Overview

• Transit patronage trends

• Concentration and asymmetry of service and use

• Possible causes of recent ridership declines

• Some implications for the future
Patronage: Up since 2000, down since 2007, down a lot since 2014
Trips per resident: Mostly down since 2007

Transit Use Per Capita
Relatively flat nationally, but down in California since 2009

- US
- CA
- SCAG

Concentration and asymmetry

- A few people make most of the trips
- A few neighborhoods generate most of the trips
- A few operators carry most of the passengers
A few people make most of the trips

- 2% of SCAG residents ride very frequently
  - ~45 trips/month

- 20% ride occasionally
  - ~12 trips/month

- 78% ride transit very little or not at all
  - < 1 trip/month
A few neighborhoods generate most of the trips

- 60% of region’s transit commuters lived in census tracts that comprise <1% of the region’s land area
A few operators carry most of the passengers

• Fewer than 10% of the region’s transit operators carry about 80% of the region’s passengers
Concentrated use means concentrated ridership losses

- LA Metro, OCTA, LA DOT, and SM Big Blue accounted for 88 percent of the state’s ridership losses between 2010 and 2016
  - LA Metro alone for 72%

- Half of California’s total lost ridership is accounted for by 17 LA Metro routes (14 bus and 3 rail lines) and one OCTA route
  - 12 LA Metro routes accounted for 38% of state losses
Changes in transit service and fares have mostly followed, and not led, falling ridership.
Changes in transit service and fares have mostly followed, and not led, falling ridership.
Fuel prices and TNCs have likely played contributing, but not leading roles.
Fuel prices and TNCs have likely played contributing, but not leading roles

- Lyft and Uber are growing
  - Could both add and subtract transit riders
  - Detailed use data not publicly available

- Significant TNC use since 2012
  - Per capita transit use down since 2007
Fuel prices and TNCs have likely played contributing, but not leading roles

• Research
  – Most TNC users not core transit users
  – Most TNC trips not core transit trips

• Another form of auto access
  – Continued TNC growth could make a bigger dent on transit use
Smoking gun: *Private vehicle access has increased substantially in the 2000s*

- **1990s...**
  - SCAG region added 1.8 million people and 456,000 household vehicles
  - 0.25 vehicles/new resident

- **2000 to 2015...**
  - Region added 2.3 million people and **2.1 million** household vehicles
  - 0.95 vehicles/new resident
Smoking gun: *Private vehicle access has increased substantially in the 2000s*

- SCAG households during the 2000s added vehicles are nearly 4X the rate of the 1990s

- Back of the envelope
  - SCAG residents spent more on these 2.1 million additional vehicles than LA Metro and Metrolink spent on all rail and BRT over the same period
What explains transit use?

Less Transit Use
What explains transit use?

(UCLA)
What explains transit use?

• No driver’s license
What explains transit use?

- No driver’s license
- African-American
What explains transit use?

- No driver’s license
- African-American
- 0 vehicle household
What explains transit use?

- No driver’s license
- African-American
- 0 vehicle household
- Few vehicle household
What explains transit use?

• No driver’s license
• African-American
• 0-vehicle household
• Few-vehicle household
• Recent immigrants
Zero-vehicle households way down, especially in low-income households
Zero-vehicle households way down among recent immigrants
Immigrants: *Changing composition over time*

Note: the presentation contained an error in how the data were depicted in chart format; this table reflects the data correctly.

<table>
<thead>
<tr>
<th>SCAG Region Immigrants From Asia &amp; The Americas, 2010-2015</th>
<th>2000</th>
<th>2010</th>
<th>2015</th>
<th>00-'15 Chg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia</td>
<td>28.7%</td>
<td>33.9%</td>
<td>35.3%</td>
<td>23.0%</td>
</tr>
<tr>
<td>The Americas</td>
<td>63.7%</td>
<td>59.1%</td>
<td>57.7%</td>
<td>-9.4%</td>
</tr>
<tr>
<td>Latin America</td>
<td>62.4%</td>
<td>58.0%</td>
<td>56.5%</td>
<td>-9.5%</td>
</tr>
<tr>
<td>Central America (incl. Mex.)</td>
<td>58.8%</td>
<td>54.5%</td>
<td>53.0%</td>
<td>-9.9%</td>
</tr>
<tr>
<td>Mexico</td>
<td>47.7%</td>
<td>42.4%</td>
<td>41.3%</td>
<td>-13.4%</td>
</tr>
<tr>
<td>South America</td>
<td>2.6%</td>
<td>2.7%</td>
<td>2.7%</td>
<td>3.8%</td>
</tr>
</tbody>
</table>

Source: US Census Summary File Data
Evidence: Some change in the characteristics of residents living in high-transit use neighborhoods
Increased vehicle access has likely had a very large effect on transit use.
Conclusions

• The regional pool of transit users is changing
  – Fewer heavy-use “transit dependents” over time
  – More “choice riders” with access to cars
  – This situation is unlikely to reverse anytime soon

• Some trends are more variable
  – Fuel prices likely to rise again at some point
No easy answers

• Replenish the pool of very frequent transit users
  – Such as with a large increase in low-wage immigrants to the region

• Broaden the base of occasional transit users
  – If every 4\textsuperscript{th} non-rider added 1 transit trip every two weeks, ridership would be up region-wide
  – This would likely require more aggressive management of private travel
Thank you

Evelyn Blumenberg, Michael Manville, Brian D. Taylor
UCLA Institute of Transportation Studies