Complete Streets Implementation

City of Oakland

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Oakland Department of Transportation

1. Think like an economist

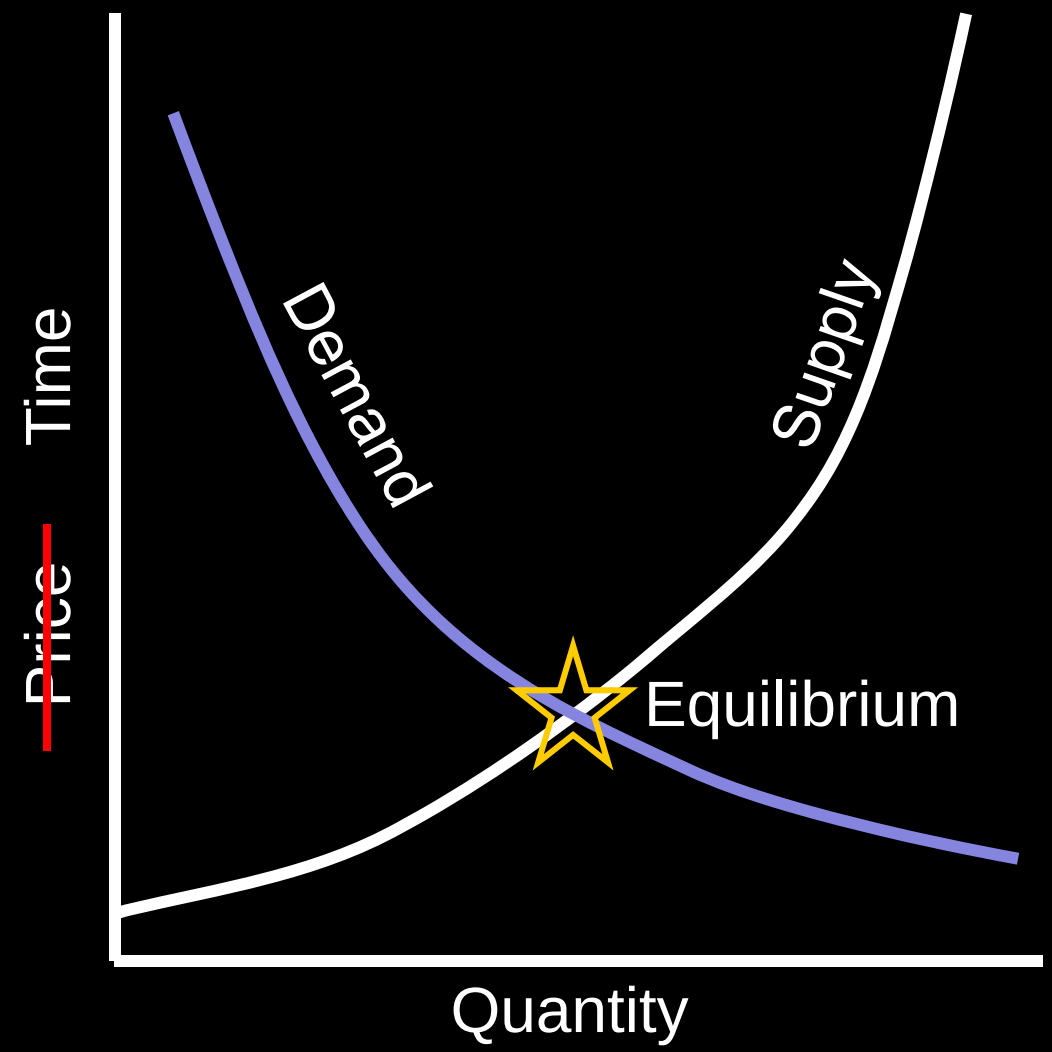
Personal Mobility: Most Inefficient Sector

- Cars used only
  5% of useful life

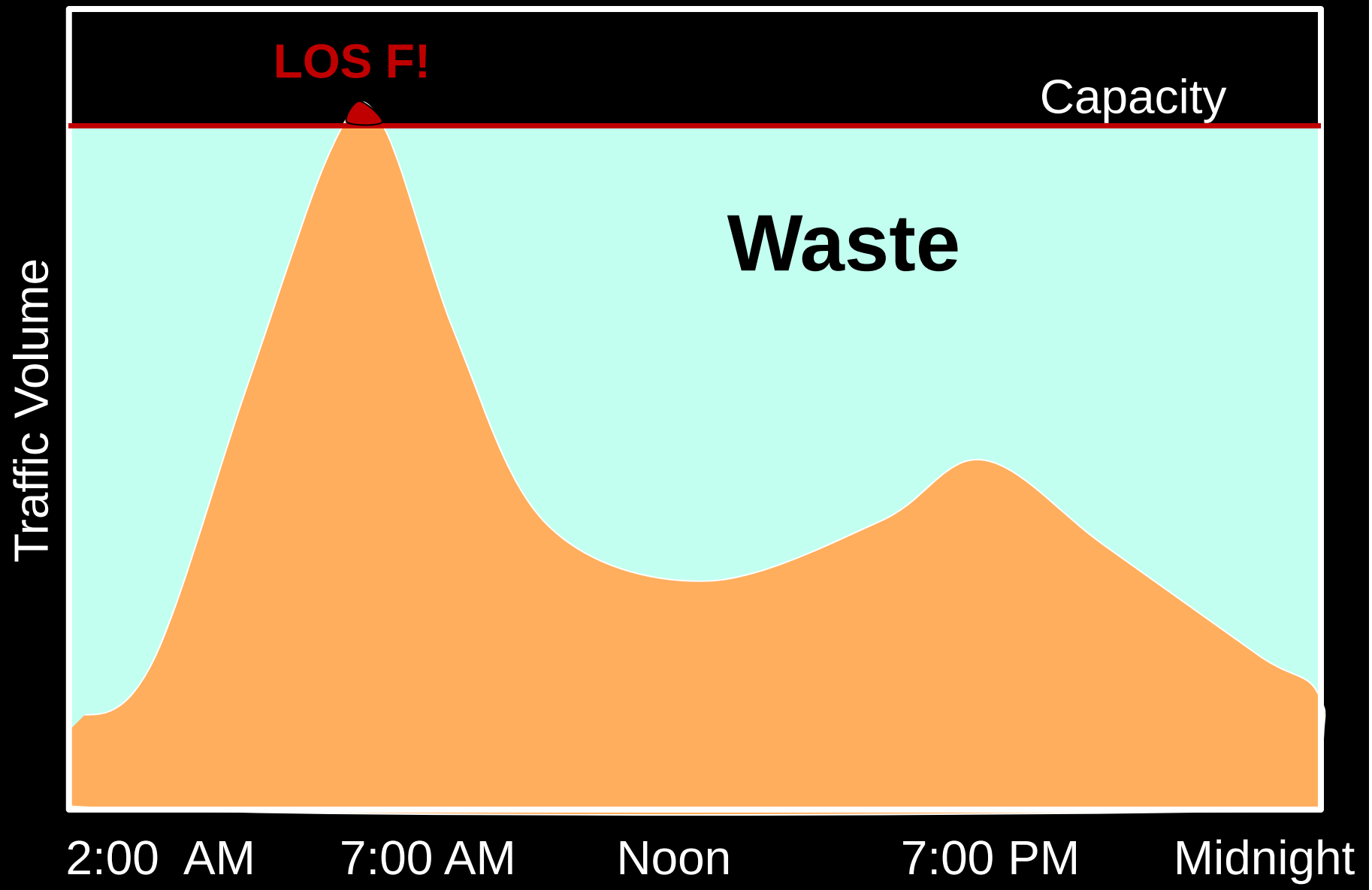
- Only 25% of
  capacity used

Transportation Demand Management

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



Traffic Economics

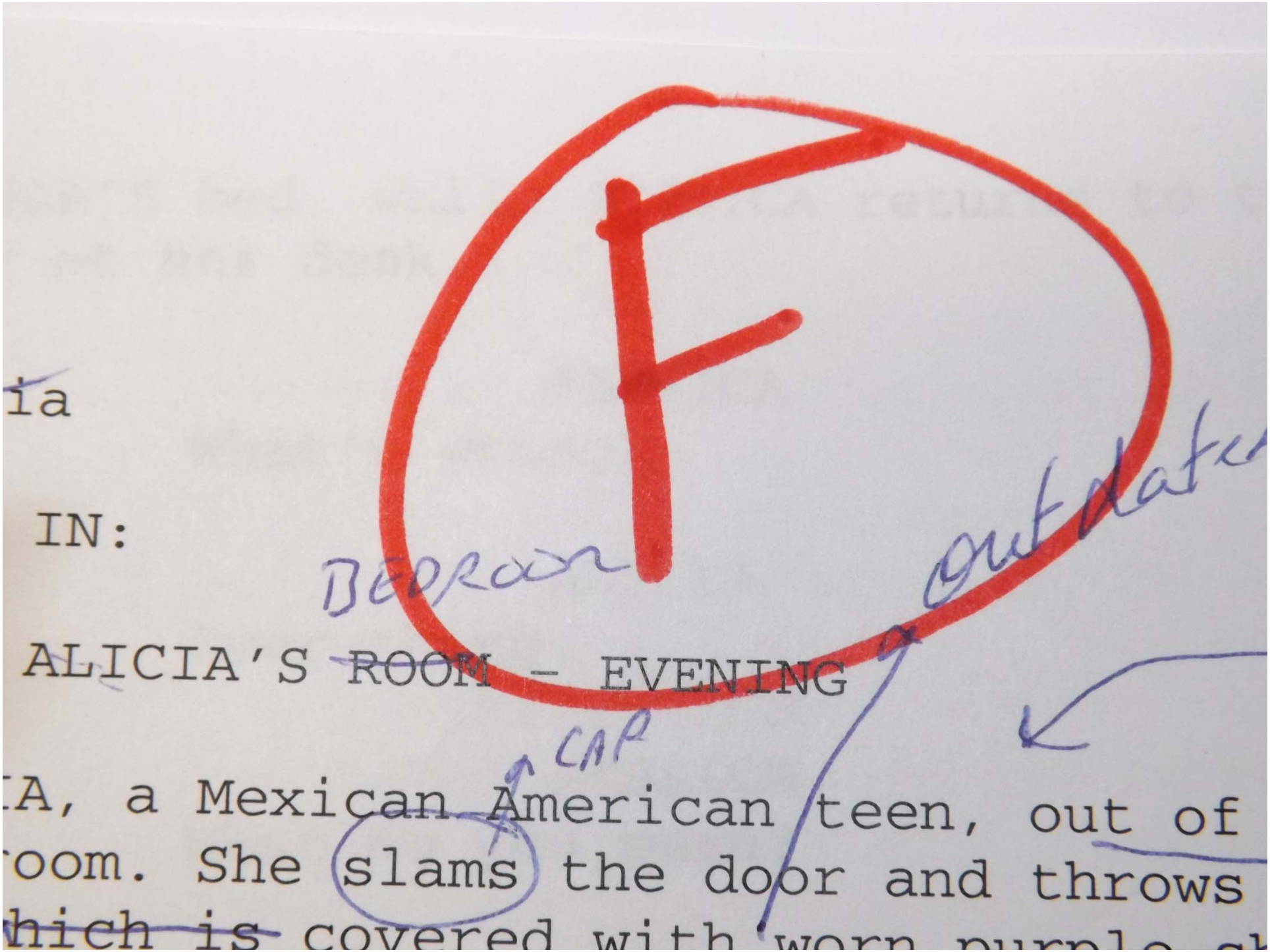


2. Measure What Matters

Old Speed Paradigm -> Roadway LOS

LOS	Average delay in seconds per vehicle	Description of motorist perception
A	< 10	Free-flow traffic: "Good" LOS
B	10.1 – 20	Reasonable free-flow
C	20.1 – 35	Stable but unreasonable delay begins to occur
D	35.1 – 55	Borderline "bad" LOS
E	55.1 – 80	"Bad" LOS: long queues
F	> 80	Unacceptable: very high delay, congestion

Source: Reid Ewing



ia

IN:

ALICIA'S ~~ROOM~~ - EVENING

IA, a Mexican American teen, out of
oom. She slams the door and throws
~~hich is~~ covered with worn purple

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

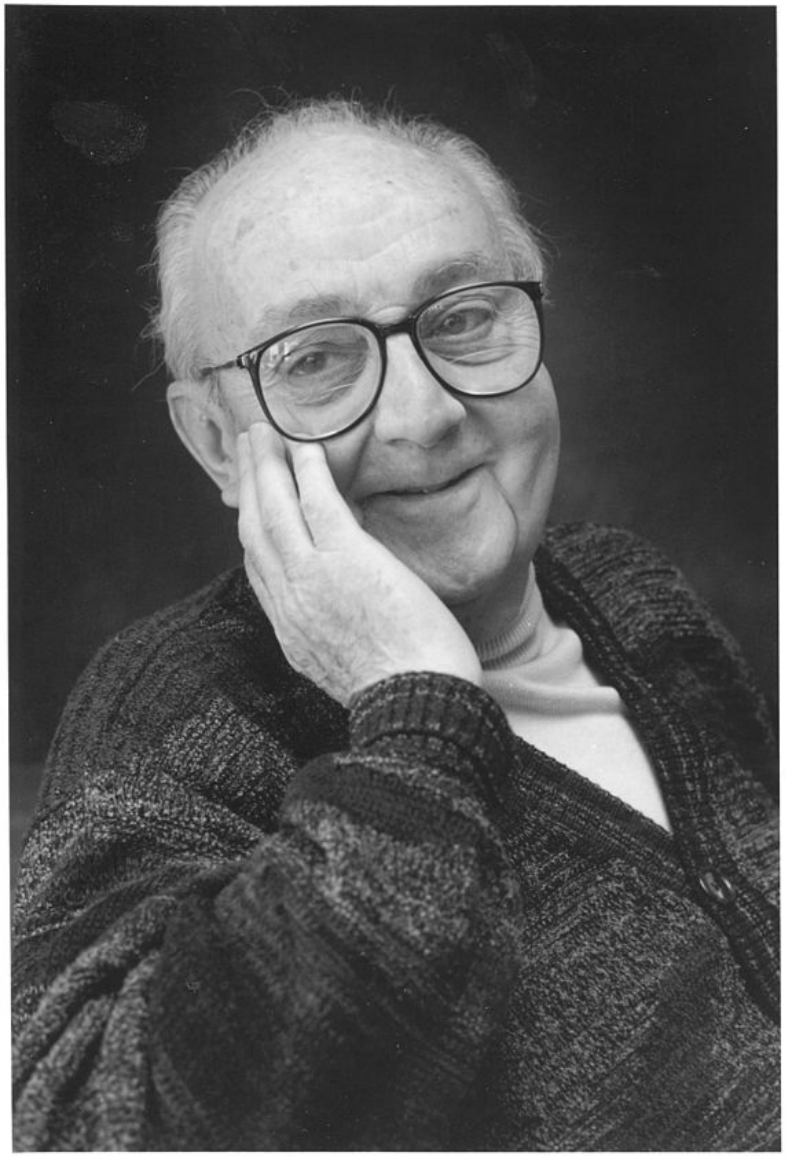
LOS → Regional Average per Capita Vehicle Kilometers Traveled

3. Use the Right Tools, and Use them Correctly

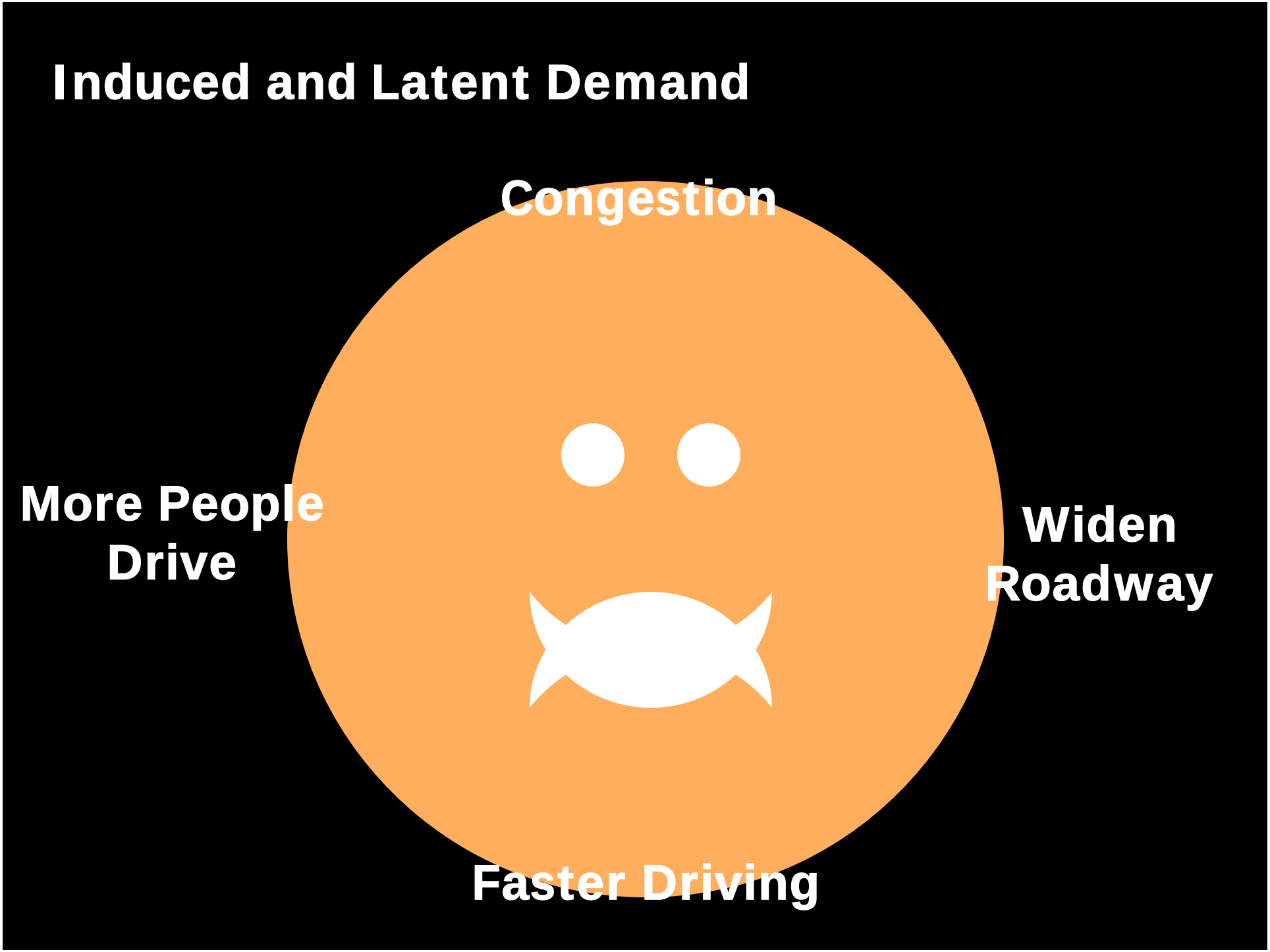
“All models are wrong, but some are useful.”

George E. P. Box,

Empirical Model-Building and Response Surfaces **(1987)**



Induced and Latent Demand



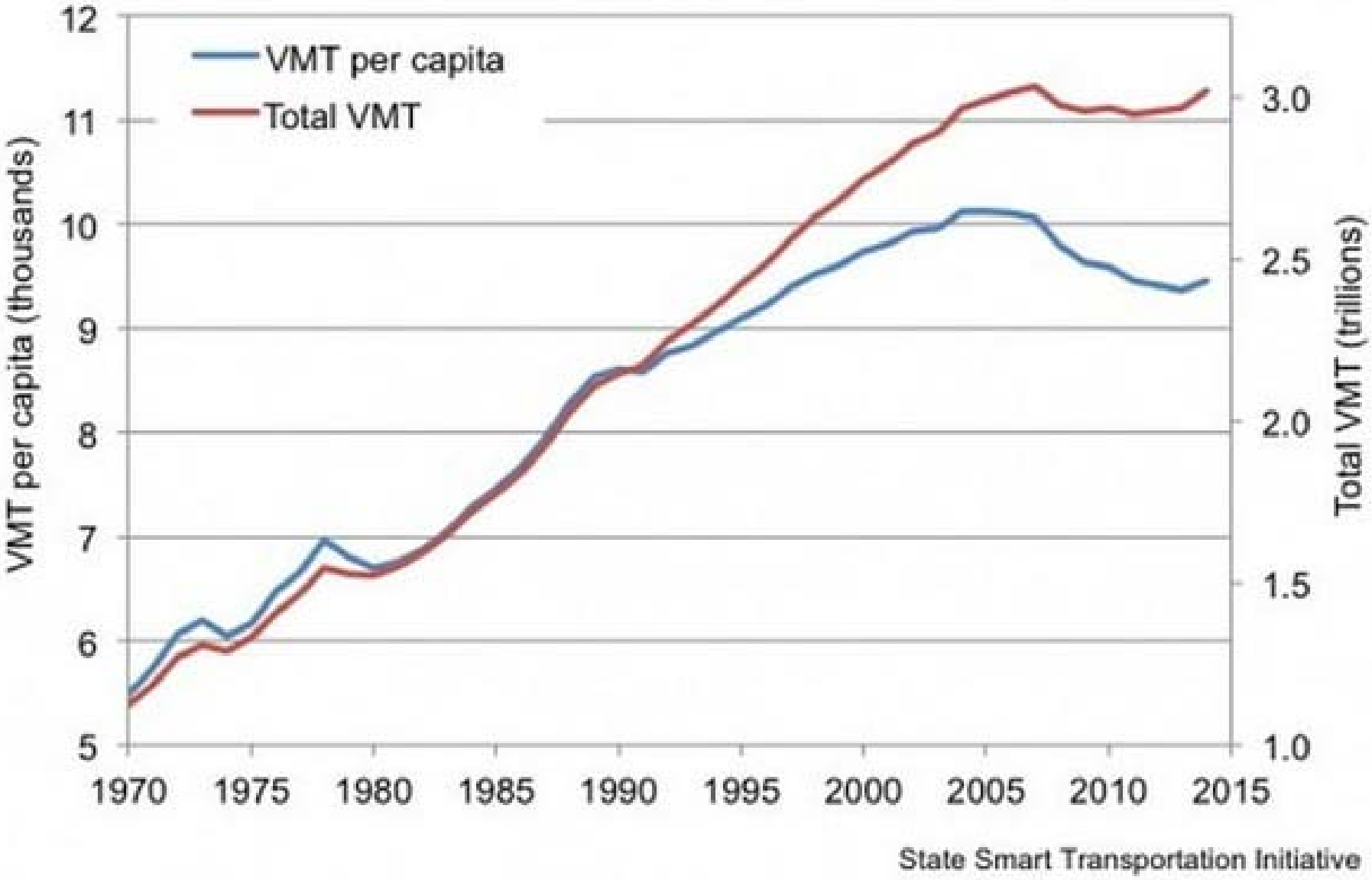


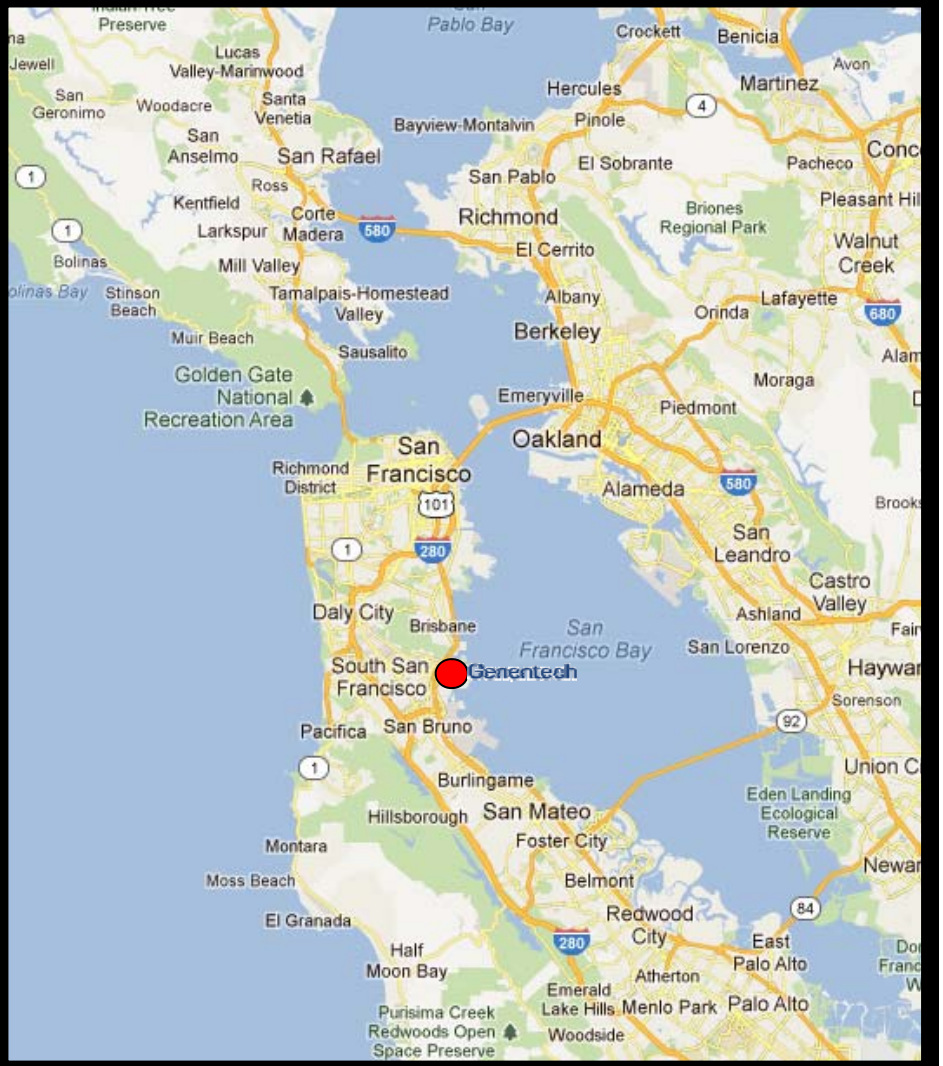
Figure 1. Annual vehicle-miles traveled (VMT), total and per capita, in United States. Data source: FHWA and Census Bureau.

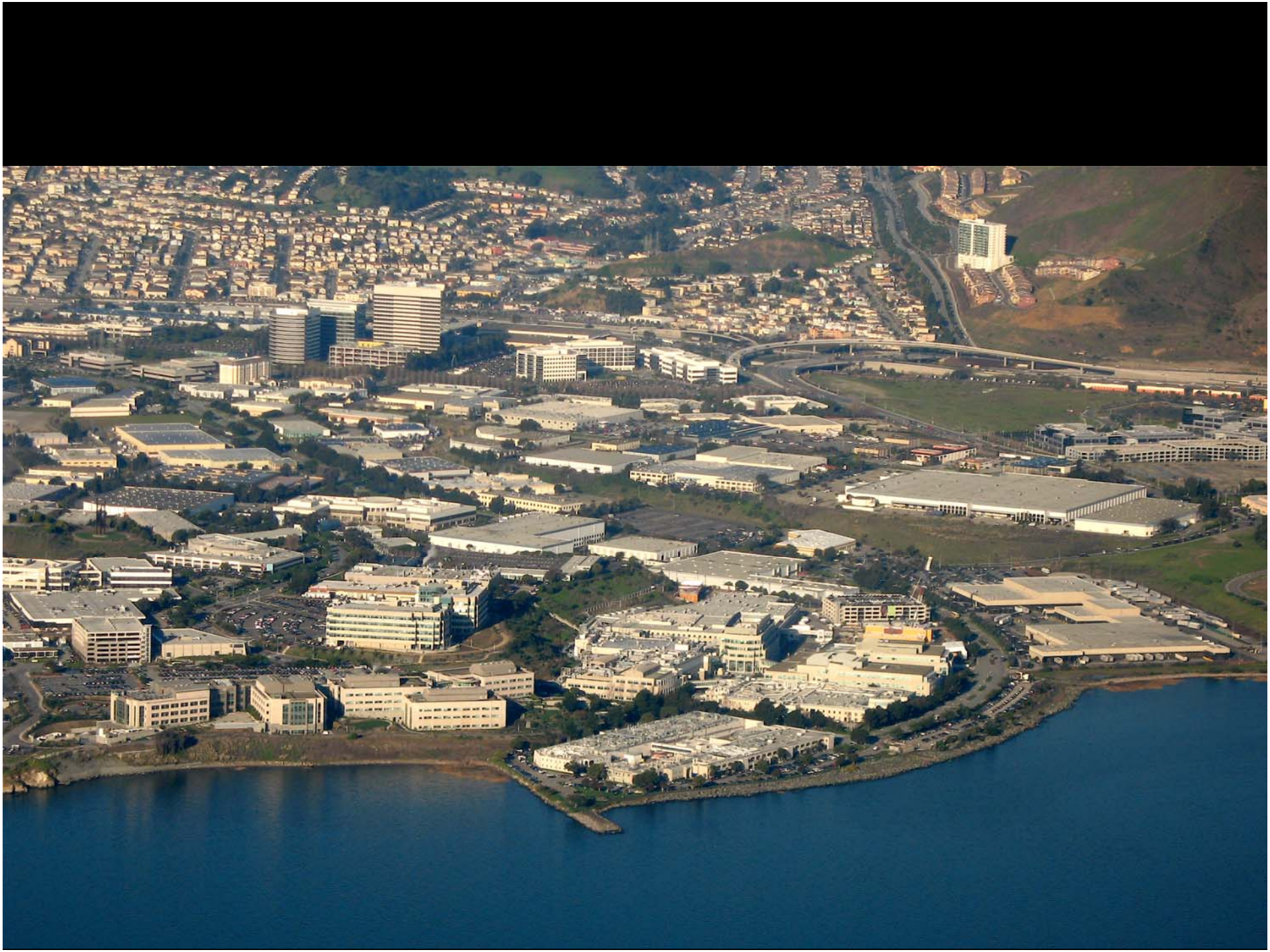
Source: Eric Jaffe, “Driving in America is Approaching a New Normal.” CityLab http://www.citylab.com/commute/2015/03/driving-in-america-is-approaching-a-new-normal/388421/

4. Reward the Private Sector for doing the Right Thing

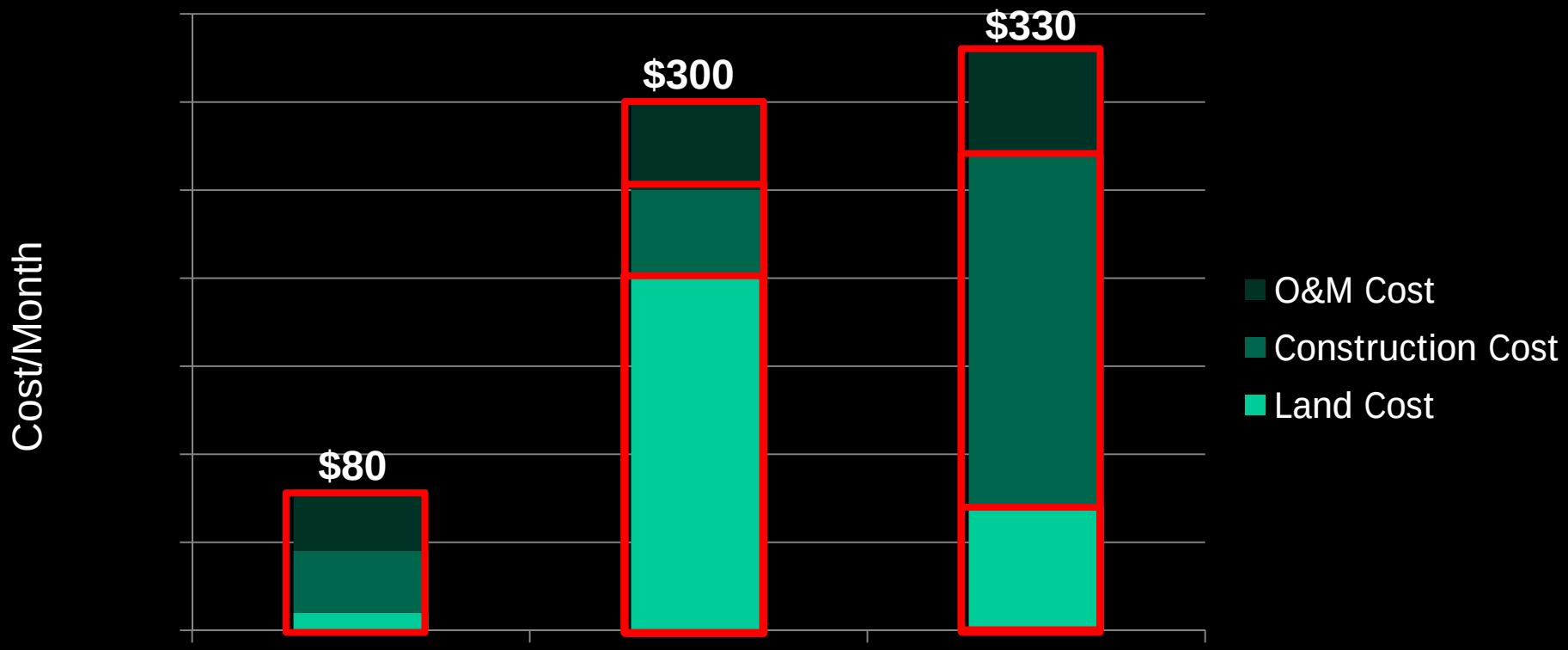
Location

Genentech
South San Francisco





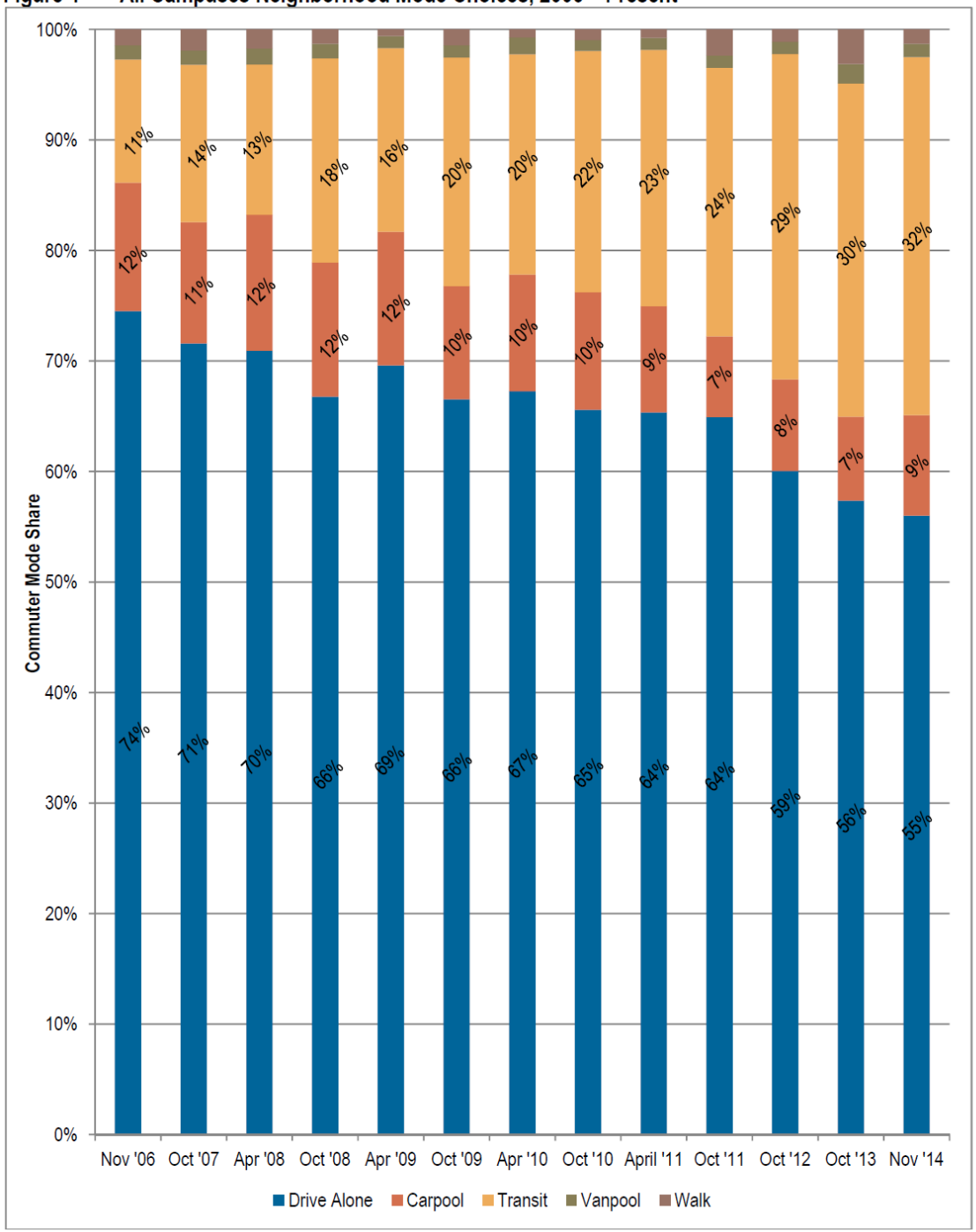
Parking Cost Break-Down



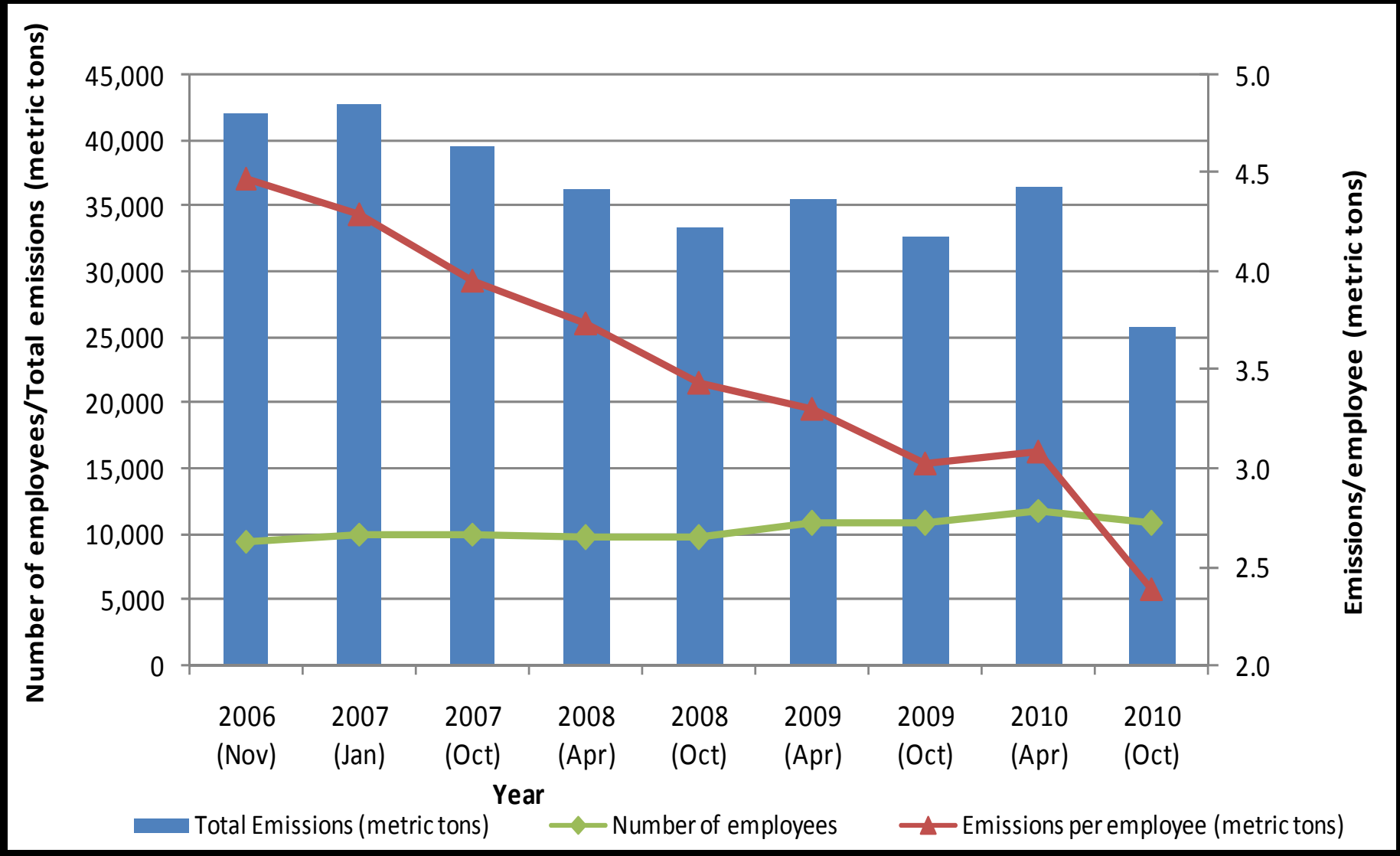
Source: Adapted from Victoria Transport Policy Institute, 2012

Results

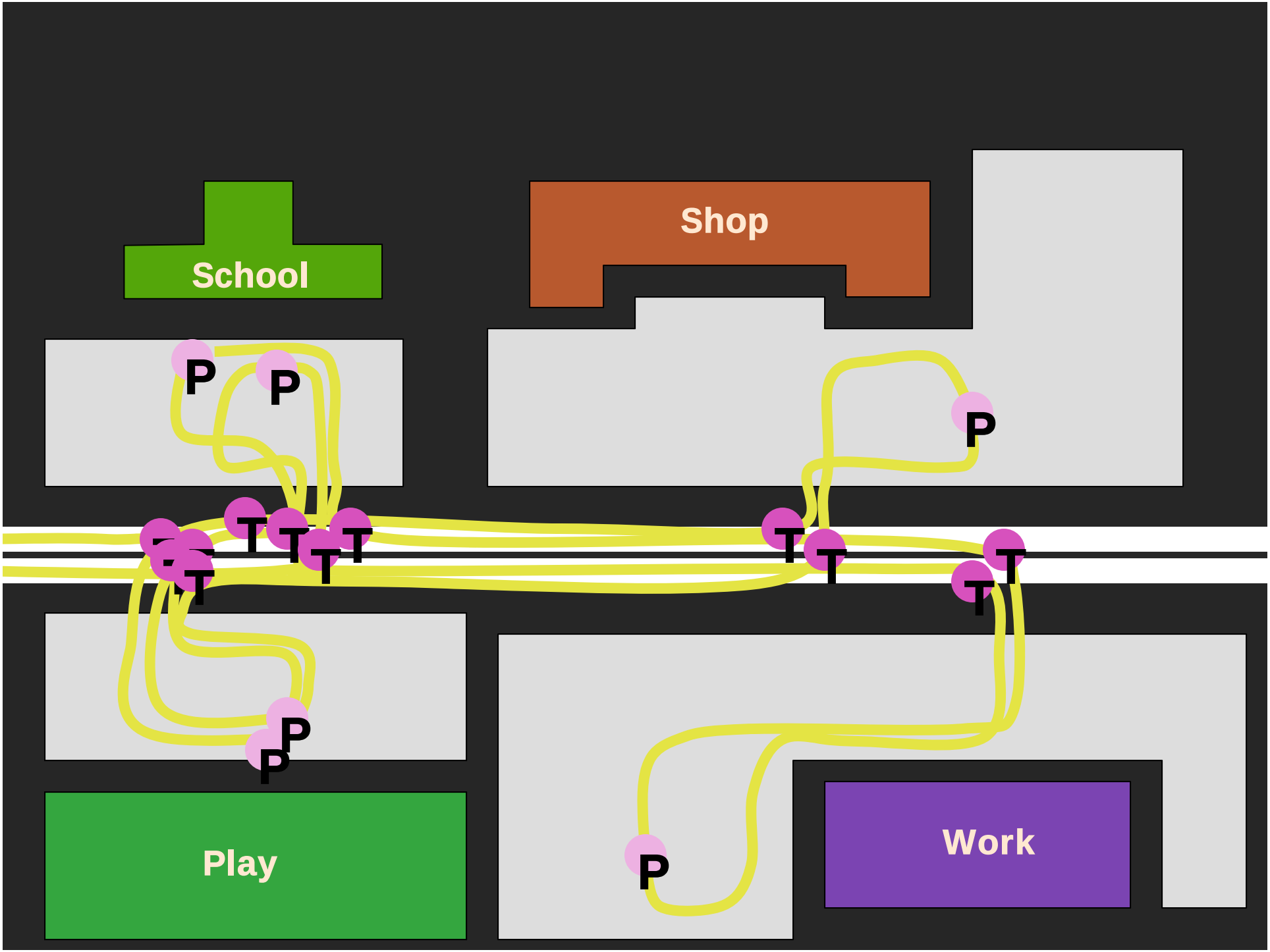
Figure 4 All Campuses Neighborhood Mode Choices, 2006 – Present



GHG Reduction Impacts by Year



5. Be Smart About Parking


School
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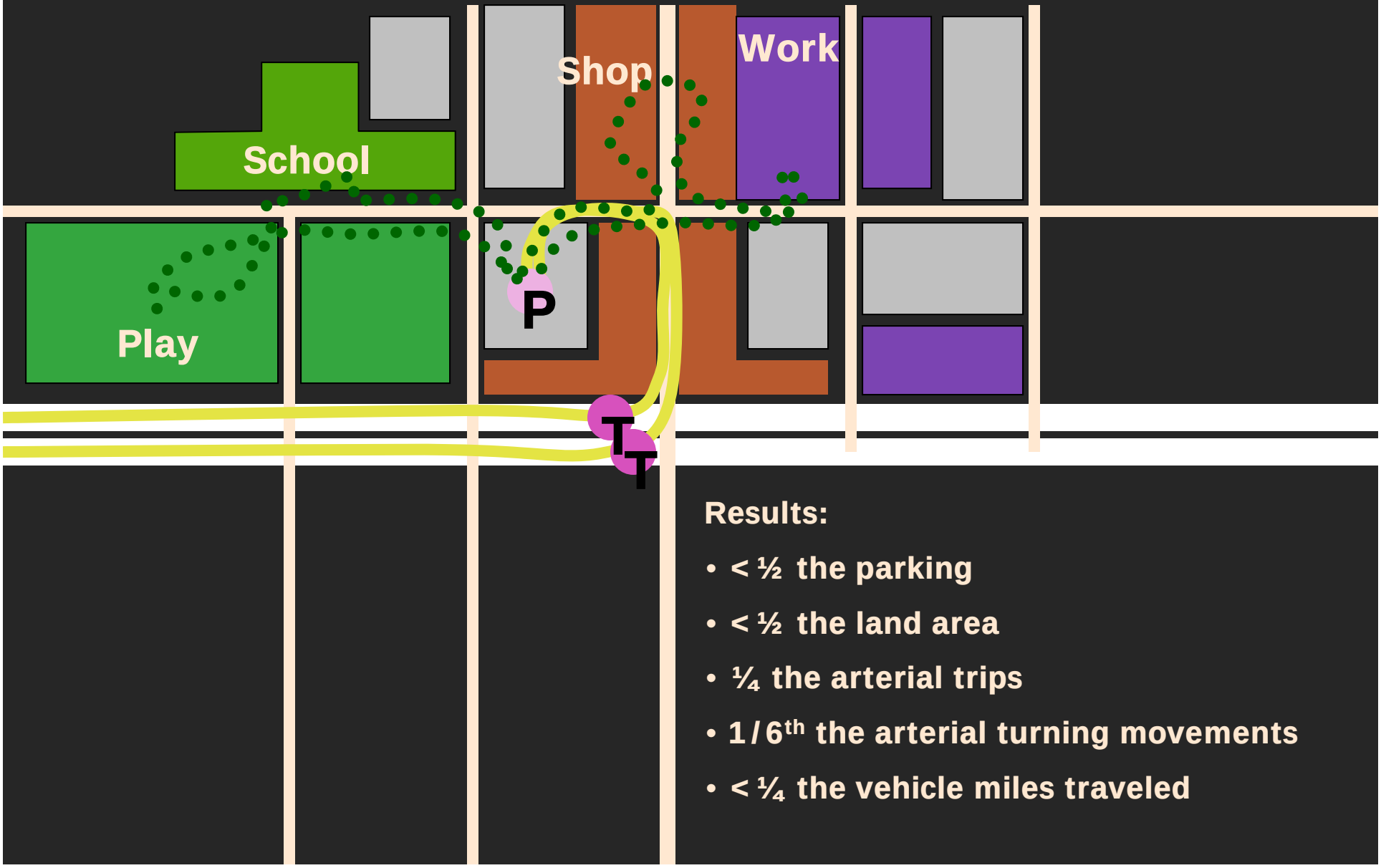
Play
Work

Mixed Use, Park Once District



Results:

- < ½ the parking
- < ½ the land area
- ¼ the arterial trips
- 1/6th the arterial turning movements
- < ¼ 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

URBAN GREENING