



Minnesota Department of Transportation

Request for Interest

Personal Rapid Transit (PRT) Viability and Benefits

1. Introduction

The Minnesota Department of Transportation (Mn/DOT) seeks input from local government agencies, companies, universities, and/or organizations (as responders) interested in providing information about the viability and benefits of Personal Rapid Transit (PRT) in Minnesota. Based upon the potential benefits claimed by PRT advocates, it is in the public interest to gather information about these projects. Mn/DOT also seeks advice and comment on the formation of PRT advisory group similar to the Transportation Engineering and Road Research Alliance (TERRA) [www.terreroadalliance.org] organization as a governance structure. Mn/DOT prides itself on being a global leader in transportation and innovation. It is important for Mn/DOT to explore new transportation technology and take a leadership position in understanding future opportunities and applications for PRT technology in Minnesota.

2. Background

2.1 Mn/DOT is a multimodal organization that recognizes the importance of innovative, context-sensitive, and environmentally sustainable transportation strategies to expand future travel capacity and mitigate the effects of transportation-related greenhouse gas emissions.

Mission: Provide the highest quality, dependable multimodal transportation system through ingenuity, integrity, alliance and accountability.

Vision: Global leader in transportation, committed to upholding public needs and collaboration with internal and external partners to create a safe, efficient and sustainable transportation system for the future.

Mn/DOT is not planning to seek funding for a PRT project from the upcoming legislative session. Private sector continues to express interest regarding development of PRT along Minnesota trunk highways, within Municipalities, and within Airports, Hospital, and University complexes. Based upon the potential benefits claimed by PRT advocates, it is in the public interest gather information about these projects. At a minimum, future PRT implementation has implications for trunk highway right of ways and therefore it is appropriate for the Commissioner of Transportation to understand how PRT may be deployed in Minnesota. This effort should be considered a fact-finding project only.

2.2 On June 16, 2009, the U.S. Environmental Protection Agency (EPA), joined with the U.S. Department of Transportation (DOT) and the U.S. Department of Housing and Urban Development (HUD) in a HUD-DOT-EPA Interagency Partnership for Sustainable Communities to help improve access to affordable housing, more transportation options, and lower transportation costs while protecting the environment in communities nationwide. A partnership agreement and six livability principles will help align and guide combined agency efforts and investments to maximize community benefits in livability, affordability, environmental excellence, and the promotion of green jobs for the future. A PRT demonstration should support sustainable communities and livability principles.

Livability Principles: 1) Provide more transportation choices, 2) Promote equitable, affordable housing, 3) Enhance economic competitiveness, 4) Support existing communities, 5) Coordinate and leverage federal policies and investment, and 6) Value communities and neighborhoods.

3. On November 17, 2009, Mn/DOT and the University of Minnesota Center for Transportation Studies hosted a PRT International Forum in Rochester, MN. At the forum, public and private industry representatives discussed potential applications for PRT in Minnesota and lessons learned from PRT implementation at London Heathrow Airport. Following the presentation, panelists representing government transportation agencies, state and local elected officials, and private industry responded to the presentations and offered impressions of PRT and its potential impacts. Mn/DOT Commissioner Tom Sorel formally announced Mn/DOT's interest in exploring efforts to understand how PRT may be deployed in Minnesota.

Mn/DOT is seeking information on the status of Personal Rapid Transit in the State of Minnesota.

Mn/DOT is not advocating for the construction of a PRT system, but is trying to determine what projects may be under consideration by private and/or public entities within Minnesota. Mn/DOT has no plans to invest any state funds into the development or construction of a PRT project.

Mn/DOT intends to use the information received in response to this RFI to understand the status of PRT and to evaluate the potential for the future implementation of a PRT in Minnesota.

4. Requested Information

4.1 Mn/DOT requests the following general information from interested responders regarding proposed or possible projects, programs, and initiatives including but not limited to demonstration and/or full scale implementation:

- Proposed PRT concepts and objectives
- Public involvement approach
- Integration with and impact on existing transit systems and right-of-way
- Scope of the system (track/guide way length, number of stations, number of vehicles, maintenance facility)
- Alternatives and/or preliminary engineering analysis
- Technology utilized
- Estimate of capital costs of some example options

- Estimate of operating and maintenance costs of some example options
- Estimate of revenue generation of some example options
- Anticipated benefits from the demonstration
- Proposed public-private partnership arrangements including definition of roles, relationship, and cost-sharing and revenue-sharing between the proposer, and other public and private partners
- Implementation plan and schedule
- Identify partnership opportunities across multiple types of organizations (Public, Private Partnerships) as well as the overall quality of the scope and design concept that include functional, aesthetic, and sustainable design considerations that foster community livability, affordability, environmental excellence and economic development.

4.2 Responders should take note of the existing Transportation Engineering and Road Research Alliance (TERRA) organization. Mn/DOT would likely apply a similar governance structure involving public/private partnerships in a PRT demonstration project. Responders are requested to offer ideas on how such an alliance could be formed and structured. Visit www.terraroadalliance.org for more information on this model of a governance structure.

4.3 In addition to the aforementioned, Mn/DOT is interested in systems that will be powered in part, or ideally entirely by renewable energy, whether a PRT project could generate local job opportunities, and the extent to which any system could utilize technological innovations to better integrate transportation services and improve the user experience, such as real-time information and connecting PRT to existing transit services.

4.4 Please see the appendices for additional sources of information on upcoming Federal Transit Authority funding and Mn/DOT guidance on public-private partnerships that may be useful to your proposal.

5. Response Information

5.1 Who May Respond

Responses from any city, county, company or organization, such as a university, institution, or partnership of same with the ability to build, operate and maintain such a system are welcome.

5.2 Cover Letter

Cover letters should include a brief description and background on your company/organization and partners (if relevant), key principals, their credentials, and all contact information including contact name and title, address, phone number, and e-mail address.

5.3 Capabilities

Provide a brief summary of your organization's capabilities and experience that may be relevant to the information requested.

5.4 Client reference

Include a list of clients or references where your system or relevant comparable experience has been implemented or relevant comparable experience.

6. Contact Information

Please submit questions and responses via fax, e-mail, mail, or courier to:

Mukhtar Thakur
Minnesota Department of Transportation
MS 675
395 John Ireland Blvd.
St. Paul, MN 55155
Phone: 651-366-4691
Fax: 651-366-4699
e-mail: Mukhtar.Thakur@state.mn.us

Organizations responding to this RFI shall designate a single contact within that organization for receipt of all subsequent information regarding this RFI and the forthcoming processes. The name of this contact shall be made available to all Mn/DOT staff.

Prospective responders who have any questions regarding this RFI may submit questions by e-mail only to: Mukhtar Thakur by 12:00 PM on March 1, 2010. All questions and responses will be posted on the Mn/DOT Office of Transit website: www.dot.state.mn.us/transit/.

7. RFI Time Line

Date	Event
February 08, 2010	RFI Released
March 1, 2010	Deadline for Questions
March 15, 2010	Mn/DOT Responds to Questions
May 4, 2010	Responses Due

8. Public Nature of Response

This RFI is NOT a Request for Proposal, bid, or quotation. The RFI does not obligate Mn/DOT to award a contract, proceed with a project, or take any other action.

All materials submitted in response to this RFI are public according to the Minnesota Data Practices Act, Minnesota Statutes, Chapter 13. By submitting a response to this RFI, the responder agrees that the submitted data are not trade secret data as defined by Minnesota Statutes 13.37 Subd. 1(b).

All materials submitted become the property of Mn/DOT. Materials will not be returned to the responder.

Responders are responsible for all costs associated with the preparation and submission of responses to this RFI.

9. Delivery Process

E-mail responses to the RFI are preferred. Please submit one (1) paper copy of your response and one (1) compact disk with an electronic copy. Please limit responses to a total of 30 pages, including attachments.

Submit responses to:

Minnesota Department of Transportation
Attn: Dawn Thompson
Office of Technical Support – Consultant Services
395 John Ireland Blvd.
Mail Stop 680
St. Paul, MN 55155
Email to: Mukhtar.thakur@state.mn.us

To assure that a response will be considered as part of the current review of this RFI, it should be received on or before 2:00 PM Central Time on May 04, 2010.

Please note that Mn/DOT offices have implemented new security measures if the response will be dropped off at the Mn/DOT office location. These new procedures do not allow non-Mn/DOT employees to have access to the elevators or the stairs. Please allow enough time and follow these instructions for drop-off:

- enter through the Rice Street side of the Central Office Building (1st Floor).
- leave the response with the front desk personnel, where it will be time stamped and delivered to the appropriate personnel.

10. Review of Responses

Responses received pursuant to the RFI will be evaluated in accordance with the terms of the RFI. In reviewing responses, the following criteria are anticipated to be among those that will be considered:

- the overall quality of the scope and design concept, including functional, aesthetic, and sustainable design considerations that foster community livability, affordability, environmental excellence, and economic development inclusive of green jobs;
- the extent to which the submittal addresses the submission considerations listed in part 4 of the RFI;
- the public benefits that would be provided by the project, and extent to which it enhances Mn/DOT's mission and vision to embrace innovative, multi-modal, and sustainable transportation initiatives.

Because of the nature of an RFI, there will be no response rating or formal determination of relative preference from this process except to the extent that the Commissioner selects one or more for further action. However, Mn/DOT may request additional information and conduct interviews of responders as part of the RFI evaluation process.

Alternative Format. This Request for Information can be made available in an alternative format, such as large print, Braille, or cassette tape. To make such a request, please contact the agency contact person:

Mukhtar Thakur
MS 675
Minnesota Department of Transportation
395 John Ireland Blvd.
St. Paul, MN 55155-1899
Office Phone: 651-366-4691
Fax: 651-366-4699
Email: mukhtar.thakur@state.mn.us

Appendix A

(Excerpts from “Mn/DOT Public Private Partnership Guidance for Road Pricing and Intelligent Transportation System (ITS) Projects,” Office of Traffic, Security and Operations: December 2006)

Background

Rapidly increasing congestion on roadways in the Twin Cities Metropolitan Area is making it more difficult for the Minnesota Department of Transportation (“MnDOT” or “Department”) to fully achieve its mission to:

- Improve access to markets, jobs, goods, and services;
- Improve mobility; and
- Help Minnesotans travel safer, smarter, and more efficiently.

Like most parts of the United States, Minnesota is confronting seemingly intractable challenges in transportation. While congestion increases and demand for improved facilities continues to rise, funding shortfalls persist and important projects are deferred. The twenty years of national experience to date with current travel demand management and traffic system management applications suggest that they can be, at best, only part of any solution. Traditional funding sources will remain inadequate for the foreseeable future.

A recent report by the Texas Transportation Institute stated that in the Twin Cities in 2002, an average 20-minute off-peak trip took almost 28 minutes to complete during the peak due to heavy traffic demand and incidents. This congestion costs \$740 per peak-period road traveler and wastes 93 million gallons of fuel annually. From 1982 to 2002, total person-hours of congestion delay in the Twin Cities increased at a higher rate than any other metro region in the U.S. The amount of additional road system expansion needed every year to keep a constant congestion level if traffic continues to grow at the present rate is 61 lane miles. The total annual cost of congestion for the region is \$971 million and will continue to rapidly grow if nothing is done.

A wide variety of public and private efforts such as incentives to increase transit use, carpooling, telecommuting, land use and economic development planning are helping to address congestion issues, but they are not sufficient to ensure efficient, timely, and predictable travel as growth continues.

There is growing sentiment that public-private partnership (PPPs) initiatives may be able to address some of these challenges more efficiently than public agencies going alone. Provisions of SAFETEA-LU make congestion pricing and innovative financing techniques, to supplement conventional fuel and vehicle taxes, possible options on much of the Federal-aid system. Minnesota, as a leader in the deployment of intelligent transportation systems (ITS) and a designated Federal Highway Administration (FHWA) road pricing demonstration state, desires to use pricing and ITS as tools that could raise new revenues for transportation improvements, increase safety and to offer motorists a more reliable, congestion-free option.

1.A. What are Public-Private Partnerships (PPPs)

Public-private partnerships (PPPs), as defined by FHWA, are contractual agreements formed between a public agency and private sector entity that allow for greater private sector participation in the delivery of transportation projects.

Traditionally, private sector participation has been limited to separate planning, design or construction contracts on a fee for service basis – based on the public agency’s specifications.

Expanding the private sector role allows the Department to tap private sector technical, management and financial resources in new ways to achieve certain public agency objectives such as greater cost and schedule certainty, supplementing in-house staff, innovative technology applications, specialized expertise or access to private capital.

The private partner can expand its business opportunities in return for assuming the new or expanded responsibilities and risks.

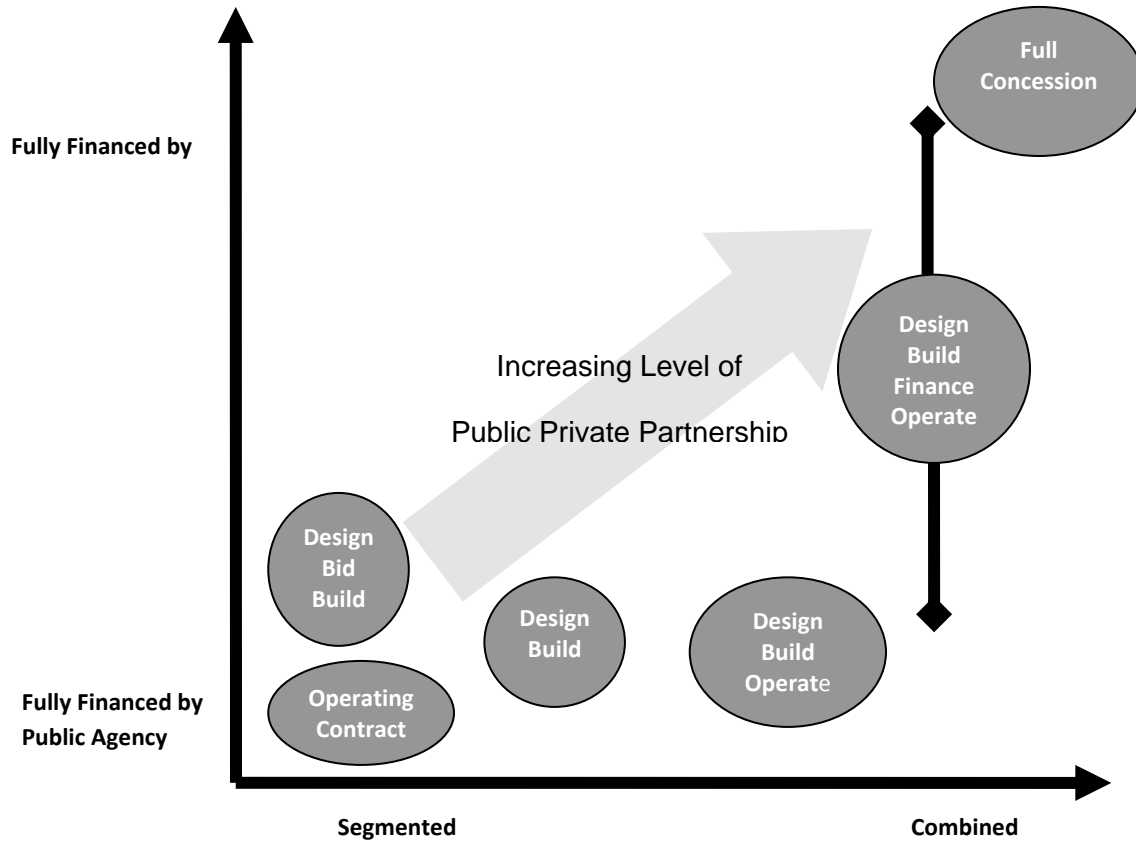
Some of the primary reasons for public agencies to enter into public-private partnerships include:

- Accelerating the implementation of high priority projects by packaging and procuring services in new ways;
- Turning to the private sector to provide specialized management capacity for large and complex programs;
- Enabling the delivery of new technology developed by private entities;
- Drawing on private sector expertise in accessing and organizing the widest range of private sector financial resources;
- Encouraging private entrepreneurial development, ownership, and operation of highways and/or related assets; and,
- Allowing for the reduction in the size of the public agency and the substitution of private sector resources and personnel.

The term “public-private-partnership” is used by Mn/DOT, other public agencies and private firms to mean a number of business arrangements. Diagram 1 shows the various types of procurement models for road pricing projects and the increased shifting of risk and partnering based on the delivery and financing method.

In this guidance, the term “public-private-partnership” is used for any scenario under which the private sector assumes a greater role and increased level of financial risk in the planning, research and development, financing, design, construction, operation, and/or maintenance of a transportation facility. The increased level of private financial risk can take many forms, including but not limited to in-kind contributions, equity match of public dollars, or securing project financing through new revenue streams.

Diagram 1: PPP Models for Road Pricing Projects

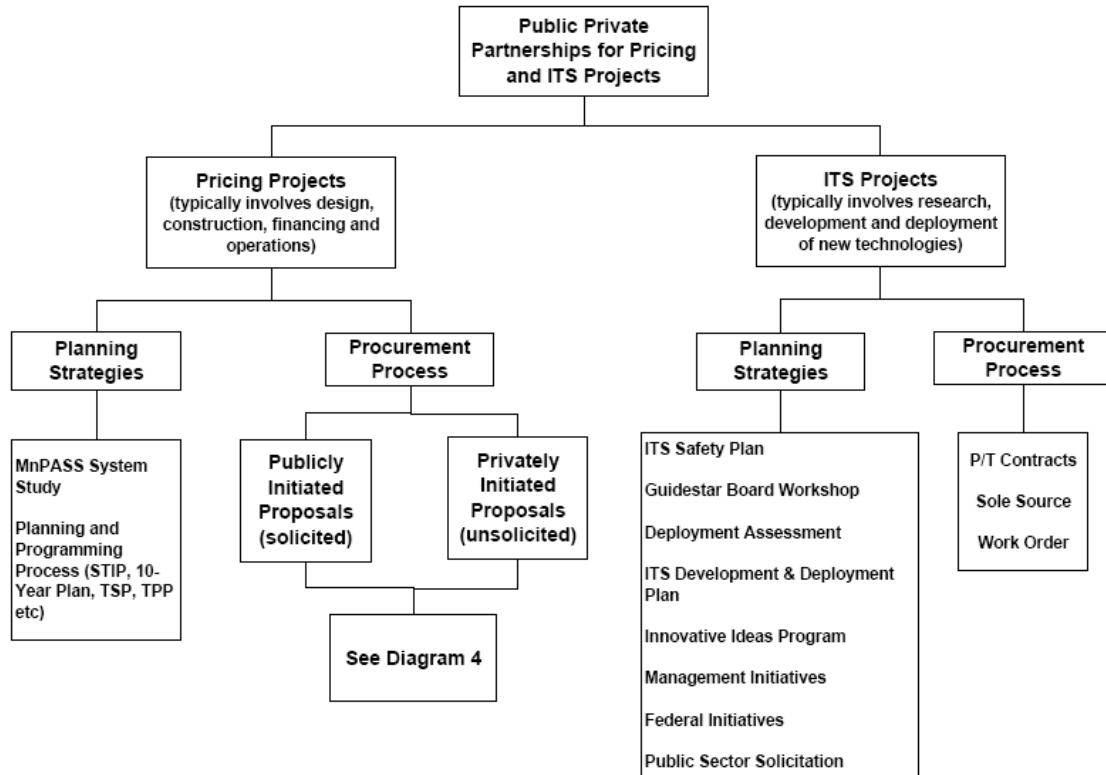


1.B. Purpose and Need

The purpose of this guidance is to provide direction to Mn/DOT staff for when and how to pursue public private partnerships (PPPs) for pricing and Intelligent Transportation System (ITS) initiatives that promote mobility, travel time reliability and safety. Diagram 2 depicts an overview of how the PPP process applies to pricing and ITS projects.

Mn/DOT views PPPs as a specific means, which when judiciously and strategically applied, can better leverage existing resources and investments. PPPs are not a panacea and should not be pursued as an ends unto themselves. There are many benefits associated with the traditional approach to government procurement and financing of infrastructure projects. Some projects do not warrant a change from pay-as-you-go financing and design-bid-build contracting methods. The key for Mn/DOT is to determine on a case-by-case basis which projects are best suited for a PPP procurement model that involves increased private sector participation in project development and financing.

Diagram 2: PPP process for Pricing & ITS Projects



1.C. Potential Benefits of PPPs

PPPs provide benefits by allocating the responsibilities to the party – either public or private – that is best positioned to manage the activity to produce the desired result. With PPPs, this is accomplished by specifying the roles, risks and rewards contractually, so as to provide incentives for maximum performance and the flexibility necessary to achieve the desired results.

The potential benefits of using PPPs to deliver transportation projects include:

- Expedited completion compared to conventional project delivery methods;
- Project cost savings;
- Improved quality and system performance from the use of innovative materials and management techniques;
- Substitution of private resources and personnel for constrained public resources; and,
- Access to new sources of private capital.

Whether Design-Build-Operate, Design-Build-Finance-Operate, or some other variant, PPPs are attractive because they can offer new ways to share risk, tap private sector innovation and access private financing. The key to unlocking the potential benefits of PPPs is to have in place a competitive, fair and transparent procurement process. Guidance for a competitive, fair and transparent procurement process for publicly initiated (solicited) and privately initiated (unsolicited) proposals is described in detail in Chapter 2.