

Appalachian Transportation Institute (ATI) Research Project Description

Project Number: ATI TRP 99-33

Project Title: Major Corridor Financing Options

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Project Objective: This project will identify the various options used around the US for financing major corridor construction and assess the applicability for consideration and implementation in WV.

Abstract: At least two new highway corridors are planned for Southern West Virginia representing a critical link for economic development in this part of WV, much of which; has been classified as "economically depressed" per national standards. The roads will be built in some of the most variable terrain and therefore will be very expensive and funding for these projects has not been totally secured. This study will focus on identifying and ranking options for funding critical highway infrastructure in the State with special emphasis on the applicability to the King Coal Highway (I-73/74) and the Coalfields expressway. This research will also investigate and apply appropriate methods for disseminating information to policymakers, planners, stakeholders and citizens. The project will also identify the most efficacious development of an implementation strategy for the financing options, including potential modifications to State institutions that assist in the goals of funding appropriate highway infrastructure.

Task Descriptions:

This research will progress in three phases:

- 1) Development of alternative financing options
- 2) Public dissemination and input
- 3) Strategy development and recommendations

Research in each phase may progress concurrently, however each successive phase does require inputs from earlier phasing. A description of each phase is outlined below.

1) Development of Alternative Financing Options

An exhaustive review of research into financing mechanisms for new highway construction will be conducted. This review will include not only recent applications of

financing in the United States but also mechanisms employed internationally to secure key infrastructure funds.

This may include attending national conferences, such as those held by the International Road Federation where presentations are made on innovative financing techniques, and an annual award for innovation in road financing is presented.

This literature review will be summarized into comparative form for future reference. This process will identify a criteria for evaluation each proposal.

Criteria for Evaluating Financing Proposals

Possible mechanisms for financing highway construction will be evaluated and ranked on the following criteria:

- Revenue potential. The ability of the mechanism to raise the needed resources.
- Equity. The fairness of the distribution of costs and benefits.
- Efficiency. The ability of the government to collect the revenue.
- Political acceptability. Palpability of the mechanism to taxpayers and decision makers.

The revenue potential, equity, and efficiency of the financing mechanisms can be assessed through economic impact analyses. Combining economic forecasts with financial theory to ascertain the feasibility and sustainability of each proposal.

Possible Sources of Information

The following is a partial list of sources from statistical and other information can be obtained to fulfill the purpose of this study.

- U.S. Department of Transportation
Federal Highway Administration
- *Highway Statistics*
- *Highway Finance Bulletin*
- “Innovative Finance” Test Project
- Department of Transportation in each State
- American Association of State Highway and Transportation Officials
- American Road and Transportation Builders Association.
- International Road Federation Annual Conference.
- Annual Award for “Innovative Finance”
- National Highway Institute Courses on Highway and Transportation Issues, including a two day course on Highway Financing

- Nick J. Rahall, II Appalachian Transportation Institute Highway Program Financing Workshop
- Turner-Fairbank Highway Research Center Seminars and courses.
- World Road Statistics
- Pan American Institute for Highways

These criterion and data sources are illustrative, not exhaustive and will be combined to provide a user- friendly menu of alternative financing sources to a wide variety of users. Once these data have been collected and analyzed they will be subjected to a West Virginia specific modification. This will permit a State specific application to be developed that evaluations regional variation in key areas that include, but are not limited to demographic and economic variation, alternative transportation and regional use patterns. This final portion will include information collected from public meetings and other information collection forums around the State, but especially in the southern West Virginia counties.

2) Public Dissemination and Input

An examination of effective public strategies shall be undertaken and implemented for the purposes of this study. This may include public information meetings, workshops, formal educational forums and media briefings. The study team includes a consultant who is familiar with transcribing and collating public meeting data. In addition, the study team has extensive experience in briefing policy research to policymakers, the media, industry, commercial and other stakeholder groups and the public as a whole.

The purpose of this process is to familiarize interested parties at the broadest level in the method for identifying and evaluating alternative financing criterion. This process will also provide much needed anecdotal and qualitative data on the efficacy of alternative financing processes. The integration of these data into the selection criterion will enhance the viability of each potential option. Forums, dates and the degree of participation in this process will be coordinated with interested parties such as WVDOT, ATI and others.

3) Strategy Development and Recommendations

The final phase of this study involves providing specific financing strategies and recommendations to State, local and non-profit organizations. Examples of these include both traditional sources, with specific applications and alternative mechanisms described below. The study will also identify specific implementation strategies and adjustments to current organization that may facilitate funding of key infrastructure.

Traditional Sources of Revenue

The following is a partial list of the traditional sources of revenue for highway funding.

- User Fees. Road user fees take a variety of different forms.

- Motor-Fuel Taxes
- Vehicle Registration Fees
- License Plate Fees
- Levies on Heavier Vehicles
- Tolls.
- Bond Issuance. Issuing debt to meet the high initial capital requirements. Bonds can then be paid off out of revenues from user fees and or general revenues.

Automation of toll rolls, such as the 91 Express Lanes in the Los Angeles, CA area; may allow toll roads to be more feasible in rural areas than before. The Intermodal Surface Transportation Efficiency Act of 1991 also allowed for the private ownership of Toll Roads, encouraging the use of private investment funds in their construction. Revolving Funds such as the Washington State Public Works Trust Fund, makes loans to encourage road construction.

Milestones, Dates, Schedule: Start Date: 01/12/01 End Date: 12/31/01.

This process will provide short interim reports quarterly, a final report with technical appendices that includes results from the public meetings. The report will also treat further study needs identified in the research

Budget: \$80,000.00

Student Involvement: The project will provide employment support for at least 1 undergraduate and 1 graduate student. The student workers will support the Principal Investigator as project assistants. This project is not anticipated to lead to a student thesis directly.

Relationship to Other Research Projects: This project is related to several other ATI projects in terms of complementing a broad effort to support cost effective planning and development of transportation infra-structure and info-structure needed to support economic development in the rural mountainous areas of WV.

Technology Transfer Activities: Final reports will be available on the ATI website. All, ATI Principal Investigators will present findings through the ATI Transportation Seminar Series to invited guests from WVDOT, USDOT, other ATI Principal Investigators, students and other invited guests. Other opportunities to present the project results will be explored including conferences and peer reviewed journals, etc.

Potential Benefits of this Project: This study will help provide the most cost effective plan to help acquire critically needed improvements in the transportation infra-structure of some of the most rural and economically depressed regions in WV with applicability to similar regions in the US.

TRB Keywords: Highway Financing, Finance Options, Funding