Aviation Technical Advisory Committee

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Ground Access Analysis

Task is to create model trip tables for incorporation into the RTP/SCS model that reflect ground trips from the region to each airport.

• Development of trip tables requires several steps
  • Trip Generation
  • Trip Distribution
  • Mode of Arrival
Ground Access Analysis

Trip Generation

• How many airport trips does each part of the region generate?
  • Draw on passenger surveys conducted by airports that ask about trip origins
  • Identify socio-economic data that SCAG already has that correlate with the number of airport trips from each subregion
  • Apply correlations to each model zone (~4000)
Ground Access Analysis

How many airport trips does each part of the region generate?

• Because of small sample size in passenger surveys, data were aggregated into subregions that would have similar relationships with each airport
Ground Access Analysis

Trip Generation

• How many airport trips does each part of the region generate?
  • Identify socio-economic data that SCAG already has (for 2012 base year) that correlate with the number of airport trips from each subregion
  • Apply correlations to each model zone (~4000)

<table>
<thead>
<tr>
<th></th>
<th>Resident</th>
<th>Visitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>??</td>
<td>??</td>
</tr>
<tr>
<td>Non Business</td>
<td>??</td>
<td>??</td>
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<td><strong>Business</strong></td>
<td>High Income Workers</td>
<td>Professional Employment</td>
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<td><strong>Non Business</strong></td>
<td>Income Weighted Population</td>
<td>Hospitality Employment</td>
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</tbody>
</table>

• Adjustments for county, weekend destinations, and central business districts
Ground Access Analysis

Trip Distribution

• Which trips go to which airport?
  • Match distribution of trip lengths from passenger surveys

![Graph showing trip distribution by distance for Residential Business](image)
Ground Access Analysis

Mode of Arrival

• What mode of transportation do passengers use to get to the airport?
  • Based on distribution of modes from passenger surveys and available modes at each airport
Ground Access Analysis

Next Steps

• Convert Production-Attraction **person** trips tables to Origin-Destination **vehicle** trip tables
  • Difference between drop-off (1 air passenger trip = 2 round trip vehicle trips) and drive alone (1 air passenger trip = 1 round trip vehicle trip)

• Apply methodology to 2040 scenario, as directed by Transportation Committee
Thank you!

Learn more by visiting www.scag.ca.gov.
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