ENSURING EQUITY & NONDISCRIMINATION IN REGIONAL PLANNING

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February 6, 2014

2014 DOT Civil Rights Virtual Symposium

OVERVIEW

1. Quick look at Title VI obligations of MPOs

2. Review and critique current methods for measuring equity in regional planning & suggest improvements

3. Maximizing equity: learning from the 6 Wins Network's campaign

QUICK LOOK:

TITLE VI OBLIGATIONS OF MPOS

TITLE VI & REGIONAL PLANNING

1. DOT Title VI Regulations. 49 CFR part 21

2. DOT LEP Policy

3. FTA Title VI Circular 4702.1B

4. Title VI Certification. 23 C.F.R. § 450.334(a)(3)

TITLE VI & REGIONAL PLANNING

■ Recipients "may not . . . utilize criteria or methods of administration which have the effect of subjecting persons to discrimination because of their race, color, or national origin . . . ." 49 C.F.R. § 21.5(b)(2)

■ MPOs must analyze whether the impacts of the distribution of State and Federal public transportation funds have a "disparate impacts on the basis of race, color, or national origin . . . ." FTA C 4702.1B

TITLE VI & REGIONAL PLANNING

- MPOs "shall certify at least every four years that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements including . . . Title VI of the Civil Rights Act of 1964 . . . ." 23 C.F.R. § 450.334 (a) (3).

- Westchester County False Claims Case

Civil rights guidance and equity analysis methods for regional transportation plans:
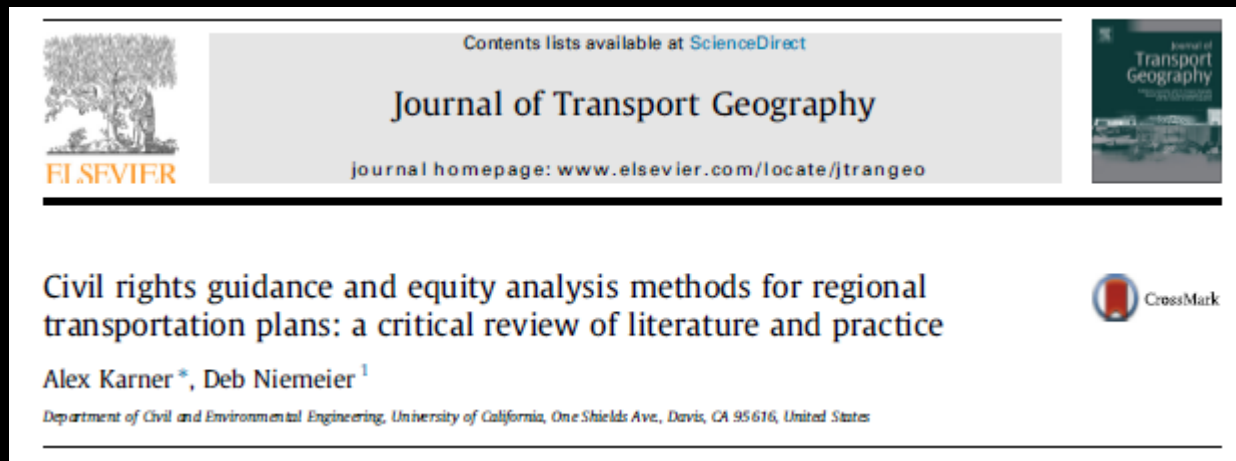# A critical review of literature and practice
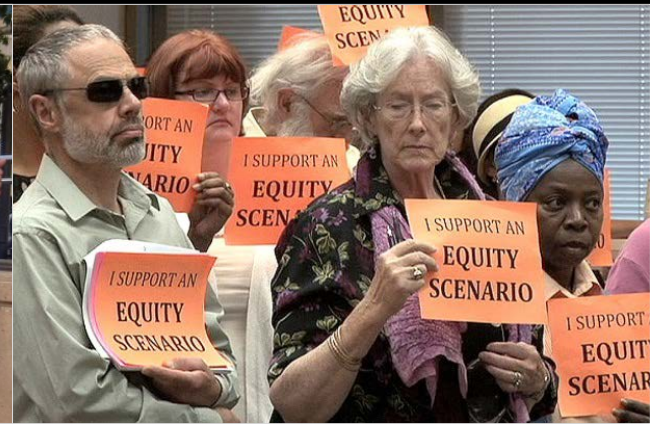
Alex Karner, PhD
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DOT Civil Rights Symposium
February 6, 2014

Overview

- Training in civil engineering
- Dissertation work in the Bay Area

Karner, A. and D. Niemeier (2013). "Civil rights guidance and equity analysis methods for regional transportation plans: a critical review of literature and practice." Journal of Transport Geography **33**: 126-134.

How do regional transportation planning agencies implement civil rights laws like Title VI?

How do regional transportation planning agencies implement civil rights laws like Title VI?

How effective are their methods at characterizing inequity and discrimination?

Regional equity analysis

- Regions attempt to show compliance with Title VI in part by conducting a regional equity analysis using travel demand model outputs (and sometimes other data)

- We would expect this analysis to head off litigation and focus policy and programming on mitigation

Overview

- Traditional environmental justice analysis

- Transportation equity analysis

- Shortcomings and potential solutions:
  - Geographic aggregation
  - Race
  - Forecasting
  - Timing

Traditional environmental justice analysis

*hazardous waste treatment, storage, and disposal facilities in the US*

	Within 1 km.	Between 1 km. and 3 km.	Between 3 km. and 5 km.	Beyond 5 km.
Population				
Total Population (1000s)	845	7,828	14,101	225,936
Population Density (persons per square kilometer)	690	840	810	24
Race/Ethnicity				
Percent People of Color	47.7%	46.1%	35.7%	22.2%
Percent African American	20.6%	20.4%	20.6%	11.2%
Percent Hispanic	23.1%	20.4%	18.1%	7.8%
Percent Asian/Pacific Islander	4.4%	5.4%	5.3%	2.7%
Percent Native American	0.6%	0.6%	0.5%	0.8%

source: Bullard et al., 2007

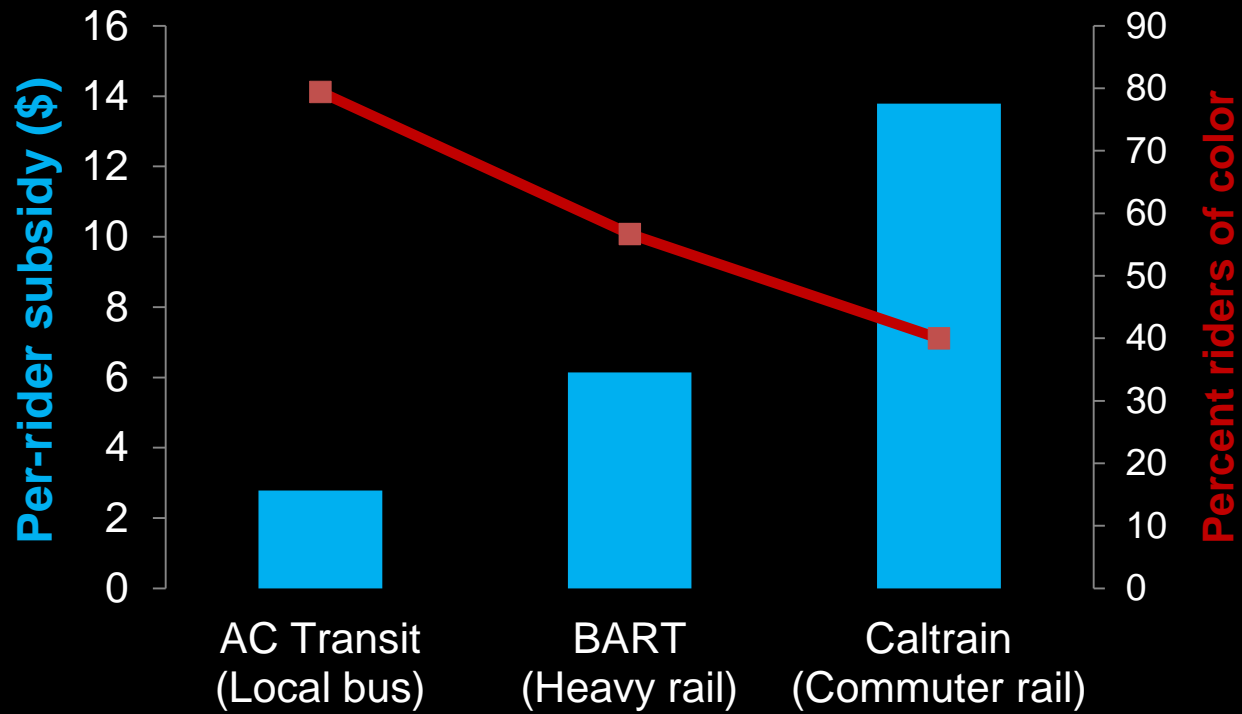# Traditional environmental justice analysis

- Studies demographics and exposure

- All residents affected equally
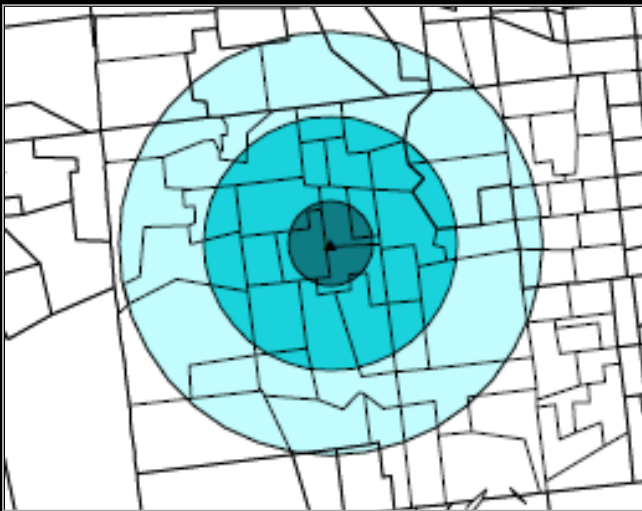
Analyzing demographics of exposure
source: Bullard et al., 2007

An urban smokestack in Beijing, China

Per-rider subsidy ($) vs Percent riders of color

- AC Transit (Local bus)
- BART (Heavy rail)
- Caltrain (Commuter rail)

source: richmondconfidential.org

source: sfexaminer.com

Transportation equity analysis

State-of-practice transportation equity analysis

1. **Identify target populations**
   - Select geographic zones using thresholds

2. **Select measures**
   - Accessibility, air quality, investments, etc.
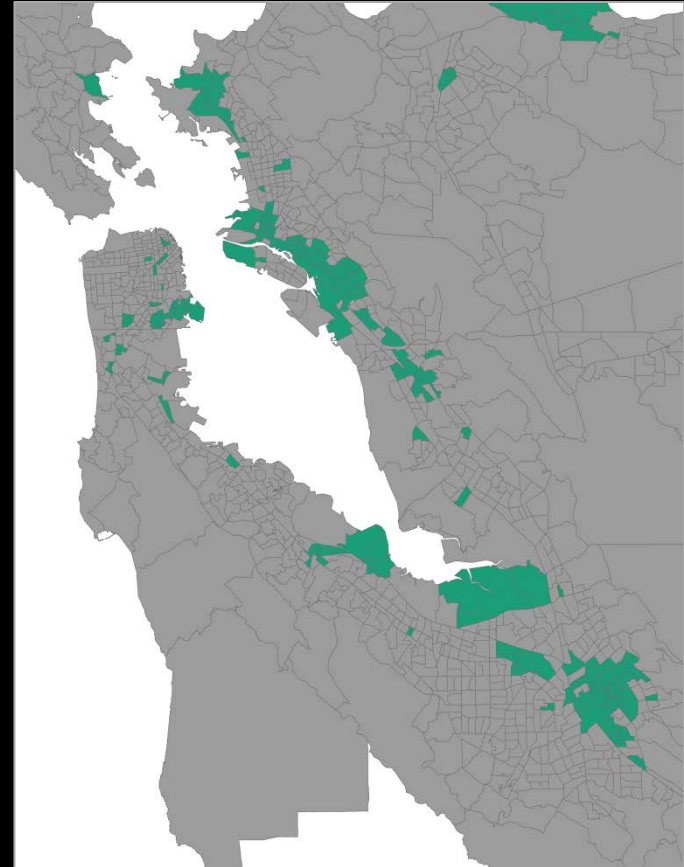
3. **Assess equity**
   - Assess average changes in measures
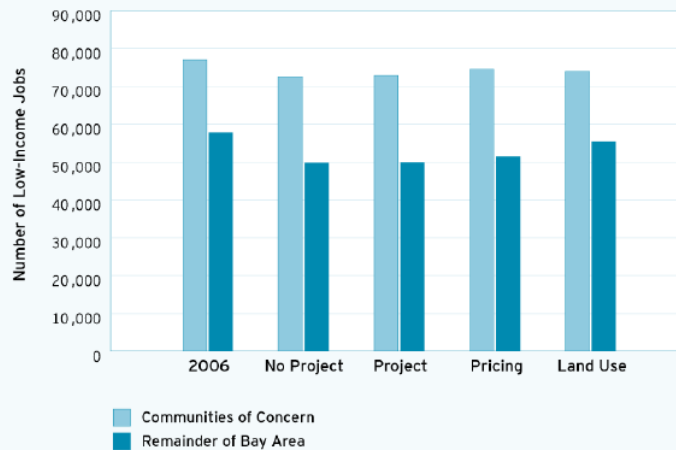
Step 1: Identify target populations

Metropolitan Transportation
Commission's 1454 TAZ system

All TAZs with:
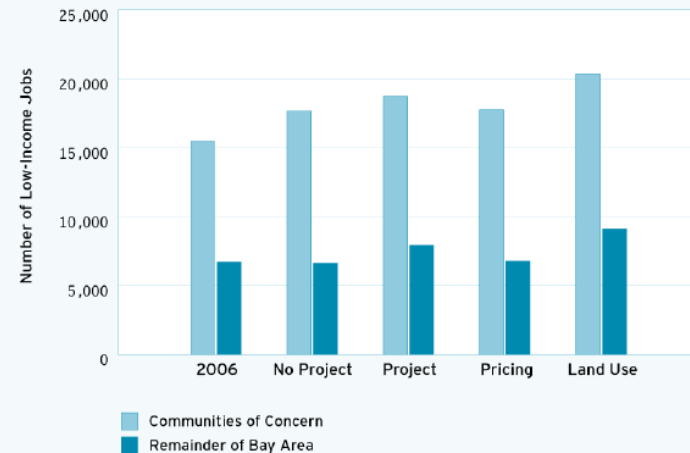> 30% low-income people and
> 70% people of color

Step 2: Select measures

Results from the Metropolitan Transportation Commission's
2009 regional equity analysis

Step 3: Assess equity

"The **Transportation 2035 Plan distributes transportation benefits and burdens equitably**; there is no systematic disbenefit to low-income and minority communities of concern, and in almost all cases these communities fare at least as well or better than the remainder of the region as a result of the proposed investments."
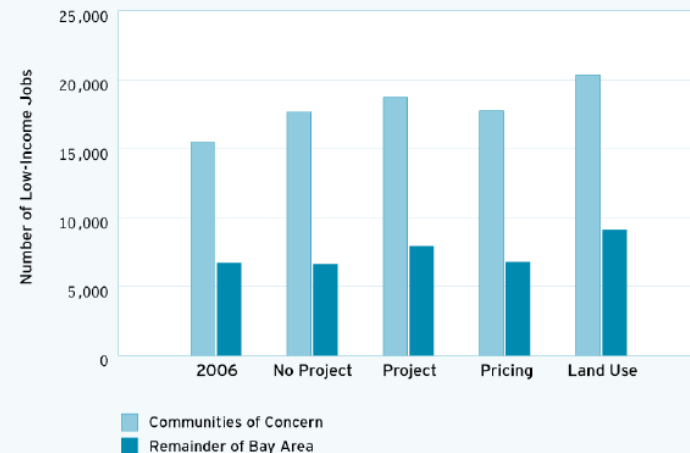
- MTC's 2009 regional transportation plan

Low-Income Jobs Accessible in 30 Minutes by Auto
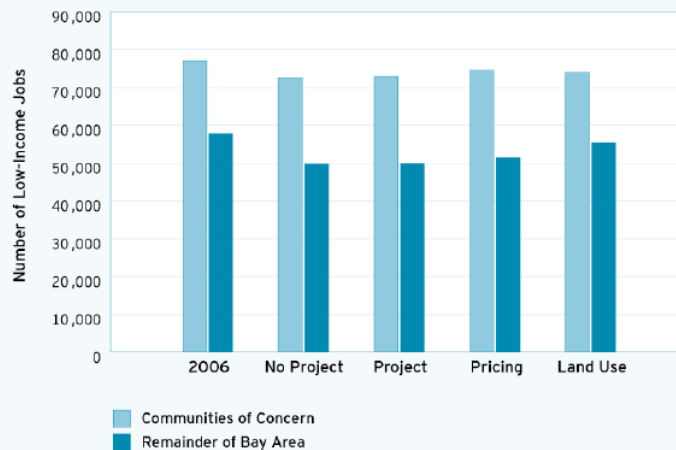
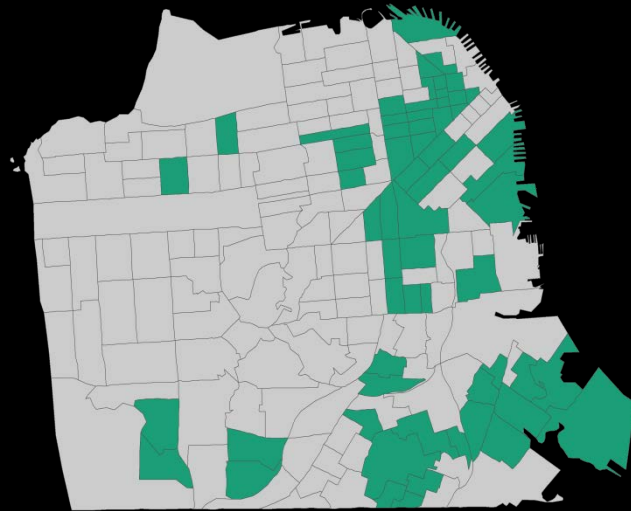Low-Income Jobs Accessible in 30 Minutes by Transit

Shortcomings with traditional analyses

Geographic aggregation

> 30% low-income

1 dot = 60 low-income residents

San Francisco County, data from 2005-2009 American Community Survey estimates

Communities of concern = 25.6 minutes
Remainder of the region = 26.8 minutes
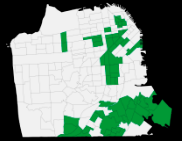
Communities of concern = 25.6 minutes
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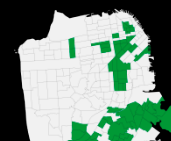
Mode	Zero vehicle HHs	All other HHs	Difference
All modes	37.1	26.1	+11.0
Non-motorized	19.5	16.4	+3.1
Walk to bus	34.2	32.6	+1.6
Walk to BART	59.6	45.9	+13.7

2005 mean commute time in minutes

Evidence on race and travel behavior

- Spatial mismatch between appropriate jobs and housing location for blacks (Ihlanfeldt and Sjoquist, 1998)
- Race strongly associated with transit and non-motorized use (Pucher and Renne, 2003; Kockelman, 1997)
- Whites travel more than people of color and white men make more trips (Liu, 2000)
- Accessibility to bus service declines as proportion of people of color increases (Wells and Thill, 2012)
- Accessibility to grocery stores lower in black areas (Grengs, 2001)
- Racial disparity in relationship between commute time and income (Zax, 1990)

Race and modeling

> Right now our forecasting models don't include ethnicity and that's critical for doing the analysis of the future that the groups are asking for.
>
> MPO Staff Member
> *January, 2012*

Race and modeling

Right now our forecasting models don't include ethnicity and that's critical for doing the analysis of the future that the groups are asking for.

MPO Staff Member
January, 2012

I would think that issue [i.e. forecasting racial demographics] would be pretty minor – that would be pretty far down my list of concerns at our efficacy of predicting the future.
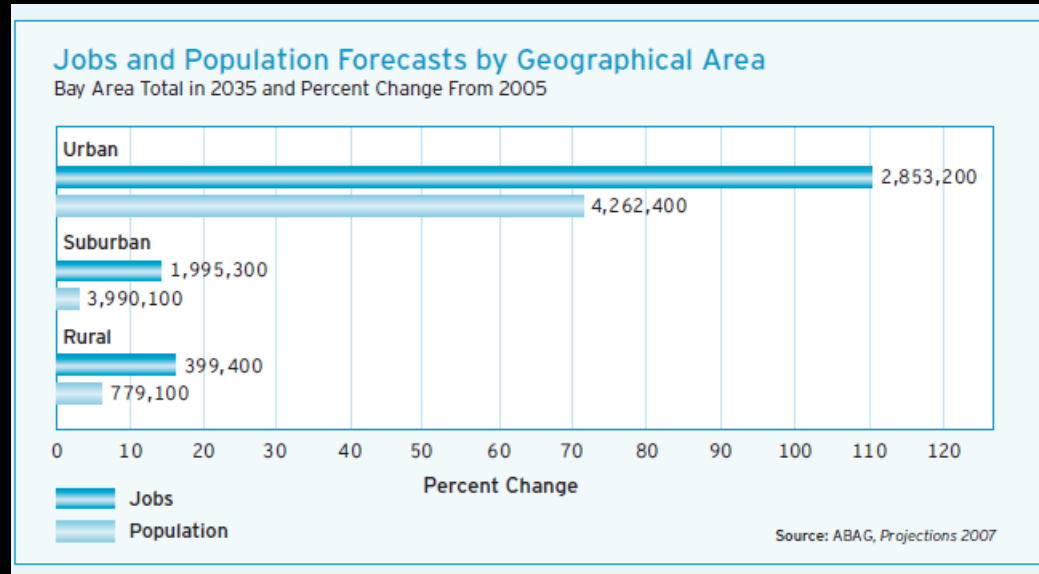
MPO Staff Member
June, 2011

Race and modeling

- Four step models
  - *Problem*: Geographic aggregation omits large portions of people of color
  - *Solution*: Test different population definitions

- Activity-based models
  - *Problem*: Race not included in synthetic populations
  - *Solution*: Solve through its inclusion

Forecasting

- Forecasting is highly uncertain and error-prone and usually predicts improvements
  - Economic growth
  - Job density

Jobs and Population Forecasts by Geographical Area
Bay Area Total in 2035 and Percent Change From 2005

Urban — 2,853,200 / 4,262,400
Suburban — 1,995,300 / 3,990,100
Rural — 399,400 / 779,100

Percent Change: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120

Jobs
Population

Source: ABAG, Projections 2007

source: MTC's 2009 RTP

Forecasting

- Existing equity "gaps" go unnoticed
  - Between auto/transit users
  - Between geographically dispersed populations

- Ample current data are available to guide decision-making

AMERICAN COMMUNITY SURVEY
U.S. CENSUS BUREAU

PUBLIC USE MICRODATA SAMPLES

CALIFORNIA
Household Travel Survey
C H T S

2008/2009 On-Board Rider Survey—System-wide Results

October 2010

Alameda-Contra Costa Transit District

GTFS Data
Exchange

bart
2008 BART Station Profile Study
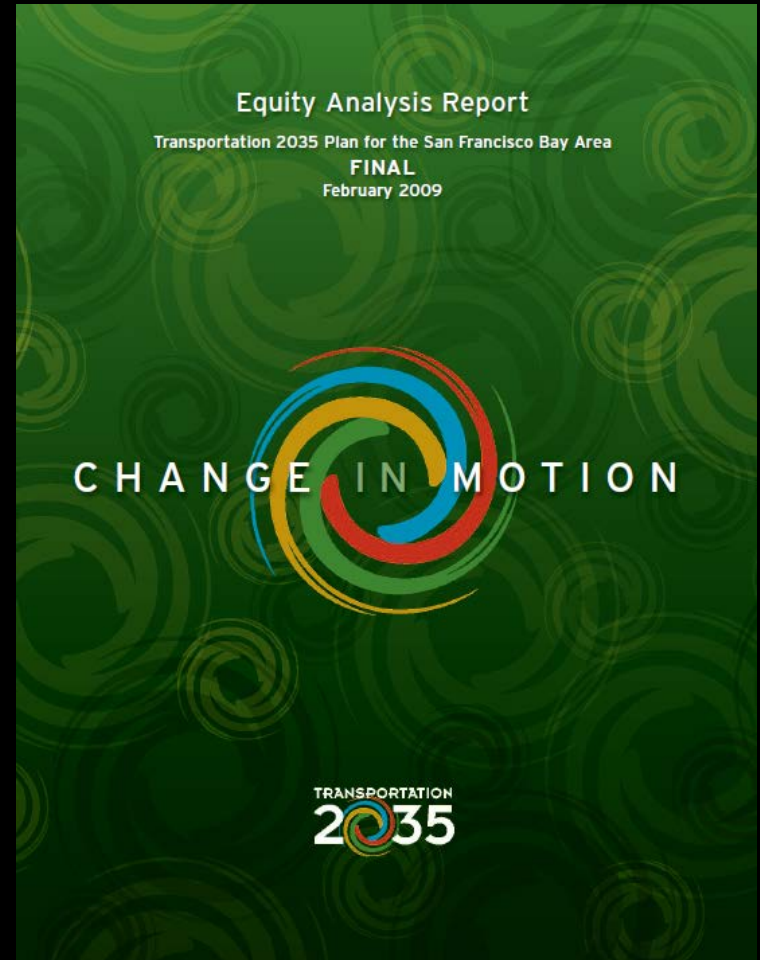
Forecasting

Perhaps the strongest feedback MTC staff received from the Minority Citizens Advisory Committee this equity analysis is that <u>its analytical approach does not directly address the differing levels of access and mobility that exist within the region today</u>. Rather, the RTP equity analysis relies on long-range forecasts to estimate and compare aggregate outcomes between communities of concern and the remainder of the Bay Area region-wide in the future.

- MTC 2009 Regional Transportation Plan

Equity Analysis Report
Transportation 2035 Plan for the San Francisco Bay Area
FINAL
February 2009

CHANGE IN MOTION

TRANSPORTATION
2035

Timing

- Equity analyses often completed after major planning decisions have been made

- Earlier completion and refocusing on near term equity conditions can focus attention on mitigation and existing inequities

- Results can then be used to *guide* policy and programming decisions

Median bus commute times (min)

- 8.13 - 30.6
- 30.6 - 37.0
- 37.0 - 42.2
- 42.2 - 48.5
- 48.5 - 104.1
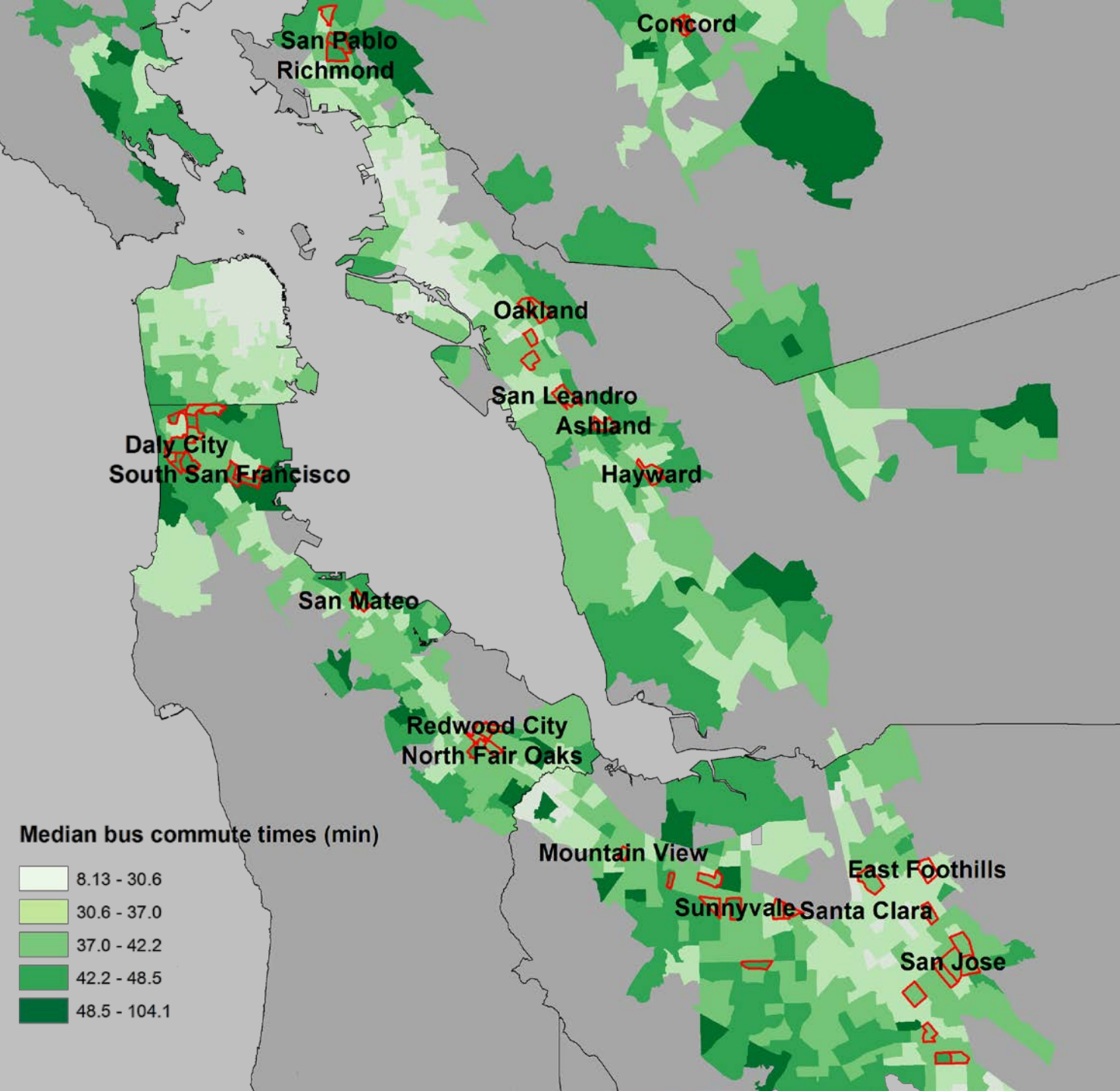
2005 base year model run

28

Recommendations

1. Ensure group definitions are meaningful

2. Consider race apart from other categories

3. Consider existing conditions and data (modeling not always required)

4. Stage the analysis to feedback to decision making

Conclusions

- Virtually *any* analysis is acceptable

- Methods are not likely to uncover discriminatory impacts

- Problem is analytical *and* institutional
  - Low incentive to innovate

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References and further reading

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MAXIMIZING EQUITY IN REGIONAL PLANNING:

LESSONS FROM THE 6 WINS NETWORK

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ABOUT PUBLIC ADVOCATES INC.

- Challenging the systemic causes of poverty and racial discrimination since 1971

- Strengthening community voices and achieving legal victories on their behalf

- Advancing SOCIAL EQUITY in areas such as:

  - Education
  - Housing
  - Transit

Vital building blocks of opportunity

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8

REGIONAL PLAN
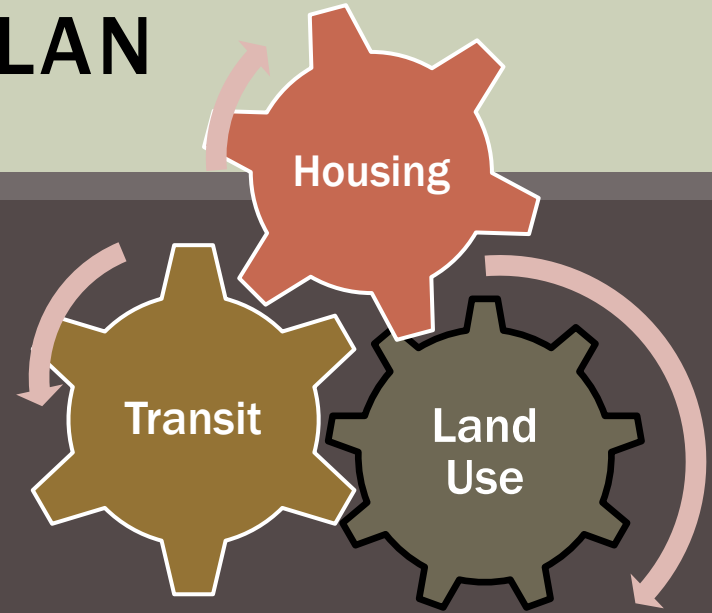
- 28-Year transportation plan
- Calls for GHG reduction targets
- Integrates transportation and land use
- $292 billion in transportation investments
- 2.1 million projected new residents
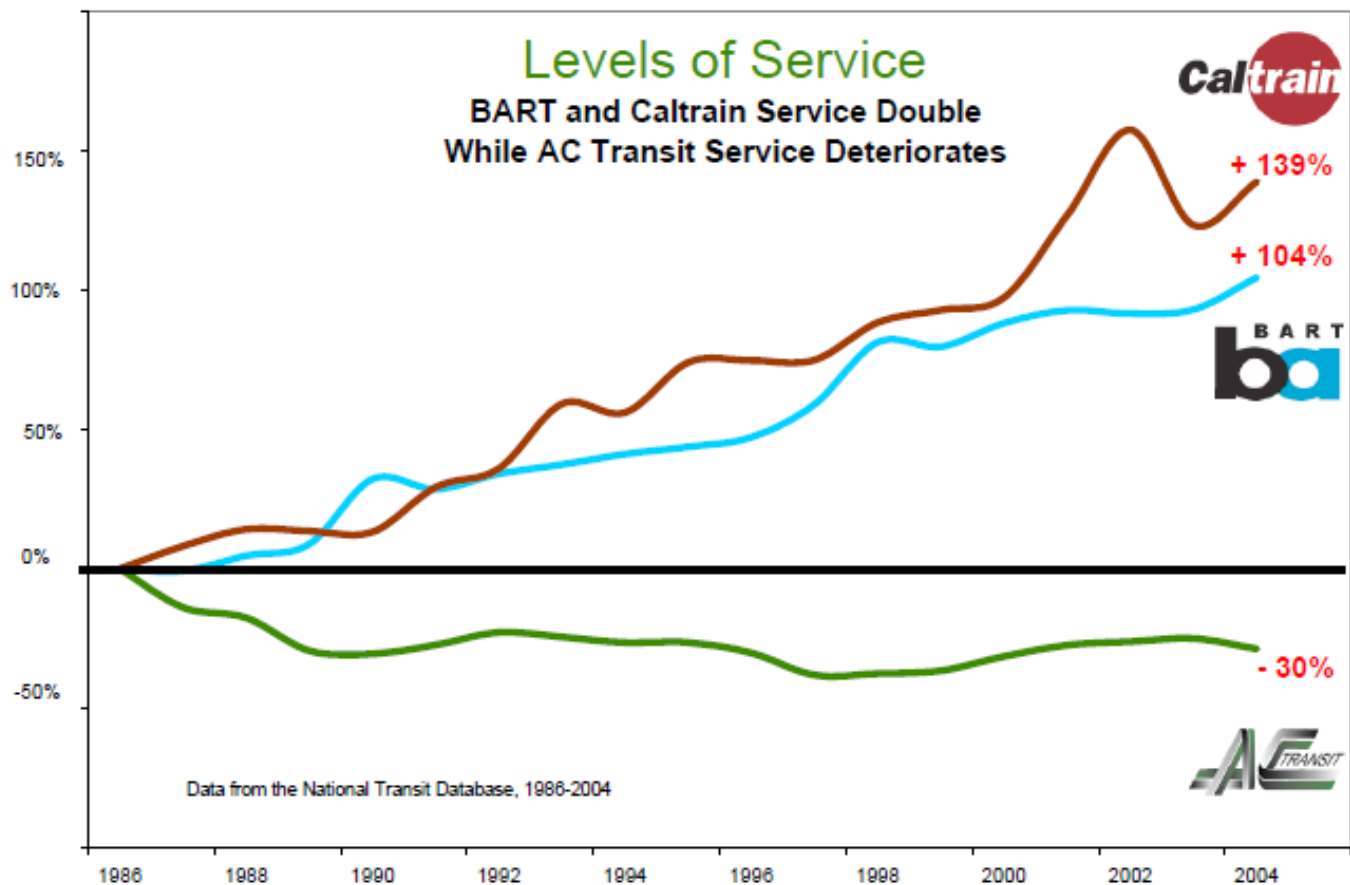
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GOING BEYOND THE EQUITY ANALYSIS

- Community groups had a long history of trying to influence the regional plan

- Shifted focus from flaws in equity analysis to shaping inputs (policies and investments), performance measures, and ongoing analysis

- Sought to close real gaps (e.g. inadequate transit, lack of affordable housing, economic displacement)

SAN FRANCISCO BAY AREA: TRANSIT

- Fare hikes and service cuts

  - AC Transit lost 8% service miles between 2008-11, ridership declined by 12%, while fares increased 11%

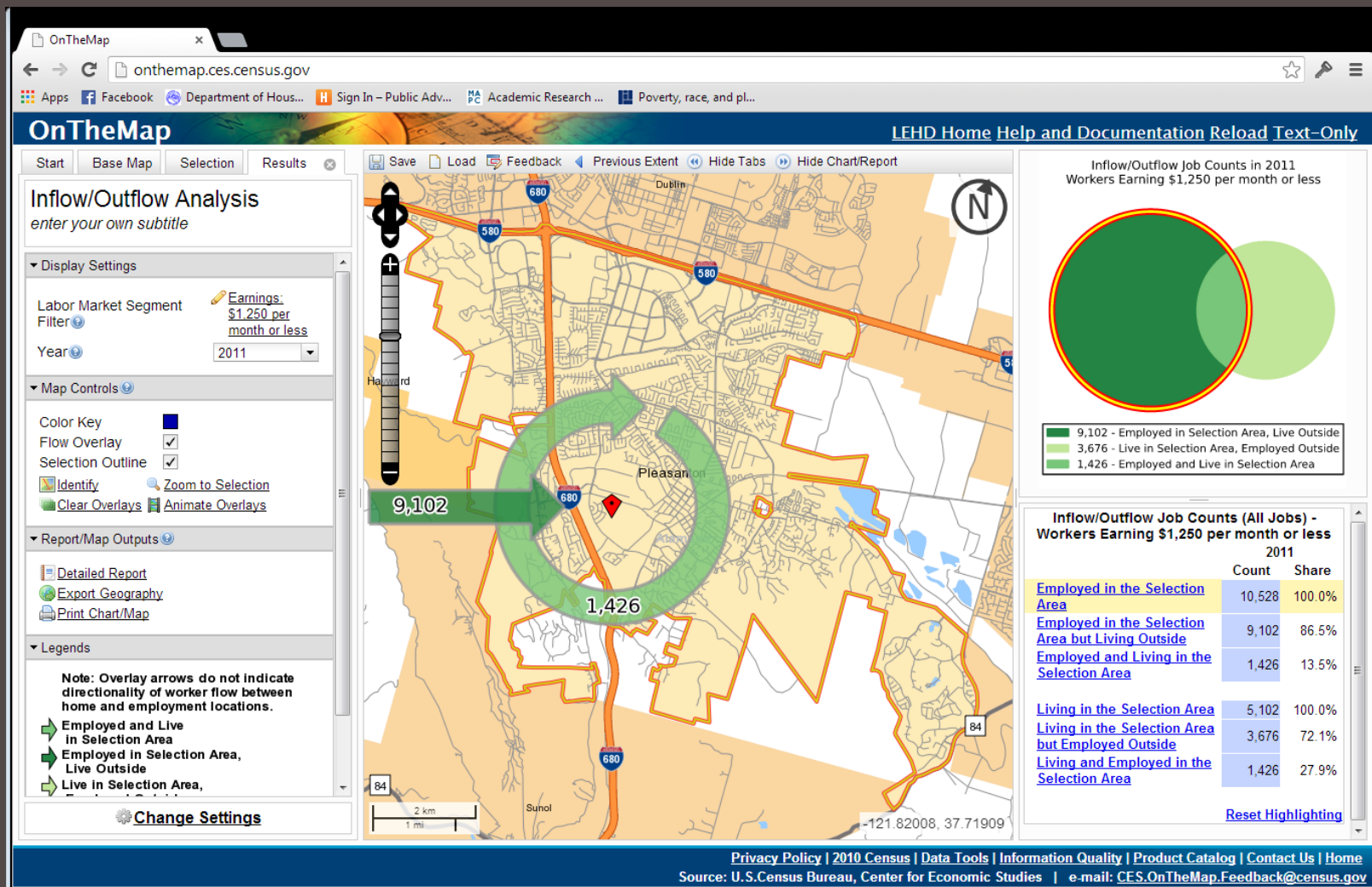- Households earning $20-50k devote 63% of budget to housing & transportation (highest % in U.S.)

PERSISTENT INEQUITIES

Levels of Service
BART and Caltrain Service Double
While AC Transit Service Deteriorates

+ 139%

+ 104%

- 30%

Data from the National Transit Database, 1986-2004

BAY AREA: HOUSING & DISPLACEMENT

- Median home price = $555,000 (on the way back to $700k+)

- 5+ minimum wage jobs needed to afford 2-bedroom apartment in most SF neighborhoods

- Oakland and Richmond lost 23% of African American population between 2000 and 2010

- 7 out of the 10 cities with highest African American population % are in in suburbs & exurbs

- Marin County: 80% white (region: 52.5% white)

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LOW-INCOME IN-COMMUTERS

DISPLACEMENT TODAY

SUSTAINABLE PLANNING <u>FOR WHOM?</u>

Low-income households will be spending <u>over 74%</u> <u>of their incomes</u> on H+T

Table ES-2. Summary of Equity Analysis Technical Performance Measures: EIR Scenarios

Measure	Target Population	2010 Base Year	1 No Project	2 Draft Plan (Project)	3 Transit Priority Focus	4 Network of Comm.	5 Env., Equity & Jobs	% Change Base Year to Project	No Project to Project
Housing + Transportation Affordability	Households <$38,000/yr	72 %	80 %	74 %	77 %	74 %	73 %	3 %	-7 %
	Households >$38,000/yr	41 %	44 %	43 %	43 %	42 %	43 %	4 %	-4 %
Potential for Displacement	Communities of Concern	n/a	21%	36%	25%	31%	21%	n/a	68%
	Remainder of Region	n/a	5%	8%	7%	9%	6%	n/a	67%
VMT Density	Communities of Concern	9,737	11,447	11,693	11,536	12,123	11,259	20%	2%
	Remainder of Region	9,861	11,717	11,895	11,804	12,261	11,626	21%	2%
Average Commute Time	Communities of Concern	25	26	26	25	26	25	5%	-1%
	Remainder of Region	27	29	27	26	27	27	2%	-6%
Average Non-Commute Time	Communities of Concern	12	13	13	13	13	13	5%	0%
	Remainder of Region	13	13	13	13	13	13	1%	0%

Source: MTC and ABAG estimates.

36% of households in communities of "concern" will be at high risk of displacement.

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ADVOCATING FOR A SUSTAINABLE & EQUITABLE REGION

6 BIG WINS FOR SOCIAL EQUITY

- Community Power
- Investment Without Displacement
- Affordable Housing
- Economic Opportunity
- Healthy & Safe Communities
- Local Transit Service

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COMMUNITY VISION: LEAD WITH EQUITY

- **Distribute Housing Growth Equitably:** Increase quality affordable housing options in *both* urban areas *and* suburban job centers

- **Protect against Displacement:** Ensure that lower-income communities are not displaced by TOD through regional grant incentives (One Bay Area Grant Program)

- **Improve Local Transit Service:** Fund more of the local transit service on which low-income riders of color depend

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I SUPPORT AN EQUITY SCENARIO

I SUPPORT AN EQUITY SCENARIO

Photo credit:
Paloma Pavel

EEJ: THE "ENVIRONMENTALLY SUPERIOR ALTERNATIVE"

- 3.5 million fewer miles of car travel per day

- 165,000 more people using transit per day

- 1,900 fewer tons of CO_2 emissions per day

- Energy savings amounting to 600,000 gallons of gasoline per day

- Aggregate savings in rent for low-income households of $79M per year

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EEJ: THE "ENVIRONMENTALLY SUPERIOR ALTERNATIVE"

- 33 percent decrease in displacement risk for low-income households

- 30,000 fewer residents at risk of flooding due to rising sea levels by 2015

- 12.5% more local transit; 13% more express bus service; 6.5% more BART service

22

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DATA + ORGANIZING = CHANGE

Education and Advocacy

Media & Communications

Turnout & Testimony

Broadening Support

KEY IMPROVEMENTS WON

- Improvements to **One Bay Area Grant program** to link to local affordable housing and anti-displacement policies and reward local affordable housing approvals

- Commitment to inclusive regional public process to allocate **Cap & Trade Revenues** with at least 25% going to benefit disadvantaged communities

- First ever commitment by MTC to develop a "comprehensive strategy" to focus on **funding transit operations and maintenance**

24

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LESSONS LEARNED

Maximizing social equity also maximizes environmental benefits, reduces sprawl, and creates more sustainable regions.

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LESSONS LEARNED

- EEJ success demonstrates need to better coordinate transportation, land use and housing planning in a way that integrates equity throughout

- Regional planning agencies often lack political backing to implement forward-thinking ideas

- Communities of color and low-income communities are natural allies because they have the most at stake. MPOs must build authentic partnerships

- Scarce public dollars must be leveraged to advance multiple bottom lines – especially social equity.

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THANK YOU

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27

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