ENSURING EQUITY & NONDISCRIMINATION IN REGIONAL PLANNING
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)
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
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
Global Institute of Sustainability
Arizona State University

DOT Civil Rights Symposium
February 6, 2014
Overview

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

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

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
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

San Francisco
Oakland
San Jose

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
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
<table>
<thead>
<tr>
<th>Mode</th>
<th>Zero vehicle HHs</th>
<th>All other HHs</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>All modes</td>
<td>37.1</td>
<td>26.1</td>
<td>+11.0</td>
</tr>
<tr>
<td>Non-motorized</td>
<td>19.5</td>
<td>16.4</td>
<td>+3.1</td>
</tr>
<tr>
<td>Walk to bus</td>
<td>34.2</td>
<td>32.6</td>
<td>+1.6</td>
</tr>
<tr>
<td>Walk to BART</td>
<td>59.6</td>
<td>45.9</td>
<td>+13.7</td>
</tr>
</tbody>
</table>

2005 mean commute time in minutes

Communities of concern = 25.6 minutes
Remainder of the region = 26.8 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

(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
Forecasting

Perhaps the strongest feedback MTC staff received from the Minority Citizens Advisory Committee this equity analysis is that its analytical approach does not directly address the differing levels of access and mobility that exist within the region today. 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
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
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
Contact
Alex Karner
alex.karner@asu.edu
http://www.alexkarner.com
@AlexKarner

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References and further reading

MAXIMIZING EQUITY IN REGIONAL PLANNING:
LESSONS FROM THE 6 WINS NETWORK
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
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
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)
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

Data from the National Transit Database, 1986-2004
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)
LOW-INCOME IN-COMMUTERS
DISPLACEMENT TODAY
**Table ES-2. Summary of Equity Analysis Technical Performance Measures: EIR Scenarios**

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

Source: MTC and ABAG estimates.

Low-income households will be spending over 74% of their incomes on cement.

36% of households in "communities of concern" will be at high risk of displacement.
ADVOCATING FOR A SUSTAINABLE & EQUITABLE REGION
6 BIG WINS FOR SOCIAL EQUITY

- Community Power
- Investment Without Displacement
- Local Transit Service
- Affordable Housing
- Economic Opportunity
- Healthy & Safe Communities
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
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 CO2 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
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
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.
Maximizing social equity also maximizes environmental benefits, reduces sprawl, and creates more sustainable regions.
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.
THANK YOU

Guillermo Mayer
President & CEO, Public Advocates Inc.
gmayer@publicadvocates.org

http://www.publicadvocates.org/climate-justice
Facebook: PublicAdvocates
Twitter: @publicadvocates