Complete Streets Implementation

Jeffrey Tumlin, Interim Director
Oakland Department of Transportation
1. Think like an economist
Personal Mobility: Most Inefficient Sector

- Cars used only 5% of useful life
- Only 25% of capacity used
Transportation Demand Management

- Making more efficient use of existing infrastructure
- Making sure mobility is always available, whenever needed
Traffic Economics

Traffic Volume

2:00 AM 7:00 AM Noon 7:00 PM Midnight

Los F!

Capacity

Waste
2. Measure What Matters
## Old Speed Paradigm -> Roadway LOS

<table>
<thead>
<tr>
<th>LOS</th>
<th>Average delay in seconds per vehicle</th>
<th>Description of motorist perception</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>&lt; 10</td>
<td>Free-flow traffic: “Good” LOS</td>
</tr>
<tr>
<td>B</td>
<td>10.1 – 20</td>
<td>Reasonable free-flow</td>
</tr>
<tr>
<td>C</td>
<td>20.1 – 35</td>
<td>Stable but unreasonable delay begins to occur</td>
</tr>
<tr>
<td>D</td>
<td>35.1 – 55</td>
<td>Borderline “bad” LOS</td>
</tr>
<tr>
<td>E</td>
<td>55.1 – 80</td>
<td>“Bad” LOS: long queues</td>
</tr>
<tr>
<td>F</td>
<td>&gt; 80</td>
<td>Unacceptable: very high delay, congestion</td>
</tr>
</tbody>
</table>

Source: Reid Ewing
ALICIA'S ROOM - EVENING

A, a Mexican American teen, out of room. She slams the door and throws which is covered with worn purple al
Level of Service A
Level of Service F

Source: Neighborhoods.org
What’s important depends upon perspective

Traffic engineer:  F A
Economist:       A F
California Shift: Senate Bill 743

Los Angeles
Regional Average per Capita Vehicle Kilometers Traveled
3. Use the Right Tools, and Use them Correctly
“All models are wrong, but some are useful.”

George E. P. Box,

Induced and Latent Demand

- Congestion
- Widen Roadway
- Faster Driving
- More People Drive
Despite recovery, driving rates continue to decline since peak in 2005.

4. Reward the Private Sector for doing the Right Thing
Genentech
South San Francisco

Location
Parking Cost Break-Down

Source: Adapted from Victoria Transport Policy Institute, 2012
Results
GHG Reduction Impacts by Year

- **Year**
  - 2006 (Nov)
  - 2007 (Jan)
  - 2007 (Oct)
  - 2008 (Apr)
  - 2008 (Oct)
  - 2009 (Apr)
  - 2009 (Oct)
  - 2010 (Apr)
  - 2010 (Oct)

- **Total Emissions (metric tons)**
  - 2006 (Nov): 45,000
  - 2007 (Jan): 42,500
  - 2007 (Oct): 39,000
  - 2008 (Apr): 35,500
  - 2008 (Oct): 32,000
  - 2009 (Apr): 28,500
  - 2009 (Oct): 25,000
  - 2010 (Apr): 21,500
  - 2010 (Oct): 18,000

- **Number of employees**
  - 2006 (Nov): 10,000
  - 2007 (Jan): 12,000
  - 2007 (Oct): 14,000
  - 2008 (Apr): 16,000
  - 2008 (Oct): 18,000
  - 2009 (Apr): 20,000
  - 2009 (Oct): 22,000
  - 2010 (Apr): 24,000
  - 2010 (Oct): 26,000

- **Emissions per employee (metric tons)**
  - 2006 (Nov): 4.5
  - 2007 (Jan): 3.5
  - 2007 (Oct): 3.0
  - 2008 (Apr): 2.5
  - 2008 (Oct): 2.0
  - 2009 (Apr): 1.5
  - 2009 (Oct): 1.0
  - 2010 (Apr): 0.5
  - 2010 (Oct): 0.0
5. Be Smart About Parking
Mixed Use, Park Once District

Results:

• <\frac{1}{2}\) the parking
• <\frac{1}{2}\) the land area
• \frac{1}{4}\) the arterial trips
• 1/6\)th the arterial turning movements
• <\frac{1}{4}\) the vehicle miles traveled
Align the mechanics of governance with your values

Align values with budget

Beware costs in one account and benefits in another
Values
Goals
Objectives
Strategies
Performance Measures
Budget
Reporting