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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)