

# Research Problem Statement

## Title<sup>1</sup>

Funding Transportation in Small, Rapidly-growing Communities

## Background<sup>2</sup>

Many suburban and smaller growing communities across the nation face multiple challenges when it comes to generating revenues for infrastructure improvements and maintenance. These challenges include lack of taxing authority, a small tax base from which to generate new revenue, lack of programming authority for Federal funds, and increased travel demand that triggers a variety of needs for costly capital, operating, and maintenance improvements.

While long-term funding is the subject of extensive research and discussion at the national level, the focus tends to be on capital needs and larger urban areas. Research related to local transportation investments for smaller communities is not on the radar screen. There is clear gap in available tools for equitable, adequate, and sustainable long-term funding mechanisms for roadway maintenance at state and local levels. Similar gaps exist for building, operating, and maintaining transit system and nonmotorized facilities in communities of all sizes. The operation and maintenance of roadways, transit systems, and sidewalks or bicycle facilities is an ongoing need that is not necessarily contingent upon usage levels, especially in conditions of rough terrain and harsh weather.

Additional funding and finance tools, scaled for use in smaller western communities, are needed to allow near-term investments that take advantage of current flexibility, preserve future options, and avoid higher-cost retrofit projects in the future. These tools and examples may include locally generated revenues, as well as innovative leveraging of state and Federal funding sources.

## Objective

The objective of the research is to develop additional examples and case studies for funding multimodal transportation construction, preservation, and maintenance in smaller, rapidly growing communities.

## Potential Benefits<sup>3</sup>

There is a growing need to develop transferable funding tools tailored to smaller communities, particularly those in states without dedicated funding for non-roadway projects. Currently

---

<sup>1</sup> This section corresponds to “Problem Title” in the MDT and TCRP Research Problem Statements.

<sup>2</sup> This section corresponds to “Problem Statement” in the MDT Research Topic Statement, and “Research Problem Statement” in the TCRP Research Problem Statement.

<sup>3</sup> This section corresponds to “Urgency and Expected Benefits” in the MDT Research Topic Statement, and “Urgency and Payoff Potential” in the TCRP Research Problem Statement.

available tools do not provide enough mechanisms to be applied across all community types, nor are there sufficient examples of these funding tools being used to deploy, operate, and maintain multimodal investments. This lack of breadth may be exacerbated since some funding mechanisms used by larger communities may cost more to establish and operate than they can deliver in revenue for smaller communities.

Since local jurisdictions consistently report that funding gaps are a high priority, it would be helpful to have additional tool implementations, examples, and case studies for funding transportation construction, preservation, and maintenance in smaller, rapidly growing communities. While some successful examples exist of exactions and fee programs being used as one element in a comprehensive funding portfolio, additional examples are needed of how those comprehensive portfolios were developed, marketed, and sustained for smaller communities.

## Relationships to the Existing Body of Knowledge<sup>4</sup>

The Transportation Research Board (TRB) *Research in Progress* (RIP) database was searched in December 2009<sup>5</sup>, and the Transportation Research Information Services (TRIS) database was searched in April 2010<sup>6</sup>. One RIP citation was found relating to funding of transportation in smaller communities. *Financing Tools for Rural and Small Urban Area Projects*<sup>7</sup> focused on communities in Texas to determine appropriate financing tools for each type of project and to provide guidance on developing partnerships and packaging cost- and risk-sharing agreements involving the Texas Department of Transportation (DOT), local entities, and/or private entities. The study reviewed recent and pending legislation in Texas on transportation financing tools available to rural and small urban areas. The majority of the case studies cited in the report utilized Pass-Through Tolling Agreements (PTA) as the alternative financing tool and thus not relevant to the stated research need.

The TRIS search returned 33 records from the last 10 years, of which seven specifically related to aviation. The report *Feasibility of Mileage-Based User Fees: Application in Rural/Small Urban Areas of Northeast Texas* describes a public acceptance framework for potential future applications of mileage-based fees rather than actionable examples. The report *Innovative Financing at the Local Level: Project Funding for a Regional Transportation Agency* explores the experience of the Ada County Highway Department (ACHD, Idaho) in fostering innovative financing partnerships to leverage Federal funding for large- and small-scale projects throughout this region of 400,000 people. The manuscript *How the Public Can Help You Finance the Transportation System Plan* describes use of public outreach techniques to identify and market broad-based transportation funding strategies; the manuscript's focus is on the outreach element of a funding plan rather than the types of funding mechanisms that might be appropriate in some communities. The conference paper *Dedicated Transit Funding in a Small County* reports on the experience of St. Lucie

---

<sup>4</sup>This section corresponds to "Related Research" in the TCRP Research Problem Statement. This information is included in the "Problem Statement" section of the MDT Research Topic Statement.

<sup>5</sup> RIP search terms: finance, funding, district.

<sup>6</sup> TRIS keyword search string: "(finance or financing or funding) and (small or medium)"

<sup>7</sup>Persad, K.R., C.M. Walton, and P. Franco. 2009. [http://www.utexas.edu/research/ctr/pdf\\_reports/0\\_6034\\_1.pdf](http://www.utexas.edu/research/ctr/pdf_reports/0_6034_1.pdf).

County, Florida in investigating and implementing a countywide Municipal Service Taxing Unit (MSTU) specifically dedicated to funding public transportation services.

While the proposed research may reference some of the cases noted in the literature, a much broader research perspective is proposed that will provide greater guidance on identifying potentially relevant funding sources based on transportation needs and the regulatory and policy environment in a community.

## Tasks<sup>8</sup>

The proposed research may include conducting an Internet survey of state DOT planners plus follow-up case studies and interviews at local, regional and state levels. Additional research is desired in these fields:

- Funding and planning tools available for rural and small urban area projects;
- Success stories for modest-sized investments in smaller, growing communities;
- Investments in preservation and maintenance of transportation facilities;
- Benefits and lessons learned in implementing funding, financing and associated planning tools;
- Decision-making/guidance tools for funding transportation projects; and
- Guidelines for partnering with private and public investors.

## Follow-on and Implementation Activities<sup>9</sup>

The end product of this research effort is anticipated to be tools and guidance for use in smaller communities. It is possible that this information could be integrated into existing on-line planning toolkits such as *Montana Transportation and Land Use: Resources for Growing Communities*.<sup>10</sup>

## Estimated Funding Requirements<sup>11</sup>

The estimated funding needed for this research project is \$115,000. Estimated labor needs for the research team are about 200 hours for a principal investigator, 150 hours of mid-level research

---

<sup>8</sup>This section corresponds to “Research Proposed” in the MDT Research Topic Statement and the TCRP Research Problem Statement.

<sup>9</sup>This section corresponds to “Implementation Plan” in the MDT Research Topic Statement. There is no corresponding section in the TCRP Research Problem Statement.

<sup>10</sup> <http://www.mdt.mt.gov/research/toolkit/>.

<sup>11</sup> This section corresponds to “Estimate of the Problem Funding and Research Period” in the TCRP Research Problem Statement. There is no corresponding section in the MDT Research Topic Statement.

support, and 400 hours of junior-level research support. A research period of 12 months, including review time for draft reports, is anticipated.

### **Relationship to FTA Strategic Research Goals and/or TCRP Strategic Priorities<sup>12</sup>**

The proposed research supports FTA Strategic Research Area 2 (Support Improving the Performance of Transit Operations and Systems) by addressing techniques to generate local funding to support state of good repair. Similarly, the proposed research supports TCRP Strategic Priority 4 (Flourish in the Multimodal Environment) by providing transit operators actionable examples of funding mechanisms that can be matched to a community’s characteristics.

### **Person(s) Developing the Problem<sup>13</sup>**

<<To be completed at time of submittal to the research program.>>

### **Process Used to Develop Problem Statement<sup>14</sup>**

This problem statement is the product of the *Local Transportation and Land Use Coordination: Tools and Gaps* research project sponsored by the Montana Department of Transportation.<sup>15</sup> The research topic was one of six high-priority gaps in practice identified by the research team and confirmed by a research panel comprised of representatives from city, county and state government agencies as well as transportation stakeholder groups.

### **IT Component<sup>16</sup>**

The necessary software applications are already resident within planning offices. No new software is anticipated to be developed as part of this research effort. It is anticipated that the research product may be incorporated in an existing database within the *Montana Transportation and Land Use Toolkit*.

### **Date and Submitted By<sup>17</sup>**

<<To be completed at time of submittal to the research program.>>

---

<sup>12</sup> This section only appears in the TCRP Research Problem Statement.

<sup>13</sup> This section only appears in the TCRP Research Problem Statement.

<sup>14</sup> This section only appears in the TCRP Research Problem Statement.

<sup>15</sup> [http://www.mdt.mt.gov/research/projects/planning/smart\\_trans.shtml](http://www.mdt.mt.gov/research/projects/planning/smart_trans.shtml).

<sup>16</sup> This section only appears in the MDT Research Topic Statement.

<sup>17</sup> This section corresponds to “Submitted by” in the MDT Research Topic Statement.