Steps to a More Equitable Transportation System

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Regional Planning, Policy, and Strategy Advisor
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Inequities Are Baked Into Our Systems

Redlining
Highway Construction
“Urban Renewal”
Access to Opportunities
Health Outcomes
Inequities Are Baked Into Our Systems

White
Cis-gendered
Heterosexual
Ivy-educated
Male

...with a strong sense of privilege

Here’s what I’ve learned.
Framing Equity in Road Tolling
Re-Framing Road Pricing

What are you paying for?

Paying to Use the Road

Paying *Others* to *Not* Use the Road

“*My taxes built the road! Why should I have to pay more?*”

“*Lexus Lanes!*”

“*Inequitable!*”

**Prof. Michael Manville: Flip the Scenarios**
Imagine the opposite of today.

Drivers pay to use roads.
Congestion is far lower.
Pollution is far lower.
Transit is faster and more frequent.
Discount programs for low-income commuters.
Would you switch to today’s system?

Rich and poor drive “for free,” but...

- The “rich” drive much more than the “poor.”
- Buses would be slower.
- Pollution and GHG would increase.
- Pollution impacts would fall heavily on the poor.
- Fewer revenues for mitigation/equity.
In the Real World:

The “normalcy” of the status quo prevents us from thinking of its fairness.
In the Real World:

The “normalcy” of the status quo prevents us from thinking of its fairness.

What form of “unfairness” can we best mitigate?

Prof. Michael Manville:
Mitigation of Harms

Structural Change
Key Proposition:

That structural inequity in our transportation system may be remedied in part by effective, equitable road pricing.
Road Pricing + Smart Investment Strategies ➔

- More frequent and affordable public transit
- Safer pedestrian and bicycle routes
- Improved health outcomes for EJ communities
- Discounts & exemptions for low-income HHs

EJ = Environmental Justice
HHs = Households
Equitable Outcomes

✓ Greater Affordability

✓ Improved Access to Opportunities

✓ Community Health
TransForm’s 5 Steps to an Equitable Road Pricing Program
1. Identify Who/What/Where

2. Define Equity Outcomes & Performance Indicators

3. Determine Benefits and Burdens

4. Choose Programs that Advance Transportation Equity

Program Adopted/Implemented

5. Provide Accountable Feedback & Evaluation
Step #1

Identify
Who, What, and Where
Step #1: Identify Who, What, and Where

Are the right populations included?

- Low-Income
- Minority
- Seniors?
- Limited-English?
- Persons with Disabilities?
- Immigrants and Refugees?
- Small Businesses?
- Meal Deliveries?

*Should priority be given to certain populations? Why?*
Step #1: Identify Who, What, and Where

Does the measure of household income adequately capture the target population?

In some metro areas households earning up to twice the Federal poverty level may still be economically disadvantaged and in need of more equitable policies.
Step #1: Identify Who, What, and Where

**Alternative or Additional Pricing Strategies?**

*Put another way, does the list of project alternatives include all the options that best serve vulnerable communities?*

*Have representatives of vulnerable communities provided input on measures, strategies, and goals?*

**Scope/budget for multiple iterations?**

**Community-identified priorities?**
Vancouver, BC

Conducted a coarse-level evaluation:
What is the tool’s potential to
• Reduce congestion;
• Promote fairness;
• Support investment; and
• Meet other important considerations?

Two policy tools were taken forward for further study
Step #1: Identify Who, What, and Where

Project boundaries cover all?

Extended Impact Area

Direct Impact Area

Location of critical services

Examples: shopping, medical care, education, religious, and recreation.
Step #2

Define Equity Outcome and Performance Indicators
<table>
<thead>
<tr>
<th>Type of Equity</th>
<th>Key Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process Equity</td>
<td>Full Participation</td>
</tr>
<tr>
<td>Outcome Equity</td>
<td>Affordability</td>
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<tr>
<td></td>
<td>Access to Opportunity</td>
</tr>
<tr>
<td></td>
<td>Community Health</td>
</tr>
</tbody>
</table>
Understanding Impacts

No Toll Plan:
- Vulnerable Communities: Impacts
- General Population: Impacts

With Toll Plan:
- Vulnerable Communities: Impacts
- General Population: Impacts

Arrow notation: ↔
For its I-10 and I-110 ExpressLane pricing study, looking at Low-Income commuters:

1. # using transponders.
2. # & % using of HOT lanes
3. Usage of HOT lane credits.
4. Mode choice before/after.
6. General purpose lane speeds.
8. Share of time savings vs. share of tolls and transponder costs.
10. Toll revenue investment.
THE FOUR EQUITIES

1. Full Participation
## Increasing Degree of Participation

<table>
<thead>
<tr>
<th>Level</th>
<th>Minimal</th>
<th>→</th>
<th>Optimal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Public Participation Goal</strong></td>
<td>Vulnerable Communities are provided information on the project.</td>
<td>Vulnerable Communities provide feedback to the goals.</td>
<td>Solicitation of public concerns and aspirations is ongoing</td>
</tr>
</tbody>
</table>

### Sample Outreach Strategies
- Fact sheets
- Websites
- Open houses
- Public meetings
- Public comment
- Focus groups
- Surveys
- Workshops
- Deliberative polling
- Advisory committees comprised of residents
- Consensus building
- Participatory decision-making
- Citizen juries
- Ballots
- Delegated decisions
- Formal representation on decision-making groups
Full Participation

Activities Held
- # of meetings
- Share of project budget

Community-Based Organizations
- Staff time devoted
- Support & funding

Communications
- Which languages
- Ethnic media outlets

Number of Participants

Responsiveness
- Community priorities implemented
THE FOUR EQUITIES

2.

Affordability
## Affordability

<table>
<thead>
<tr>
<th>Discounts</th>
<th>Regressiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>On tolls</td>
<td>Tolls, revenue redistribution</td>
</tr>
<tr>
<td>On transit fares</td>
<td>% &amp; Δ of household budget</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Participants</th>
<th>Amount of Subsidies from Tolls</th>
<th>Total Expected Savings</th>
<th>Cost of Alternative Modes</th>
</tr>
</thead>
<tbody>
<tr>
<td># participating in discounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% of eligible participating</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
3.

Access to Opportunity
Affordability

Funding

Investment in other modes
% of toll revenues for other modes

Service Quality

Δ in transit speed, reliability
Δ in auto travel time

Service Levels

Transit improvements

Transit Use

Paying Tolls vs Shifting Travel

Δ in Access to Jobs, etc.
THE FOUR EQUITIES

4.

Community Health
Community Health

Infrastructure
- Miles of safe bike/ped ways

Funding
- $ spent on bike/ped in target zones
- $ spent on clean-air buses

Safety Improvements
- Collision, death & injury rates

Air Quality
- New clean-air buses
- Reduction in particulates, others

Trips Shifted to Bike/Ped

Health Benefits
Additional Resources:

NCHRP’s *Assessing the Environmental Justice Effects of Toll Implementation or Rate Changes: Guidebook and Toolbox* has several lists that are useful for additional perspective:

- A checklist for understanding the role of quantitative and qualitative performance indicators (pp. 358-359).
- Table 3 (pp. 135-138), “Practical approaches for reaching low-income, minority, and other traditionally underserved populations,” presents an agency-level perspective on reaching members of vulnerable populations.

The Greenlining Institute’s *Mobility Equity Framework* identifies 12 indicators recommended for equity studies (pp. 11-13).\(^1\)
Step #3

Determine Benefits and Burdens
Step #3: Determine Benefits and Burdens

The scale of impacts

Community interest in those impacts

The potential of impacts to help/hurt target populations

Relative Impacts

Absolute Impacts
QUESTIONS TO ASK

- Affordability
- Social Impacts
- Alternatives
- Access Opportunity
- Travel Time
- Business Access
- Transit Impacts
- Noise
- Traffic Diversion
- Rents
- Environmental
Case Study: NYC Congestion Pricing

Working poor who would potentially pay congestion tolls

Working poor who would benefit from better and more affordable transit
Step #4

Choose Strategies to Advance Transportation Equity
| Affordability and Driver Assistance | Driver Discounts, Caps & Exemptions  
Cash Payments  
Transit Discounts |
|-----------------------------------|-------------------------------------------------|
| Greater Mobility Options & Safer Active Transportation Networks | Improved Transit Service  
Carpool and Vanpool Programs  
Pedestrian/Bike Improvements  
New Mobility Programs |
| Programs for Seniors and People with Disabilities | Accessible Information  
Targeted Transit/Shuttle Routes |
| Healthier Communities | Encourage Clean Air Vehicles |
Step #5

Provide Accountable Feedback and Evaluation
Step #5: Provide Accountable Feedback and Evaluation

- Monitoring & Evaluation Timeline
- Feedback Mechanisms
- Communication of Monitoring & Eval
Case Study: Stockholm

2006 7-Month Congestion Pricing Pilot Program

**BEFORE:**
- Traffic Down 22%
- GHG Emissions Down 14%
- Business Sales Up 5%
- Improved Transit

**AFTER:**
- 2/3

47
Case Study: Stockholm

- High-income individuals were affected more than low-income;
- Men paid 65% more congestion prices than women;
- Relatively few drivers paid the majority of congestion charges – but most paid occasionally;
- Young and low-income individuals benefitted from lower transit fares; and
- Journeys in central areas were shorter, with a lower % by car.
- 18 new regional bus lines and 2,800 new park-and-ride spaces.
### QUESTIONS TO ASK:

<table>
<thead>
<tr>
<th>For Project Funding Commitments:</th>
<th>Pilot Process?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entity Responsible?</td>
<td>Continuous Oversight?</td>
</tr>
<tr>
<td>Priority</td>
<td>Unresolved Equity Issues?</td>
</tr>
<tr>
<td>Follow-Through?</td>
<td>Continued Participation</td>
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<th>Who Determines Success?</th>
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Institutional Issues
Institutional Issues

Priority
Equity must be a stated, up-front goal, championed at the highest levels of organizations involved.

Comfort
Prepare to get uncomfortable. At every level. That’s how you know you’re doing Equity work.

Depth
Racism is built into policy, procedures, and laws. It’s often hidden or seems benign to leadership.

Team
Those working with communities must be involved with program planning.

-Christine Moses
Equity in a Post-Covid World
Equity in a Post-Covid World

Whither Transit or Wither Transit?

It’s About Time

Hoffman Formula: 5 = 40

Reversing the Order of Planning
The Order of Planning

Optimize the Automotive System

Fit Transit Around the Auto

Limit the Pedestrian

Fit Bicycles Around Everything
A Better Order of Planning

Optimize Transit

Optimize Bicycle Infrastructure

Expand the Pedestrian Realm

Optimize the Automotive System
Thank you!