Discussion Items

- Motivation for the study
- Data collection approach
- Current status and schedule
Motivation and Background
Motivation and Background

- Data needed for SCAG model validation
  - Count data last collected in 2012 by SCAG
  - Region has undergone change in the interim

- Detailed classification data required:
  - 15-minute intervals
  - Segmented by vehicles classes

- Comprehensive region-wide coverage

- Leverage existing data to the extent possible
Data Collection Approach
Three-step Approach

### Primary Data Collection
- Freeways
- Non-Freeways

### Caltrans Data Sources
- PeMS
- WIM/TAMS
- Caltrans Counts

### Local Data Sources
- Complementary efforts
- County/city data

- Data collected on Tuesday-Wednesday-Thursday
- No data collected on President’s Day/Memorial Day Tuesdays
- No data collection around Universities during Spring Break
Primary Data Collection

- Includes screenlines and external cordons
- Includes freeways and arterials
- 2012 locations used as starting point
Primary Data Collection

Locations identified by SCAG

<table>
<thead>
<tr>
<th>Screenline/Cordon</th>
<th>Freeways</th>
<th>Non-Freeways</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screenline</td>
<td>231</td>
<td>547</td>
<td>778</td>
</tr>
<tr>
<td>External Cordons</td>
<td>20</td>
<td>33</td>
<td>53</td>
</tr>
</tbody>
</table>

Dropped low volume roadways

Final list of locations

<table>
<thead>
<tr>
<th>Screenline/Cordon</th>
<th>Freeways</th>
<th>Non-Freeways</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screenline</td>
<td>231</td>
<td>488</td>
<td>719</td>
</tr>
<tr>
<td>External Cordons</td>
<td>20</td>
<td>32</td>
<td>52</td>
</tr>
</tbody>
</table>
Primary Data Collection

Non-Freeway locations
» All locations will be counted using tubes
» Data obtained in 15-minute intervals
» Includes all 13-FHWA classes of vehicles

Freeway locations
» Primary data collected at 30 locations
» Uses a combination of Wavetronix and video
» Remaining locations obtained using existing Caltrans data sources
» One-day data collection at all locations
Primary Data Collection

**Identifying Freeway Locations**

- Include locations that have poor quality or no Caltrans data.
- Include major external locations.
- Some locations deemed important in 2012.
- Good distribution throughout the region.
Available Caltrans Data

**PeMS data**
- Comprehensive coverage
- Historical data
- Detailed time slices
- No vehicle classification

**Major steps**
- Assign station to screenline
- Evaluate data quality
- Drop poor performing stations
Available Caltrans Data

- WIM data
  - Weigh-in-motion
  - Less comprehensive
  - Historical data
  - Detailed time slices
  - Vehicle classifications

- Same criteria as PeMS data cleaning
Available Caltrans Data

TAMS Data
» Truck Activity Monitoring System
» Developed by UC Irvine Researchers
» Captures vehicle classification
» Subset of PeMS

Same criteria as PeMS data cleaning
Primary Data Collection on Freeways
Local Data Sources

- Explore data-sharing with LA Metro
- Request SCAG Partners for other existing data

Anurag Komanduri
akomanduri@camsys.com

KiHong Kim
kimk@scag.ca.gov
Current Status & Schedule
Schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>0. Project Management</td>
<td>M 1</td>
</tr>
<tr>
<td>1. Assemble and Evaluate Existing Traffic Count Database</td>
<td>M 2</td>
</tr>
<tr>
<td>2. Conduct New Field Traffic Count Surveys</td>
<td>M 3</td>
</tr>
<tr>
<td>3. Regional Screenline Count Database</td>
<td>M 4</td>
</tr>
<tr>
<td>4. Final Report and Presentations</td>
<td>M 5</td>
</tr>
</tbody>
</table>

- **Kickoff Meeting**
- **Coordination Meeting (Biweekly)**
- **TM#** Technical Memorandum
- **MTF#** Presentation to Model Task Force
Tasks Accomplished

- Finalized primary data collection locations.
- Data collection on non-freeway locations underway (~15% completed)
- Plan to access and assess Caltrans data.
- Preparing permit requests for freeway locations.
Next Steps

- Data review of all sources
- Design database to house data
- Develop procedures to adjust for:
  - Time-of-day splits
  - Seasonality
  - Vehicle classification for PeMS
- Integrate within SCAG model network
- Present to MTF after project is complete
CS and SCAG Team
Team Members

Eric Bierce
Principal-in-Charge
ebierce@camsys.com

Anurag Komanduri
Project Manager
akomanduri@camsys.com

Chao Wang
Technical Lead
cwang@camsys.com

KiHong Kim
SCAG Project Manager
kimk@scag.ca.gov
Thank You