



## **I-95 Corridor Coalition**

# **Final Research Report: Administrative and Legal Issues Associated with a Multi-State VMT-Based Charge System**

*This Report Documents a Research Study Aimed at Informing the Discussion Surrounding a VMT-Based Mileage Charge System*



**I-95 CORRIDOR  
COALITION**

**November 2010**

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This report was produced by the I-95 Corridor Coalition. The I-95 Corridor Coalition is a partnership of state departments of transportation, regional and local transportation agencies, toll authorities, and related organizations, including law enforcement, port, transit and rail organizations, from Maine to Florida, with affiliate members in Canada. Additional information on the Coalition, including other project reports, can be found on the Coalition's web site at <http://www.i95coalition.org>.

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# Executive Summary

## Project Background and Intent

The I-95 Corridor Coalition's initial Vehicle Miles Traveled (VMT) project focused on the institutional and administrative requirements of a multi-state VMT-based system, as well as legal and regulatory issues that must be addressed in order to adopt such a system. The Coalition's intent by initiating this research project was to raise the level of understanding of the challenges that the adoption of a multi-state VMT-based road-user charging system would pose to state and federal government agencies involved in the collection and distribution of funds. It also intended to raise key issues that require further review and analysis.

Most previous work on VMT-based systems has focused on technology options, public acceptance and communications, and on small-scale single-location demonstrations of concepts. This project is the first VMT-charge related effort to focus specifically on business models, institutional and administrative arrangements, and legal issues – state and federal -- – critical to real-world application on a regional or national scale. The Coalition's multi-agency structure provides a unique basis and important perspective for informed consideration of these key issues.

The primary objectives of this project were to identify VMT system functionalities (to the extent needed for this analysis), assess existing and potential institutional and administrative requirements, explore the potential use of existing state agency, toll agency, and multi-state or multi-agency revenue collection systems, prepare very preliminary estimates for administration and enforcement costs, and identify legal issues. This report documents the study activity and identifies key issues that require further review and analysis.

## Approach

In May 2009, the I-95 Coalition convened a workshop of experts to discuss how the Coalition could best contribute to the national dialogue regarding VMT-based charge systems. Following the recommendations of the National Surface Transportation Policy and Revenue Study Commission and the work of other organizations including the Federal Highway Administration, the Oregon Department of Transportation, and the Transportation Research Board, the workshop resulted in a set of recommendations regarding the issues that a multi-state program for a VMT-based system should examine. Among these was a recommendation to “address issues related to the institutions and procedures needed for fee collection and audit enforcement...”

In carrying out this study, the project team took advantage of other recent studies of VMT-based system options and issues. Many of these studies are cited in chapter 2 of the report. In order to assess current state and toll authority operating concepts and requirements and to determine state and federal issues, numerous interviews were conducted with state officials (representing DOT program and legal staff, departments of motor vehicles and revenue

collecting agencies), toll authority officials, relevant association and clearinghouse representatives, and private vendors. In preparing preliminary cost estimates, extensive use was made of the bids submitted by vendors hoping to operate an all-vehicle VMT-based system in the Netherlands, and other cost estimates. The work of the project team was coordinated and reviewed through an I-95 Corridor Coalition Member Advisory Committee (MAC) composed of representatives from Coalition member organizations.

## **VMT-Based System Functionality**

The essential administrative, institutional and legal requirements for an implementable VMT charge system will in part be driven by the range of functions to be provided by the system in its intended role of either augmenting or replacing motor vehicle fuel taxes. This role relies on several key functions being performed successfully, including:

- Calculating vehicle miles driven;
- Communicating mileage information to a processing point;
- Applying a per mile rate by vehicle type;
- Invoicing and collecting payments and providing for related communications with users;
- Retaining auditable records; and
- Providing security and enforcement.

It is recognized that there are other VMT-based system functions that might be of interest to some states or localities. These functions would primarily use financial incentives to achieve a range of policy goals such as reducing congestion, road wear, and harmful emissions by varying the per-mile charge based on certain vehicle, travel or system performance characteristics. These functions might require calculation of VMT driven by time of day and/or by general location (e.g., by jurisdiction or by cordon area) or by specific location (i.e., on a specific facility) – and would require more sophisticated vehicle technologies.

For the purposes of this project, three broad functionality options were chosen to form a framework for the analysis of the administrative, institutional and legal requirements. These options closely correspond to those considered in other studies and cover the full range of system functionality. They range from “simple” -- deployment of a system designed to accommodate only the mandatory system function of recording and reporting miles driven, to “moderate” -- deployment of a system that achieves some of the optional functionality associated with general location variability, e.g., travel by time of day or by jurisdiction or small geographic area (cordon-based congestion charges) -- to “complex” -- deployment of a system designed to accommodate the full range of optional system functions necessary to alter driver behavior and create user financial incentives by varying the per-mile charge by time-of-day, by facility, and by other factors. While there are a range of technologies to accomplish these options, the study used those representing the consensus among several existing national analyses, including a pay at the pump option (simple), second generation on-board diagnostics port (OBD II)/cellular transmission approach (moderate) and GPS-based system (advanced). The Coalition’s MAC directed the project team to use the most advanced option (a GPS-based system) to consider administrative and legal issues.

## Identification and Analysis of Administrative Requirements

Given the assumptions regarding the objectives of a VMT-based charge system and the characteristics of the most promising technologies, specific administrative functions and institutional arrangements necessary to collect VMT-based charges were identified for each of the three generic functionality options. Administrative requirements identified included processes for:

- **Enrolling User Participants** – Existing state and federal motor fuel taxes have no administrative requirement related to user enrollment. However, the vehicle-use basis of VMT charges introduces such an administrative function under each of the technology options. Enrolling user participants is essential to system interactions with the participants, including fee calculations, fee collections, and maintaining user interfaces and communications. This report advises that enrollment should be integrated with state registration fees collection processes.
- **Accumulating Mileages and Charges Due, by State and by Agency** - Accurate mileage information is needed for each vehicle or at least for each vehicle owner by jurisdiction or by agency. Data collection and assurance of data quality will be a challenging aspect of administering VMT-based charges. The report recognizes models such as the International Registration Plan (IRP) and the Interagency Group (IAG) and current processes that could be expanded and adapted to a VMT-based collection system.
- **Calculating and Billing Charges to Users** – The mode and frequency of collecting VMT charges will impact the cost and complexity of the system. If collection as part of registration or the re-registration of a vehicle is acceptable, then state collections every one or two years would focus on assessing the miles traveled by the vehicle being registered or re-registered. More frequent or more complex billing will require greater effort. Agencies will also have to deal with the 17 percent of users who may not have bank accounts or credit cards. This report recognizes that toll authorities have extensive experience in this administrative function.
- **Maintaining User Interface and Communication** – Public understanding and system transparency will be essential for acceptance and appropriate service. System administration must include provisions for rapid response to customers and clear communication regarding where, when and how charges will be incurred. The study recognizes that customer service facilities and programs similar to current DMV call centers and toll authority customer contact centers will need to be deployed in any VMT-based system.
- **Auditing, Security, and Enforcement** – The credibility of the system depends on consistent and reliable system operations and verifiable user compliance among agencies. Monitoring is required to determine whether the in-vehicle systems are functional while a vehicle is in use. Administrative procedures will be necessary for enforcing the collection of charges that are due on vehicles with non-functioning

systems. Auditing is an important function to assure that the reporting and payment of VMT-based charges are legitimate. This report further addresses the current issues and models in place to deal with registration evasion and maintain collection confidence.

- **Calculating and Reconciling State and Agency Mileages** - VMT-based charges must be accurately assessed by vehicle and appropriately allocated to the state (or facility or sub-state jurisdiction) in which the mileage accrues. The IAG provides an existing arrangement that allows reconciliation of toll collections among participating agencies and integrated billing for the account-holding users of the participating facilities. IRP and IFTA reconcile charges among heavy vehicle accounts. The report identifies some instructive lessons from these two organizations in a VMT-based charge system.
- **Distributing Revenues Among the States and Other Agencies** - System efficiency and equity depend on appropriate distribution of the VMT charge revenues. The data and administrative requirements will differ substantially based on whether the requirement for estimating charges is geographically coarse, such as estimating charges due to each state, or geographically fine, such as estimating charges due to the owners of particular roads (e.g. toll facilities). The report identifies existing IAG, IRP and IFTA procedures that handle revenue allocations smoothly and efficiently.
- **Preserving Data for Planning Analysis:** A wealth of vehicle and travel data would be generated and collected under a VMT-based system, ranging from vehicle utilization to actual vehicle flow data, depending on the technology used and how data are collected. Consideration needs to be given up-front to preserving such data, at an appropriately aggregated level to protect user identity, for planning and system modeling purposes.
- **Identifying Specific State and Multi-State Administrative Units and Their Respective Responsibilities** - There are a range of possible approaches to efficient allocation of functions among existing (or newly created) entities. Approaches may differ by state. Efficient systems designs must distribute all functions among units and define an overall management structure for the integration of all functions. This report finds that these units will need to have the functionally required administrative capabilities and systems, including the data collection technologies and the information management systems.
- **Identifying Governance Procedures and State and Other Agency Membership Rules and Requirements** - Several key policy and governance roles must be fulfilled at both the intra and interstate level - both for resolving issues between states and for defining multi-state agreements. Many of these administrative and institutional requirements are already in place for state administration of motor vehicle registrations, motor fuel taxes, and with toll authorities. This report identifies the key parameters and opportunities for transferability of processes and process adaptation



## Applicability of Current Operational Environments

A key challenge associated with this potential new approach to roadway charges is management of the transition from the existing systems of fuel and related motor vehicle taxes and fees to a new VMT-based charge system. Interviews conducted with state Department of Motor Vehicle officials, (DMVs), the American Association of Motor Vehicle Administrators (AAMVA), IAG, IRP and toll authorities' representatives, as well as interactions with the MAC, revealed a number of issues and concerns that must be addressed for a successful transition to VMT charges. Key concerns include potential costs, institutional and systems capacity, data confidentiality and information privacy. In the case of the DMVs, officials noted that VMT charge administration would constitute another diversion from their core business. Other key findings identified in interviews and reviews surrounding the administrative requirements for VMT and the existing capabilities included:

1. *Data and administrative requirements* will differ substantially based on whether the requirement for estimating charges is geographically coarse, such as estimating charges due to each state, or geographically fine, such as estimating the charges due to the owners of particular roads (e.g. toll facilities). The situation becomes much more complex and data intensive for administration of charges that would be collected by facility (or travel lane) and by time of day.
2. *Interaction, involvement, and coordination among state motor vehicle agencies are essential* for many of the administrative activities surrounding VMT. But most importantly, there must be coordination regarding registration files and vehicle ownership. Basing enrollments on the current files for state vehicle registrations is the only straightforward method of enrolling all of the users. Any other arrangement would be a duplicative effort resulting in added cost. While the DMVs are the best-positioned current entity for administering a VMT-charge, they lack the capacity to execute a VMT-based system without external (private or quasi-private) assistance and/or extensive additional resources (such as personnel and systems redesigns) to build capacity. States' current registration processes are highly automated and work very well, but the addition of a VMT-based charge to the registration process adds a substantial burden. Any connection must be fully automated and any VMT-based system would need to accommodate current state trends to move as many transactions as possible to the Internet and to accommodate this service channel option.
3. *The scale of the data management challenge must be recognized.* The functions of accessing and accumulating mileages by state are already performed for the owners and operators of heavy vehicles operating in multiple states under the procedures for the International Registration Plan (IRP) and the International Fuel Tax Agreement (IFTA). However, accumulating mileages and charges by state and by agency for other vehicles under the moderate or the complex option will require the performance of new and similar administrative functions for a very large number of additional vehicles for which mileage records are not now kept. The IRP offers instructive applications for this administrative process, and should be further reviewed. However, in its current state, the IRP Clearinghouse could not function for netting VMT charges. The Clearinghouse

application and the IRP governance structure are good model components for a VMT-based system.

4. *Billing and collecting payments will require re-engineering, and customer contact avenues (such as call centers) will also need to be fortified.* This function can be based on the existing registration processes using models from current administrative or back office structures such as state registration processes or other methods such as those currently used by the IAG for the payment and collection of tolls. In addition, current registration processes are handled by entities other than the DMV in some states (such as county offices) and thus, any VMT charge program in those states will need to interface with that structure.
5. *Customer interface will be one of the most important and costly system components, especially if charges are determined based on a number of variables including time of day or facility.* Although any VMT-based administrative system has to be easy and electronic, credit card fees are a concern and payment frequency is a critical parameter. The addition of VMT charges to credit card transactions could increase state administration costs of collection. Information system issues are a major concern as many state DMV systems are not advanced enough, or modern enough, to handle either the volume or complexity of a VMT-based charge program.
6. *New enforcement processes will be required to ensure that VMT charges are paid and collected.* Issues of registration fee evasion may be aggravated with the addition of VMT charges. Processing violations in electronic tolling represents a sizeable administrative cost at the back office, and other related costs for collection agencies and legal services to pursue egregious toll violators will need to be considered in the enforcement of VMT charge collection. The arrangements currently in place with the IAG to pursue toll evaders offers a model for consideration, but also requires the extensive exchange of state-to-state data and electronic interactions between state DMV registration databases.
7. *Calculating and reconciling state and facility mileage, (as well as distributing accurate revenues to states) will be key new functions to assure that VMT-based charges are accurately collected and allocated to the states or facilities where the mileage accrues.* The IAG provides an arrangement that allows reconciliation of toll collections among participating agencies and integrated billing for account-holding users of participating facilities. The IRP Clearinghouse also provides a model for state-to-state reconciliation and netting exchange.
8. *Existing toll system operators and their contractors understand most of the functions necessary for VMT system administrative and institutional arrangements.* These system operators – such as those involved with E-ZPass -- have much more experience integrating the combined functions than most DMVs and better understand the complexities of system technologies. The ideal institutional arrangement for VMT system administration may be a quasi-government entity, such as a toll authority, using a private vendor familiar with these types of operations on a large scale. A critical component of the consideration of such an arrangement would be the ability for the DMV to share vehicle registration data.

9. *The functions required at the federal level will have limited precedents, and will be “easier” to administer at the state level from a purely administrative standpoint because the states have registration files and the examples of toll agency cooperation. The federal government has no current interface with vehicle owners and will face severe user enrollment, user communication, data and enforcement challenges without the development or adaptation of a federal bureaucracy (or a private sector contract) to handle collection, and/or a state partnership for the collection of federal fees.*

## **Preliminary Cost Estimates**

Costs associated with administering a VMT-based charge system will be a major concern. The current motor fuel taxation system is very simple and does not directly distinguish miles, location of travel, or vehicle type, and is therefore very inexpensive to administer. A VMT charge system – with its increased range of functions -- is necessarily more expensive and must be justified by its greater range of policy functions as well as the emerging shortcomings of the existing motor fuel taxation scheme. While cost is definitely not the only important factor in comparing potential VMT-based charges to motor fuel taxes, it will certainly receive attention in deliberations over future revenue sources at the state and federal level. A key challenge is to weigh the increased costs against the importance of the additional functions in a cost-benefit context.

### **Current Administrative Costs for Motor Fuel Taxes and Vehicle Registration Fees**

Nationally, an average of 0.82 percent of motor fuel tax receipts have been used for administrative or collection expenses over the past decade, based on information compiled from FHWA’s annual reports of Highway Statistics. The figure is comparable for I-95 Coalition states, estimated at an average of 0.86 percent. Nationally and for the Coalition member states, 11.0 percent and 12.8 percent of the motor vehicle registration receipts are used for collection expenses, respectively, at an average cost of almost \$13 per vehicle nationally, and almost \$12 per vehicle for Coalition states.

### **Preliminary Estimates of the Administrative Costs of VMT Charge Systems**

The common drivers of cost which will impact on the total administrative costs of a VMT charge system include (1) number of vehicles or user accounts; (2) vehicle miles of travel to be tracked and allocated by state or facility; (3) number of participating agencies; and (4) required level of detail in terms of time of day, facility, or geography. There is no existing VMT charge system at the network level anywhere in the world from which to develop reliable cost estimates. In addition, most cost data from the various existing revenue systems –ranging from fuel taxes to registration fees to tolls -- is fairly aggregated and, therefore, difficult to use in creating a “unit cost model” specifically for a VMT charge system. The cost variation by scale of program introduces an additional complexity because the costs will not be linearly dependent on the number of units.

Therefore any approach to estimating VMT charge system costs must be based on considerable professional judgment and explicitly acknowledges a substantial amount of uncertainty. As

demonstration trials proceed in the United States or other countries, more evidence on the costs of VMT-based charges will become available.

The all-vehicle VMT charge system proposed two years ago in the Netherlands represents the best current approximation of the costs of implementing such charges, based on the implementation costs bid for the project by private service providers. The cost analysis for this project is based on the Netherlands costs as compiled for the NCHRP 19-08 task reports. The Netherlands proposed to replace a range of current highway fees with the VMT charges, to be applied to all vehicles. However, the Netherlands is not yet proceeding on a VMT-based system, primarily because of a change in government leadership, so true costs remain uncertain. (Other countries do have VMT charges which apply only to heavy trucks, but both the administrative costs and the amounts collected per vehicle are very high in relation to any charges that have ever been proposed for light vehicles).

Because each Netherlands vendor allocated their bid costs differently, the aggregated yearly costs of operating or administering their systems provide the best indicator of what the vendors expected with regard to costs. The total yearly administrative costs for each Netherlands vendor ranged from \$51 per vehicle to \$115 per vehicle among the three vendors who bid on the project. Using a cost of \$51 per vehicle per year in administrative costs provides a starting point for estimates that might have relevance in the U.S.

Some cost savings may be available in the US by building on existing administrative systems. Because our assumptions regarding the range of enrollment costs (by using existing state registration files) is from \$3 to \$15 per vehicle, and the lowest total Dutch bid for enrollment included about \$14 per vehicle (using new VMT user enrollment functions), there might be an opportunity to save up to \$11 per vehicle in enrollment costs when compared to the Netherlands bids. Thus the range of preliminary estimates of administrative costs for systems assumed to have the full functionality specified in the Dutch bid process is from \$40 per vehicle per year upwards.

At lower functionality, such as for assessing straight VMT charges by state, without regard to time of day or facility, this report estimates that savings of \$10 per vehicle per year may be possible in comparison to the Dutch bids, or a total estimated administrative cost of \$30 per year per vehicle upwards.

It is not anticipated that heavy vehicle users would incur any added costs under a VMT-based system, or that states would incur added administrative costs attributable to heavy vehicle users, since for all practical purposes these users already have records maintained for the IRP of their VMT in various states. However, the IRP and IFTA records of the various firms are a mixture of paper records and electronic files in different formats. Thus, substantial efforts to reconcile and standardize these reporting systems will be needed in order to automate the administration of heavy vehicle VMT charges as part of overall VMT charges. Such reconciliation and standardization may have substantial benefits to carriers and states under IRP and IFTA even if there are no VMT charges. Heavy vehicle users constitute 7 percent of VMT and just over 1 percent of total vehicles, so the lack of net new costs or nominal costs for VMT associated with these vehicles does not impact substantially on total cost estimates.

## **VMT Charge System Costs in Context**

User financing has been the foundation for federal and state highway programs in the United States for over a half century. All states and the federal government currently collect taxes on the use of motor fuel, and the vast majority of proceeds from those taxes are used to support highway or other surface transportation construction, operations, and maintenance. But the number of vehicles powered by alternative fuels, hybrid vehicles, and electric vehicles, as well as the average fuel economy for automobiles and other light-duty vehicles are projected to increase substantially in coming years. Given that reality, the current state and federal surface transportation funding structure that relies primarily on taxes imposed on petroleum-derived motor fuels is not sustainable in the long term.

The types of VMT charges that might be implemented in the U.S. range from constant charges for vehicles of a certain configuration per mile of travel on all roads, to charges that may vary by facility used or by time of day. Charges which vary by facility and time of day may be able to reshape travel patterns, with some potential benefits that will not occur with constant charges per mile of travel or with continued use of per gallon motor fuel taxes.

The average annual total U.S. federal fuel tax paid (at 18.4 cents per gallon) by a motorist today who drives a light duty vehicle 10,000 to 12,000 miles per year at 20 miles per gallon (the current national average) is around \$100 per year. With the addition of an average state fuel tax just above 20 cents per gallon, the light duty vehicle owner pays about \$200 per year in total motor fuel taxes. Heavy trucks which travel more extensively at fewer miles per gallon generally pay substantially more. For the heaviest combination trucks, which on average travel 70,000 miles per year at 7 miles per gallon (and pay federal tax of 24.4 cents per gallon), motor fuel tax payments can be over \$4,000 per year.

In the U.S., current annual expenditures for highways are about \$120 billion to \$130 billion. This level of expenditure is supported not only by fuel taxes, but also by vehicle fees, property and sales taxes, tolls and general funds. If all these sources were replaced by VMT charges spread across 240 million registered vehicles, \$500 per vehicle per year in VMT charge revenues would be required. This compares to this report's lowest preliminary administrative cost estimate of \$30 to \$40 per vehicle per year, resulting in a ratio of administrative costs to collections of about 6 percent to 8 percent - somewhat lower than the current costs of collecting registration fees, but considerably higher than the fuel tax collection costs of less than one percent. The Netherlands had set a goal of 6 percent of annual fees to be spent on administration, but it should be noted that the total highway fees per vehicle in the Netherlands are much higher than in the U.S.

## **Institutional Arrangements**

This report concludes that the most promising institutional arrangements for administering a VMT-based charge system will balance continued strong state or toll facility involvement and control with management efficiency. States wish to maintain their administrative responsibilities for revenues within their borders, but they would have a range of choices as to how much assistance for VMT fee administration they would contract out to third parties,

including private contractors or non-profit organizations with the appropriate back office capabilities. In such a state-centered approach, a state agency or agencies will be responsible for the administrative and legal functions necessary to monitor and administer VMT-based charges, including reconciliation and coordination with other states. Other administrative functions might either be performed in house or contracted out. Given the scale of the data handling, systems requirements, and administrative complexity, it is likely that contracting approaches would be used. This implies an institutional arrangement within which states maintain full policy, legal and administrative control, but have options to use private contractors or multi-state cooperative entities to handle some or all of the administrative functions related to monitoring and collecting VMT-based charges. Existing cooperative mechanisms such as AAMVA, IAG and the IRP, or models based on those arrangements, could be the most logical places to perform the revenue reconciliation and revenue clearinghouse functions, similar to the functions now performed for apportioned heavy vehicle registration fees and E-ZPass toll revenues. However, neither IRP nor IAG currently have the administrative capacity to handle a multi-state VMT charge.

The National Motor Vehicle Title and Information System (NMVTIS), a current infrastructure for the sharing of title information among the states, should be further analyzed and considered as a model or as the potential infrastructure for owner and registration data sharing for any VMT charge structure. More use could be made of NMVTIS to assure that states effectively share information on where vehicles are registered or re-registered, ownership changes and title changes. Since NMVTIS does not currently include ownership or personal information, AAMVA and motor vehicle administrators have noted that the addition of this information to NMVTIS will be a major concern. Further study is essential to develop an approach that builds on this or other models.

## **Legal and Regulatory Issues**

### **State Legal Issues in Implementing a VMT-Based Charge System**

Key state legal issues were identified and reviewed through a survey of legal counsel representing transportation agencies within the I-95 Corridor. Respondents were asked a series of questions related to a hypothetical VMT charge system applied to all motorists and facilities within participating states. The limited existing legal precedents – supplemented by professional opinions -- were used as the basis for the identification of the likely key issues including: the impact of characterizing VMT charges as taxes, fees, or tolls; current legal limitations on use of motor vehicle-related revenues; roles and authority in rate setting; transition from fuel taxes to VMT charges; legal authorities for multi-state collection and redistribution, delegation of program administration, enforcement and penalties; and data sharing and privacy.

The following observations summarize state legal issues related to implementation of a VMT-based system:

- A statewide VMT-based system of charges would not be likely to face insurmountable state constitutional or other legal issues.

- Specific authorizing legislation will need to be carefully drafted to address issues related to use of VMT-based revenues, rate setting, characterization of VMT-based charges, enforcement provisions and adjudication processes and mechanisms – and would be desirable even for a pilot program.
- There are available powers and precedents associated with a multi-state system, although a formal interstate compact related to VMT charges could facilitate implementation.
- Existing state privacy laws related to the sharing of data for enforcement purposes and the protection of personal information from use for non-governmental purposes appear to be adequate, especially in combination with federal privacy laws applicable to motor vehicle users. In a few cases, additional strengthening or clarification was recommended.

### **Federal Legal Issues in Implementing a VMT-Based Charge System**

The following observations summarize federal legal issues related to implementation of a new VMT-based system:

- It is unlikely that constitutional restraints exist for states seeking to implement a system of VMT-based charges. Reasonable VMT-based charges are sufficiently similar to taxes and tolls collected under current law to have been tested repeatedly before the United States Supreme Court.
- The collection of VMT-based charges is significantly more complex than current taxes on motor fuel, and involves transactions with millions of taxpayers each year, rather than with the several thousand fuel wholesalers who currently pay fuel taxes.
- It may be efficient to collect state and federal VMT-based charges simultaneously via a single system. FHWA already relies on states to assist with efforts to implement and enforce various highway programs, and – with state assent -- could use grant conditions and other incentive programs to encourage state cooperation in collection and enforcement.
- Current law protects personal information from release for non-governmental purposes. Federal laws are already supplemented by state laws in this regard.

### **Next Steps**

This report provides a strong foundation for identification and discussion of the key administrative, institutional and legal issues and implications for state DOTs and toll agencies and authorities surrounding the consideration of VMT charges. The I-95 Corridor Coalition member organizations provide a unique setting for further consideration of these issues. Areas that might be further investigated in the near future should include:

- a more refined analysis of already identified administrative requirements;
- identification of current state and toll authority functions that could or would need modification to accommodate a VMT charge program;
- more refined cost estimates based on input from industry and analysis of similar functions performed by or for states;
- assessment of current interagency arrangements, including the IAG and arrangements between state DOTs and their sister state revenue agencies;
- the development of an administrative functions concept of operations for a multi-state VMT-based charge system;
- assessment of the NMVTIS model as the basis of a system to exchange vehicle ownership/registration information and VMT data among the states; and
- interface and other issues associated with federal government use of state systems to collect potential federal VMT charges.