Project Title

Reconnecting America: Redesigning Transportation Policy to Enable Intermodal Intercity Travel

Principal Investigator

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Objective

This project will facilitate intermodal integration by exploring the policy implications of a comprehensively modeled intermodal network and identifying policy constraints that currently inhibit its implementation. This investigation will then evaluate opportunities for overcoming policy constraints by identifying the magnitude and distribution of productivity gains that would arise from intermodal integration. Research results will be communicated to opinion leaders and decision makers in media, government, industry, and labor as an alternative to the increasingly bleak economic results of existing intercity transportation arrangements.

Abstract

Numerous studies have estimated ridership on enhanced rail corridors, and some research has analyzed trade-offs between air travel and rail travel, but no published research has ever assessed the market potential of an integrated air-rail network, with rail serving as a key part of that network for links under 600 miles. One reason for such an analytical gap is that current transportation policy remains organized around analyzing, planning, and financing individual modes, with intermodal linkage considered as a supplementary effort.

Task Descriptions

With support from the MacArthur Foundation, the "Reconnecting America" (RA) research team is currently engaged in path-breaking modeling that demonstrates how American intercity travel behavior would adapt to enhanced intermodal integration. This modeling activity builds upon a unique analysis of databases never previously linked for the purpose of forecasting intermodal travel demand between American cities. Data being used for the RA model includes existing studies of high-speed rail corridors, the

Official Airline Guide's record of flight schedules, and FAA analyses of US air transportation. The RA model also draws from surveys and data concerning intercity highway travel, including the American Travel Survey, in order to identify the time/price trade-offs for travel, the possibilities for integrated routings, and the city pairs that have potential for higher speed rail travel, serving both the airport and city center.

CUNY's Aviation Institute (CUNY-AI) will analyze existing approaches to developing intermodal policies and systems and will identify the obstacles and constraints that must change in order to realize the productivity gains from the enhanced intermodal travel network, being forecast by the RA model.

CUNY-AI will evaluate RA's integrated intermodal network to identify opportunities for innovative partnerships and alliances, both among air, rail, and road carriers—as well as between these firms and federal and state governments, that could generate enhanced value from intercity passenger travel. Such value will be identified along three distinct, but potentially complementary scales.

- Individual travelers can save time, cost, while also avoiding discomfort and uncertainty through enhanced intermodal integration.
- Transportation firms can generate greater yields by providing higher quality intermodal services as well as serving a growing demand that would be stimulated by intermodal integration.
- And society as a whole can benefit from the reduced energy consumption, diminished pollution, and more compact spatial structure that often follows greater intermodal integration. America's national security also benefits from the greater redundancy and resiliency of intermodal travel networks.

The CUNY-AI research team will develop and elaborate policy options that could unlock such enhanced value and then collaborate with the RA team to estimate the magnitude and the distribution of benefits that could be expected to flow from such intermodal innovations. Policy initiatives to tap intermodal productivity would then be ranked in order of their promise as well as clustered, where appropriate, to identify the synergy that can be generated by packages of policy adjustments.

Project Milestones

| Project launch. | 1 December 2002 |
|---|-----------------|
| First working paper | 1 February 2003 |
| Midterm progress report | 1 April 2003 |
| Distribution of second working paper | 15 May 2003 |
| Preparation of contents for draft final report | 15 June 2003 |
| Delivery of draft report and briefing materials | 15 July 2003 |
| Release of final report | 31 July 2003 |
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Budget

| NCIT Funds | \$12,000 |
|----------------|----------|
| Matching Funds | \$12,000 |
| Total Funds | \$24,000 |

Student Involvement

CUNY-AI will recruit an undergraduate research assistant to work an average of ten hours per week on this project. This City University of New York student will gain research skills by assisting in data collection and analysis and possibility co-author a scholarly publication arising from this work.

Relationship to Other Research Projects

This proposal will leverage the significant resources and expertise already committed to RA's intermodal travel analysis.

Technology Transfer Activities

Policy research gets transferred into practice through its "uptake" by media, government, industry, labor, and others. With legislative reauthorization of Amtrak, aviation, road, and transit programs all slated for 2003, there is considerable opportunity to inform policy deliberations.

Research results will be published in scholarly journals. Op-ed pieces, media and governmental briefings, and an interactive website will communicate directly with opinion leaders, decision makers, and the public.

Potential Benefits of the Project

Given the deepening economic crises confronting both Amtrak and America's airlines, considerable interest can be expected in the identification of intercity transportation productivity gains. A more integrated intermodal network for intercity travel offers considerable potential for enhancing economic, environmental, and security benefits. Placing timely, objective, and well-documented policy options before government, industry, and labor at a time when America's transportation legislation is being reauthorized will demonstrate NCIT's value as a generator of new knowledge.

TRB Keywords

Intercity Transportation, Intermodal Transportation, Passenger Transportation, Transportation Policy, Airlines, Rail