Equity of Evolving Transportation Finance Mechanisms
Special Report 303
Committee on Equity Implications of Evolving Transportation Finance Mechanisms
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Context

- Traditional sources of funding for surface transportation – notably **Highway Trust Fund** – are **not keeping pace** with costs to sustain the highway system.

- Growing interest in **new mechanisms** such as high-occupancy-toll (HOT) lanes, vehicle-miles-traveled (VMT) fees.

- Questions raised about **equity** (≡ **fairness**) of new mechanisms.
Study Charge

- Provide guidance to public officials about assessing equity of evolving mechanisms
  - Identify dimensions of equity for public policy debates
  - Suggest specific issues for policy makers to consider
    - No value judgments about what constitutes an equitable transportation system
    - No advocacy for any particular mechanism
A Challenging Task

- **Complex**, important, lightning rod, well beyond finance
  - Multidimensional, many perspectives
  - Difficult to grasp, even for experts

- Much written but **mostly theory**
  - Little empirical evidence, especially in U.S.
Focus on Evolving Transportation Finance Mechanisms

- The less traditional, especially forms of road pricing using electronic tolling
  - HOT and express toll lanes
  - Cordon and area pricing
  - Distance-based pricing

**BUT**

- Comparisons to traditional mechanisms *vital*
Mechanisms Differ from Place to Place

- **HOT or Express Toll Lanes**
  - New construction
  - HOV lane conversion
  - HOV exemption policy

- **Cordon pricing**
  - Location of cordons
  - Availability of options
  - Exemptions
  - (New York City congestion pricing proposal)

Source: WSDOT
Equity Has Many Dimensions

• **Income**
  – Are different economic classes burdened disproportionately?

• **Geographic**
  – Are different districts or regions paying proportionately more or receiving proportionately less from transportation investments?

• **Generation**
  – Are costs paid by current and future generations proportional to service benefits they receive from transportation investments?

• **Modal**

• **Race-ethnicity**

• **Participation in decision process**
Example: New York City Cordon Pricing Proposal

- **Dimensions:**
  - Geographic:
    - Manhattan vs. boroughs
    - Above or below 86th St.
    - Out-of-city legislators
  - Income: Blue collar tradespeople vs. white collar subway riders
  - Participation

- **No case is likely to be one-dimensional**

Source: FHWA
Many Uncertainties, Little Experience

- Actual **implementations** of road pricing are **sparse**
  - limited empirical evidence
  - most of experience outside United States

- Many studies look only at **burdens not benefits**

- Results depend on **local conditions**; e.g.,
  - geographic distribution of jobs and housing
  - availability of alternative transportation services
Burden Shifting -- Passing the Buck

Where possible, those who shoulder the initial burden of financing schemes – taxes, pricing – may find ways to shift the impacts to others, making it difficult to anticipate the ultimate effects.
It’s Complicated

- **Broad generalizations** oversimplify reality and can be misleading
  - Equity implications not always as they seem initially; e.g.,
    - HOT lane use rises with income, but low-income drivers use HOT lanes when time-saving pays off
    - Burden shifting
- **The “devil is in the details”**
  - How mechanism is structured affects who pays
  - Use of revenue affects who benefits
  - Availability of alternatives affects who can avoid the pricing
- **Guidance** to decision makers cannot be “one size fits all”
How Fair Is the Baseline?

- Existing mechanisms have not prompted equity debates to the same extent as road pricing
- **Bias** in favor of **status quo**
- Few explicit comparisons of existing and evolving finance mechanisms
- But, **existing mechanisms** have their own issues – e.g., many are **regressive**
Sales Taxes: A Popular Option

• Often politically expedient
  – Low rate raises considerable revenue
  – Revenues can be used for multiple purposes, not just transportation
  – Local control is attractive

**BUT**

• Less equitable than gas tax or other user fees
  – Disproportionate burden on low-income households (more regressive )
  – Disconnect those who benefit from those who pay
Advice for Public Officials
Define and Analyze the Baseline

- Examine current financing mechanism
  - How are we financing transportation now? People do not know…
  - How fair is it? Regressive finance options are common and widely accepted

- Don’t be diverted by popular rhetoric
  - “It’s not fair…” “I don’t like it…” “Lexus lanes”
Consider Who Is Affected

- Use analysis, modeling where possible to analyze details, explore options and impacts
- Recognize potential importance of burden shifting – passing the buck
Engage the Public in Decision Making

- Engage stakeholders early and often – participation equity
- Develop outreach programs and educational activities
- Use feedback to modify designs in response to equity concerns
Use Public Opinion Research

- Gauge public opinion and understanding
  - Before a proposal is implemented
  - Following implementation
    - Experience can help build support; e.g., London, Stockholm

BUT

- Polling has **both value and risks**
  - Need rigorous sampling strategies, careful phrasing of survey questions
Track and Learn From Experience

- **United States**
  - Domestic experience adds **credibility**
  - Conduct **before-after studies**

- **Other countries**
Explore Remedies

- Many ideas but very limited practical experience

- Improving public transportation sometimes helps address income inequities but is not a universal remedy

- Explore pricing exemptions, discounts, subsidies, or rebates to those adversely affected
  - Implementation issues
  - Funding
Recap

- Equity has many dimensions
- Devil is in the details
- Ask a broad range of questions about equity impacts
- Compare to baseline
- Consider both burdens and benefits
  - Burden shifting can change equity impacts
- Engage public early and often in decision-making process
Going Forward

- This is **not the last word** on finance equity
- Need to **learn from practical experience**
  - Comprehensive before-after studies
  - Data collection, analysis
- **Handbook** describing recommended procedures for conducting equity analyses
Expert Papers

- Equity, Pricing, and Surface Transportation Politics
  - Alan Altshuler, Harvard University

- Remediating Inequity in Transportation Finance
  - David King, Columbia University

- The Empirical Research on the Social Equity of Gas Taxes, Emissions Fees, and Congestion Charges
  - Lisa Schweitzer, University of Southern California

- The Incidence of Public Finance Schemes
  - Sarah West, Macalester College
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Questions?