Research Ideas in Transportation Economics

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Overview

- Focus on issues for which significant political decisions would benefit from better economic analysis

- Three examples
  - Specialized transit services
  - Economic and social impacts of transportation investments and policies
  - Congestion pricing
Specialized Transit Services

- Origins in human services
- They would like it to be more efficient, but don’t really understand what this means or how to do it
- A challenging subject:
  - Very complex, many very relevant details, little written down
  - Research “clients” often don’t understand economics that well – it can be hard to communicate these ideas
Research Issues: Efficiency

- Understanding what efficiency means in this context and how to measure it
- Considerable confusion in existing research
  - Inappropriately comparing costs across agencies with different services, clients, etc.
  - Counting service cuts, or shifting costs to other budgets, as efficiency gains
  - Counting expenditures as benefits when they go to another transit agency
Research Issues: Institutions

- Services are funded by dozens of programs, all with their own rules
- Variations in driver and vehicle standards, who can be transported, what price can be charged, how funding is allocated,…
- Funders demand “coordination” but this variety of rules makes it hard in practice
- Incentive structures lead to undesirable choices by providers
Economic and Social Impacts

- Significant transportation debates revolve around issues that are basically economic in nature, but without good economic insight.

- Examples from Minnesota:
  - Twin Cities economic vitality will suffer if congestion is not addressed immediately.
  - Projects can be justified by economic development impacts even if B/C is low.
  - Travel behavior is strongly dependent on urban design and land use.
The Problem

- Travel forecasting models and BCA address a tightly circumscribed set of issues.
- The fact that these other issues are excluded leads all sides to believe that BCA results can be discounted or even ignored entirely.
- Some of these issues have been studied at length, but very often by researchers with a clear preference for a given answer.
Research Needs

- These issues are fuzzy, probably cannot be addressed with the clarity of BCA
- But lesser insights would still be useful:
  - Rules of thumb: bounds on likely outcomes of a policy or investment under various conditions
  - Statements about the quality of evidence, certainty of conclusions, for various issues
  - Estimated value or utility of given outcomes
  - Better research designs, data collection strategies
Congestion Pricing

- Economic principles are well understood in the abstract
- But politicians and citizens are sensitive to impacts that theory often doesn’t address
  - Neighborhood costs of local street traffic
  - Congestion on non-priced routes
  - Impacts on lower incomes
  - Potential business losses
  - Value of reliable travel time option
Research Ideas

- It is not inherently implausible to think that pricing might be a good idea in some cases and not in others, depending on how these secondary issues resolve.

- Need standardized theory of how they should be addressed, in general and in the context of specific proposals (what local data is necessary).