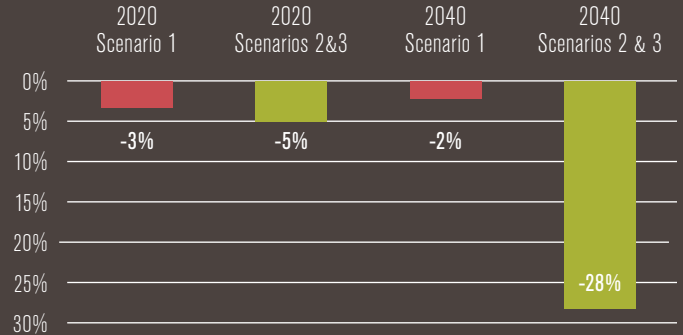
### Change in Total Daily VMT by Scenario

(Relative to 2010)

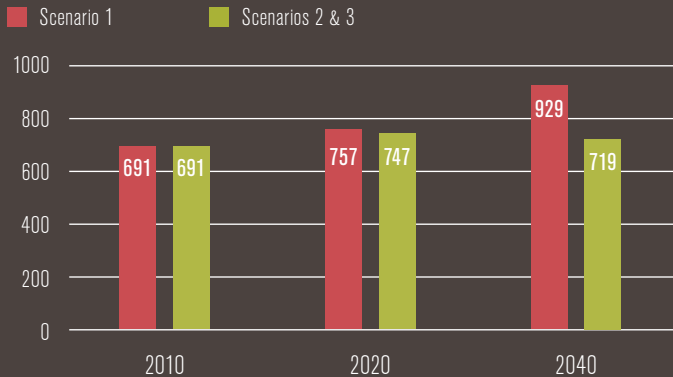


### Change in Daily VMT Per Capita by Scenario

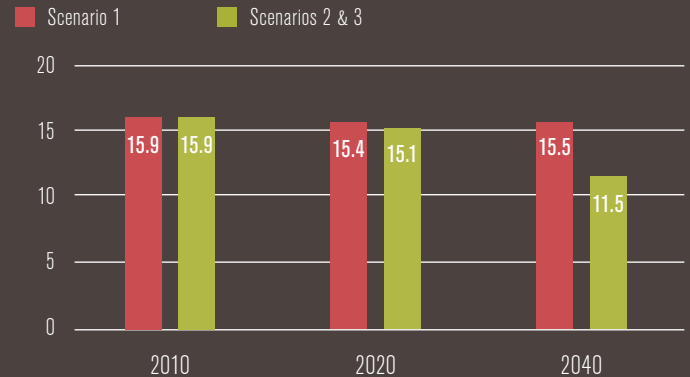
(Relative to 2010)



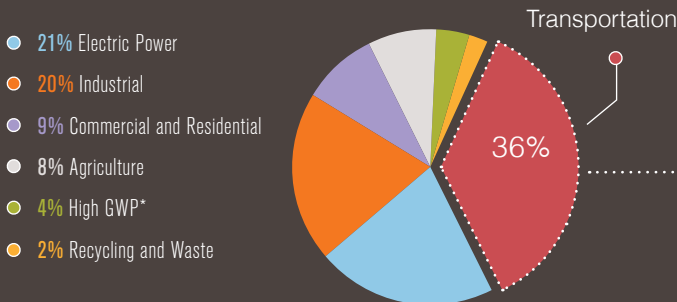
### Vehicle Miles Traveled (daily miles, in millions)



### Daily VMT Per Capita (daily miles, in millions)



### Transportation Sector Responsible for 36% of State's Greenhouse Gases



\*High global warming potential gases are mostly man-made gases used in industrial processes.

### Transportation Sector's GHG Producers

