

Transportation 2030 Equity Analysis Review

Minority Citizen's Advisory Committee

April 9, 2007

METROPOLITAN TRANSPORTATION COMMISSION

Purpose of Equity Analysis

- *Regional* analysis to assess the distributional effects of long-range transportation plan investments
- Measure the benefits and burdens associated with the investment alternatives proposed in the 2030 Plan to make sure minority and low-income populations share equitably in the benefits without bearing a disproportionate share of the burdens

Equity Analysis Methodology

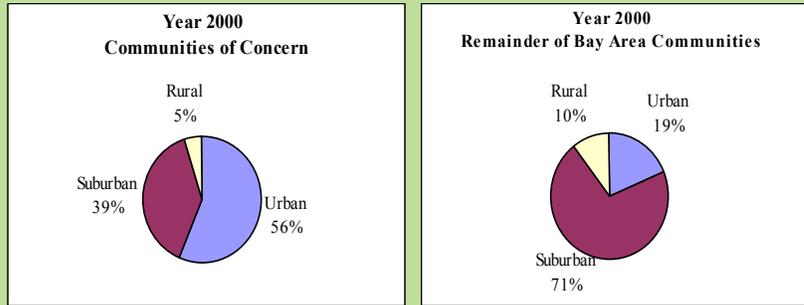
- Access and travel time to jobs
- Access and travel time to essential destinations
 - elementary, middle schools, high schools,
 - community colleges and universities,
 - food stores,
 - health services
 - social services (including banks and post offices)
- User benefits
- Vehicle miles traveled and emissions

Defining Communities of Concern

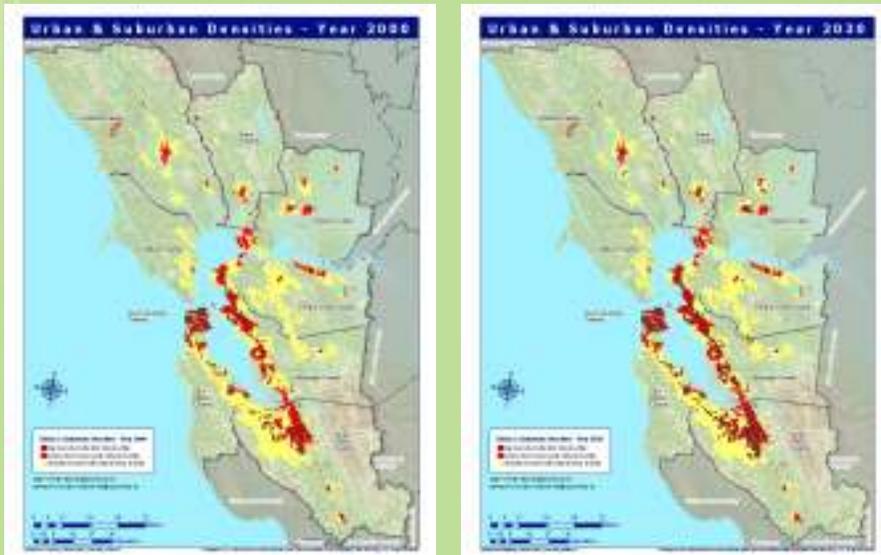
- Evaluate concentrations of Bay Area low-income and minority population so that comparisons can be made to the remainder of the region across investment alternatives



Population Density Distribution of Communities of Concern/ Remainder of Bay Area



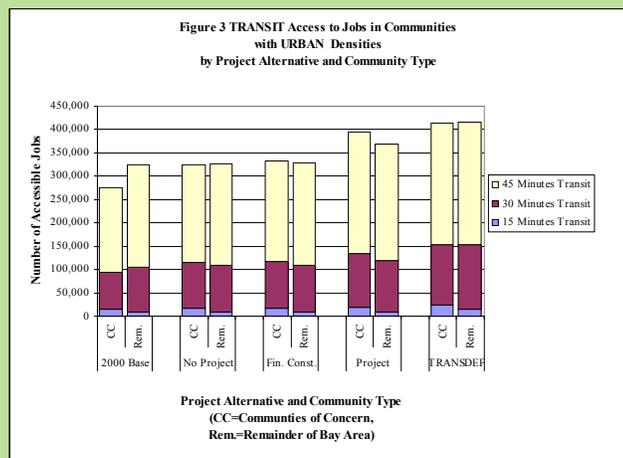
Urban and Suburban Densities



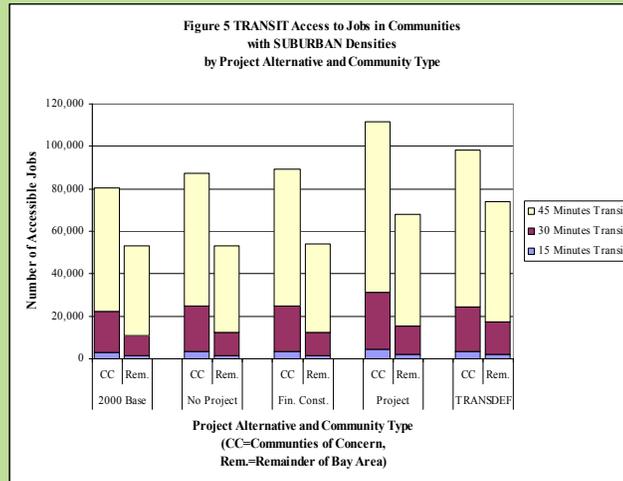
Access to Jobs

- Communities of concern (COCs) with both *urban and suburban* densities have access to more jobs *by transit* than the remainder of the Bay Area
- COCs (urban and suburban) and the remainder of the Bay Area have access to a similar number of jobs *by auto*

Access and Travel Time to Jobs Transit Access from Urban Communities



Access and Travel Time to Jobs Transit Access from Suburban Communities



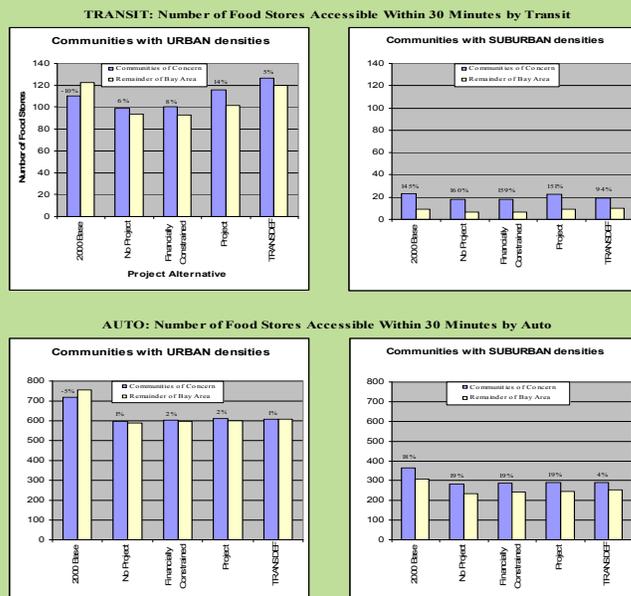
Location of Low-income Jobs Relative to Communities of Concern



Access to Essential Destinations

- Results for both urban and suburban COCs vary depending on which destination is examined
- Urban and suburban COCs will have access to a *greater number* of food stores, elementary schools and high schools by auto and transit than the remainder of the Bay Area
- Urban and suburban COCs will have access to *fewer* health services by auto and transit (in most cases) than the remainder of Bay Area communities

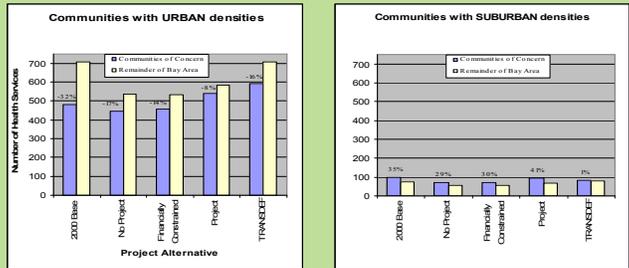
Figure 10
Access to FOOD STORES



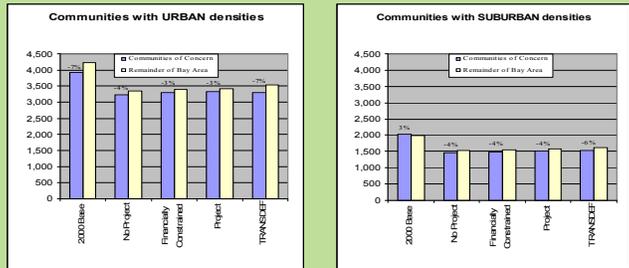
Note: Percentages above columns reflect the number of establishments Communities of Concern can access relative to the remainder of Bay Area communities. For example, a value of 5% implies that Communities of Concern have access to 5% more establishments than the remainder of communities. Similarly, a -5% implies that Communities of Concern have access to 5% fewer destinations than the remainder of Bay Area Communities.

Figure 11
Access to HEALTH SERVICES

TRANSIT: Number of Health Services Accessible Within 30 minutes by Transit



AUTO: Number of Health Services Accessible Within 30 minutes by Auto



Note: Percentages above columns reflect the number of establishments Communities of Concern can access relative to the remainder of Bay Area communities. For example, a value of 5% implies that Communities of Concern have access to 5% more establishments than the remainder of communities. Similarly, a -5% implies that Communities of Concern have access to 5% fewer destinations than the remainder of Bay Area Communities.

Average and Aggregate Travel Time

- The remainder of the Bay Area drives approx. 10% more for both work and non-work trips compared to COCs
- COCs take transit 5%-7% more often for both work and non-work trips compared to the remainder of the Bay Area
- COC travel times for work trips are a few minutes shorter by auto and approx. 10 min. shorter by transit compared to the remainder of the Bay Area

User Benefits

- Communities of concern benefit most from the TRANSDEF alternative
- The remainder of the Bay Area benefits most from both The Project and TRANSDEF alternatives, which are nearly equal

Table 9

User Benefits	Transportation 2030 Alternative		
	Financially Constrained	Project	TRANSDEF
Communities of Concern			
Travel Time User Benefits	\$68.17	\$153.20	\$229.94
Out-of-Pocket Cost User Benefits	\$4.82	\$1.77	(\$19.68)
Total User Benefits	\$72.99	\$154.97	\$210.26
Remainder of Bay Area			
Travel Time User Benefits	\$82.80	\$135.84	\$214.68
Out-of-Pocket Cost User Benefits	\$2.45	(\$0.17)	(\$81.36)
Total User Benefits	\$85.25	\$135.67	\$133.32

* User benefits are annual per capita benefits in 2004 constant dollars.

Vehicle Miles Traveled and Emissions

- Per capita, more vehicle miles are traveled in COCs than the remainder of the Bay Area
- Emissions per capita are higher for COCs compared to the remainder of the Bay Area
- Except for particulate matter, emissions are significantly reduced for *all* Bay Area communities due to projected advances in emissions technology.

Conclusions

- Overall, COCs share share equitably in the benefits of the Transportation 2030 investment alternatives without bearing a disproportionate share of the burdens
- Across the alternatives, transit will serve communities of concern better than the remainder of the Bay Area
- While emissions are higher in COCs than the remainder of the Bay Area, all 2030 alternatives yield lower emissions than if a No Project alternative is pursued
- Detailed results can help to inform planning efforts (for example, access to health services)

Next Steps

- Allocate the Lifeline Program's \$216 million on projects that improve transportation in COCs
- Complete remaining community-based transportation plans
- Continue to develop land use and development policies that incorporate the transportation, housing and service needs of COCs
- Continue to refine the equity analysis methodology
- Pursue Lifeline Transportation and Access to Mobility strategies outlined in the Transportation 2030 Plan
- Continue to work towards improving the Bay Area's air quality