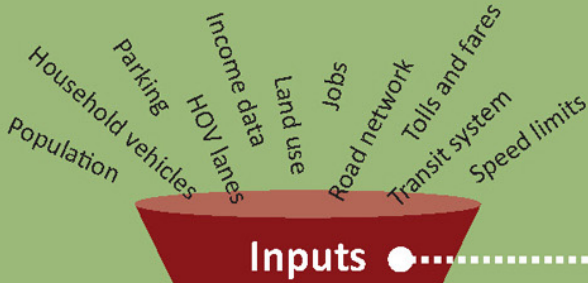


Regional Travel Demand Model

The Regional Travel Demand Model is a computer software package that replicates our regional transportation system

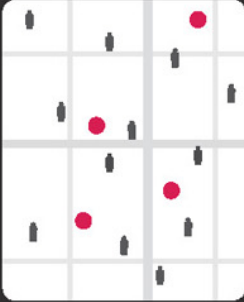


SMTC's model is a "Four Step Model" that takes inputs such as population and economic forecasts, the geographic dispersion of people and jobs throughout the region, and a description of the transportation system – the roads and transit system.

Regional Travel Demand Model

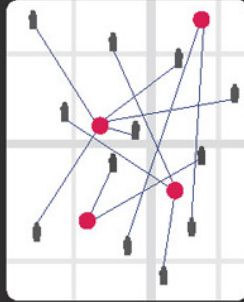
TRIP GENERATION ①

– How many trips will be made?



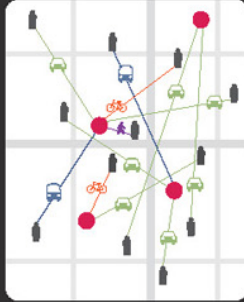
TRIP DISTRIBUTION ②

– Where will the trips come from and go to?



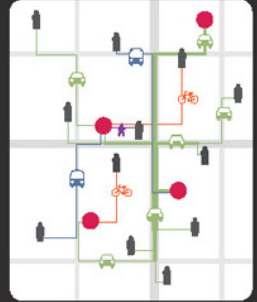
MODE SPLIT ③

– How many people will drive, take the bus, walk, bike, etc.?



NETWORK ASSIGNMENT ④

– What routes will be used for the trips?



Key: Trip Origin (black icon), Trip Destination (red dot), Road/Highway (grey line), Automobile Trip (green car icon), Transit Trip (blue bus icon), Pedestrian Trip (purple person icon), Bicycle Trip (orange bicycle icon)

The model outputs, to be used in impact analyses to evaluate transportation system alternatives, include the amount of travel, the performance of the transportation system, and mode usage.

Outputs

Number of transit riders
Number of vehicles
Travel time
Number of trips
Congestion and delay
Number of miles traveled