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***The Road to Reform:  
Restructuring the Commonwealth's  
Transportation Agencies***

**Massachusetts Taxpayers Foundation**

**in collaboration with**

**The Artery Business Committee**

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## Introduction

An effective transportation system is a critical underpinning of the state's economy and quality of life. At the same time, the organizational structure of the state's transportation agencies has powerful effects on their ability to plan, develop and operate a first-rate transportation system.

The departments and authorities that manage the largest components of the transportation network – the Executive Office of Transportation and Construction (EOTC), the Massachusetts Highway Department (MHD), the Massachusetts Turnpike Authority (MassPike), the Massachusetts Bay Transportation Authority (MBTA) and the Massachusetts Port Authority (MassPort) – face a daunting set of challenges that have arisen in the years since the agencies were created.

With the Central Artery/Tunnel project the highest priority over the last decade, the Commonwealth has fallen far behind in addressing other transportation needs. Nearly \$5 billion of authorized highway and other transportation projects are in the queue for bond funding, but the state plans to spend less than \$600 million of transportation bonds per year. The result is an enormous backlog of deferred maintenance and repair projects, with 61 percent of the state's roads in poor or mediocre condition and 12 percent of its bridges structurally deficient. At the same time, the state lacks adequate funding to enhance and expand the system. Major highway improvements that have not yet been authorized would make the list even longer. The MBTA has more than \$2 billion in legally required expansion projects on its agenda and, at the same time, faces \$3 billion in deferred maintenance and modernization of its present system.

None of the state's transportation agencies can afford to finance more than a fraction of the costs of expanding and maintaining its piece of the system. The Commonwealth's heavy

debt burden limits borrowing for capital projects, and operating budget cuts have pushed MHD to use an increasing share of its bond funds to cover personnel costs. Federal transportation aid was cut by 40 percent in 1998, and over the next decade the state will need to divert \$1.5 billion in future federal highway aid to repay Artery debts. Even with a modest increase in future federal support, which now appears likely, the state will still be struggling to pay for the most critical transportation improvements.

The MBTA's financial capacity is limited by its finite revenue sources under forward funding and the heavy \$4 billion debt burden inherited from the old funding system. MassPike's contributions to Artery construction costs have put that authority \$2.5 billion in debt, and it now faces the costs of operating and maintaining the highway network with no new source of funds and threats to its existing revenues from proposals to eliminate tolls. The ability of all of the authorities, including MassPort, to finance their capital programs has also been affected by revenue losses attributable to the economic downturn and increased security costs since 9/11.

The financial shortfalls exacerbate complex operational and planning issues. Completing construction and cost recovery on the Artery will require tremendous attention and resources, and the state is now faced with the challenge of operating and maintaining the new system, one of the most technologically sophisticated road networks in the world. Looking beyond the Artery and deciding the state's priorities for the next generation of transportation improvements is complicated by the fragmented organization and funding of the transportation agencies and the lack of an overarching strategy to guide planning.

It is in this context that the administration has proposed to merge the operations of the Turnpike Authority and Highway Department

and to make other changes in the organization of the transportation agencies. The Governor deserves credit for initiating an important debate with his proposals, and the Legislature deserves credit for responsibly taking up the issue. A joint commission on transportation restructuring was formed last year in response to the Governor's merger proposal when it was first introduced. The commission, which includes representatives of the administration, the Legislature, the transportation agencies and the business community, has been meeting and considering a range of options for organizing transportation responsibilities. The House, in its fiscal 2005 budget, has proposed the creation of a Transportation Coordination Council to identify opportunities for savings and to develop comprehensive transportation plans.

Disjointed and unable to finance more than a fraction of the state's capital investment priorities, the transportation agencies are widely recognized as being in need of reform. The purpose of this paper is to provide guidelines for evaluating restructuring proposals and to consider the administration's key proposals in the context of those guidelines.

The organizations authoring this report – the Massachusetts Taxpayers Foundation (MTF) and the Artery Business Committee – have a major stake in the success of the transportation system and each has devoted significant resources to transportation issues.

MTF has published a series of research reports on transportation finance issues, including *Reaching the Breaking Point: The Commonwealth's Capital Dilemma*, an analysis of the impact of paying for the Central Artery on the Commonwealth's ability to meet its capital needs, and *The Third Rail: Financing the MBTA*, which contributed to MTF's pivotal role in the enactment of the MBTA forward funding legislation. *MBTA Capital Spending: Derailed by Expansion?* and, most recently, *MBTA: Increasing Fiscal Strains Threatening Success of Forward Funding*, have highlighted the need to develop new funding sources for expansion of the transit system and to put the T on a sound financial footing. Three of these reports have won prestigious national awards.

The ABC was formed in 1989 as the voice of the business community on all matters that pertain to the CA/T project. Its focus has been on construction and traffic mitigation, planning and design, and transportation finances. The organization played a lead role in establishing the Metropolitan Highway System legislation in 1997 and has been an active participant in influencing state and federal transportation financing. It is currently involved with shaping the design and governance of the new Rose Kennedy Greenway.

## Executive Summary

### **The Commonwealth needs comprehensive, integrated transportation planning.**

- The Turnpike/Highway Department merger and new Office of Transportation Planning proposed by the Governor acknowledge the state's fragmented transportation decision making process. The larger issue that needs to be addressed is coordinated intermodal planning among the Executive Office of Transportation and Construction (EOTC), the Massachusetts Highway Department (MHD) and the authorities.
- Any reorganization of the Commonwealth's transportation agencies should be aimed at developing a comprehensive investment plan to meet the state's critical transportation needs. Major decisions about statewide capital priorities are now being made in a piecemeal way, with limited statewide perspective governing the allocation of resources. There is no process for weighing the benefits of transit projects against those of highways, and no regularly functioning mechanism for combining funds across agencies to finance the top statewide priorities.

### **The Commonwealth needs to preserve and strengthen its capacity for financing investments in transportation.**

- Facing a list of unfunded transportation needs totaling at least \$10 billion, the Commonwealth needs to develop and implement a strategy for financing the most important projects, including tools for leveraging the revenue-raising capacities of the state and each authority. While transportation pricing through tolls and fares must be part of the strategy, other financing mechanisms, such as real estate development and leveraging increased property values, also need to be considered in a more comprehensive way. A transportation finance commission

should be created to develop such a strategy.

- Any reorganization of the state's transportation agencies should preserve the ability of the agencies to generate the revenues required to fund investments in transportation, including tolls and other user fees. In particular, the proposal to merge MassPike and MHD raises legitimate concerns about the Commonwealth's long-term ability to maintain adequate funding sources for the Metropolitan Highway System (MHS) and the Turnpike.
- The creation of independent authorities empowered to cover their costs through user fees has long been a central part of the state's organizational strategy and is in other states a common model for building and running the most expensive and complex transportation assets. The ability to raise substantial and predictable amounts of revenue is one of the primary reasons why the authorities were created to manage major transportation projects.

### **The Commonwealth needs to strengthen its ability to operate and maintain its transportation assets.**

- Protecting the integrity of the taxpayers' \$15 billion investment in the Central Artery and harbor tunnels requires an organization whose focus is operating and maintaining the system. The organization needs advanced technical and financial capacities for the tasks, which are far more complex and costly than for other state roads. A series of consultant reports and decisions by previous administrations and legislatures suggest that MassPike is likely to be best equipped to accomplish these tasks.
- The proposal to give the Highway Department responsibility for completing the Central Artery and operating and

maintaining the MHS raises concerns about MHD's ability to take on new responsibilities of this magnitude. With already limited resources, focusing its attention on the MHS could also impair MHD's ability to accomplish its current mission of constructing, operating and maintaining the bulk of the Commonwealth's highway network.

- Given the high stakes and the complexity of the tasks involved, any proposal to restructure the management of the state's transportation system should be backed by a detailed implementation plan that spells out the budget, funding sources, structure, staffing, capabilities and performance standards for the new organization. Given the challenges of MHD's current responsibilities, the implementation plan needs to demonstrate how the department could succeed – at managing the completion of Artery construction, at operating and maintaining the MHS, and at meeting the need for capital investments throughout the state road and bridge system.

**Reform is needed to produce savings while improving the quality of transportation services.**

- The Governor and the Legislature clearly recognize the need for reforms and should be commended for initiating the debate with serious proposals.

- Achieving savings by eliminating overlap and duplication is an important goal, especially during a time of tight state budgets and unfunded transportation priorities. However, saving dollars is only part of the reason for reform. The requirement for comprehensive, integrated transportation planning, for additional revenues to finance transportation investments, for better construction procurement and project management methods, and for enhanced organizational capacities to operate and maintain crucial transportation assets are all critical reasons to pursue reforms.
- Examination of the projected savings from a MassPike/MHD merger suggests that some would be difficult or impossible to realize, would clearly result in reduced services, or would shift costs currently borne by MassPike to other state agencies. Other savings could be achieved without a merger. In any case, the value of the savings would be diminished if the results were lower quality operations and maintenance of the MHS and an even longer backlog of improvements and repairs to other state roads and bridges.

## Summary of Current Reform Proposals

Governor Romney and the Legislature have made five distinct proposals to reorganize the state's transportation agencies:

- Merging the operations and finances of the Turnpike Authority with the Massachusetts Highway Department (MHD), included in the Governor's fiscal 2005 budget proposal;
- Allowing MHD to operate and maintain parkways owned by the Department of Conservation and Recreation (DCR), also included in the Governor's proposed 2005 budget;
- Creating an Office of Transportation Planning and other changes in the relationship between MHD and the Executive Office of Transportation and Construction (EOTC), included in the administration's transportation bond bill;
- Eliminating the MHD Board of Commissioners, also included in the bond bill;
- Reconstituting the board of the Massachusetts Aeronautics Commission (MAC), also contained in the bond bill; and
- Creating a Transportation Coordination Council, in the House's 2005 budget proposal.

### ***Turnpike Authority/Highway Department***

***Merger:*** The proposed merger includes governance, operational and financial aspects that are largely separable, i.e., any one of these components could conceivably be adopted without the others. The Turnpike Authority board would be reconstituted to include *ex officio* the secretaries of Administration and Finance and Transportation and Construction, as well as the chair of the Commonwealth Development Coordinating Council, with the Governor selecting the board's chair. The Authority would retain control over Turnpike policies and operations, including toll levels,

although the board would be precluded from actions that would adversely affect the Commonwealth's finances.

The Metropolitan Highway System legislation that currently governs the Central Artery project calls for MHD, which owns the Artery and the associated surface parcels, to transfer the property to the Turnpike Authority, which is managing the project, when construction is complete. Under the Governor's proposal, the Artery would remain under MHD ownership.

The proposal would also eliminate most of MassPike's administrative positions and transfer the remainder, as well as toll collectors and operations and maintenance staff, to MHD. MHD would operate the Artery, as well as the Turnpike and harbor tunnels, under a memorandum of understanding with the Authority.

Merging the operations of MassPike and MHD is projected by the administration to save \$20 million annually in Turnpike operating costs. The proposal anticipates that budget cuts would eliminate duplicative overhead costs, and savings would be achieved without diminishing the quality of the maintenance of the Turnpike or Central Artery. According to the administration's assessment, the Turnpike Authority is operating at a loss and the savings are necessary to stave off insolvency or premature toll increases.

Under the proposal, the Turnpike would reimburse the Commonwealth for MHD's costs of operating and maintaining the Turnpike, Artery and harbor tunnels by transferring tolls and other revenues to a newly created state fund, the Turnpike Efficiency Fund. These costs are estimated at \$161 million in fiscal 2005.

The Commonwealth would cover the Turnpike's debt service costs with contract assistance payments from the state's General Fund, which would also be reimbursed with Turnpike revenues. The payments, budgeted

at \$113 million in 2005 (in addition to the existing \$25 million debt service subsidy), would be general obligations of the Commonwealth.

The Turnpike's debt is currently backed only by tolls and other Pike revenues, which necessitates setting aside \$180 million of the bond proceeds in a debt service reserve fund. Providing Commonwealth backing for the Turnpike's debt would eliminate the need for the reserve fund and allow the \$180 million to be spent on Turnpike capital projects, which in turn would free up \$190 million in other Turnpike funds derived from property sales. The administration proposes to use the \$190 million to help balance the state's 2005 budget.

Any remaining Turnpike revenues beyond those needed to cover operating and debt service costs would also be transferred to the Turnpike Efficiency Fund, where they could be used for any state purpose. The administration's proposal would use between \$20 million and \$50 million of Turnpike funds for maintenance of the open space parcels created by the dismantling of the Central Artery.

**Department of Conservation and Recreation Parkways:** House One, the Governor's fiscal 2005 budget proposal, would allow DCR to enter into agreements with MHD to operate and maintain its network of parkways (formerly operated by the Metropolitan District Commission). DCR would retain ownership and control over the roads, which it currently operates with its own resources.

**Highway Department/EOTC Integration:**

Provisions of the administration's transportation bond bill would overhaul the relationship between MHD and EOTC by eliminating MHD's board of commissioners – an anachronistic structure with state employees as commission members – and having the Highway Commissioner report directly to the Secretary of Transportation and Construction. The bill would also create an Office of Transportation Planning within EOTC; MHD currently controls the state's highway planning resources. MHD and EOTC have already begun the process of integrating their operations by merging administrative functions.

**Massachusetts Aeronautics Commission:**

The bond bill would also make the Secretary of Transportation and Construction the chair of the MAC board, which oversees development and operations at the state's general aviation airports. MAC is currently under the EOTC umbrella, but the Secretary does not have a seat on its board.

**Transportation Coordination Council:**

The House budget proposal for fiscal 2005 would create a Transportation Coordination Council charged with identifying ways to improve efficiency and achieve savings through sharing of resources and facilities, consolidating functions and improving coordination of services. The Council would also develop a long-range comprehensive statewide transportation plan, including recommendations for financing projects.



## Comprehensive, Integrated Transportation Planning

The organization of the transportation agencies should enhance the ability of the Commonwealth to determine priorities among competing transportation needs, and to allocate dollars across agencies and transportation modes to ensure the best use of limited capital and operating funds. What the Commonwealth needs is an overarching strategy for developing and maintaining its entire transportation system – including highways, transit and aviation – and an organizational structure that supports the strategy.

With a host of costly transportation improvements competing for construction dollars (see Figure 1), developing a comprehensive transportation investment plan for the Commonwealth, together with a strategy for financing the highest priorities, should be an explicit component of any reorganization proposal. The objective is to advance the most critical projects in every transportation mode in the context of the overall system.

Crafting an integrated approach to transportation development is complicated by the autonomous nature and separate funding streams of the state’s departments and authorities. Any proposed organizational arrangement should facilitate coordinated planning among EOTC, MHD, the authorities, metropolitan planning organizations (MPOs) and regional planning agencies (RPAs). Financing major transportation projects will require mechanisms for combining capital funds generated by the Commonwealth and

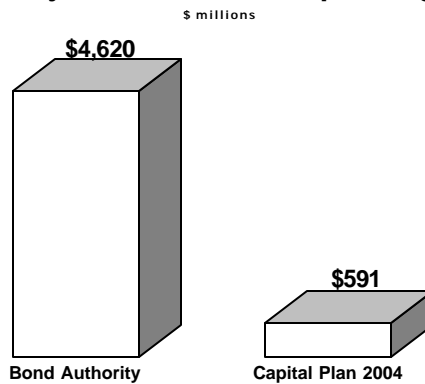
each authority to advance the state’s most important priorities.

The Governor’s proposal to merge MassPike and MHD would clearly create the opportunity for better coordination between the Authority and other state agencies, reducing the chance of the Authority taking actions that run counter to broader Commonwealth interests. Not only would the planning and engineering functions of MassPike be absorbed by MHD, but the secretaries of Administration and Finance and Transportation and Construction,

as well as the chair of the Commonwealth Development Coordinating Council, would have seats on the Authority’s board. For policy making and operational purposes, the Authority would become part of the executive branch. Combined operations would also potentially generate some savings that could be reinvested in transportation improvements.

But those benefits would come at a potentially steep cost. The Commonwealth would put the fate of its most valuable transportation asset in the hands of a department that, for many years, has had great difficulty maintaining its own roads and bridges. The state would run the risk of diluting the organizational capacity for managing complex transportation facilities that the Authority has built up over the last five decades. And by making tolls a state revenue source and putting the executive branch firmly in control of the MassPike board, the merger would likely eliminate the Authority’s formal independence, a key safeguard for maintaining tolls as an important transportation revenue source.

**Figure 1**  
**Authorized and Proposed Transportation Projects vs. Planned Spending**



**Fractured Decision Making Process:** The Massachusetts Business Roundtable's report, *Transportation Planning and Development in Massachusetts: Recommended Changes for the New Millennium*, examined the transportation planning processes in Massachusetts and 17 competing states, concluding:

Massachusetts appears to have the most fragmented transportation decision-making process of any of the states by far. Part of this is due to a lack of a strong central Department of Transportation and part due to the existence of separate transportation authorities, such as the Massachusetts Turnpike Authority, the MBTA, and Massport, that each has control over various transportation areas . . . This structure of highway authorities severely impacts the ability to evaluate intermodal transportation needs and thoroughly analyze whether train, road, or even bike path expansion can work together to meet statewide and/or regional transportation needs . . . Without true central control of transportation planning, it is not likely that the state is always making the best transportation decisions for the benefit of the Commonwealth as a whole.

The major problem in the state's transportation planning process is not that the agencies never work together – all are involved in the Central Artery project, for example – but that major decisions about statewide capital priorities are made in a piecemeal way, rather than as part of a comprehensive strategy that reflects a variety of considerations, including economic growth and development, housing, land use and air quality.

In Massachusetts, each department and authority makes capital planning and investment decisions largely in isolation, with no structure or process in place for statewide priority setting. Regional and local priorities

are established by the metropolitan planning organizations, but there is no analogous procedure for evaluating proposals for major projects of statewide significance. The federally required State Transportation Improvement Program includes both state highway and transit projects, but the planning process is bifurcated, with little or no analysis that compares the costs and benefits of investments across transportation modes. MHD compares highway projects against other highways, and the MBTA compares transit lines with each other, but there is no mechanism for comparing highways with transit lines that would help decide which combination of projects would produce the greatest return on the state's investment. The capital projects of MassPike (except for the Artery) and MassPort are not even included in the statewide plan.

MassPike's sale of the Allston Landing property to Harvard University provides an example of the problems that can arise with the state's splintered approach to planning. EOTC, MassPort and the MBTA feared the sale would eliminate or restrict the option to use the parcels for transportation purposes, including better rail access to the seaport and a commuter rail layover facility for the T. With no regular mechanism in place to ensure that the interests of the other agencies were adequately represented in MassPike's decision making process, resolving the issue required extraordinary, *ad hoc* negotiations. Averting such problems in the future is one of the reasons the administration understandably cites for its merger proposal.

**Separate Capital Funding Sources:** Each department and authority spends its own capital funds on its own projects, with no statewide perspective governing the allocation of resources and no regularly functioning mechanism for combining funds across agencies to finance the top statewide priorities. There is certainly precedent for such cross-agency spending – the Commonwealth, MassPike and MassPort have each contributed to the financing of the

Artery, with the MBTA spending on related transit projects, for example – but this is an exception to the rule forced by the staggering costs of the project, rather than the normal approach for major investments.

No such creativity has been applied to the MBTA, which is legally mandated to build a series of new transit lines as environmental mitigation for the Central Artery project. The agreement signed by EOTC and the Executive Office of Environmental Affairs commits the T to construct – and pay for – the Greenbush commuter rail line, the restoration of Green Line service on the Arborway, the central segment of the Silver Line between Boylston Station and South Station in Boston, extending the Green Line north to Medford, and connecting the Red and Blue Lines in Boston (see Table 1).

**Table 1**  
**MBTA Expansions:**  
**Artery Commitments**

\$ millions

<u>Project</u>	<u>Est. Cost</u>
Greenbush Commuter Rail	\$479
Arborway Restoration	95
Silver Line Phase III	760
Green Line Extension*	375
Blue Line/Red Line Connector*	220
	\$1,929

\* old estimate; actual cost will be higher

MTF’s analysis of the T’s capital finances under the forward funding fiscal reforms, *MBTA Capital Spending, Derailed by Expansion?*, concluded that the T cannot afford the mitigation requirements or any other expansion projects within its new fiscal constraints without sacrificing needed maintenance and modernization of its current system or undermining its long-term fiscal viability. The Foundation recommended that the Commonwealth take the lead in developing new ways to finance the highest priority expansions through a combination of

state capital funds, user fees and alternative financing mechanisms.

While there is a growing recognition among policy makers that the T cannot finance the mitigation commitments on its own, no alternative plan has been developed, leaving the projects in limbo. Even though the economy of the greater Boston area is highly dependent on mass transit – 60 percent of workers in downtown Boston take the T to work – and the Commonwealth has included the mitigation projects in its federally required air quality plan, there is still no state-level strategy for financing them. The state has the option of using federal highway dollars for transit projects but has rarely done so. The proposed transportation bond bill, which lays out the administration’s priorities for spending Commonwealth bond funds, does not include any allocation for mitigation or other MBTA projects.

The parkways inherited by the Department of Conservation and Recreation from the old Metropolitan District Commission provide another example of the state’s disjointed management and funding of transportation assets. Many of the roads are in substantially deficient condition, but DCR is not adequately funded to maintain them, and no agreement is in place that defines how MHD and DCR will deal with the public safety and traffic management problems they present. The proposal in the Governor’s bond bill to allow DCR to enter into agreements with MHD to operate and maintain the parkways is a positive but only partial solution that leaves the question of sufficient funding unaddressed.

**Alternatives for Coordinated Planning:** The administration has indicated it is developing a more comprehensive, long-term transportation capital plan that promises to consider the state’s transit as well as highway needs, but implementing the plan will be complicated by the state’s organizational structure, which provides no support for taking a broad view of state priorities and resources, exacerbating the scarcity of capital dollars.

The creation of the Office of Transportation Planning (OTP) proposed in the transportation bond bill would address part of this problem by consolidating MHD's planning resources under EOTC. The lack of such resources for EOTC was highlighted in the MBR report, which concluded:

While on the surface the Executive Office of Transportation and Construction (EOTC) oversees statewide planning processes, most of the planning staff is in the MassHighway Department, which although under the EOTC on an organizational chart, in reality appears to function as a separate entity . . . the separation of MassHighway's budget from that of the EOTC gives the power mostly to where the money flows, and this seems to be MassHighway . . . the current structure has the agency with the primary charge of thinking about state transportation policy with very little real resources, and thus authority, to implement such planning.

However, even with the OTP in place, the planning functions of the MBTA, MassPort and MassPike would still be separate and disconnected, and the new office would represent only a small first step toward integrated statewide transportation planning.

The recent creation of the Commonwealth Development Coordinating Council to oversee the state's transportation, housing and environmental agencies is another move in the right direction, but the Council's ability to develop a more integrated statewide approach to capital planning is limited by the structure of independent authorities with independent agendas and funding streams. The Council approach also does not adequately address the role of the MPOs and RPAs.

Achieving more integrated and comprehensive planning does not necessarily require merging the transportation agencies. The study currently underway of the transportation uses

for the Allston South parcels – involving all of the authorities under the leadership of EOTC – provides a good illustration of the potential for multi-agency, multi-modal planning that is possible under the current organizational structure. One objective of any reorganization plan should be to make such efforts routine rather than exceptional.

The Transportation Coordination Council proposed by the House would include representatives of all of the agencies and provide an ongoing structure for developing a comprehensive statewide transportation plan. The Council would serve a different purpose than the current MPO planning process, which focuses on ranking regional projects and allocating available federal and state transportation funds. The role of the Council would be to evaluate the Commonwealth's transportation needs and recommend ways of financing the top priorities.

While the Office of Transportation Planning, the Commonwealth Development Coordinating Council and the Transportation Coordination Council could all be improved with fine-tuning, none of these mechanisms goes far enough in resolving the schisms in transportation planning and finance.

An alternative would be to expand the responsibilities of the Office of Transportation Planning (OTP) created under EOTC beyond highway projects to include responsibility for intermodal transportation planning. OTP could exercise oversight of the planning and development operations of MHD and each of the authorities, or those planning functions could be partially merged, with OTP providing planning services to each authority. In any case, the capital plans of each of the authorities could be required by statute to conform to a comprehensive statewide plan that would be developed by OTP with input from the authorities, other state agencies, metropolitan planning organizations, regional planning agencies and the public.

## Capitalizing on Authorities

In restructuring the transportation agencies, the challenge is to get the most leverage from each department and authority without sacrificing the benefits the current structure provides. The central issue facing the state’s leadership is to strike the right balance between the greater coordination and economies of scale that come with consolidation on the one hand, and the focused operational and revenue-generating capacities provided by the independent authorities on the other.

When evaluating proposals to reorganize transportation functions, policy makers should consider why the state’s authorities were created in the first place. One reason is the authorities’ ability to raise revenues for long-term, large-scale transportation projects, and to be removed from the ups and downs of the annual state budget process. The creation of independent authorities empowered to cover their costs through user fees has long been a central part of the state’s organizational strategy.

The other basic rationale for authorities is to have the expertise necessary for building and maintaining sophisticated transportation assets concentrated in a single entity. Successfully constructing and operating public transit systems, seaports, airports, and major tunnels and bridges requires skilled personnel, specialized equipment and other resources, as well as organizational units singularly focused on their particular missions.

**Authorities as Financing Tools:** The ability to raise substantial amounts of revenue for transportation purposes is one of the primary reasons why the authorities were created in the first place. MassPike and MassPort receive almost no assistance from the state’s general revenues. They are expected to operate like private-sector businesses, selling their services at market rates to users, and covering all of their costs, including investments in capital assets. User fee revenues allowed the state to

build transportation infrastructure that would have been difficult or impossible to build with tax dollars alone, such as the Turnpike, the new Central Artery, and the modernization of Logan Airport and the Port of Boston. The state’s three major transportation authorities together generate more than \$1 billion in user fee revenues annually (see Table 2).

**Table 2**  
**Authority Revenues**  
**FY 2004**  
\$ millions

<b>MassPort</b>	
Airport Revenues	\$311
Port Revenues	43
Tolls	24
<hr/>	
Subtotal	\$378
<b>MBTA</b>	
Fares	\$304
Other	60
<hr/>	
Subtotal	\$364
<b>MassPike</b>	
Tolls	\$252
Other	70
<hr/>	
Subtotal	\$322
<b>Total</b>	<b>\$1,064</b>

The MBTA, which receives a sizable taxpayer-funded subsidy in order to keep public transportation affordable, covers about a third of its costs through fares, parking fees, advertising and concessions. Forward funding, which put a limit on the amount of state support, was designed to push the T to be more entrepreneurial by taking steps to increase ridership and pursue more aggressively opportunities for non-fare revenues. One objective of forward funding was to take advantage of the demand for public transit to generate additional revenues to operate the system and improve the quality of services.

Authorities are also intended to insulate the decisions necessary to raise revenues from the political process. Political differences can cause uncertainty in paying for long-term, expensive transportation projects. Authority boards are charged with the responsibility – and granted the independence – to take the actions necessary to develop and operate their transportation infrastructure for the longer term.

Designing and building major transportation facilities takes years, or even decades, requiring a much longer-term perspective than a one-year budget or two- or four-year election cycle. The need to maintain the condition of transportation assets in order to retain users and generate the user fees that pay for the system also favors the longer planning horizons and more focused missions of authorities.

**Authorities as Operational Specialists:** The creation of independent authorities with specialized organizational capacities is a common model for building and running the most expensive and complex transportation assets. Most of the nation’s public transit systems and seaports are operated by authorities, as are many airports, tunnels, bridges and toll roads:

- Bridges, tunnels, railroads, subways and buses in the New York City area are operated by the Metropolitan Transportation Authority, while the New York Thruway Authority operates toll roads in other parts of the state.
- The New Jersey Turnpike and the Garden State Parkway are operated by the New Jersey Turnpike Authority.
- The Maryland Transportation Authority finances and operates highways, bridges and tunnels, and helps to finance and construct projects for other agencies, such as the Port of Baltimore and the Baltimore/Washington International Airport.

- Toll roads and bridges in California are operated by independent authorities, including the Bay Area Toll Authority, Golden Gate Bridge Highway and Transportation District, San Joaquin Hills Transportation Corridor Agency, and the Foothill/Eastern Transportation Corridor Agency.

In the Commonwealth, the Massachusetts Port Authority was created in 1956 to expand and maintain Logan International Airport and the Port of Boston, build the Callahan Tunnel, and take over operations of the Tobin Bridge from the Mystic River Bridge Authority. The Massachusetts Bay Transportation Authority was formed in 1964 by combining the old Metropolitan Transit Authority with private commuter rail and suburban bus lines to develop an integrated public transit system in the greater Boston area. Fifteen regional transit authorities have been created to provide public transportation in other parts of the state. The Massachusetts Aeronautics Commission was established in 1946 to oversee and promote the development of municipally and privately owned general aviation airports.

The Massachusetts Turnpike Authority was created in 1952 to build and operate the Massachusetts Turnpike between the New York border and Rt. 128, and its mission has since been expanded to construct and operate a high-end highway system in metropolitan Boston. In 1958 the Legislature transferred responsibility for building the Callahan Tunnel from MassPort. The Authority also took over operating the Sumner Tunnel from the city of Boston. MassPike’s portfolio grew further in 1965 with the completion of the Boston Extension of the Turnpike from Rt. 128 to I-93 in downtown Boston. Capitalizing on its experience with urban highways and tunnels, MassPike was given the central role in building and operating the Central Artery/Tunnel project, the state’s most sophisticated and costly highway network, by the Metropolitan Highway System legislation in 1997.

## Financing Investments in Transportation

The proposal to merge MassPike and MHD raises serious concerns that the Commonwealth will reduce its use of tolls as a key funding source for the MHS, the Turnpike and other parts of the transportation system. Any reorganization of the state’s transportation agencies should preserve and enhance the ability of the agencies to generate the revenues needed to fund investments in transportation.

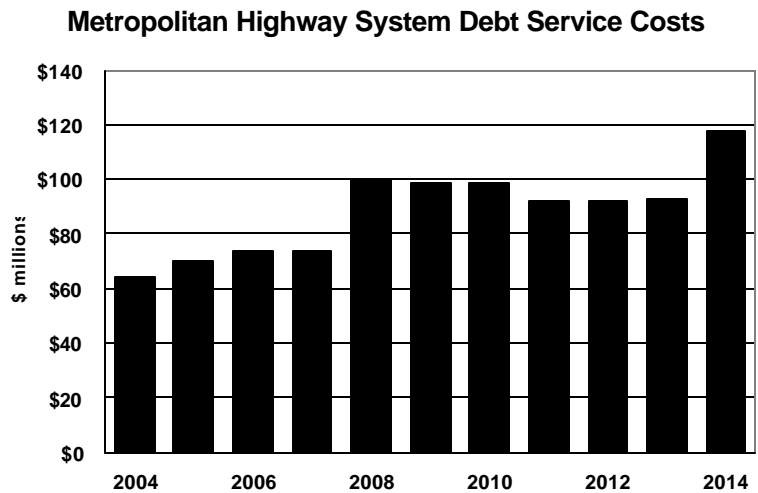
User fees charged by the authorities – Turnpike, tunnel and Tobin Bridge tolls, MBTA and regional transit authority fares, and MassPort landing fees and concessions – are critical sources for building, operating and maintaining much of the state’s transportation network. Facing a long list of unfunded transportation priorities, the Commonwealth needs to develop and implement a strategy for financing the most important projects, and the organizational structure of the transportation agencies should be designed with that strategy in mind.

**Toll Revenues Critical:** Given the importance of the revenue-generating function of the authorities in general, and MassPike in particular, any reorganization needs to preserve the independence necessary to collect tolls – and increase them when necessary – as a financing source for transportation purposes. MassPike and MassPort generate nearly \$300 million in tolls annually that the Commonwealth cannot afford to lose. Without tolls, the state would have to find other sources to cover the costs of operating and maintaining the Turnpike, harbor tunnels and Tobin bridge, as well as a significant portion of the costs of building the Central Artery.

MassPike currently plans to increase MHS tolls by about 20 percent in 2008 and again in 2014 to support the Authority’s Artery bonds

and the operating and maintenance costs of the MHS (no increases are planned for the Western Turnpike). MassPike’s MHS debt service costs will jump in 2008 by \$26 million per year to \$123 million and in 2014 to \$143 million (see Figure 2). In addition, maintaining the Central Artery, which does not generate any toll revenues, adds about \$30 million in annual costs that will increase with inflation. Unless the Commonwealth assumes responsibility for these costs – the current so-called operating assistance is actually used to help cover debt service – tolls are the only feasible funding source.

Figure 2



The operating savings produced by the merger, if they were achieved, would not result in any immediate relief for tollpayers. The Governor’s proposal preserves existing tolls and, while hoping that savings in MHS operating costs will mitigate the size of future toll hikes, recognizes that increases will be necessary. Under the proposal, the Turnpike Authority board would retain the power to set toll rates and would be precluded by statutory language from taking any action that would be financially harmful to the Commonwealth.

However, the plan also makes tolls a revenue source in the state budget. About \$160

million of toll and other MassPike revenues would be transferred in 2005 to a new Turnpike Efficiency Fund, a holding account on the Commonwealth's books, to reimburse MHD and other state agencies for operating and maintaining the Turnpike and the MHS. Another \$113 million would be transferred to the state's General Fund to reimburse the Commonwealth for paying the Authority's debt service.

Even with the statutory safeguards included in the proposal, turning tolls into a funding source for state expenditures raises the concern that public acceptance of tolls will be eroded. Like any group of users paying for a service, the willingness of drivers to pay tolls depends on knowing that their dollars are used to build, operate and maintain the highway system. Transferring tolls to the Commonwealth's coffers would weaken that connection, and demonstrating the need for tolls would be more difficult if they are just a minor revenue source in a \$25 billion state budget.

Even with an independent appointed board, MassPike has been pressured to back away from required toll increases. The ability to resist such pressure is likely to be much less if the board were to lose all of its remaining autonomy.

For example, in 1997 the state administration pushed for smaller toll increases to finance MassPike contributions to the Artery project than had been recommended in the 1996 feasibility study. Without the larger toll increase, MassPike's revenues were inadequate to cover its debt service costs, necessitating a \$25 million annual subsidy from state taxpayers to the Authority. The Governor's merger proposal would continue the subsidy.

More recently, resistance by legislators to the 2002 toll increase – also a requirement of the Artery finance plan – led the MassPike board to delay implementation of the scheduled increase, resulting in a downgrade of the Authority's credit rating. MassPike later

exempted Fast Lane users from half of the increase, costing the Authority \$12 to \$14 million per year in lost revenues. The toll discount program has produced operating losses that the administration cites as a primary reason for the merger. In other words, if the discounts had not been created, the Authority would operate in the black.

Most recently, legislation filed in the Senate would use MassPike reserves to pay off Western Turnpike debts and take down tolls west of Rt. 128. With no toll revenues, an estimated \$52 million in operating and maintenance costs currently paid by users of the road would have to be absorbed in the state budget, requiring an equivalent amount of cuts in other state spending (see Table 3).

**Table 3**  
**Western Turnpike**  
**Operating Costs**  
**FY 2004**  
\$ millions

Operations & Maintenance	\$15
State Police	10
<u>Capital Reconstruction</u>	<u>27</u>
Total	\$52

The authors of the 1996 MHS feasibility study were also concerned with the potential for unsound political decision making without regard for the financial consequences. The study looked at other states for potential organizational models, including Oklahoma where the Oklahoma Turnpike Authority (OTA) and the Oklahoma Department of Transportation are governed by the same state transportation commission. The feasibility study concluded:

OTA's separate financing structure and cross-departmental system governance could serve as a model for the MHS in some respects, but it actually falls short in its failure to insulate the Authority from short-term changes in the state's



political equation. This characteristic is an important factor in securing investor confidence in future financial offerings.

The point is not to suggest that decisions on tolls can – or should be – totally immune from political influence. Elected officials will always – and should always – play a part in financial policy making. The concern is that with the executive branch in full control of the Turnpike board and tolls flowing into the state budget, the Authority would lose all of its independence and tolls would be subject to even greater short-term political pressures. Any restructuring of revenue-generating authorities needs to strike a balance between accountability to the voters and the autonomy needed to act in what is ultimately the best interest of the Commonwealth and its residents.

#### ***State Needs Transportation Finance***

**Strategy:** Whichever organizational model is adopted, the Commonwealth needs to develop a strategy for financing investments in transportation, including tools for leveraging the revenue-raising capacities of the state and each authority. The strategy should safeguard existing tolls and other transportation revenue sources, as well as address the equity issues surrounding the current use of tolls.

Tolls are widely used around the world to finance transportation investments, and the Commonwealth can ill afford to disregard the potential uses of toll revenues in Massachusetts. Tolls are used not only for the costs of toll roads, but also for other projects that benefit tollpayers by reducing traffic congestion. Tolls on bridges in the San Francisco Bay area, for example, were recently increased to help pay for public transit projects in the region. New York's Metropolitan Transportation Authority uses toll revenues from its Triborough Bridge and Tunnel Authority to support MTA's subway, commuter rail and bus operations, reducing the need for taxpayer subsidies. New Jersey puts toll revenues generated by the New Jersey Turnpike and the Garden State Parkway

into a statewide fund, together with the state's federal highway aid. This allows tolls to be used in support of projects around the state, and federal highway funds to be used to help maintain the two toll roads.

Restructuring the transportation agencies should be an opportunity to address the toll equity issue – the fact that east-west Turnpike drivers are helping to pay for the Central Artery, but not north-south drivers. A joint commission of the Legislature and administration formed to consider the equity issue acknowledged the reality of the problem but failed to propose any concrete solutions. While the Turnpike Authority will need to cover rising debt service and operating costs with additional toll revenues, the state and MassPike will be challenged in their plan to continue to increase tolls only on the east-west drivers who are already bearing a disproportionate burden. The Commonwealth's financial strategy needs to spread the burden of Artery payments and other transportation investments more equitably through alternative pricing strategies based on tolls or other user charges.

***Transportation Finance Commission to Develop Strategy:*** A transportation finance commission would be one approach to developing a financing strategy. The commission, which could include experts in transportation planning and finance and representatives of the business community and environmental groups, would be charged with evaluating the state's transportation investment needs and recommending a strategy for financing the top priorities. The commission recommendations could include:

- the allocation of state bond funds and federal highway and transit aid to the most urgent projects of statewide importance (the MPOs would still be responsible for allocating funds for local and regional projects);
- funding packages for major projects that include authority-generated revenues;

- alternative financing mechanisms such as tax increment financing and public-private partnerships;
- new revenue sources such as tolls, user fees and gas taxes; and
- alternative pricing strategies, such as congestion-based tolls or distance-based transit fares.

The commission's broad and bipartisan membership would help build political support for its recommendations, including the difficult decisions required to raise revenues for transportation. The creation of such a commission was enacted by the Legislature in 2000 but vetoed by then Governor Cellucci.

Another mechanism for financing statewide transportation priorities would be a transportation infrastructure fund that pools capital resources from the Commonwealth and each authority to the extent allowed by legal restrictions. Such a fund would help apply the model used to finance the Central Artery – which required cash or in-kind contributions from the Commonwealth and each of the major authorities – to other high-priority projects that are beyond the means of any one agency.

***Turnpike Reserves Should Be Used for Transportation:*** The debate over the use of tolls for financing transportation priorities should extend to the use of MassPike reserves, which are ultimately derived from tolls. The Governor's proposal to provide Commonwealth backing for MassPike's bonds would eliminate the need for the Authority's debt reserves, freeing up \$190 million, which the administration proposes to use to help balance the state's 2005 budget.

The proposed transfer raises both policy and financial questions. If the debt reserve were used to offset operating costs, the state would be using non-recurring revenues to cover recurring costs. Using MassPike reserves as a one-time revenue source for the Commonwealth budget would prolong the state's structural deficit, requiring additional

spending cuts or revenue increases in fiscal 2006.

One-time revenue sources are best spent on one-time projects. At the same time, user fees should provide benefits to the users who pay the fee. The reserves were generated by bond sales that are backed by toll revenues. If the reserves are to be used for any other purposes, addressing a portion of the state's enormous backlog of transportation capital needs would be a more appropriate use of the tolls paid by users of the highway system.

Another concern is the use of bond debt to pay for one year's operating costs. Since the reserves were created with bond proceeds, the Commonwealth would, in effect, be using borrowed monies as a funding source for its budget. As a result, the state would incur financing costs. The reserves currently generate about \$10 million in investment earnings that cover the debt service costs on the bonds that funded the reserves, i.e., the reserves are now self-financing. Draining the reserves would eliminate the earnings, which MassPike estimates will total \$465 million over the next 35 years.

The administration has factored into its proposal the higher debt service on the MassPike bonds, which represents the cost of using the reserves for the state budget. These debt service costs would have to be covered by toll revenues, so the higher costs would translate into a requirement for larger toll increases over the long term.

Moreover, there may be more cost-effective means than the Turnpike's relatively high-interest debt. The state could borrow for less in the current low-interest market.

***Risk of Taking on Turnpike Debt:*** Under the Governor's proposal, MassPike's bonds would not be refinanced as Commonwealth debt but would remain nominally debts of the Turnpike Authority. The contract assistance provided to the Authority to pay its debt service would be a general obligation of the Commonwealth, meaning that the

Commonwealth would ultimately be responsible for paying off the bonds and would have to use its taxing authority to cover the costs if tolls and other Turnpike revenues were insufficient.

Under the Governor's proposal, the costs of the Turnpike's debt service would be entirely covered by tolls and other Turnpike revenues transferred to the state, and there would be little risk to the Commonwealth or its credit rating, at least in the short term. At the same time, however, assuming responsibility for MassPike's \$2.5 billion in outstanding bonds – mostly issued to finance Artery construction costs – would represent a large increase in the

amount of debt for which the Commonwealth is responsible. The state currently has approximately \$16.8 billion in outstanding debts, including contract assistance liabilities with general obligation backing.

In the longer term, however, the need for toll increases in 2008, 2014 and 2020 to cover rising debt service and operating costs does present a significant risk, as discussed above. The proposal attempts to address this concern with statutory language that precludes the Turnpike Authority board from taking any action that would be financially harmful to the Commonwealth, but statutes can easily be amended as circumstances change.

## Managing Costly Transportation Assets

Any reorganization plan needs to preserve and enhance the ability of the Commonwealth's agencies to construct and manage its transportation assets, including the Central Artery, the Metropolitan Highway System, and the statewide road and bridge network. The proposed merger would transfer responsibility for completing the Central Artery – by far the largest item currently on the agenda of any of the state's transportation agencies – from MassPike to MHD just as the giant project enters its final phases. Changing project owners this late in the process would run the risk of disruptions that could lead to delays and higher costs.

The merger proposal also raises legitimate questions about the Highway Department's ability to operate and maintain the Metropolitan Highway System after the project is complete. Managing the Central Artery, harbor tunnels and Boston Extension is far more complex – and costly – than other state roads, and the Commonwealth needs an organization with a strong focus on the MHS to protect the integrity of the taxpayers' \$15 billion investment. Concerns about MHD's ability to maintain adequate attention to – and funding for – its proposed new responsibilities

are heightened by the challenges the department faces in repairing and rebuilding the state's other roads and bridges.

Conversely, taking on the responsibility of the MHS could divert MHD's resources from its current mission of constructing, operating and maintaining the bulk of the Commonwealth's highway network. With a long backlog of roads and bridges in need of repair, the state can ill afford to shift attention from adequately maintaining the broader statewide highway system.

Completing, operating and maintaining the MHS is a very different kind of responsibility than running the state's other roads and bridges. A series of consultant reports and decisions by previous administrations and legislatures suggest that MassPike is likely to be best equipped to manage the MHS. While it is not inconceivable that one agency could handle both, the risks are large and it is important to ensure that the respective missions will not be compromised.

The proposal assumes that the MHS would be operated and maintained by the same MassPike staff that now perform these functions transferred to MHD management.

However, MHD has had difficulties in hiring sufficient numbers of qualified staff, and no plan has been developed that shows how the transition would work. Given the high stakes and the complexity of the tasks, any transportation merger proposal should include a detailed implementation plan that demonstrates how the new department could succeed – at managing the completion of Artery construction, at operating and maintaining the MHS, and at meeting the need for capital investments throughout the state road and bridge system.

**MassPike as Manager of the MHS:** The decision to give the Turnpike Authority responsibility for operating and maintaining the MHS was the product of extensive analysis and debate. MassPike’s role in the Artery dates to the 1990 Lazard Freres report, which was commissioned by EOTC at the direction of the Legislature to evaluate the state’s options for financing the project. The Lazard report proposed the creation of a “Metropolitan Highway System” (MHS) consisting of the Boston Extension, the Central Artery, the harbor tunnels, including the third tunnel to be built as part of the project, and the Central Artery North Area (CANA), the interchange between I-93 and Rt. 1 at the north end of the Zakim Bridge. The report concluded that the MHS would achieve operational efficiencies by unifying traffic management operations and finances under a single entity.

The Lazard report also considered whether one of the existing transportation agencies – MHD, MBTA, MassPort or MassPike – or a new entity would be best suited to operate and maintain the MHS. The alternatives were evaluated on four criteria: institutional compatibility, technical qualifications, financial capability and investor acceptance. The report concluded that MassPike was the agency best suited to operate the MHS based on its experience in operating tunnel systems, compatibility with its original mission, and the Pike’s stable and independent revenue sources. The Lazard report also cited

concerns with MHD’s ability to recruit and hire needed staff and to obtain the funds necessary to operate and maintain the MHS.

Governor Weld filed legislation in 1995 to create the MHS under the aegis of MassPike. The Legislature did not enact the MHS at that time, but did partially implement the concept by transferring responsibility for the operation of the Ted Williams Tunnel to the Authority. The tunnel legislation also required a new assessment of the financial feasibility of the Artery and the MHS. The result of that assessment, the “Joint Feasibility Study Regarding the Metropolitan Highway System,” released in 1996, extended the argument for the creation of the MHS under the management of the Turnpike Authority. The report concluded:

From a transportation operations perspective, consolidation of the completed Project and the existing network of highways, highway bridges and tunnels within the metropolitan Boston area into a single entity is a sound idea . . . A single owner-operator would be better able to realize the full benefit of technological advances in traffic management and incident response. The combination of its operational experience in managing roads and tunnels and financial capacity and access to the capital markets makes the [Turnpike] Authority the most appropriate entity to manage the MHS. A single consolidated system of highways and harbor crossings under the ownership and management of the Authority offers accountability and lower maintenance, and would eliminate the need for duplicate management, operations and equipment . . . MHS should be a structure for operating, maintaining and financing a unified system of roadways, tunnels and harbor crossings in metropolitan Boston, that would utilize the existing managerial, technical and financial staff of the Authority.

The Legislature accepted the recommendations of the administration's feasibility study and enacted the MHS legislation in 1997. The legislation divided the Turnpike at Rt. 128 into two financially independent cost centers. The Boston Extension, together with the Artery, the tunnels and CANA, comprised the MHS to be owned and operated by MassPike. The Authority assumed management of the Artery project, with ownership to be transferred from MHD when construction was complete. The MHS bill also committed MassPike to pay a sizable portion of the project's construction costs.

**Completing the Central Artery:** The proposal to reverse course and shift oversight of Central Artery construction from MassPike to MHD would carry a high risk of operational disruptions that, in turn, could lead to further project delays and higher costs. Close to \$1 billion in Artery construction still remains to be completed, an amount far greater than the cost of any single project for which MHD has had responsibility.

Overseeing the Artery's final construction and demolition contracts and the transition from construction to operations and maintenance, as well as audits and cost recovery efforts, all require extensive project management, technical oversight and inspection capabilities of the kind that would take substantial time to develop in MHD. As noted previously, the proposal does not address how MHD would transfer MassPike employees to state employment or acquire these capabilities on its own.

The Turnpike Authority has been fully engaged in these roles since it took over responsibility for managing the project in 1997. MassPike is responsible for ensuring that contractors meet the thorough and rigorous completion requirements spelled out in the protocols for transferring the completed elements of the project to the Authority. Outstanding claims and liabilities, as well as cost recovery efforts, are being resolved by

MassPike's general counsel and an independent review team.

**Operating and Maintaining the MHS:** The merger proposal also raises the question of whether MHD could successfully operate and maintain the MHS after the Artery project is complete. Retaining Turnpike personnel to perform the functions, as the proposal assumes, would be complicated by the department's difficulties in hiring qualified staff and by budget cutbacks. The Highway Department would be hard-pressed to devote adequate attention to the MHS in the face of inevitable pressures to spread its limited resources across the state to address the department's backlog of deferred maintenance.

Operating and maintaining the MHS is far more complex – and costly – than other state roads. With much of the road network underground or on elevated structures, the MHS is the Commonwealth's most sophisticated highway system. A computerized operations control center monitors traffic flow, accident and fire detection and response, security, air quality, ventilation, and pumping and lighting systems around the clock. Regular maintenance is required for seven ventilation buildings, hundreds of fans, pumps, message signs and lane control signals, and thousands of data collection devices, including traffic detectors, video cameras and vehicle height detectors, in addition to the tunnel and bridge structures themselves. Responsibility for these functions is transferred from construction contractors to MassPike personnel as construction of each component is completed under the Authority's staffing plan. Additionally, post-9/11 security concerns and emergency response needs demand heavy state police and fire coverage. MassPike estimates that annual MHS operations and maintenance will cost \$29.7 million for the Artery and \$9.2 million for the Boston Extension in 2006.

MHD would clearly face major challenges in taking over MHS operations and maintenance

from MassPike, especially the need to recruit and retain sufficiently qualified staff. The Lazard report expressed concerns about MHD's "capacity to recruit and hire the needed level of staff" and the "ongoing ability to obtain the funds necessary to operate and maintain the system." More recently, Federal Highway Administration (FHWA) officials questioned whether MHD had sufficient numbers of qualified engineers working on federally supported projects. While MHD was able to address FHWA's concerns, lower pay scales and the constraints of the civil service system – MassPike is not subject to civil service – will create additional hurdles for MHD to overcome in replicating MassPike's capabilities after a merger.

Adequate funding for MHD personnel is clearly an issue. The department currently charges the costs of about 1,400 – over 80 percent – of its staff to bond funds in the capital budget. The proportion has increased in recent years as MHD's operating budget has been cut back. While capitalizing the costs of personnel who are working directly on bond-funded capital projects is a reasonable financial practice, charging general administrative and operational costs to bond funds is not. The administration estimates that only about half of the MHD personnel charged to the capital budget are directly tied to projects, and has proposed in the transportation bond bill to begin moving staff costs back to the operating budget, but not until fiscal 2007.

Continuing fiscal pressure on MHD would certainly create an incentive to charge Artery operating and maintenance costs to bond funds if those costs were part of MHD's budget. If this happened, future taxpayers would end up paying interest on the cost of services provided in years past, and fewer capital dollars would be available for other important transportation projects.

***Operating and Maintaining the Statewide Road and Bridge System:*** Conversely, if the Highway Department could successfully

absorb MassPike's functions, policy makers would still need to ensure that doing so would not impair MHD's ability to accomplish its current mission: constructing, operating and maintaining the bulk of the Commonwealth's highway network. Of particular concern is the question of whether taking on the responsibility for managing the most complex network of roads, tunnels and bridges in the state and a large toll collection operation would reduce the ability of EOTC and MHD to undertake major improvements and repairs of roads and bridges in other areas of the state.

The Commonwealth's long history of delayed maintenance of its transportation infrastructure raises legitimate concerns about MHD's ability to handle both its current mission and the new challenges of the MHS. In presenting the case for its proposal, the administration cites pavement smoothness statistics as an indicator that MHD's interstate highways are better maintained than the Turnpike. Others counter that 12 percent of MHD's bridges are structurally deficient (in poor condition or unable to carry the weight for which they were originally designed), and that 61 percent of Massachusetts roads are in poor or mediocre condition, the highest proportion among the New England states (see Figure 3).

The point is not to determine whether MHD or MassPike currently does a better job of maintaining its roads, but to ensure that the resources necessary for both operating and maintaining the MHS and improving and repairing other state roads and bridges are available and dedicated to those purposes under whatever organizational structure is adopted. The capacity to manage sophisticated transportation assets should be preserved and not diluted to the point where the quality of operations and maintenance suffers.

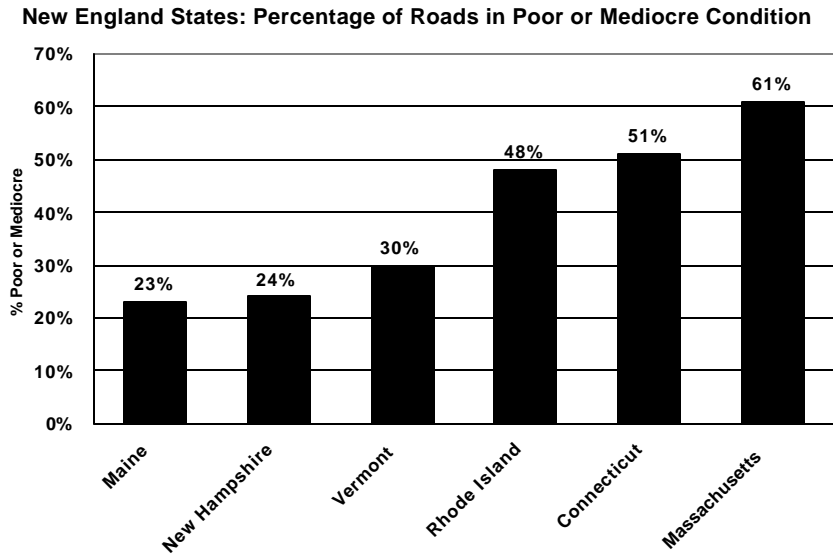
***Need for Implementation Plan:*** While the Turnpike Authority is not the only organization that could provide the levels of operations and maintenance the MHS demands, policy makers need to ensure that

the capabilities currently resident in the Authority are retained if the Authority is merged into the larger Highway Department. The presentation of the administration’s proposal states that the merger would not result in any cuts to Turnpike maintenance and operations and that these tasks would be performed by the same staff and contractors, which will presumably require MHD to employ current MassPike personnel. However, MHD’s staffing and financial challenges, compounded by the complexity of the tasks involved, make it unclear how – or if – the transition would work.

Both the Lazard report and the 1996 feasibility study raised significant questions about the MHD’s ability to maintain and operate the MHS, questions that remain largely unanswered. Given the high stakes – the future of the Commonwealth’s transportation infrastructure and the successful completion and operation of the largest, most complex public works project in its history – these concerns must be laid to rest before acting on any proposal to expand MHD’s responsibilities so dramatically.

Answering those questions will require a detailed implementation plan – which should

**Figure 3**



Source: American Society of Civil Engineers, 2003

accompany any reorganization proposal to merge MassPike and MHD. Such a plan would spell out the budget, funding sources, structure, staffing, capabilities and performance standards for the new organization, as well as the steps required to implement the merger and a schedule for the transition. The plan should also address critical issues, such as the capacity of MHD and other state agencies to absorb MassPike’s administrative functions without additional spending (see the section below), and the feasibility of transferring MassPike operations and maintenance personnel to state employment. To date, no such a plan has been developed.

## Balancing Savings and Quality

Anticipated savings are a major argument for the administration's merger proposal.

Achieving savings through restructuring that minimizes overlap and duplication is of course an appropriate goal, especially during a time of tight state budgets with a long list of unfunded transportation improvements. However, saving dollars is only part of the reason for reform. The needs for comprehensive, integrated transportation planning, for additional revenues to finance transportation investments, for better construction procurement and project management methods, and for enhanced organizational capacities to operate and maintain crucial transportation assets are all critical reasons to pursue reforms.

It is clear that MassPike and MHD have some administrative functions in common and that economies of scale could be expected if the agencies were merged. However, under closer examination, some of the projected savings from a MassPike/MHD merger would be difficult or impossible to realize, would clearly result in reduced services, or would only shift costs currently borne by MassPike to other state agencies. At the same time, other of the proposed savings could be achieved without a merger, particularly through more efficient toll collection or transferring responsibility for maintaining Turnpike feeder highways from the Commonwealth to MassPike.

The importance of savings from restructuring needs to be balanced against the requirement for high quality planning, construction and operation of the transportation system. Even if substantial savings could be achieved from the merger, their value would be diminished if they resulted in lower quality operations and maintenance of the MHS and an even longer backlog of improvements and repairs to other state roads and bridges.

**Merger Savings:** The administration estimates that the merger proposal would

generate at least \$20 million in annual savings, primarily from eliminating administrative functions that can be absorbed by MHD and other state departments. The savings would be reflected in MassPike's spending, not the Commonwealth's. In other words, MassPike reimbursements to the Commonwealth for operating its facilities would be \$20 million less than what the Turnpike currently spends. MHD spending would increase by approximately \$160 million per year, but these costs would be offset by Turnpike tolls and other revenues transferred to the Commonwealth, so there would be no net impact on the state budget.

Whatever operating savings are produced by the merger would be offset by the loss of approximately \$10 million in annual earnings on the Authority's debt service reserve, which would be used for balancing the state budget, as previously discussed. The remainder of the savings, if they were realized, would help balance the Turnpike Authority's operating budget by offsetting the revenue losses created by the toll discount program (also discussed above).

Achieving the savings would entail the elimination of 216 full time equivalent positions from MassPike's current payroll of 1,400. The proposed reductions include:

- \$3.6 million from eliminating 51 toll collector and auditor positions;
- \$3.4 million from eliminating 36 administrative positions, including 15 custodial positions and six planning and development staff;
- \$2.9 million from replacing MassPike's insurance policies with self-insurance by the Commonwealth;
- \$2.1 million from eliminating 24 human resources positions;
- \$1.6 million from eliminating 21 finance positions;



- \$1.6 million from eliminating 17 maintenance positions;
- \$1.3 million from replacing exact change lanes with electronic toll collection; and
- \$1.2 million from eliminating 34 marketing positions.

While some of these savings may be realized from the proposed merger, it is our belief that a number of the measures would be extremely difficult to implement:

- Exact-change lanes have already been replaced by electronic toll collection (ETC). Most of MassPike's toll collection equipment budget pays for the ETC service provider fees that will increase as ETC utilization increases.
- About \$1 million of the administrative savings are funds for salary increases under collective bargaining agreements.
- The custodians included in the administrative line items clean toll booths and maintenance facilities that would remain in operation.
- About \$500,000 of the maintenance savings results from closing buildings which will be needed for operating and maintaining the Artery.
- The administrative savings include the salaries of the current Turnpike board members, which the proposal would retain.

Other savings measures would clearly result in reduced services. For example, 14 of the 34 "marketing" positions are staffing for emergency service patrols and 13 are for visitor information centers. Eliminating the positions would mean eliminating the patrols and closing the centers. While it is legitimate to consider whether the state should be providing these services or whether they are affordable, doing away with them would be more than an administrative or marketing cut.

Some of the projected savings would be offset by increased spending or reduced revenues elsewhere. For example, shifting to self-insurance would transfer the costs of repairing damage to Turnpike facilities from MassPike's insurance policies to the Commonwealth's already overburdened capital budget. Eliminating MassPike's rent payments for office space in the state transportation building would be offset by reduced income for the fund used to maintain the building.

Many of the savings proposals would shift costs currently borne by MassPike to other state agencies. Regardless of which agency is responsible, someone will have to pay for dispatching state police, managing the ETC system, and accounting for the large volume of cash generated by tolls. With funding for nearly all Turnpike administrative functions eliminated, MHD, Administration and Finance, Human Resources and other Commonwealth departments would have to absorb all of the costs within their existing budgets and staffing levels. There is presently no implementation plan for the merger that spells out how the state agencies would accomplish this.

***Operating Savings Can Be Achieved:***

Clearly some savings can be achieved in Turnpike operations even without the merger. MassPike has already reduced its staffing of Turnpike and tunnel operations (excluding the Central Artery) by 17 percent since 1996.

Toll collection is one area with potential for greater efficiency. Approximately 40 percent of the Turnpike and tunnel toll lanes have been converted to electronic toll collection, while the number of toll takers has been reduced by about 21 percent. The administration conservatively projects that additional reductions in toll collection costs could save MassPike about \$4 million annually.

The House's proposed 2005 budget requires the Authority to consider the use of value pricing strategies, including differing toll

rates, to lower operating costs and reduce traffic congestion. It should be noted that savings from eliminating toll collector positions would be partially offset by increased fees paid to the ETC service provider as additional lanes are converted. Tourism grants, which MassPike is required to make under its authorizing legislation, could be another area for economizing.

The proposal to have MassPike assume responsibility for operating and maintaining several segments of interstate highways that

connect to the Turnpike in central and western Massachusetts offers the potential for savings that would allow MHD to devote more of its limited resources to maintaining and repairing other roads and bridges under its care. The plan would also have the benefit of using existing Turnpike tolls to operate the feeder roads used heavily by Turnpike drivers. This proposal was included in the 2004 legislative budget but vetoed by the Governor.

## The Road to Reform

Reforming the Commonwealth's transportation agencies is essential if the state is to develop and maintain a first-class transportation system. The requirements for comprehensive, integrated transportation planning, for generating additional revenues to finance transportation investments, and for enhancing the state's organizational capacities to build, operate and maintain its transportation assets are all important reasons to pursue reforms.

The Governor and the Legislature should be commended for recognizing the need for change and initiating the debate with serious proposals. The central issue in the restructuring debate is to strike the right balance between the greater coordination and economies of scale that come with consolidation on the one hand, and the focused operational and revenue-generating capacities

provided by the independent authorities on the other.

Policy makers need to evaluate restructuring proposals within the framework of a broader set of issues: How should the Commonwealth organize itself to develop and operate a high quality and coordinated transportation system that supports economic growth in Massachusetts? What organizational structure would most effectively safeguard the taxpayers' considerable investments in the Artery, public transit and other elements of the transportation system? And how should the relationship between the authorities and the Commonwealth be structured to enhance the ability to finance the state's most critical transportation priorities?