

# **APPENDIX “B”**

## **Project Technical Advisory Panels: Experts and Practitioners**

### **TOPICS Include:**

- 1. Experts Advisory Panel**
- 2. Practitioners Panel**

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# 1. EXPERT PANEL

## A. Participants:

- **Marlon Boarnet - UC Irvine**, Department of Planning, Policy, and Design
- **Robert Cervero - UC Berkeley**, Department of City and Regional Planning
- **Dan Chatman - UC Berkeley**, Department of City & Regional Planning
- **Susan Handy - UC Davis**, Director, Center for Sustainable Transportation
- **Rich Kuzmyak** - Transportation Consultant
- **John Thomas – U.S. Environmental Protection Agency**, Development Community and Environment Division, Smart Growth program

## B. Meeting Dates (all via teleconference):

- April 9, 2010
- May 28, 2010
- November 2, 2011

## C. Summary of Input Provided re: Analysis of Detailed Land Use and Transportation Data

1. Begin evolving the models as much as possible toward a common form incorporating, for example, the lessons learned from attempts to estimate person travel with the (pilot) Fresno data could be incorporated into the approach to modeling person travel in the models for Sacramento, Bay Area, and the other small and medium MPOs
2. If using a sequence of models such as those illustrated, check for propagation of error from one step to the next.
3. Check elasticities captured in the models with published national elasticities.
4. Consider destination accessibility in terms of two phenomena, using at least two variables to address: local accessibility (diversity) and regional accessibility. Recognize the difference between high accessibility caused by being relatively close to medium sized destinations versus being a greater distance from very large destinations.

5. Recognize that accessibility is not a linear function, particularly transit accessibility or relationships that compare transit accessibility to roadway accessibility. At the extreme low sensitivity end of the spectrum, consider dropping outliers. At the extreme high-sensitivity end of the spectrum, “spline” the independent variable in a manner that captures different dependent variable relationships for different ranges of independent variable.
6. Stratifying households to model different ranges is based on the assumption that there's substantially more between-group than within-group variation of the key dependent variables of interest, but one always has to be on guard that adding so many statistical refinements makes the modeling tool unwieldy to the user and requires so much fine-grained disaggregation that it becomes difficult to use for small to medium size places with limited modeling capacities.
7. Test discrete statistical relationships for predicting integer outcomes such as number of trips. For example, check whether the S.F. Bay Area trip generation model would perform better using negative binomial or logistic analysis rather than regression.
8. Try using “seemingly unrelated regression (SUR)” or simultaneous equations in place of simple regression
9. While trip-chaining may reduce the number of vehicle trips generated in single-use sprawled settings, chaining also occurs in mixed urban settings because of the convenience afforded by concentrated attractions
10. In addition to refined accessibility metrics, it might be worthwhile to add a mode split component. That is, after vehicle trip generation, one could then measure the accessibility of a resident to activities for a specific trip purpose -- e.g., job accessibility for work trips.
11. If considering simultaneous equations modeling (SEM), accessibility brings the time/distance element into the SEM which feeds directly into VMT -- if one has high access to jobs, the generated trips will generally involve relatively low VMT.
12. It makes sense to increase sample size and in light of the fact that attributes such as commute times and mode splits do not vary a lot among smaller MPOs -- i.e., there's greater variation in such factors between small, medium-size, and large MPOs than there is variation within each of these groups.
13. Hierarchical Linear Modeling (HLM) works well if there are variables that work at different scales -- e.g., walking access influences travel at the neighborhood scale; transit accessibility works at the regional scale, thus these variables should be modeled at different levels. To capture regional differences, as an alternative to HLM, more typically fixed-effects variables are added to models (e.g., 0-1 dummies and possible interactive terms).

## 2. PRACTITIONERS PANEL

### A. Participants: (note: Agencies located in study areas are **highlighted**)\*

Planning & Modeling	
<b>Staff:</b>	<b>REGIONAL AGENCIES:</b>
Charles Field	Amador County Transportation Commission (CTC)
Bhupendra Patel, Anais Schenk	<b>Association of Monterey Bay Area Governments AMBAG</b>
Brian Lasagna	<b>Butte County Association of Govts. (CAG)</b>
Mike Bitner, Kristine Cai	<b>Fresno Council of Governments (COG)</b>
Rob Ball, Troy Hightower	<b>Kern COG</b>
Terri King	<b>Kings Co. COG</b>
Dylan Stone, Derek Winning	<b>Madera Co. CTC</b>
Matt Fell, Rich Green	<b>Merced CAG</b>
Doug Johnson, David Ory	<b>Metropolitan Transportation Commission - MTC</b> (S.F. Bay Area)
Farah Korishodi, Kevin Vierra	<b>Riverside COG</b>
Bruce Grisenbeck, Kacey Lizon	<b>Sacramento Area Council of Governments - SACOG</b>
Steve Smith	<b>San Bernadino CAG</b>
Rick Curry, Clint Daniels	<b>San Diego Association of Governments - SANDAG</b>
Kim Anderson	<b>San Joaquin COG</b>
Brian Bresolin	<b>Santa Barbara CAG</b>
Kim Shultz	<b>Santa Cruz Regional Transportation Commission (RTC)</b>
Mark Butala, Sungbin Cho, Hsi-hwa Hu, Junga Uhm, Frank Wen	<b>Southern California Association of Governments SCAG</b>
Sean Tiedgen, Dan Wayne	<b>Shasta Regional Transportation Planning Agency (RTPA)</b>
Geoffrey Chiapella, Steve Devencenzi, James Worthley	<b>San Luis Obispo (SLO) COG</b>
Jim Schoeffling, Carlos Yamzon	<b>Stanislaus (Stan) COG</b>
Roberto Brady, Mark Hays	<b>Tulare CAG</b>

	<b>STATE DEPARTMENTS:</b>
Jennifer Gray, Doug Ito, Leslie Kimura Szeto	California Air Resources Board (ARB) Air Quality/Transportation Planning
Chris Ganson	Governor's Office of Planning & Research (OPR)
Chad Baker	Caltrans HQ Transportation Systems Information (TSI) Division
Scott White (D2), Nicholas Deal (D3), Phillip Cox (D4), Claudia Espino (D5), David Berggren (D6), Chao Wei (D7), Dan Kopulsky & Gary Green (D8), Homer Zarzuela, Pat Robledo, Sarah Lesnikowski (D10) Maurice Eaton (D11)	Caltrans District Modeling Staff in areas included in study*

<b>* B. <u>Areas included in study:</u></b>	<b>Caltrans Districts</b>	<b><u>Area Represents:</u></b>
1. <b>Sacramento Region</b>	3	Major Metro MPO, inland - <i>North</i>
2. <b>San Diego Region</b>	11	Major Metro MPO, coastal - <i>South</i>
3. <b>SF Bay Area – Passenger Rail corridors (only)</b>	4	CA's most transit-rich corridors
4. <b>Central &amp; North San Joaquin Valley:</b> <i>San Joaquin, Stanislaus, Merced, Madera, &amp; Fresno Counties</i>	6, 10	Small & medium cities; rural areas
5. <b>So. San Joaquin Valley - Tulare, Kings &amp; Kern Counties</b>	6	Small & medium cities; rural areas
6. <b>Inland Empire – Riverside and San Bernardino Counties; and Imperial County</b>	8, 11	Urban Growth Areas (Inland Empire). Small cities & rural– <i>Southern</i> (Imperial Co.)
7. <b>Central Coast - Monterey &amp; Santa Cruz Counties (AMBAG), San Luis Obispo (SLOCOG), Santa Barbara (SBCAG)</b>	5	Small cities & rural –coastal ( <i>Central</i> )
8. <b>No. Sac Valley - Shasta Co.(RTPA), Butte(CAG) + nearby rural counties</b>	2, 3	Small cities & rural –inland ( <i>North</i> )

**C. Meeting Dates and Primary Topics** (all via webinar):

- Meeting #1: **May 18, 2010** – iPLACE3S Improvements
- Meeting #2:\* **July 27, 2011** – Overview of Project
- Meeting #3: **January 27, 2012** – Data and Analysis Tools
- Meeting #4: **March 29, 2012** – Results of Analysis of Built Environment and Travel data; overview of new “Ds Analysis Modules” produced for various regions
- Meeting #5:\*\* **June 26, 2012** – T.A. to MPOs re: the development of travel demand model post-processors for eight “demonstration” areas

\* Recording of this meeting is available at: [Webinar: Project Overview \(July 27, 2011\)](#)

\*\* Recording of this meeting is available at: [Webinar: Project Update \(June 26, 2012\)](#)