

Public Transit in California: Existing Conditions and Current Practices

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Statewide Transit Strategic Plan

Background

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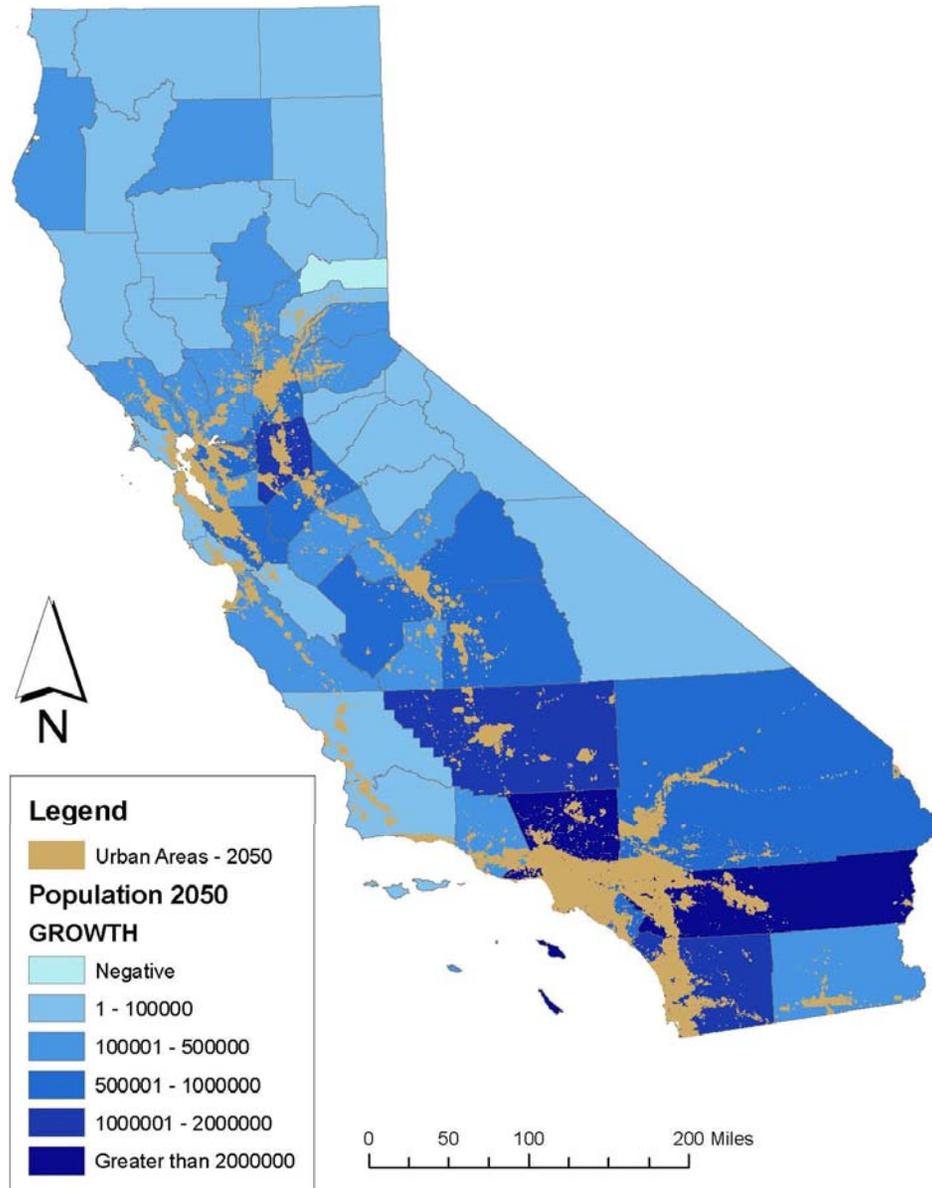
Allison Yoh



Overview: Demographics

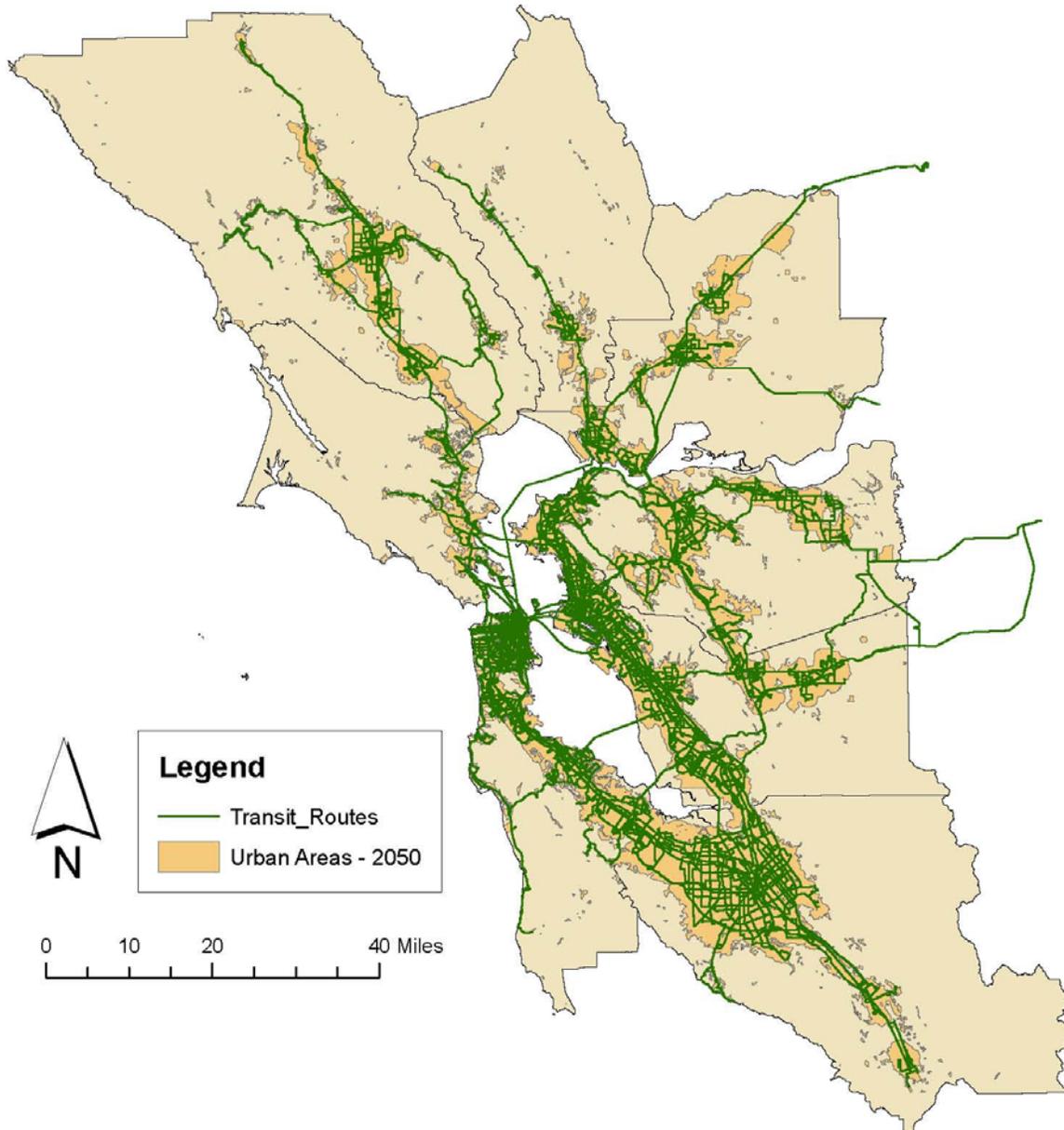
Population growth and urban areas 2010-2050

California population expected to grow by 50%



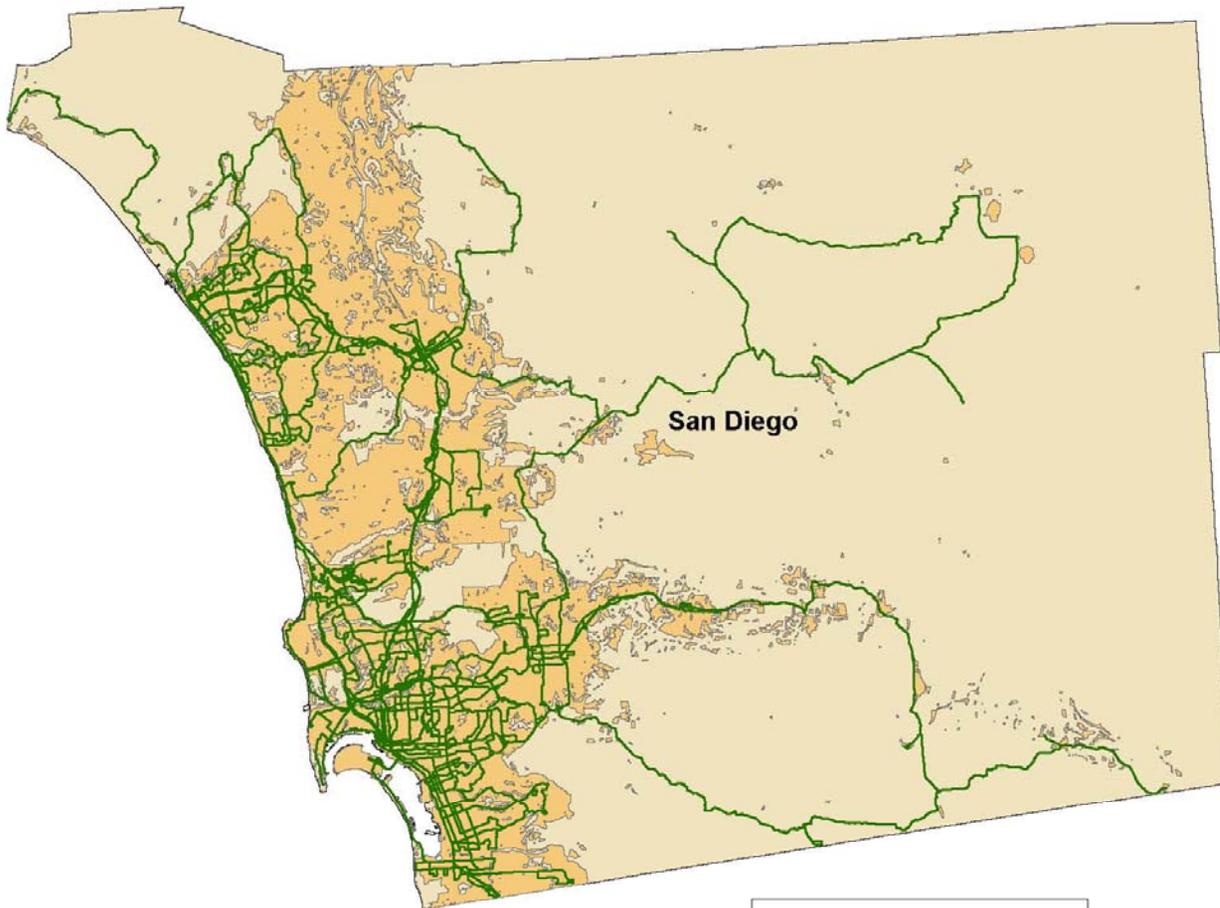
Overview: Demographics

**Urban extent
2050 vs.
current fixed-
route transit:
Bay Area**



Overview: Demographics

**Urban extent
2050 vs.
current fixed-
route transit:
San Diego**



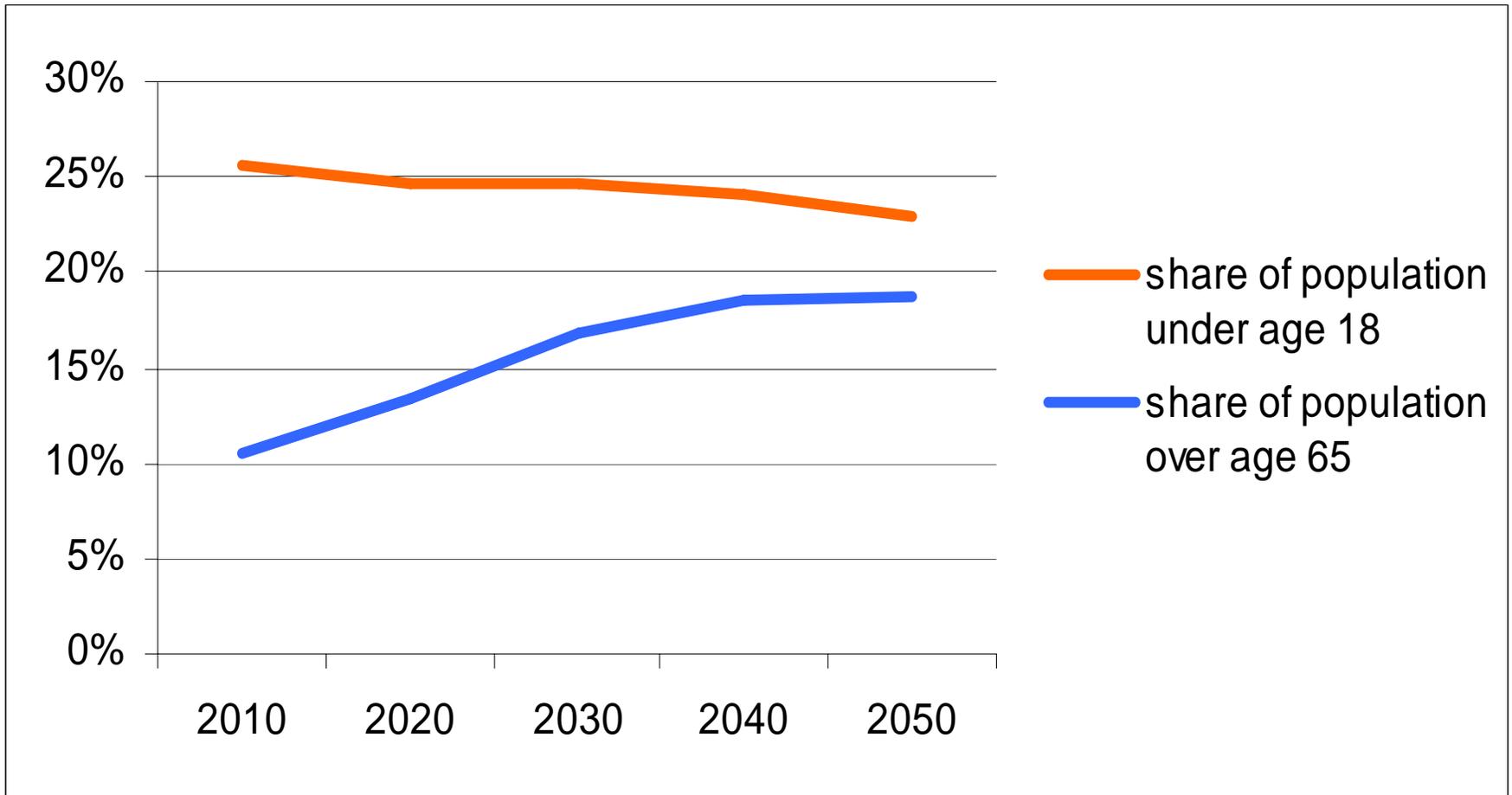
Legend

-  Transit Routes
-  Urban Areas - 2050

0 10 20 40 Miles



Population trends 2010-2050



California Transit Agencies

79 total bus and rail agencies
(reporting in 2008 NTD):

- 11 **“large”** (> 20 million annual unlinked passenger trips)
- 8 **“medium”** (10-20 million passenger trips)
- 60 **“small”** (< 10 million passenger trips)

- 4 **rail** agencies (1 large, 2 medium, 1 small)
- 6 **bus-plus-rail** agencies (5 large, 1 medium)
- 69 **bus** agencies (5 large, 5 medium, 59 small)



Source: LACMTA library archives

Study Approach

Reviewed data from National Transit Database and State Controller's office for all agencies

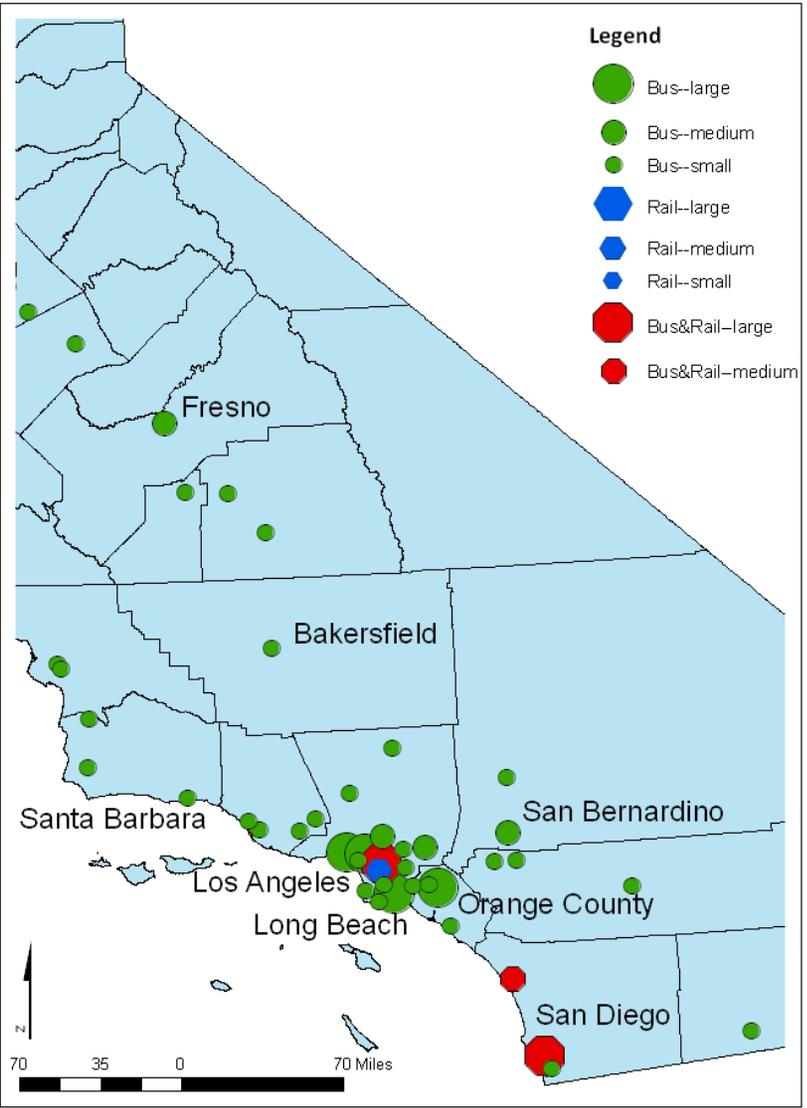
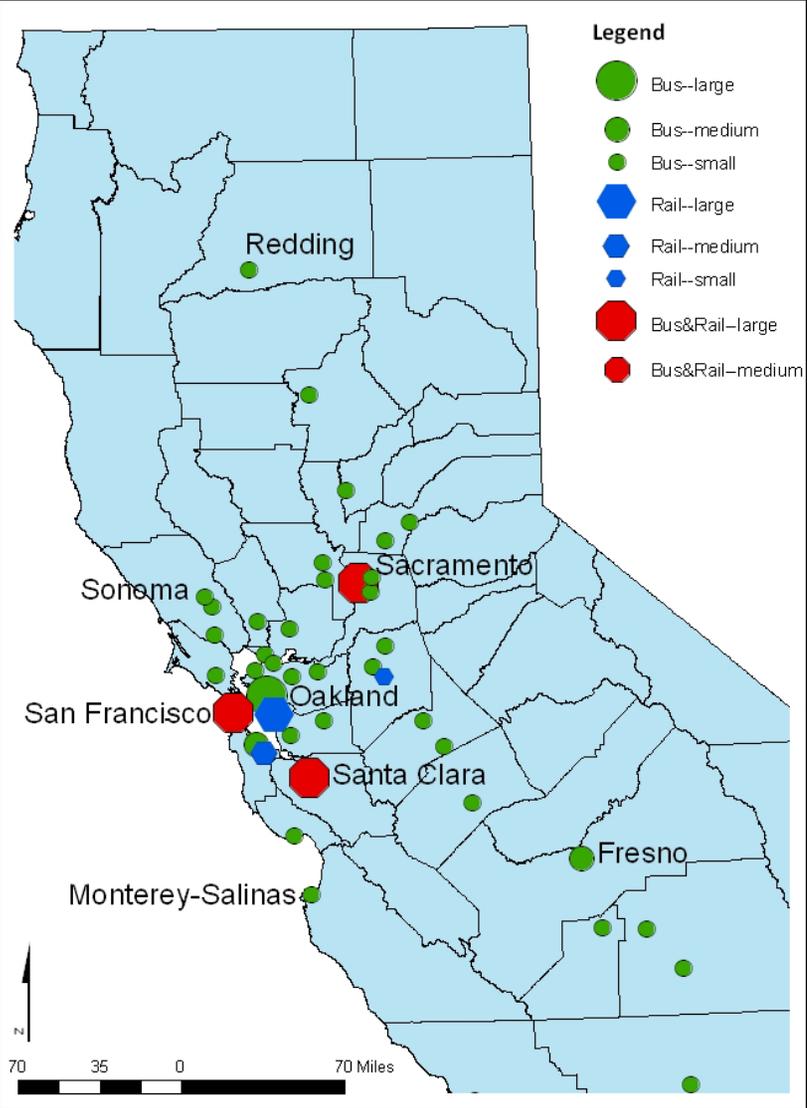
Examined a sample of agency Short Range Transit Plans and websites to identify common themes



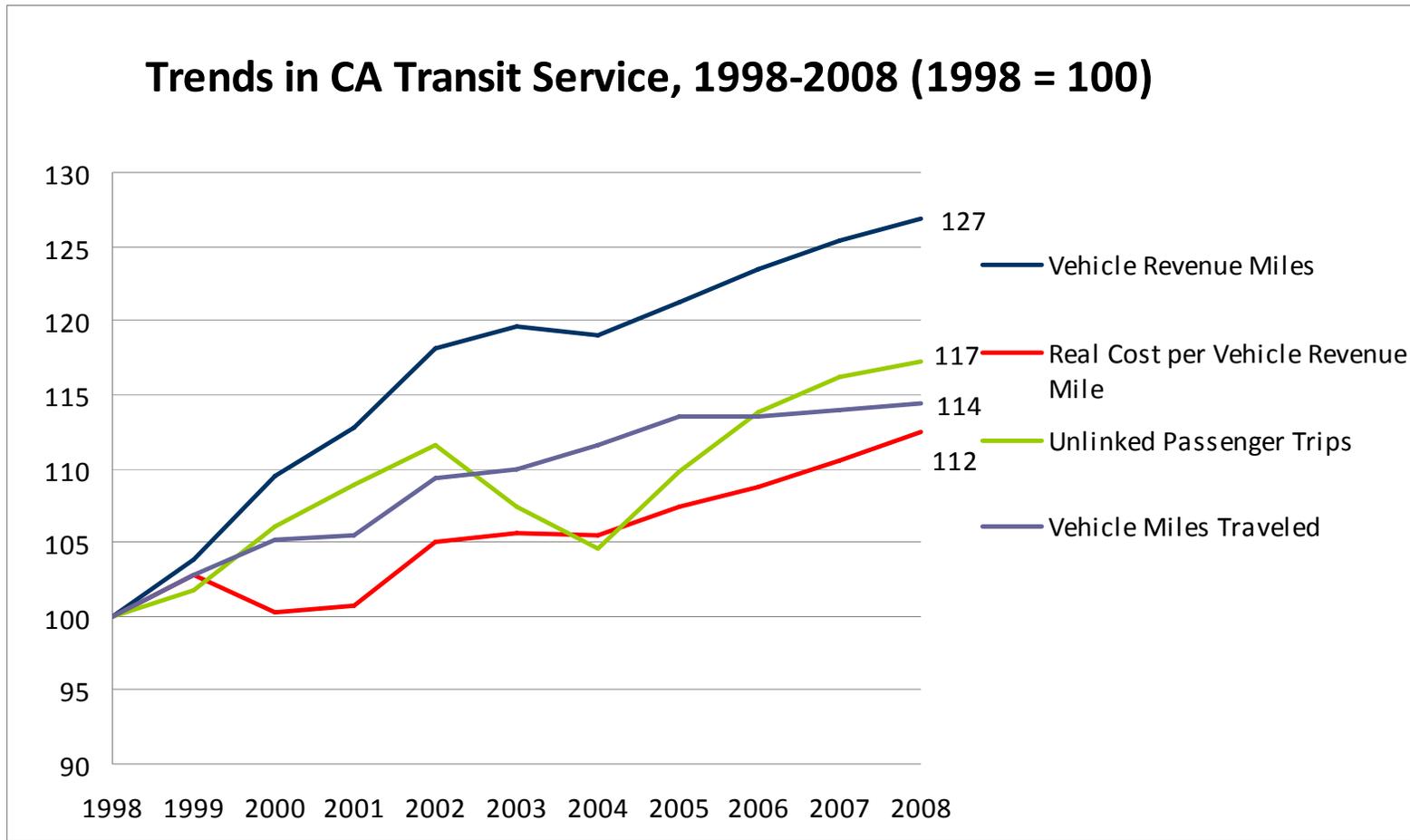
Photo by Lisa Schweitzer

Overview: Transit Agencies

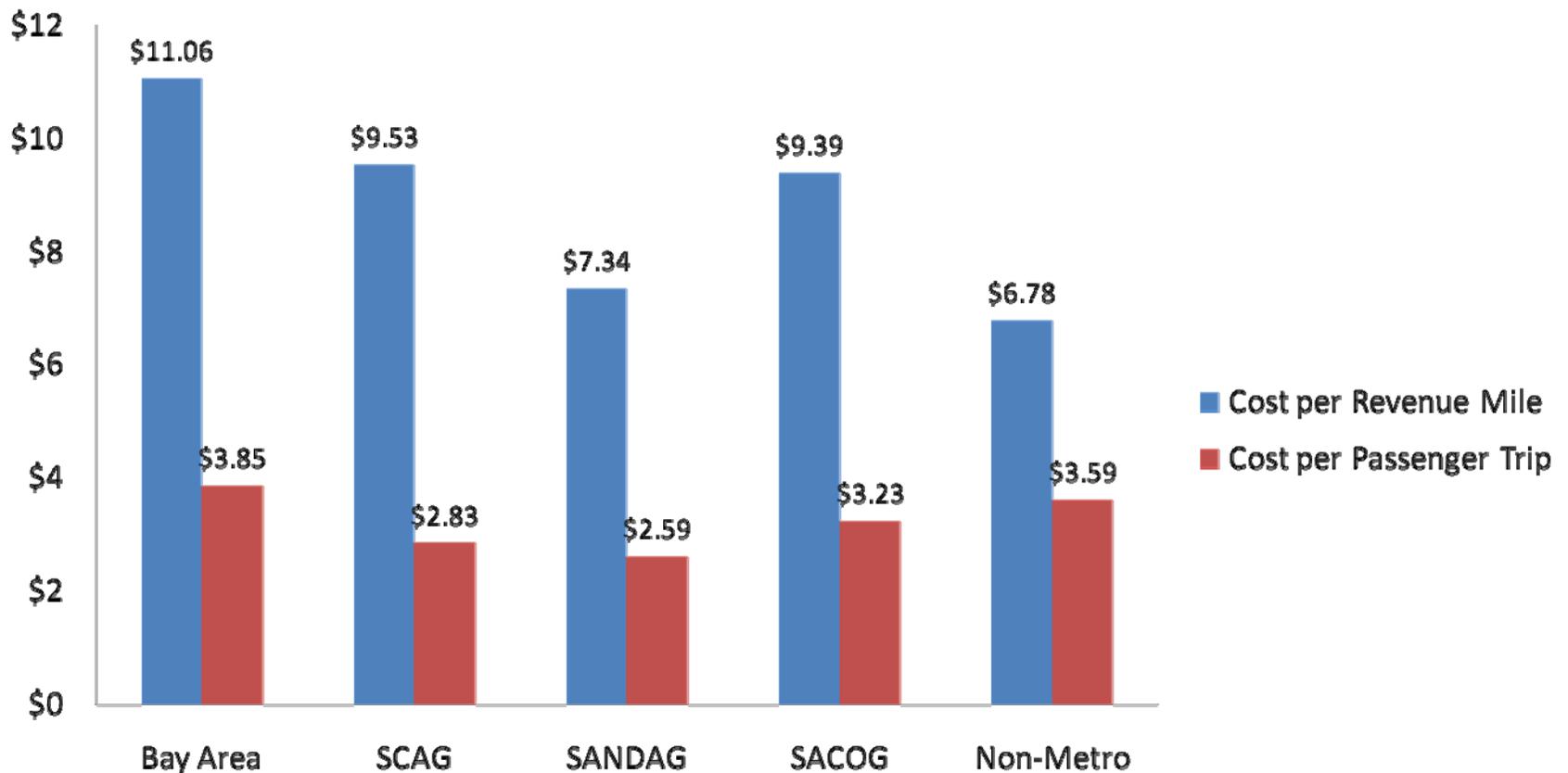
Transit Agencies by size and mode



Bus and Rail Miles, Ridership, Costs



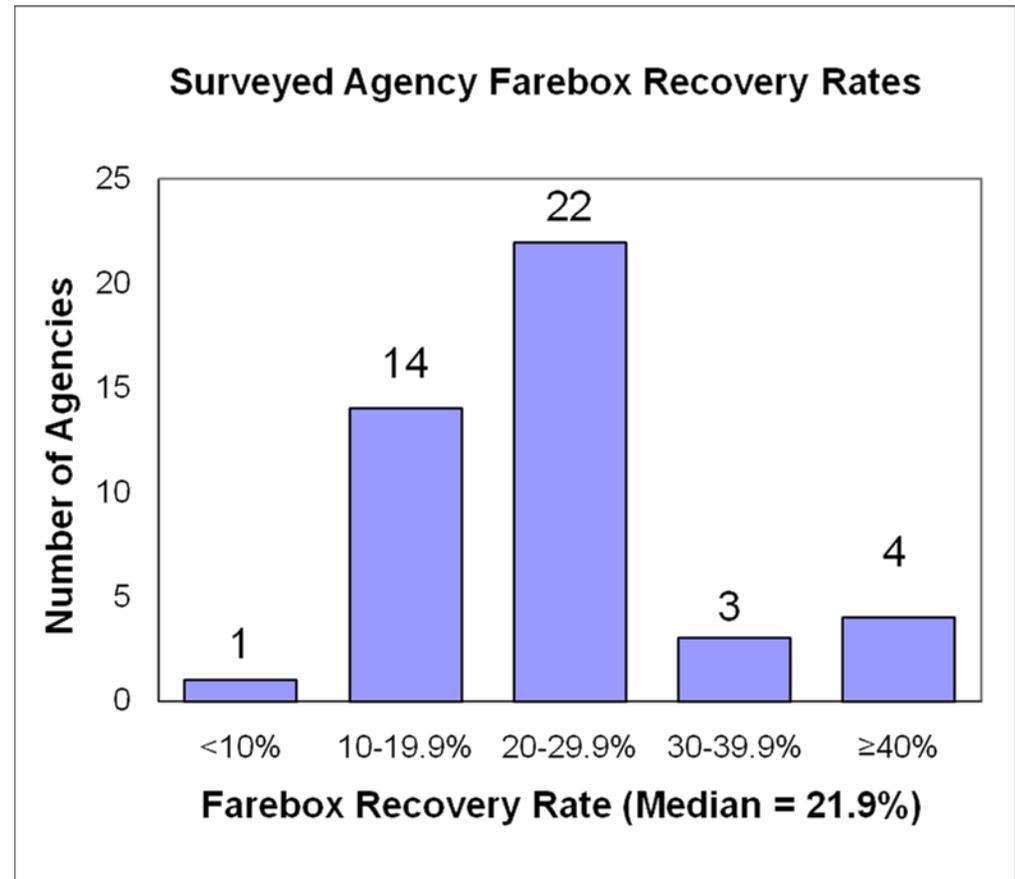
Transit Operating Costs by Region (2008)



Source: National Transit Database

Farebox Recovery

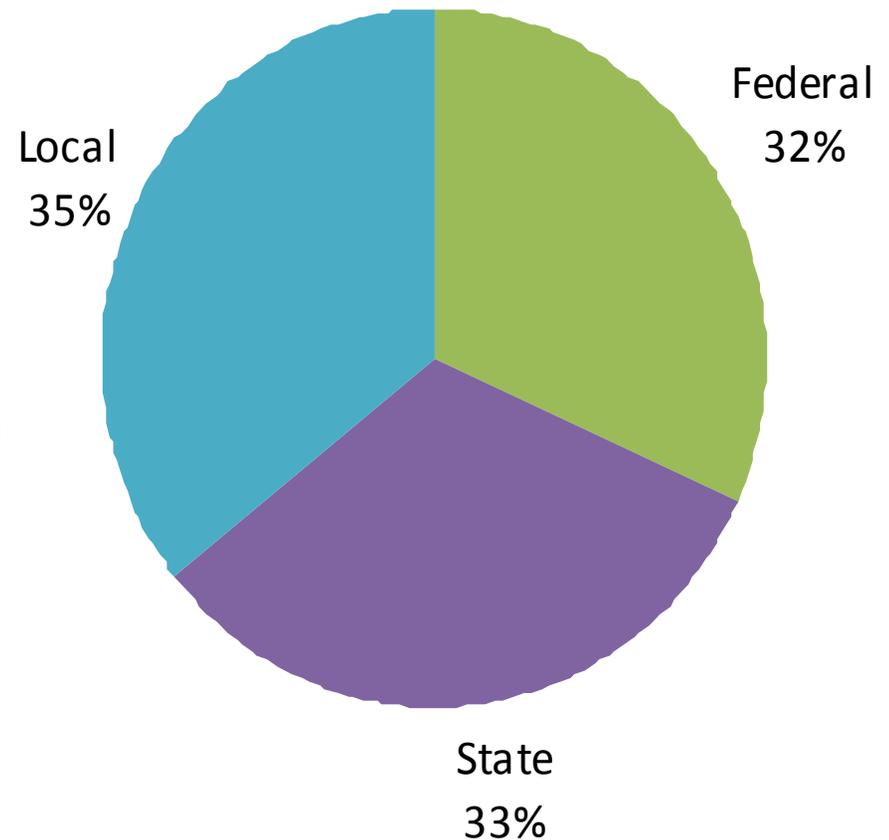
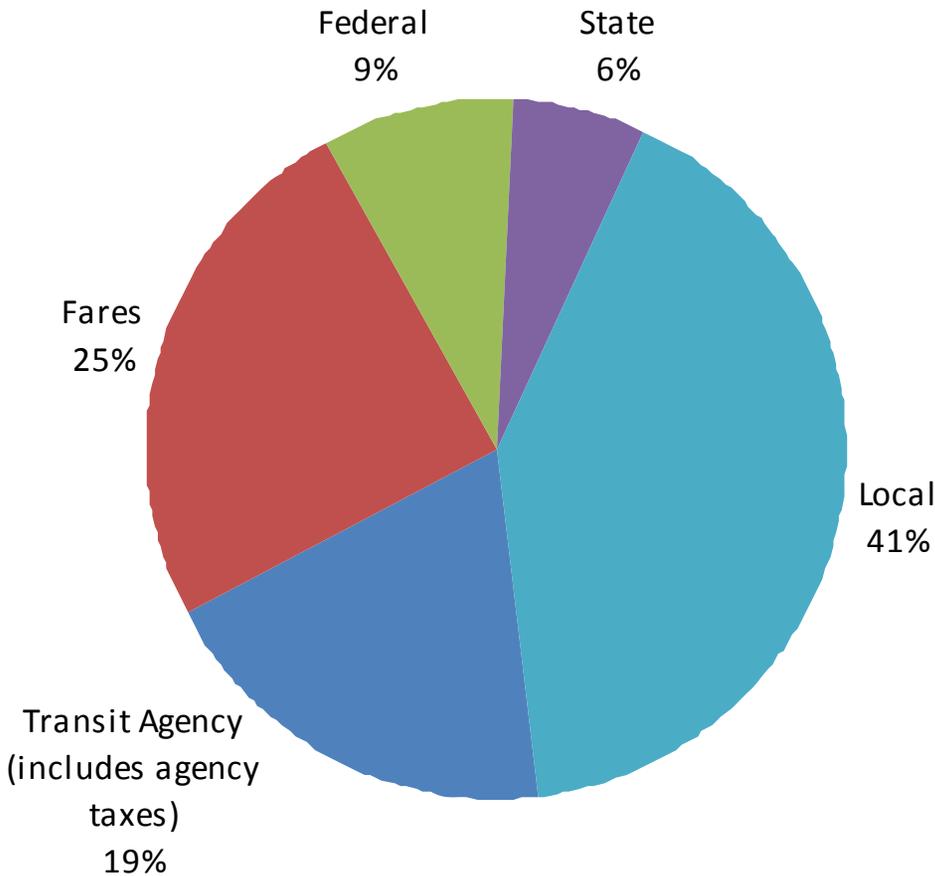
- Farebox recovery varies; usually 20% to 30%
- Rail agencies have highest recovery rates, but a few bus/bus & rail agencies recover more than 30%
- Some agencies adjust fares for inflation or according to multiyear plans.



Sources of Transit Revenues (2008)

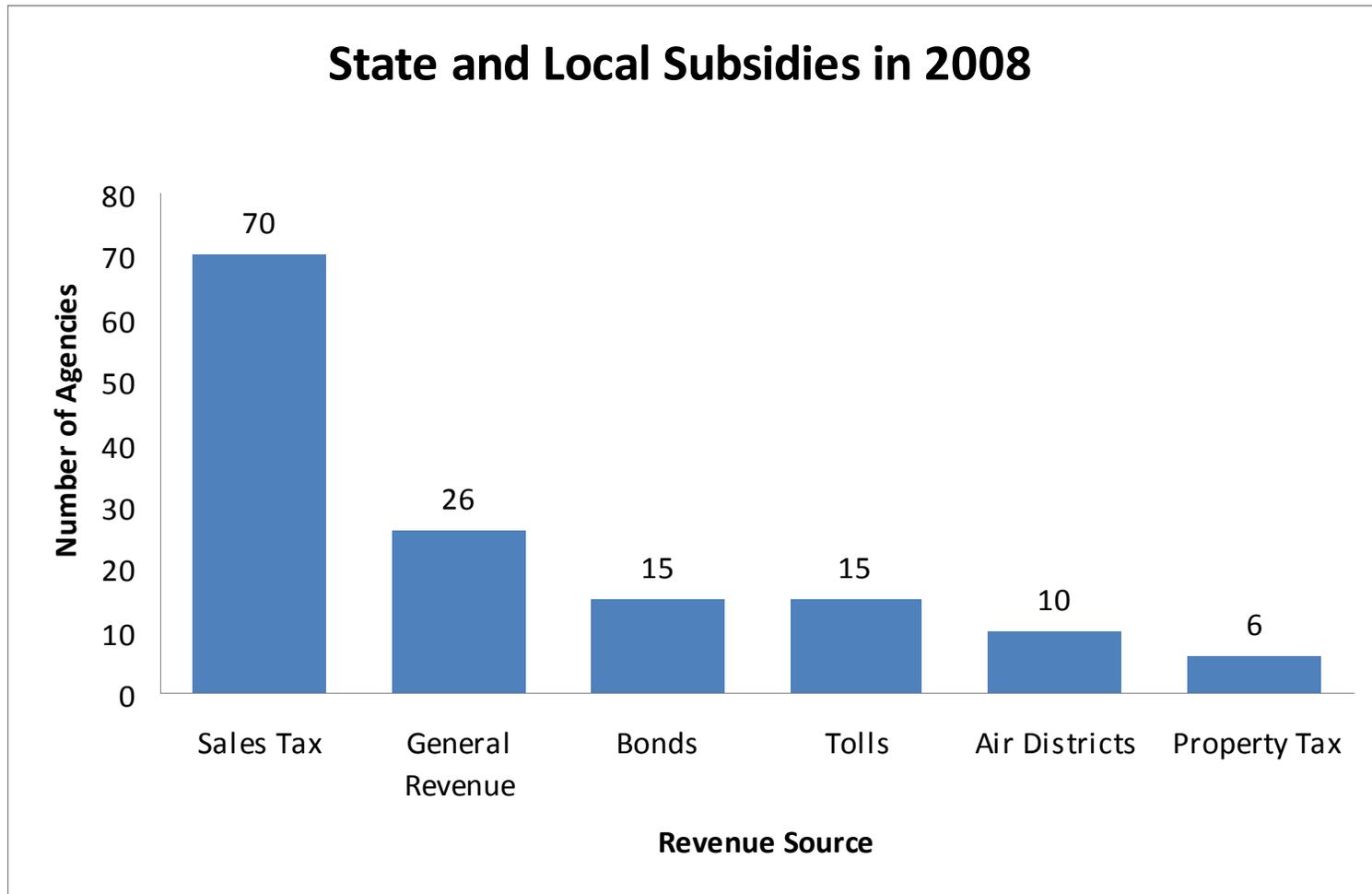
Operating Funds: \$5.8 Billion

Capital Funds: \$1.6 Billion



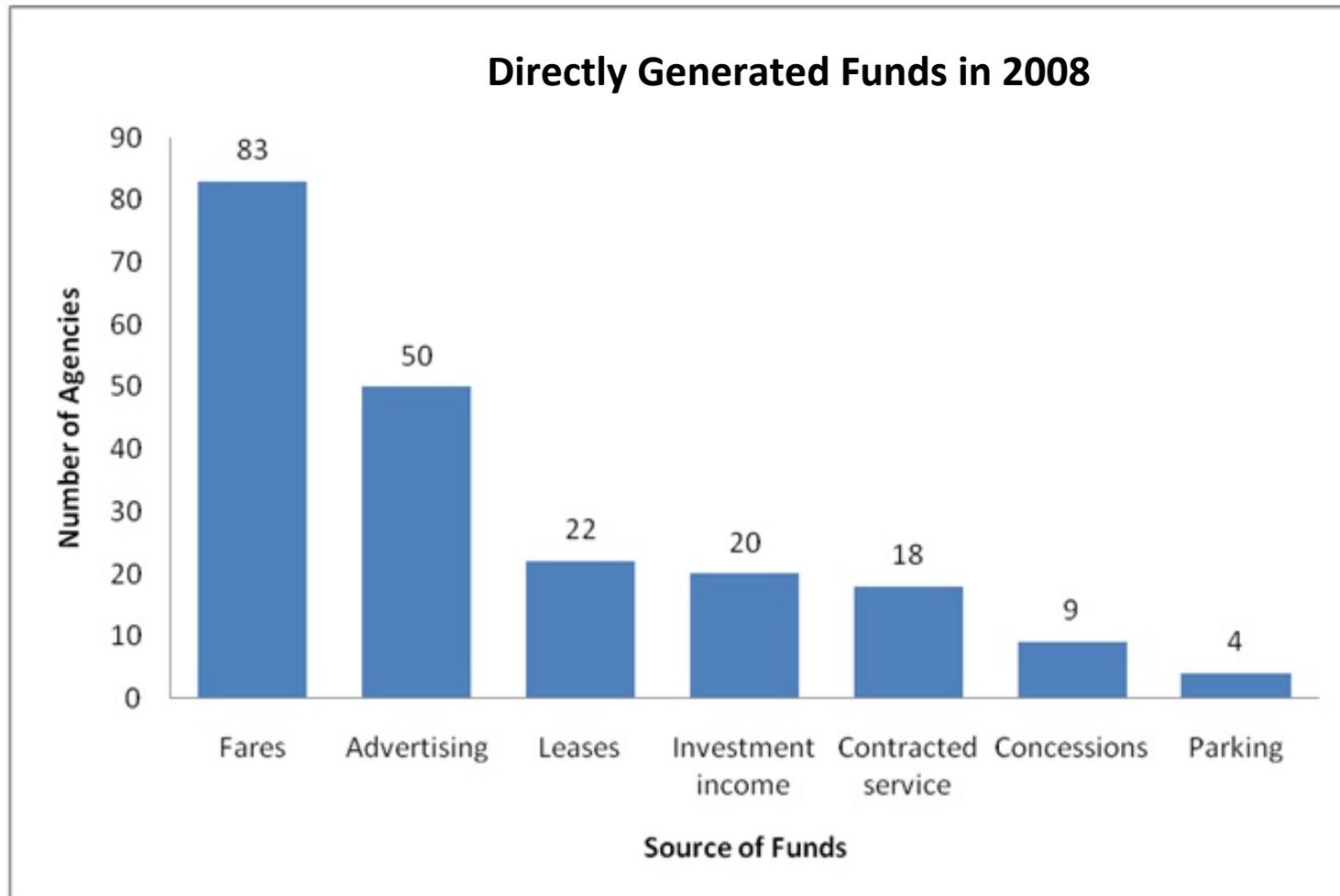
Source: State Controller's Office

Sales Taxes: Most Common Subsidy Source



Source: National Transit Database. The above totals include non-bus or -rail agencies such as ferry and paratransit operators. That an agency does not report a subsidy or that such information is absent from the NTD is not necessarily an indication that the agency did not receive funds from that source.

Opportunities to Raise Funds



Source: National Transit Database. The above totals include non-bus or -rail agencies such as ferry and paratransit operators. That an agency does not report receiving funds from a source above or that such information is absent from the NTD is not necessarily an indication that the agency did not receive funds from that source.

AB 32 and SB 375

Goals: GHG reduction via technology changes, VMT reduction (behavior changes)

Impact on Transit: Potential regulations and funding opportunities, policy guidance

California Transportation Plan

Goals: Long-range policy and vision for a multimodal transportation system

Impact on Transit: Commitment to multimodal; can generate plans for new rail, BRT

High Speed Rail

Goals: Linking Southern California, Central Valley, and San Francisco Bay Area

Impact on Transit: Can create new demand for transit around new stations

Air-Quality Mandates

Goals: Improving local and regional air quality

Impact on Transit: Regulate technology and fuels

Underserved Population Laws and Regulations

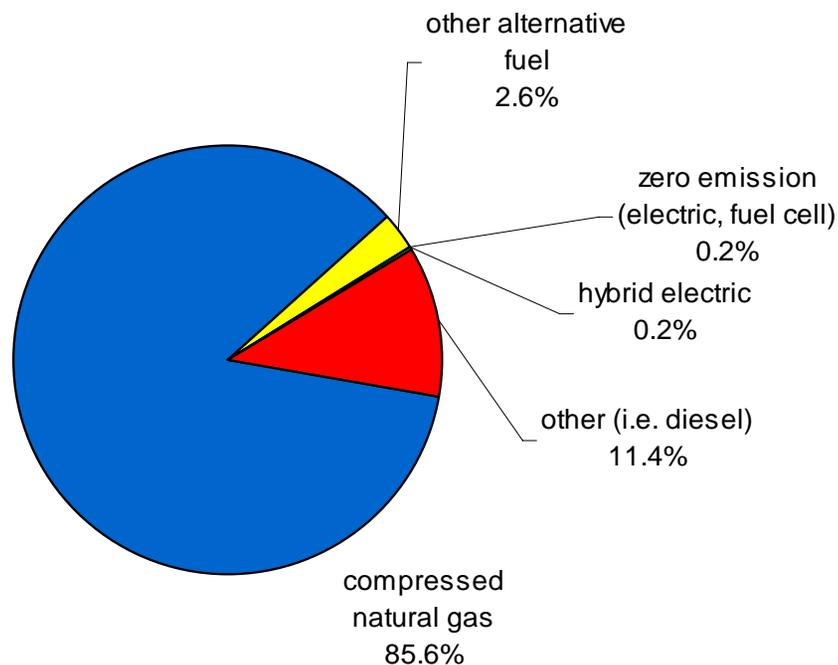
Americans with Disabilities Act (ADA)

Job Access and Reverse Commute Program (JARC)

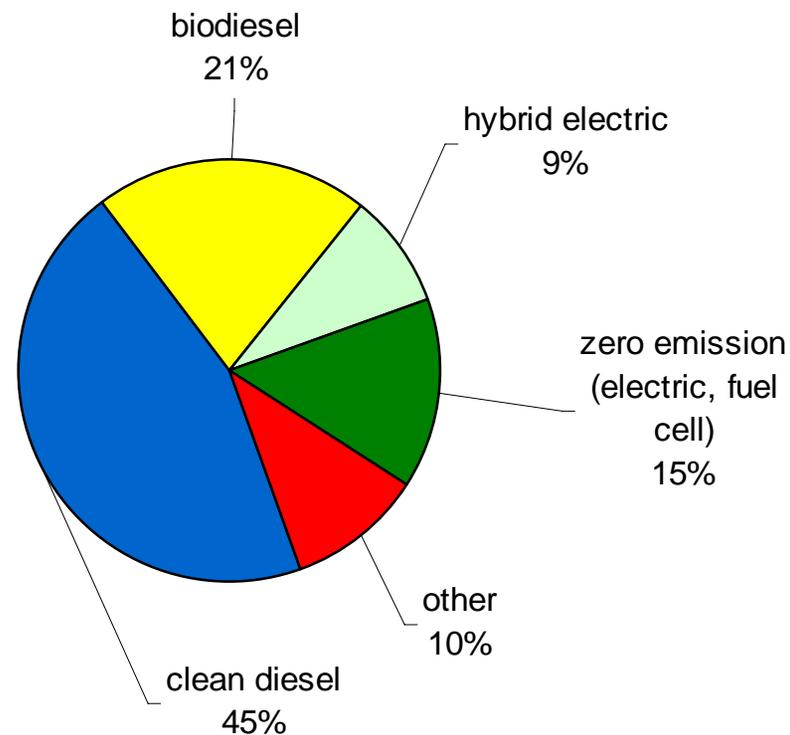
Public Transportation for Elderly

Fuel use among a sample of transit agencies

on the “alternative fuel” path



on the “diesel” path



Common Performance Measures

System Performance	Safety	Financial Sustainability	Customer Focus	Other
On-time arrival (58%)	Number of incidents in <i>X</i> miles (25%)	Farebox recovery ratio (55%)	Number of complaints in <i>X</i> miles (25%)	Proximity of riders to service (22%)
Distance between breakdowns (35%)	Number of injuries in <i>X</i> miles (10%)	Passengers per revenue mile/ revenue hour (50%)	Seating capacity (20%)	Distance between stops (10%)
Percent of trips missed (30%)		Operating cost per revenue hour (25%)	Accessibility (18%)	Minimum service by density (10%)
Headway (20%)		Operating cost per revenue mile/ passenger mile (20%)	Cleanliness (18%)	
Average weekday/ weekend boarding (13%)		Subsidy per passenger trip (13%)	Number of passenger trips (8%)	

(% of agencies studied that report using each measure)

Bus Rapid Transit

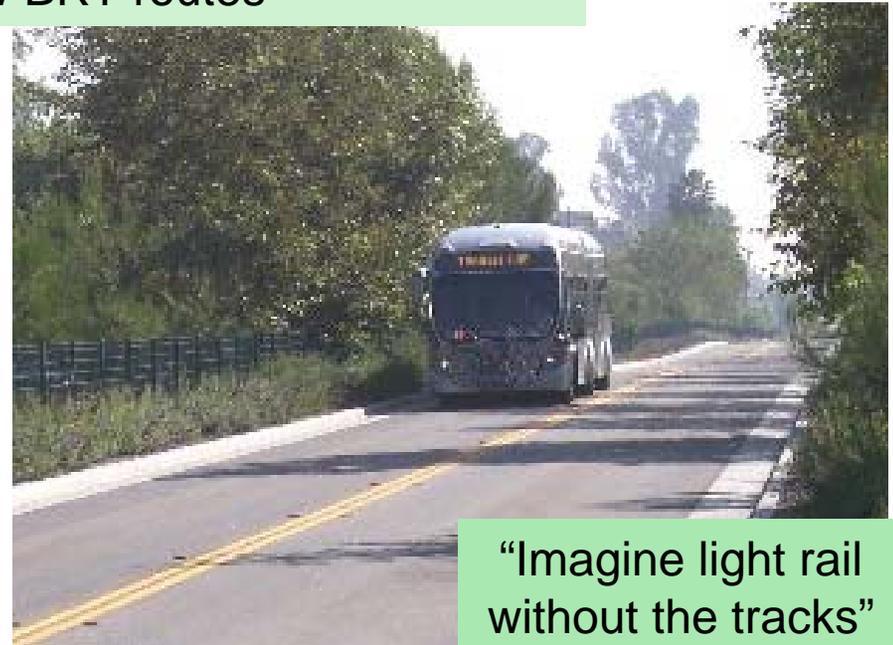
Bus transit made faster by:

- Bus-Only Lanes
- Signal Priority
- Limited Stops
- Fare Prepayment
- Real-Time Information
- Frequent Service

Bus Rapid Transit is seen as an inexpensive way to improve transit and increase ridership: 9 CA agencies have plans for 18 new BRT routes

Of 11 **existing** BRT routes in CA, only one (Orange Line, LACMTA) has all BRT elements including bus-only lanes. Others are express or “rapid” routes with limited stops, NextBus, signal priority.

Of 18 **planned** BRT routes in CA, 9 include separated bus lanes (Metro Wilshire Rapid’s planned bus lanes are peak-hour only); another 4 use queue-jump lanes, bus-only pockets, or HOT lanes.



“Imagine light rail without the tracks”

Orange Line, San Fernando Valley
Photo by L. Henry, from lightrailnow.org

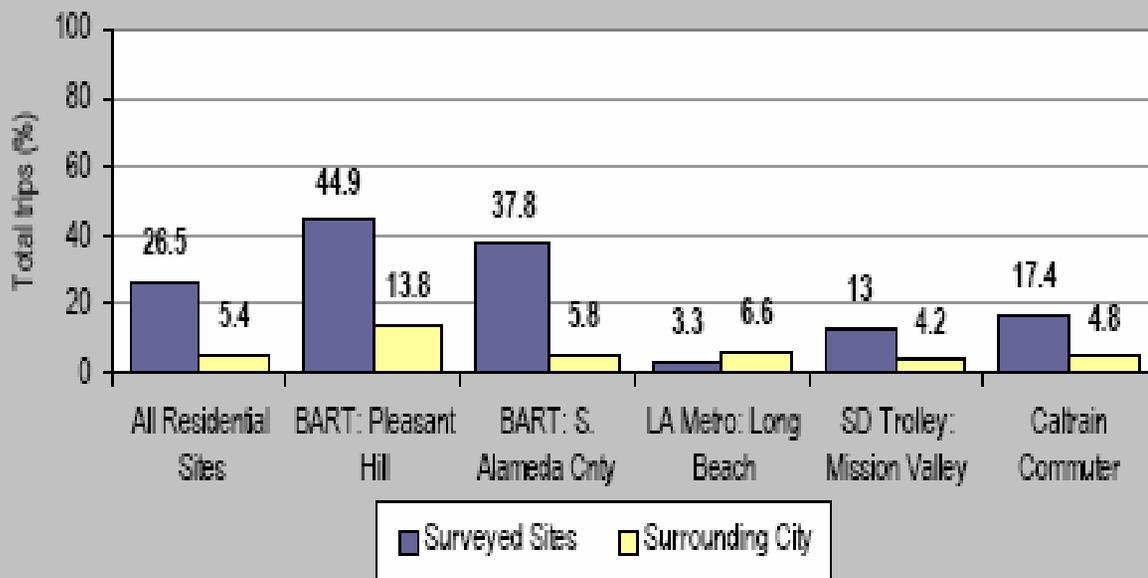
Transit Oriented Development

TOD Bonus for Transit: Those living near suburban rail stations in CA's metro areas are 4-5 times more likely to rail-commute than those living away from stations but in the same community. Source: Lund, et al (2006)



Rio Vista Light Rail Station, San Diego
Source: California Department of Transportation

Transit Commute Mode Share (Rail and Bus)



Gaining Popularity: TODs have sprouted around many of the new rail stations built in CA since 1990. Mounting congestion, shifting lifestyle preferences, supportive policies, and the advent of SB375 and AB32 have furthered interest in TOD.

Shuttles

- Last-mile access to work, shopping, or special events
- Downtown/loop shuttles can be used as congestion reduction measure
- Employer-provided shuttles may compete with public transit services



Downtown/Waterfront Electric Shuttle
in Santa Barbara

Park and Ride

- Most are Caltrans lots along freeways with HOV lanes; some are operated by transit agencies
- Rarely priced



Bicycle and Pedestrian Access

Bicycle and walking trips increasing nationwide

Improved bike/ped amenities and convenience can increase transit access and use, ie:

- Bike racks on buses
- Bikes allowed on trains
- Attended bike parking (bike stations)



Source: Buchanan-Hermit, Wikimedia

Outreach, Marketing, Fare Media

- Major forms of outreach/marketing include presentations to community groups, “Transit Ambassador” programs, promotions, and operation of transit stores.
- Important website features & characteristics:
 - Route maps, schedule, fare info
 - Trip planners, destination info
 - Show where to buy passes
 - Should be interactive, visually pleasing, accessible and relevant to different users.
- Smart cards speed boarding and allow for easy transfers between operators
 - in use in 4 areas, considered in 1 more.



Source: www.vta.org



Foothill Transit website offers information for different kinds of riders

Source: www.foothilltransit.com



Source: www.511sd.com

Thank you

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