Project Summary
Texas Department of Transportation

0-6034: Planning and Financing Tools for Rural/Small Urban Area Projects

Background

Rural and small urban areas (RSUA) face unique challenges in meeting transportation system capacity and maintenance demands. Maintenance costs are high and worsening. Faced with reduced funding, RSUA have been forced to postpone expansion needs. This research provides guidance on financing tools appropriate to RSUA transportation projects. Sources of funding, repayment options, and partnerships are explored. Seventeen case studies of Texas projects produced six key lessons, resulting in four major recommendations.

What the Researchers Did

The following tasks were completed in the period from September 2007 to November 2008:

- analysis of financing and planning tools for RSUA projects,
- development of lessons learned in using those tools,
- development of a decision-making/guidance tool for RSUA projects,
- development of guidelines for partnering with TxDOT,
- identification of features of planning tools that require modification for rural areas,
- preparation of a decision-making/guidance tool for RSUA projects, and
- project documentation.

What They Found

Project financing involves two aspects, 1) funds for construction and operation of a project (negative cash flow), and 2) revenue derived from the project (positive cash flow).

There are two primary sources of construction funding: grants and debt. Grants are in the form of federal and state grants, and local and private contributions. There are two types of debt: bonds and loans. Bonds may be state, local, or Private Activity Bonds (PAB). Loans may come from federal or state sources, such as TIFIA and the State Infrastructure Bank.

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There are five options for revenue to repay debt: reimbursements, leases, fees, taxes, and tolls. Pass-Through Tolling Agreements (PTA) are one form of reimbursement. Fees include property development fees, vehicle fees, and road access charges. Taxes may be on property values, incremental values, or sales. Tolling options include corridor and cordon tolls, VMT or mileage tolls, and congestion pricing.

Private sector investment in infrastructure has gained momentum globally. The key to successful partnerships is to strike a balance in the allocation of risks. Case studies were conducted of seventeen partnership projects in Texas to capture district experience. Six key lessons were identified:

Explain the process: All parties involved in partnership projects need to understand the transportation project development process and timelines.

Develop and maintain relationships: Good relationships with local government, chambers of commerce, and political leaders are important for leveraging funding and gaining public support.

Designate a leader and communicate: The roles and responsibilities of each entity in a partnership must be clearly defined to ensure that project information and critical issue updates reach all parties.

Set realistic schedules: Although a key benefit of debt financing is the ability to get the project done much sooner than traditional funding can achieve, TxDOT must lay out a realistic schedule for its work considering other district commitments.

Negotiate the details: As soon as possible, after potential partners enter discussions with TxDOT, the department should share with them details of various partnering arrangements.

Be flexible: The possibility of design and scope changes call for flexibility in the financial plan.

What This Means

Four major recommendations resulted from this research:

Understand project financing and revenue issues: When upfront financing is treated as a distinct issue from repayment, it is easy to see that projects must generate sufficient revenue to replenish the funds expended by TxDOT. Training in project financing should be provided to district staff charged with such responsibilities.

Select the right projects for partnerships: In most of the PTAs to date, financiers are guaranteed to get back from the state most of the money they spend. As a result, the demand for PTA funding has outpaced its availability. A more rigorous set of qualifications for partnership projects is desirable.

Select appropriate financing tools: With the growing use of alternative financing on TxDOT projects, there must be stronger evaluation of project suitability for a particular form of financing, similar to how a traffic and revenue analysis is conducted for toll projects.

Conduct a formal analysis of project benefits: When economic development is a goal and costs are to be shared, it is important that project benefits are quantified. There is a strong need for a tool to assist the districts in project benefit and/or revenue analysis.

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