



California Statewide Travel Demand Model

What? The California Department of Transportation (Caltrans) has developed the California Statewide Travel Demand Model (CSTDM), Version 2.0 to provide Caltrans, other state agencies, Metropolitan Planning Organizations (MPO), Regional Transportation Planning Agencies (RTPA) and other partners with an advanced multi-modal tour/activity based travel demand model that can forecast interregional trips and other types of travel.

Why? The CSTDM provides an advanced tour/activity model to help Caltrans develop and evaluate transportation related policies, plans and projects that best support sustainable, integrated and efficient transportation system. This model will be a key tool for emissions and GHG analysis and will be utilized by partner agencies to meet the requirements for AB 32, SB 375 and SB 391.

How? The CSTDM utilizes Citilabs Cube modeling software and has been updated to provide future year datasets for 2015, 2020, 2035, 2040 and 2050. It has also been updated to a 2010 base year to take advantage of new household travel survey data regarding interregional travel, census data and updated population and jobs forecasts post the 2008 recession. Model updates are expected on a 5 year cycle, with every other update incorporating new travel behavior and census data beyond the updated population, school enrollment and employment forecasts and updated planned projects from the MPOs, RTPAs and Caltrans that will be incorporated every 5 years.

Partners? California Air Resources Board, California Energy Commission, large MPOs (MTC, SCAG and SANDAG) all participated in technical advisory committee meetings and/or peer advisory committee meetings throughout the 2 year contract. Their input was critical during the model update process.

Products?

- Multi-modal tour/activity model

- Model travel behavior for every resident of California
- Evaluate and report on the GHG emission changes of those efforts as required by AB 32, SB 375 and SB 391
- Model will provide statewide interregional trip volumes and Vehicle Miles of Travel (VMT). Can be used to resolve discrepancies between adjacent MPOs/RTPAs
- Trip volumes and trip length distribution by trip purpose
- Provides a travel demand model for RTPAs who don't have adopted models.

Who Will Benefit? The CSTDM will help Caltrans to evaluate plans and projects that are most beneficial to the environment, economy and transportation network while lowering overall VMT and reducing GHG emissions. This model has been developed to meet the immediate needs of multiple agencies responsible for evaluating the impacts of infrastructure enhancements and other related projects on traffic congestion, air quality, fuel consumption, emissions analysis, public health, climate change and environmental justice.

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