

# Better Models = Better Results

## Myriad Uses of the New Models

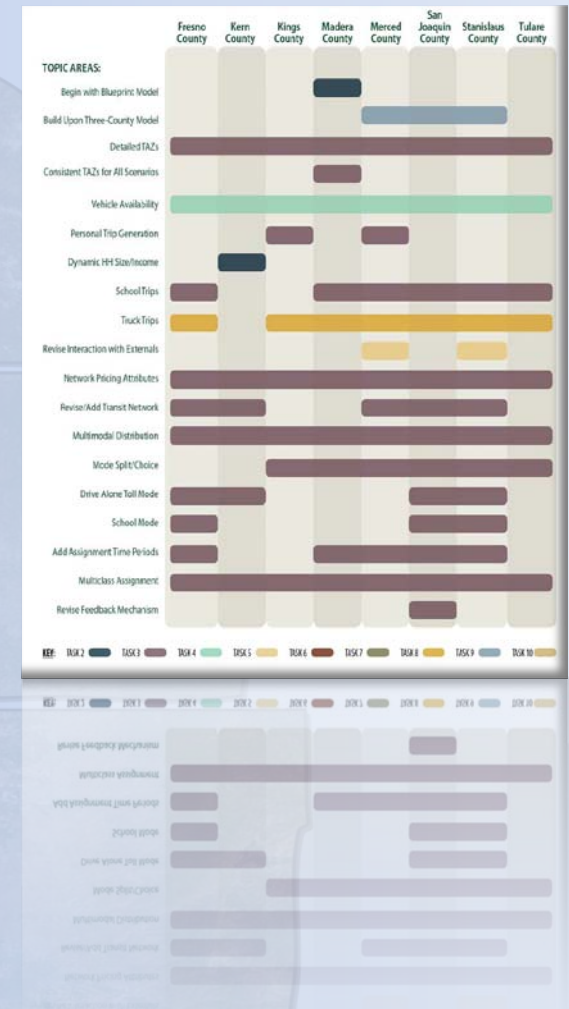
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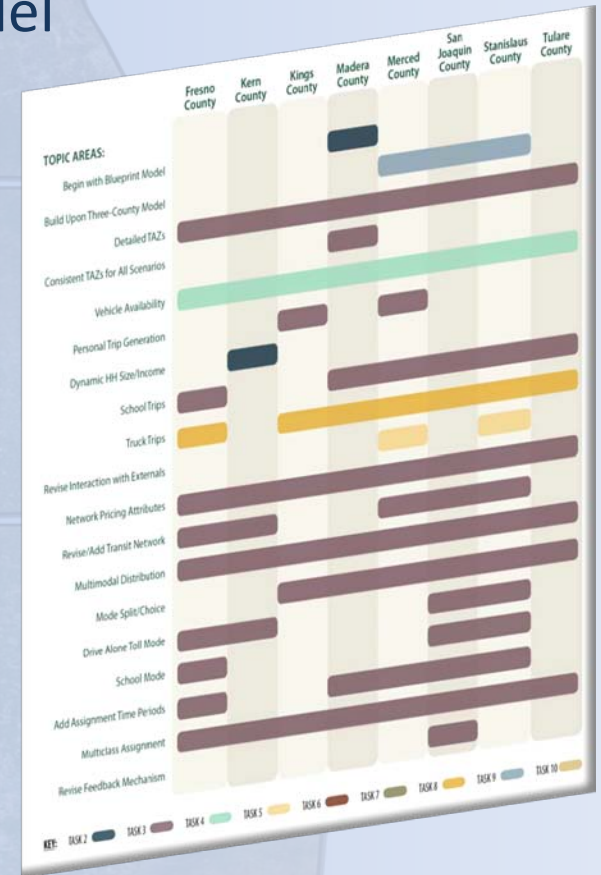
# Recap: What's New and Better?

- Standard Documentation
- Standard Model (Scripts and Parameters)
  - Common formats for all 8 MPOs
  - Trip-Based Model structures will facilitate data sharing and joint modeling efforts
- A Three-County Model
  - San Joaquin, Stanislaus, Merced
- Two Activity-Based Models
  - San Joaquin, Stanislaus, Merced (TAZ-based)
  - Fresno (parcel-based)



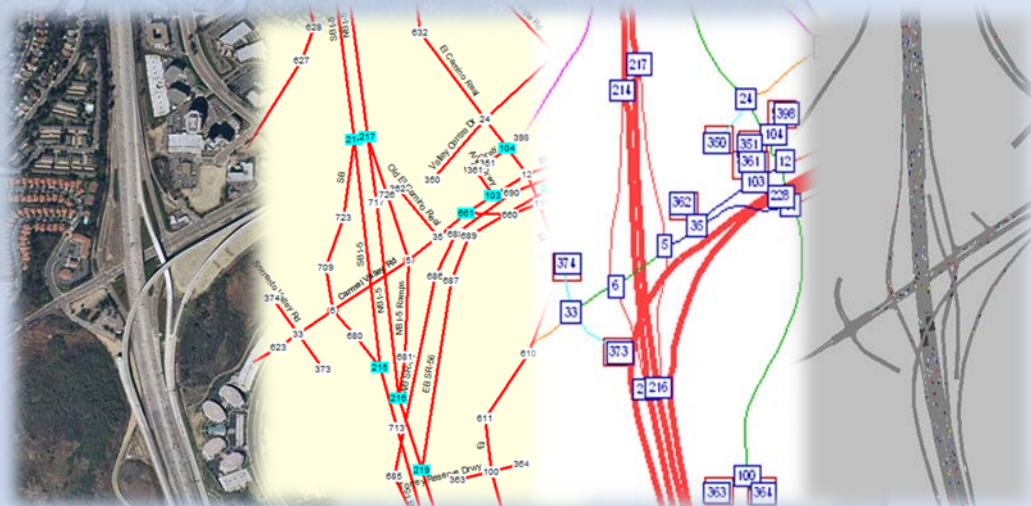
# “New and Better,” continued

- Quick Response Tools (Integrated with Models)
- Integrated Land Use/Transportation Model (Kern COG) – Transferable
- Three-County Origin-Destination (OD) Survey
- Vehicle Availability Model
- Formats, Sources, Procedures to:
  - Update Model Base Year Land Use
  - Integrate Statewide travel data
  - Model Interregional Trip-making



# Projects Benefitted by the New Models

- First and foremost, the Regional Transportation Plans and Air Quality Conformity Analysis...
  - Will meet new requirements under SB 375
    - *For Example, Sustainable Communities Strategies*
  - Will ease combining/comparing results among MPOs



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# Multi-County Projects

- Much easier to create project models for corridor studies that cross county lines; Examples:
  - New river-crossing studies
  - Highway 65 corridor study (Fresno to Merced)
  - Four-County Metro-Rural Loop
- Potential exists to develop and maintain permanent multi-county models

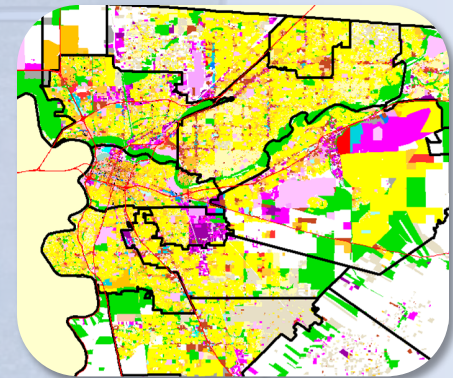


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# Pricing, “4D”, and TDM Studies

- Four-step models reflect road and parking pricing
- Quick-response tools reflect highly localized factors
- Better integration with other scenario testing tools
  - I-Place<sup>3</sup>s
  - UPLAN
  - Statewide GIS tools currently under development



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# Multi-modal Studies

- Transit
- Pedestrian and Bicycle
- Goods Movement
  - Truck Trip Generation
  - Eight-county model reflecting national data on commodity flows and local data on truck movements

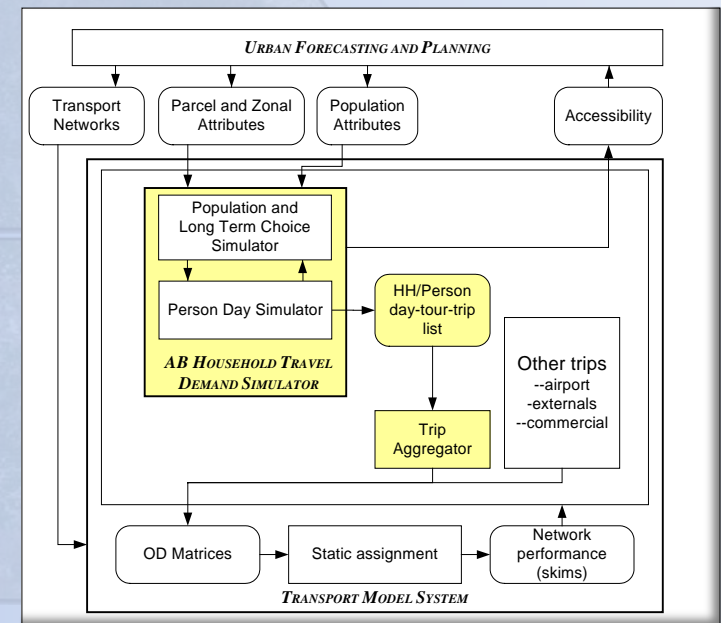


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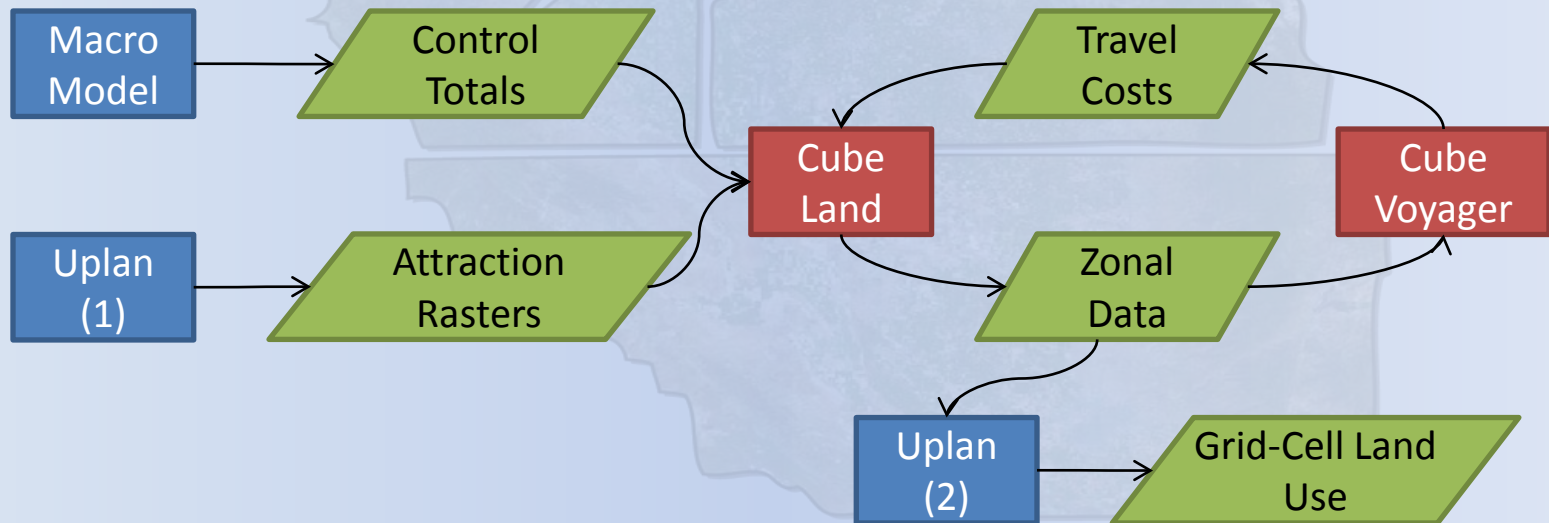
# Activity-based Modeling Studies

- More precise representation of travel
- Better behavioral model – trips are chained
- More information for analysis – provides a better understanding of how people link daily activities
- Greater ability to address TDM
- Two prototypes for the Valley:
  - Three-county zone-based
  - Fresno parcel-based



# Interactive Land Use-Transport Studies

- Cube Land (Kern prototype) will allow a new level of realism in the interaction of transport and land use
  - Example: How real estate markets work
- Possible project: Land Use plan that “fits” with available funding for transportation investments



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# Statewide Studies

- Models will share data structure with Statewide Travel Forecast Model and ARB 8-County Model
- Uploading and downloading of data from state sources and models greatly simplified
  - Example: the new Statewide Household Travel Survey
- Regional input to State Transportation Plan will be more direct resulting in more consistency between the Valley's Plans and the State's



# Summing Up

- By sharing common structures and data the new models will facilitate communication and cooperation among Valley modelers and policymakers
- By moving several steps up the ladder of modeling sophistication, Valley MPOs will be better able to talk with – and persuade – State and Federal partner agencies



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