Interactions between Transportation Capacity, Economic Systems, and Land Use

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ABSTRACT

This presentation describes research that included studying the interactions between transportation capacity, economic systems, and land use. Objectives included determining net economic changes in the area of impact of a transportation improvement, developing enough cases to demonstrate impacts by analogy, and linking to a collaborative decision-making framework.

Key words: collaborative decision making—economic impact analysis
Mid-Continent Transportation Research Symposium

SHRP2 C03
Interactions between Transportation Capacity, Economic Systems, and Land Use

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Objectives

- Determine net economic changes in the area of impact of a transportation improvement
- Develop enough cases to demonstrate impacts by analogy
- Link to collaborative decision-making framework
Research Team

• Economic Development Research Group
• ICF International
• Cambridge Systematics
• Texas Transportation institute
• Wilbur Smith, Assoc.
Philosophy

• Black boxes are unsatisfying to decision makers and the public
• Lack of transparency hurts credibility of economic impact analysis
• The public has forgotten the importance of transportation facilities to our quality of life
• Reintroducing this concept is part of collaborative decision making
Approach

- 60 case studies—analysis by analogy
- Typology based on type of facility, degree of urban/rural setting, economic climate of the area
- 40 more case studies next year, to include
  - Intermodal investments
  - Transit-oriented developments
- Web-based analysis tool
- Meta analysis report—patterns, rules of thumb, guidelines
Project Outline
19 Tasks in Sequence of 5 Key Steps

STEP 1 Preliminary Research
1 Background 2 Working Paper 3 Liaison SHRP2

STEP 2 Data Collection Design
4 Settings 5 Projects 6 Groups 7 Structure 8 Cases

STEP 3 Product Design
9 Data Design 10 Meta Analysis Design 11 DB System Structure 12 Int. Report

STEP 4 Case & Meta Analysis Implementation
13 Data Collection 14 Critical Evaluation 15 Meta Analysis 16 Working Papers

STEP 5 Database & Tool Implementation
17 Database & User System 18 Handbook 19 Final Report

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SHRP Capacity Project Interactions

C01 – CDMF

Key Decision Points
Decision Processes

Institutional Models
Methods & Tools

C02 – Performance Measures
Non-Economic PMs
Economic PMs

C03 – Interactions
Interview Topics

- Projects
- Impact Measures
- Tools
- Stakeholders
- Settings
- Problems
- Interests
- Decision Process
- Methods
- Influence
- Uses &
# Potential Cases

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<td>Beltway</td>
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<tr>
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Potential Cases by BEA Region

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Information to be Collected

- Impact measures
- Project data
- Location classification
Screen Shots of Web Tool

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