Getting the Data

• **Data Requested** – O/Ds for Hwy 37 travel, trip purpose, time of day, residence status.

• **Study Period** - AVG. Weekdays during Sept. 2014

• **Study Area** – 4 North Bay Counties, 10 Cities, 7 External zones representing travel into and out of the study area.

• **Wireless Data** - Verizon selected for North Bay Coverage.
Analysis Zones:
10 Cities
4 Counties +
External Zones
Steps for Creating OD Pairs

- Assign device home and work location
  - Home zone assigned for where a device was between 9PM and 6AM during the study period.
  - Work zone assigned based on where device was located between 9AM and 5PM during the study period.

- Assign residence status
  - Resident, home location is in the study area.
  - Visitor, persons who were observed in the study area during the study period but which were assigned home locations outside of the study area.

- Generate trips
  - O/Ds assigned to zones based on start and end points.
Summary Of Current Conditions and Samples Collected

- 33,000 vehicles per day at Sonoma – Solano county line.
- 40,000 vehicles per day in Novato
- 92,500 vehicles per day in Vallejo at junction with I-80.
- Approximately 66,000 daily trips tracked in Study Area during Sept. 2014.
- Approximately 2000 daily trips tracked moving through Hwy 37 corridor during Sept. 2014.
- AirSage applied expansion algorithms to estimate total travel through Highway 37 corridor.
Hwy 37 Observed Trips - Trip Purpose

- Commute: 22%
- Non-Commute: 78%
HWY 37 Observed Trips - Time of Day

- AM Peak: 31%
- PM Peak: 24%
- Remainder: 45%
Hwy 37 Daily Travelers, Residence Status - Sept. 2014

- Resident: 69%
- Visitor: 31%
County Share of Trip Origins, Hwy 37, Avg. Weekday, Sept. 2014

- Solano: 32%
- External: 23%
- Napa: 13%
- Sonoma: 18%
- Marin: 14%
Hwy 37 - Trip Origin Average Weekday (Sept. 2014)

- External: 23%
- Other North Bay: 21%
- Novato: 8%
- San Rafael: 6%
- Santa Rosa: 1%
- Petaluma: 3%
- Rohnert Park: 3%
- Vallejo: 20%
- Vacaville: 2%
- Napa: 4%
- Fairfield: 4%
- American Canyon: 5%
- Other: 21%
Hwy 37 - Trip Destination Average Weekday (Sept. 2014)

- External: 21%
- Vallejo: 21%
- Petaluma: 3%
- Rohnert Park: 1%
- Santa Rosa: 3%
- San Rafael: 4%
- Novato: 8%
- Other North Bay: 20%
- American Canyon: 6%
- Napa: 5%
- Fairfield: 5%
- Vacaville: 3%
### Highway 37 - AirSage Sample, 15 Highest Travel Flows

<table>
<thead>
<tr>
<th>Rank</th>
<th>ORIGIN</th>
<th>DESTINATION</th>
<th>ESTIMATED TRIPS</th>
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<tbody>
<tr>
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<td>2356</td>
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<td>Vallejo</td>
<td>American Canyon</td>
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<td>Vallejo</td>
<td>1992</td>
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<td>Other Solano</td>
<td>Vallejo</td>
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<td>6</td>
<td>Southern Sonoma County/Sonoma Valley</td>
<td>Novato</td>
<td>1703</td>
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<td>Other Solano</td>
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</table>

Estimated travel occurs on 2 lane section of HWY 37 west of Mare Island.
Limitations

• Sample based on data from one wireless service provider (Verizon).
• Biased towards mobile device users – locations logged each time a device interacts with the mobile network.
• No O/D data received for areas of Marin county outside of Novato and San Rafael (possible cell service, or service provider penetration rate issue).
Questions?