Southern California Association of Governments
Regional Screenline Count Database

Modeling Task Force
March 27, 2013
AGENDA

- Introductions
- Objectives
- Approach
- Database
- Schedule
PROJECT OBJECTIVES

• Basic Screenline Review
• Complete Screenline Count Coverage
  – 35 Screenlines (one new)
  – Regional Cordon locations
• Freeway Truck Classification counts
  – Supplement existing data on freeway links
• Updated Count Database
  – Populate the database with the new data
  – Refresh the link between the Screenline Database and SCAG’s latest roadway network
• Final Dataset
  – Ready for use in SCAG’s next model validation exercise
• Screenlines
  – New screenline (# 35) in northern Los Angeles County
  – Minor Modifications to some screenline alignments
SCREENLINE COUNT LOCATIONS - Freeways

Legend
- Interstate/Freeway
- Screenlines
- Counties
SCREENLINE COUNT LOCATIONS – Arterials and Collectors
SCREENLINE COUNT LOCATIONS - Freeways

Legend
- Orange: Interstate/Freeway
- Purple: Screenlines
- Gray: Counties
**APPROACH**

- **Data Collection Timeframe**
  - Collect on Tuesday / Wednesday / Thursday
  - Avoid major universities on Spring Break (no counts within 5 miles)

<table>
<thead>
<tr>
<th>University</th>
<th>Spring Break</th>
</tr>
</thead>
<tbody>
<tr>
<td>California State University – Los Angeles</td>
<td>March 20 - 27</td>
</tr>
<tr>
<td>California State University – San Bernardino and Cal Poly Pomona</td>
<td>March 23 - 31</td>
</tr>
<tr>
<td>California State University – Fullerton, Long Beach and Dominguez Hills</td>
<td>April 1 - 7</td>
</tr>
<tr>
<td>California State University – Northridge</td>
<td>April 8 - 13</td>
</tr>
<tr>
<td>University of California, Los Angeles, Riverside, and Irvine</td>
<td>March 23 - 31</td>
</tr>
<tr>
<td>University of Southern California</td>
<td>March 18 - 23</td>
</tr>
<tr>
<td>Caltech</td>
<td>March 21 - 31</td>
</tr>
</tbody>
</table>
• Three Tiers of Data Collection
  – 2008 Count < 500 Daily Vehicles
    • Use the 2008 count with a growth factor
  – 2008 Count 500 – 8,900 Daily Vehicles
    • Collect a new 24-Hour Count
  – 2008 Count > 8,900 Daily Vehicles
    • Collect a new 48-Hour Count

• All Non-Freeway counts will include the 13 FHWA Vehicle Classifications

<table>
<thead>
<tr>
<th>Type</th>
<th>Factored</th>
<th>1-day</th>
<th>2-days</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Arterials</td>
<td>3</td>
<td>27</td>
<td>53</td>
<td>83</td>
</tr>
<tr>
<td>Non State Arterials</td>
<td>32</td>
<td>181</td>
<td>286</td>
<td>499</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>208</td>
<td>339</td>
<td>582</td>
</tr>
</tbody>
</table>
Count Locations by Duration of Count

Legend

- Factored 2006 Count
- 1 Day Counts
- 2 Day Counts
- Screenlines
- Counties
Count Locations by Duration of Count (Inset)
• 30 Locations

• Located based on existing data
  – 2010 Counts (Wiltec)
  – 2011 Caltrans Truck Count book
    • AADT – Not ideal for model validation
  – Weigh in Motion Stations (WIM)

• Prioritize count collection in areas with heavy freight activity
FREEWAY COUNT LOCATIONS

Legend
- Freeway Counts
  - Count Locations
  - Do not count
- Count Comparison
  - WIM Station in Vicinity
  - Difference <30%
  - Witec Count Only
  - Caltrans Count Only
  - Difference >30%
  - No available counts
  - Screenlines
  - Counties
FREEWAY COUNT LOCATIONS

Legend
- ★ Count Locations
- X Do not count

Count Comparison
- WM Station in Vicinity
- Difference <30%
- Witec Count Only
- Caltrans Count Only
- Difference >30%
- No available counts
- Screenlines
- Counties
FREEWAY COUNT LOCATIONS

Legend
Freeway Counts
★ Count Locations
X Do not count

Count Comparison
- WM Station in Vicinity
- Difference <30%
- Witec Count Only
- Caltrans Count Only
- Difference >30%
- No available counts
- Screenlines
- Counties
SUPPLEMENTAL DATA COLLECTION

• Supplement cut-lines
  – Numerous upcoming freight studies
  – Arterial-based cut-lines surrounding major industrial and logistics areas
DATA VERIFICATION

• Review data as counts are collected
  – Compare to 2008 volumes
  – Check for zero-volume periods
  – Check volumes with valid ranges
    • Based on Facility Type and Number of Lanes

• Manually consider suspect data
  – Re-count as needed
• Update the 2008 Database with 2012/2013 Data
  – Retain final 2008 data and add new 2013 counts
  – Update annual growth factors based on new data
  – Review seasonal adjustment factors and revise if necessary
    (Use of adjustment factors should be minimal)
DATABASE UPDATE

• Simplified Database Structure
  – No longer necessary to accommodate:
    • Multiple data sources (Cities, counties, etc.)
    • Arterial data collected outside of the Spring or Fall
  – Minor updates to enhance data accessibility and ease of use

• Updated TransCAD Network Link
  – Link to the latest network (as of May-June 2013)
  – Explore ways to create a more permanent link
SCHEDULE

Tasks
1. Project Management
2. Field Traffic Count Survey
3. Screenline Count Database
4. Final Report/Presentations

2012

2013

Kick-Off Meeting Coordination/TRC Meeting Presentation at the Modeling Task Force Meeting
Questions?