

SCAG Regional Travel Demand Model

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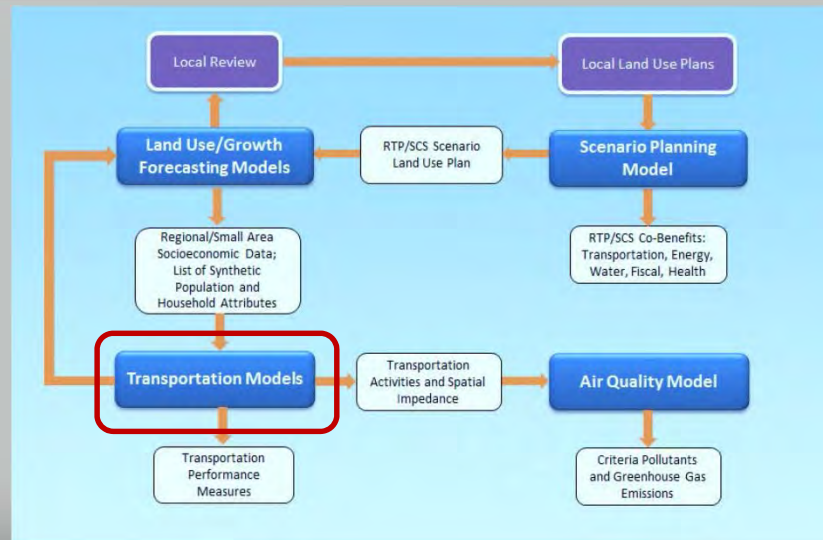
SCAG Regional Travel Demand Model

About SCAG

- The largest MPO in the U.S.
- MPO for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial
- 38k+ square miles, 18+ million population
- The primary agency responsible for the regional travel demand model



SCAG's Integrated Modeling & Forecasting Framework

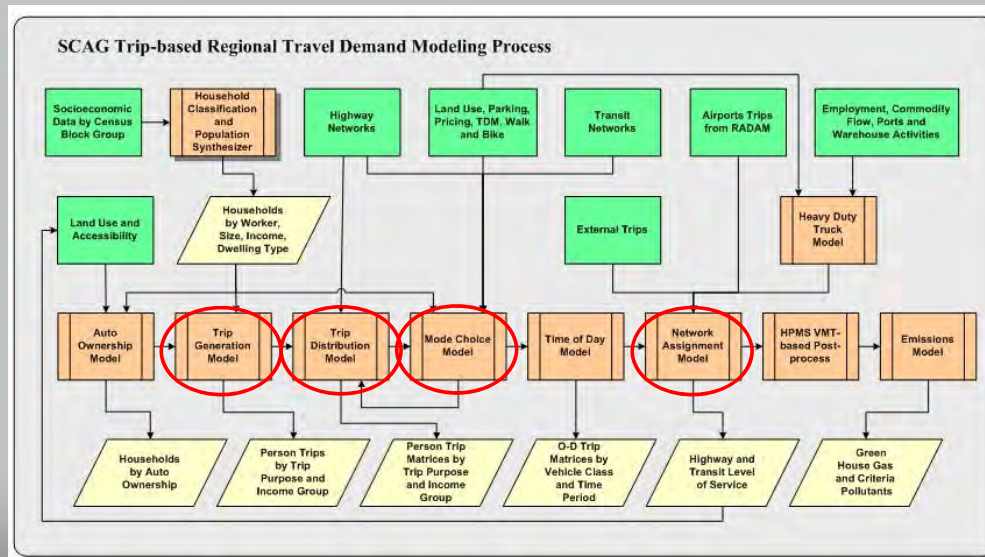


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About SCAG Model

- The latest adopted regional travel demand model is a trip-based model.
- The trip-based model was Peer Reviewed in May 2011 and found consistent with the state-of-the-practice.
- SCAG applies the model to provide quantitative analysis for the **RTP/SCS, the FTIP, the AQMP, and other regional and local projects.**
- The model is based on TransCAD software.

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Model Inputs

- Transportation Analysis Zones (TAZs) (4,109/11,267)
- Socioeconomic Data (population, employment, households, workers, school enrollment)
- Highway network (70,000+ street segments, posted speed, number of lanes, and functional classification)
- Transit network (2000+ routes/patterns, headway, service hours, fares, stop locations)
- Trips from Seaports, Airports, and External (non-SCAG)

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Model Outputs

- Vehicle trips
- Traffic volumes
- VMT by link and geographic areas
- Trips origin/destination
- Trip length
- Mode shares
- Transit boarding

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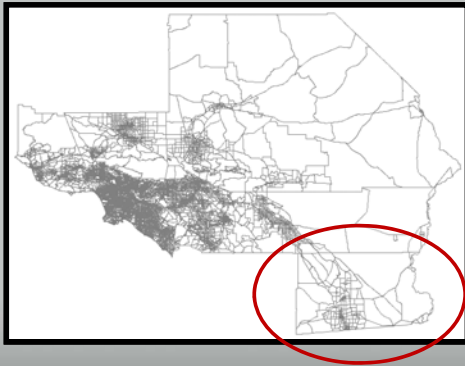
Sub-regional level Application

- Sub-regional Model Development Tool (**SMDT**)
- A tool to convert SCAG's regional model to a sub-region focused model; county/city focused.
- Adding more zones and networks in focused area while aggregating outside detailing

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Zones for focused sub-region:

Regional

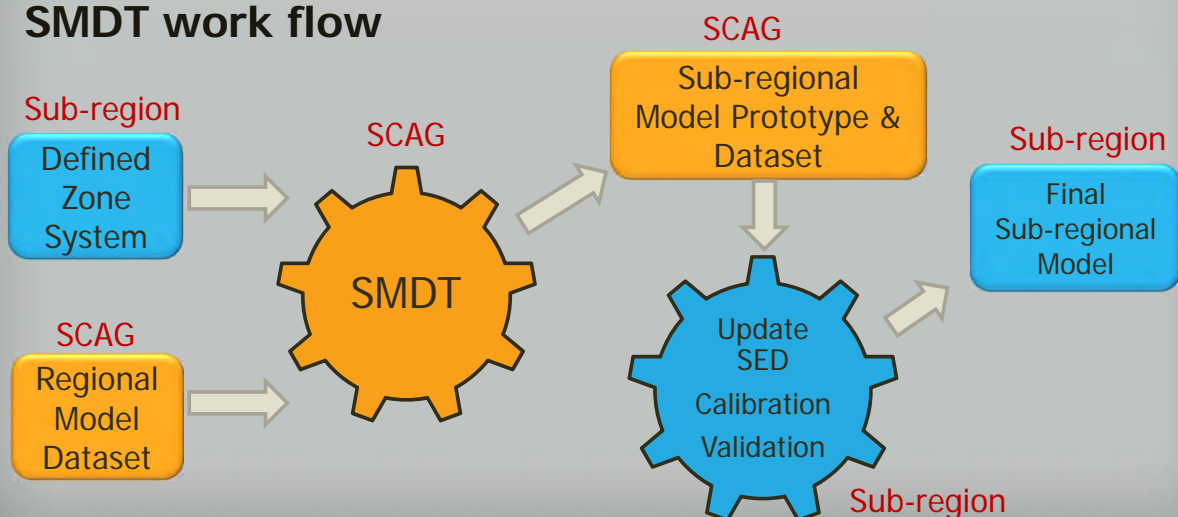


Imperial focused



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SMDT work flow



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Using SMDT

- save time and cost on sub-regional model development
- promote consistency between sub-region model and SCAG region model

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Current applications

- Ventura county
- Imperial county
- San Bernardino County
- North Los Angeles

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Thanks!

Q&A