



*"Improving the Quality of Life  
by Enhancing Mobility"*

*University Transportation Center for Mobility*

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# **A Guide to Transportation Funding Options: A Web Site Development Project**

## ***Final Report***

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A Website Development Project**

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## Executive Summary

Federal, state and local governments are struggling to meet the demands for transportation systems necessary to move people and goods. Reluctance to increase taxes at all levels combined with the declining purchasing power of revenues and increased costs for all modes of transportation have prompted exploration of all funding options and opportunities.

To aid decision-makers facing transportation funding questions, team members on this project designed a website to serve as a resource tool ([http://utcm.tamu.edu/transportation\\_funding/](http://utcm.tamu.edu/transportation_funding/)). The website simply and clearly spells out the options that are available across all transportation modes and all levels of government. It is meant to be a quick reference and provide links to more in-depth information.

This report documents the first phase of the project that focuses on providing information for highway funding, although many of the finance options can also be used to fund other modes of transportation. The website will eventually provide information about financing multiple modes of surface transportation, including:

- highways,
- transit services,
- passenger rail,
- freight rail, and
- ports and waterways.

The website consolidates information available from various sources and presents it in clear, non-technical language. The website provides a useful “one-stop shop” for relevant information. Using available data sources, such as the recent report from the National Surface Transportation Infrastructure Financing Commission, the website documents current forms of surface transportation finance and indicates where they are being used. The site also documents innovative financing techniques that are used in more limited capacities, as well as proposed legislation for additional financing tools. The site provides links related to various techniques, sample legislation, specific programs and commentary that provides additional information and insight. The website documents potential financing techniques that are being considered for the future that may not actually be in practice at this point. Links provide access to existing information about techniques.

Originally this project proposed a user-friendly guide or brochure. However, due to the constantly changing subject matter, a website that can be updated routinely as new techniques are implemented or advanced or as new research becomes available on the topic will provide a more useful tool.

# **A Guide to Transportation Funding Options: A Website Development Project**

## **INTRODUCTION**

As more and more governments at all levels struggle to finance upgrades and improvements to an aging transportation infrastructure and also fund the needed expansion of inadequate systems, there has been an increased interest in exploring non-traditional mechanisms for financing transportation in America. To investigate new opportunities it is useful to have an understanding of the financing systems in place today. Recently two national studies have been commissioned by Congress. While available information is rapidly expanding, much of this information requires a diligent and sometimes daunting undertaking to uncover and compile.

The original intent of this technology transfer project was to develop a user-friendly guidebook to transportation finance. The guidebook was intended to be useful to decision-makers by providing an easy-to-use reference regarding transportation financing options. What became readily apparent was that a seemingly straightforward task of assembling available information would require a much broader way of thinking. Moreover, the world of transportation finance and the mechanisms used to finance transportation projects are changing rapidly. Many different nomenclatures are used for similar types of financing agreements depending on location and usage.

## **APPROACH AND METHODOLOGY**

Based on these initial findings, a website emerged as the most useful type of tool for decision-makers. A website can be easily updated, and information can be added as it becomes available. Cross-references and hyperlinks enable users to easily move from one topic to another. Once the decision was made to proceed with a website rather than a document, work began on the website design and layout.

Simultaneously, several documents were collected and analyzed for content necessary for the website. As noted earlier, two comprehensive congressional studies were underway during the data collection phase of this project that provided useful documentation. The National Surface Transportation Policy and Revenue Study Commission released a report in December 2007 that provides a comprehensive review of the current financing situation (1). It also includes an overview of some innovative methods for financing future transportation projects. The second study, the National Surface Transportation Infrastructure Financing Commission, released an interim report in February 2008 that provided a snapshot of the current situation and suggested a framework for moving forward (2).

Using these documents and several websites of the Federal Highway Administration, the research team began by providing an assessment of the current funding approaches available to states and localities for the development and delivery of transportation projects. The website was designed to first provide an overview of what is collected at all levels of government and what percentage each level of government contributes to the overall transportation funding package. The funding sources vary based on the level of government, but they can be classified into general categories.



These categories include:

- general fund appropriations,
- motor fuel and vehicle taxes,
- other taxes and fees,
- bond issue proceeds,
- property taxes and assessments,
- investment income and other receipts, and
- tolls.

The National Cooperative Highway Research Program produced a report in December 2006 that examined both traditional and innovative forms of transportation financing that fall into these categories (3). A table is included on the website that discusses each option and its advantages and disadvantages. This information provides decision-makers with a snapshot of information about the financing approach, including:

- the source and history of each mechanism;
- its current yield, stability and sustainability;
- the cost-efficiency and equity;
- the economic efficiency;
- the applicability at the program or project level by different levels of government;
- the potential acceptability; and
- potential implementation issues and strategies to overcome barriers.

The last two items are especially important in the case of innovative financing strategies. As noted earlier, the nation is facing a crisis with regard to funding the transportation system, and clearly new methods must be explored. Gaining political and public support for these methods will require education on the part of policy-makers to adequately explain the need for changing a current methodology.

As the data were collected, a natural organizational structure emerged for the website. For instance, fuel taxes are collected by the federal government as well as by each state government. A breakdown of fuel taxes collected by state provides a useful starting point, followed by other types of taxes that are collected. At one point in the web design, the researcher and the designer considered differentiating between traditional and innovative mechanisms for taxes. However, it was determined early on that what may be innovative to one state may have actually been used extensively by another. Therefore, the decision to use this differentiation was abandoned because the labels of traditional and innovative seemed irrelevant.

The next logical level of organization was to provide information on various types of financing that fall into each of the broad categories. Within each category, the financing mechanism is described, examples are given and links are provided where available. The data were collected from a variety of sources including Internet searches, professional journals and industry newsletters. The source of the data is provided via link on the website.

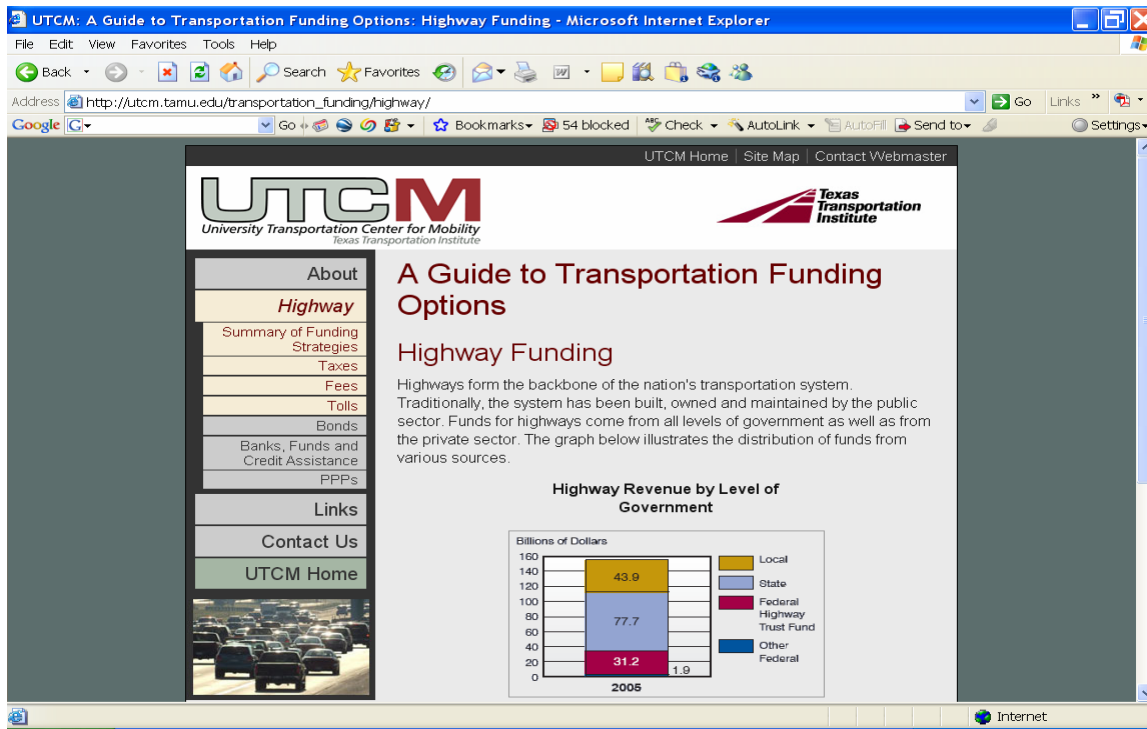
Since the website is designed as a “one-stop shop” it provides a general overview, with links designed to provide in-depth information. Many of the links are to specific project examples or

sample legislation. In this manner, a policy-maker may delve deeply into a particular type of financing or simply gain a better understanding of how a particular type of financing works. As noted, the site discusses specific types of financing and provides examples of how projects were built using a particular financing method. A specific “links” page identifies other websites related to transportation financing, including several Federal Highway Administration websites, sample legislation and other resources.

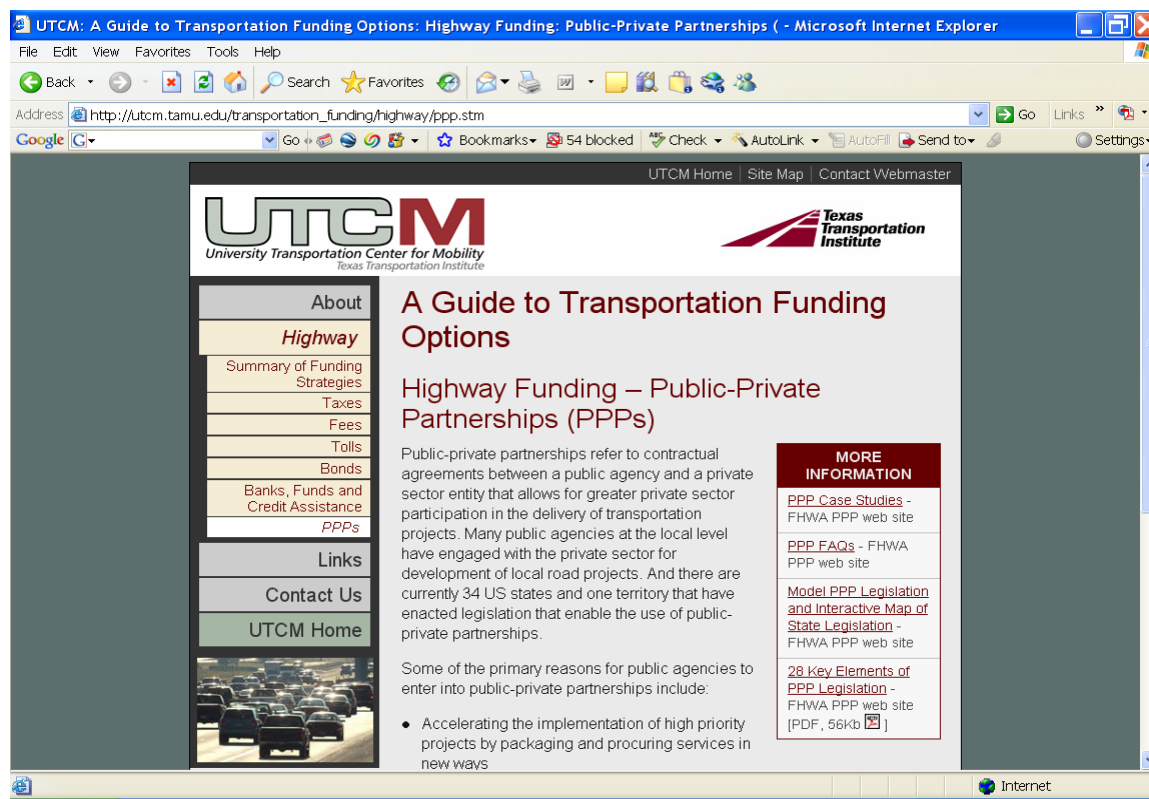
**FINDINGS**

The website, accessible at [http://utcm.tamu.edu/transportation\\_funding/](http://utcm.tamu.edu/transportation_funding/), is housed within the University Transportation Center for Mobility website. Exhibits 1 and 2 are screen shots of various pages of the site.

To comply with schedule and budget constraints, the website will be completed in phases. Phase 1 included development of the site design and layout and the population of data regarding highway funding. It is anticipated that future activities will involve adding data regarding financing other modes of surface transportation.



**Exhibit 1. Highway Funding introduction on the UTCM website.**



**Exhibit 2. Public-Private Partnerships page on the UTCM website.**

## RECOMMENDATIONS

Now that the website has been developed, it must be updated and maintained to remain a useful tool. The nature of transportation financing is evolving rapidly. New methods of financing are being explored at all levels. The website must incorporate these advances. To be used successfully as a tool for policy-makers, the website must provide timely information about transportation projects as they advance. One of the most useful features of the website is providing examples of projects and the types of financing that were used to bring them to fruition. By providing case-study examples, the website will assist decision-makers in ascertaining characteristics common to their own projects and determining the applicability of a particular method. Likewise, legislators may wish to view examples of legislation in other states in order to bring forth new financing methods in their home states.

As noted earlier, subsequent activities should undertake the task of compiling information and data regarding financing of other modes of transportation, including transit, passenger rail, freight rail and ports and waterways. Phase 1 of this project focused on highway funding because it is the backbone of the transportation system across the nation. In light of a growing global economy, limited capacity, expansion and increasing congestion on the nation's highways and railways, it is apparent that significant investment needs to be made in funding all modes of transportation. The modes all interact with each other, enabling people and goods to move throughout the country in a manner that appears seamless to the average user. In contrast, funding for the various modes is often very compartmentalized. By exploring and documenting

the financing available to the different modes, gaps can be identified and addressed. Moreover, where there are overlaps in funding availability, decision-makers may use this overlap to advance projects that were previously not fundable with limited resources.

A transportation finance website that is current and accurate will serve as a useful tool to decision-makers, policy-makers and other users. Including all modes of surface transportation expands the universe of users and educates them on transportation finance.

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