

# Future Highway and Public Transportation Finance

*Phase I: Current Outlook and Short-Term Solutions*



*prepared for*  
National Chamber Foundation®

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# Executive Summary

The *Future Highway and Public Transportation Finance Study* was commissioned by the U.S. Chamber of Commerce through the National Chamber Foundation. The objective of this two-phased study is to identify funding mechanisms to meet national highway and transit investment needs. Phase I focuses on short-term funding for the period 2005 through 2015, starting with the reauthorization of the Transportation Equity Act for the 21st Century (TEA-21). It examines Federal options that would increase Federal Highway Trust Fund (HTF) revenues, and options that could enable and stimulate greater investment by states, local government, and the private sector. Phase II will address long-term funding mechanisms, including alternatives to the current fuel tax-based system.

The key findings and conclusions of the Phase I work are as follows:

**Current revenues at all levels of government—Federal, state, and local—devoted to transportation investments are not sufficient to maintain or improve the nation’s highways and transit systems.**

- To “maintain” the current condition of the nation’s pavements, bridges, and transit infrastructure, an expenditure by all levels of government of \$222 billion (\$125 billion in capital investment and \$97 billion for operations and maintenance) is needed in 2005 and \$295 billion<sup>1</sup> by 2015. Below this level, highway and transit systems deteriorate and congestion grows.
- To “improve” highways and transit systems, an expenditure of \$271 billion is needed in 2005 and \$356 billion<sup>2</sup> by 2015. The additional investment would have a positive benefit/cost ratio and improve the productivity of the U.S. economy.
- Current revenues fall well short of these targets. Revenues from all sources are estimated at \$180 billion for 2005; \$42 billion short of the \$222 billion needed to “maintain” and \$91 billion short of the \$271 billion to “improve.”

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1. Constant dollar estimates of needs were adjusted to current dollar estimates using the Consumer Price Index (CPI) projections from the Congressional Budget Office, January 2005.

2. Ibid.



**Phase I focuses on short-term funding for the period 2005 through 2015, starting with the reauthorization of the Transportation Equity Act for the 21st Century (TEA-21).**



**The average Federal share of expenditures necessary to “improve” the overall system with strategic and economically sound investments is \$83 billion per year.**

- Total national needs for the period from 2005 to 2015 will be \$3.4 trillion to “improve” the system, but total revenue will be only \$2.4 trillion, leaving a cumulative gap of approximately \$1.0 trillion.

**Existing revenue streams into the HTF will fall \$20 billion short annually in meeting the Federal “share” of investments necessary to maintain the highway and transit systems and \$43 billion short annually to improve these systems.**

Over the past 10 years, the Federal share of total annual capital investment by all levels of government in highway improvements—financed almost exclusively through revenues credited to the HTF—has averaged about 42 percent. The Federal share of total public transit investments by all levels of government over this period has averaged about 47 percent.

If these Federal shares are applied to current and future national highway and transit system capital needs, the average annual Federal share of capital expenditures necessary just to “maintain” the current condition and performance of the nation’s highway and transit systems is \$60 billion.<sup>3</sup> The average Federal share of expenditures necessary to “improve” the overall system with strategic and economically sound investments is \$83 billion per year. These are compared to an estimated average annual Federal revenue stream of about \$40 billion available to fund highway and transit capital expenditures through 2015.

Currently, most Federal highway funds are spent to maintain the Interstate system and the other major highways that make up the National Highway System (NHS), which carries 42 percent of automobile traffic and approximately 75 percent of commercial truck traffic. Maintaining, as well as improving, the nation’s surface transportation system is critical to the nation’s economic well being.

The Federal programs are structured on a pay-as-you-go basis through the HTF, using dedicated user fees, primarily Federal motor fuel taxes. Congress has periodically increased the taxes to keep pace with the nation’s growing transportation needs, with the last increase in 1993.

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<sup>3</sup> The Federal share of needed capital expenditure in 2005 is estimated to be \$53 billion of the total \$125 billion national capital investment required to “maintain” the system. These costs grow through 2015 based on Consumer Price Index (CPI) projections.

But Federal motor fuel taxes have lost about one-third of their purchasing power since then because they are not indexed to inflation.

**Analysis of recently available Treasury data<sup>4</sup> shows that the Highway Account of the HTF would be in deficit starting in 2010, and the Mass Transit Account would be in deficit starting about 2013, assuming level funding of Federal programs after 2009.**

Recognizing the importance of investment in transportation, the Administration, in its 2006 budget, has proposed increasing Federal funding for highway and transit capital improvements to a cumulative total of about \$284 billion during the 2004-2009 period (\$235 billion for highways and \$49 billion for transit). Congress has proposed similar funding levels. Treasury estimates of HTF revenues, however, show only about \$239 billion in revenues coming into the HTF during the same period.

**Short-term funding mechanisms could help narrow the revenue gap between 2005 and 2015. Indexing the Federal motor fuel taxes would clearly have the most immediate and substantial impact on revenue shortfalls.**

- **Indexing Federal motor fuel taxes starting in 2005**—equivalent to an increase of about one-half cent per gallon each year—would raise an average of \$5.6 billion annually for the HTF and \$62 billion cumulatively through 2015.
- **Indexing Federal motor fuel taxes retroactively to 1993 (the date of the last increase)**—equivalent to an increase of about six cents per gallon in 2005 and an increase of about one-half cent per gallon each year thereafter—would raise an average of \$19 billion annually for the HTF and \$211 billion through 2015.
- **Eliminating current HTF user fee exemptions and recapturing interest earnings on the HTF balances** would add an average of \$2.0 billion annually to the HTF and \$22 billion cumulatively through 2015.

**But Federal motor fuel taxes have lost about one-third of their purchasing power since 1993 because they are not indexed to inflation.**

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<sup>4</sup> The Highway Trust Fund (HTF) account balances through 2009 were obtained from Table TF-15 of the Treasury Bulletin of March 2005. The Highway and Transit Program funding levels in 2004-2006 reflect actual and estimated obligations as presented in the President's 2006 Budget. The funding levels for 2007-2009 were derived by calculating the obligations required to generate outlays (expenditures) and account balances as reflected in the Treasury Bulletin. Funding was assumed constant after 2009.

**Federal authorization of tax-exempt private activity bonds could generate \$450 million annually and \$5 billion cumulatively by 2015.**

- **Increasing use of tolling for new infrastructure**, including Federal authorization of tolling on Interstate highways, could generate approximately \$12 billion cumulatively through 2015.
- **Continuing use of Transportation Infrastructure Finance and Innovation Act (TIFIA) credit instruments and Federal authorization of tax-exempt private activity bonds** could generate \$450 million annually and \$5.0 billion cumulatively by 2015.
- **Issuing “Build America Bonds”** (as proposed by Senators Talent and Wyden) would yield net proceeds of \$30 billion—outside the HTF—for investment between 2005 and 2010.
- **Dedicating five to 10 percent of current U.S. Customs duties** for investment in port and intermodal freight projects would generate \$1.6 to \$3.1 billion annually and \$17 to \$34 billion cumulatively.
- **Granting of investment tax credits** to equity investors in new freight-related capital improvements could attract up to \$6 billion of private capital between 2005 and 2009.

Implementing a full “package” of these short-term mechanisms could meet 70 percent of the total national investment needed to “maintain” highway and transit systems and 28 percent of the total needed to “improve” the systems. It would fulfill the Federal share of capital needs to “maintain” and meet half of the Federal need to “improve.”

The package would keep the HTF solvent while allowing significant growth in the Federal program. The package of actions assumes that Federal motor fuel taxes are indexed retroactively to 1993 and 10 percent of U.S. Customs revenues are dedicated to transportation.

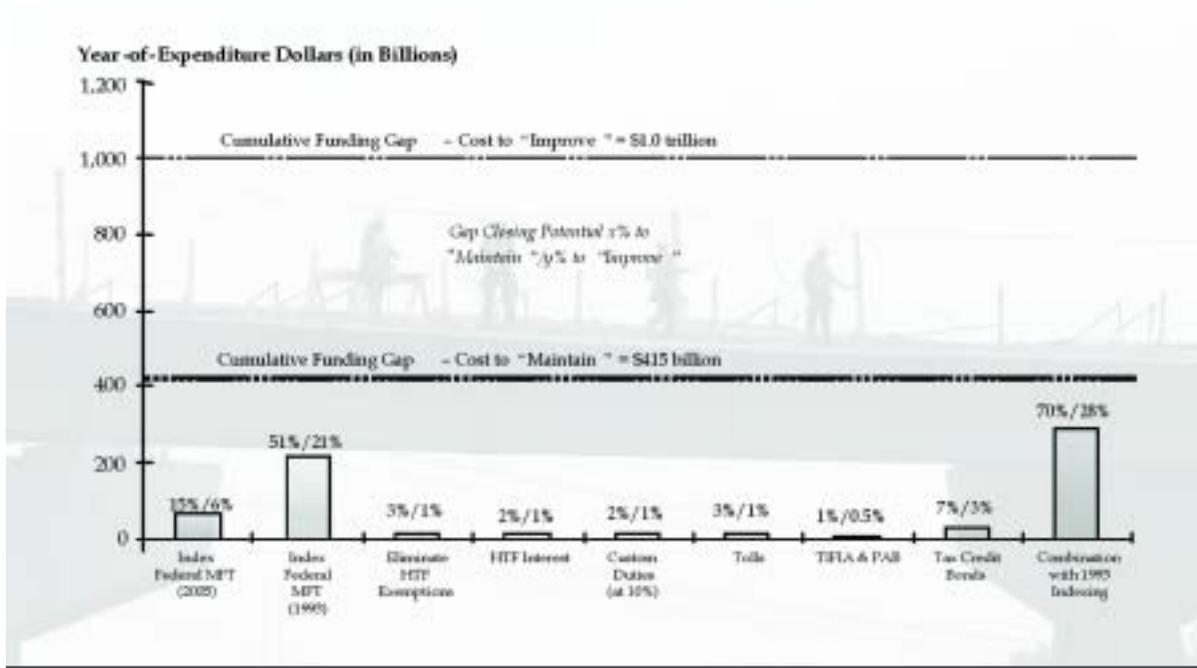
Without action in the short-term, the performance of the nation’s surface transportation system will continue to deteriorate, and transportation users, the economy, and the nation’s global competitiveness will suffer.

**Table 1. Potential of Various Short-Term Options to Close the Federal and Non-Federal Financing Gap**  
(*YOE Dollars*)

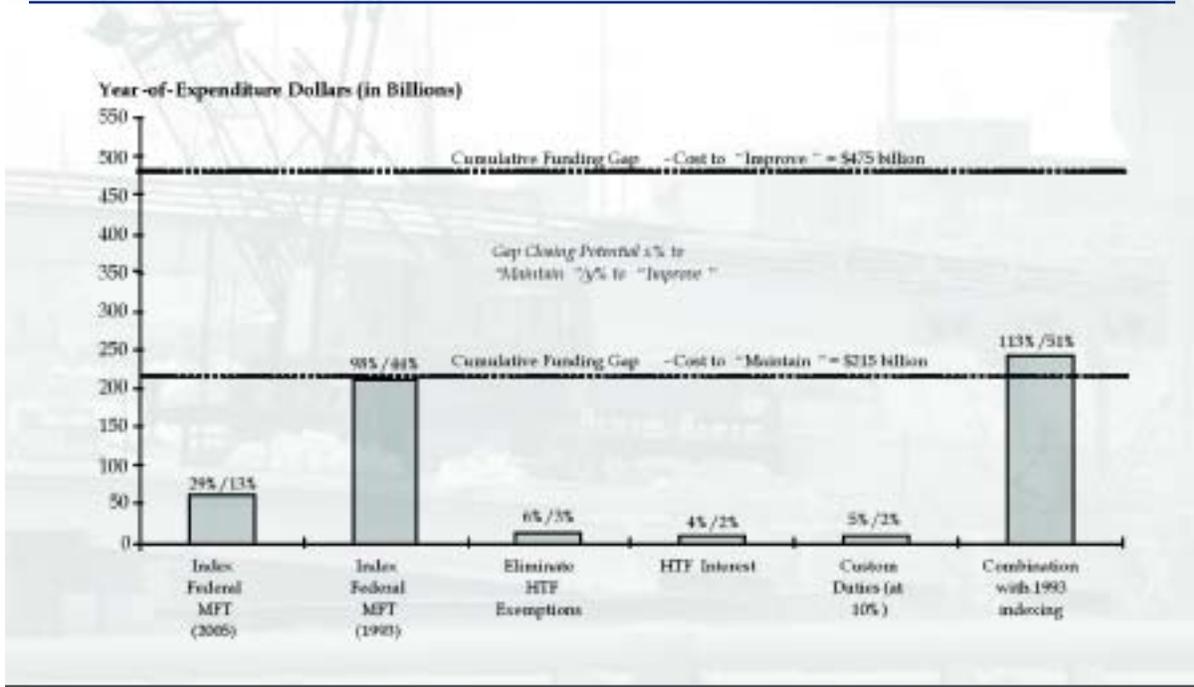
Options to Close Funding Gap	Potential to Close Federal Share of Funding Gap 2005-2015	Potential to Close Non-Federal Share of Funding Gap 2005-2015	Comments
<b>Federal Revenue Options to Increase Highway Trust Fund Revenues</b>			
Index Federal fuel taxes starting in 2005	\$62 billion		Index fuel tax rates to CPI starting in 2005
Index Federal fuel taxes retroactive to 1993	\$211 billion		Would result in 6.2 cent gas tax increase in 2005 with indexing to CPI thereafter
Eliminate HTF exemptions	\$13 billion		As proposed in President's 2006 budget
Recapture interest on HTF balances	\$9 billion		Declining source as HTF balances are reduced
<b>Other Federal Revenue Options</b>			
Utilize 5 to 10 percent of current Customs duties for port and intermodal improvements	\$17 billion at 5 percent* \$34 billion at 10 percent*		These funds would be set aside for port and intermodal purposes and mostly distributed back to Customs districts of attribution
<b>Federal Policy Options to Enable and Stimulate Greater Investment by States, Local Governments, and the Private Sector</b>			
Authorize flexible tolling provisions		\$12 billion	Rough estimate based on extensive and increasing use of tolling and pricing
Enhance TIFIA credit instruments		\$3 billion	Estimated additional private investment induced
Authorize private activity bonds (assume \$15 billion nominal authorization as proposed by Administration and Senate)		\$2 billion	Estimated additional private investment induced
Authorize tax credit bonds (assume \$30 billion net bond proceeds authorization as in Senate-proposed "Build America Bonds")		\$30 billion available for surface transportation grants through 2010; General Fund supported	Debt-oriented financing technique that leverages a Federal tax subsidy to generate new transportation funding
Authorize freight/intermodal ITCs (assume \$500 million annual limit on 20-year tax credits that are monetized over a 5-year period)		\$6 billion available for freight/intermodal projects through 2009**	Equity-oriented financing technique that leverages a Federal tax subsidy to generate new transportation funding

Notes: \* Only 30 percent of these amounts are estimated to fund highway-related needs such as intermodal connectors.  
 \*\* These funds would not address the surface transportation needs normally included in the FHWA and AASHTO Needs Reports; however, they would address needs identified in the AASHTO Freight-Rail Bottom Line Report (American Association of State Highway and Transportation Officials, Freight-Rail Bottom Line Report, Washington, D.C., 2003. Available at <http://freight.transportation.org/doc/FreightRailReport.pdf>).

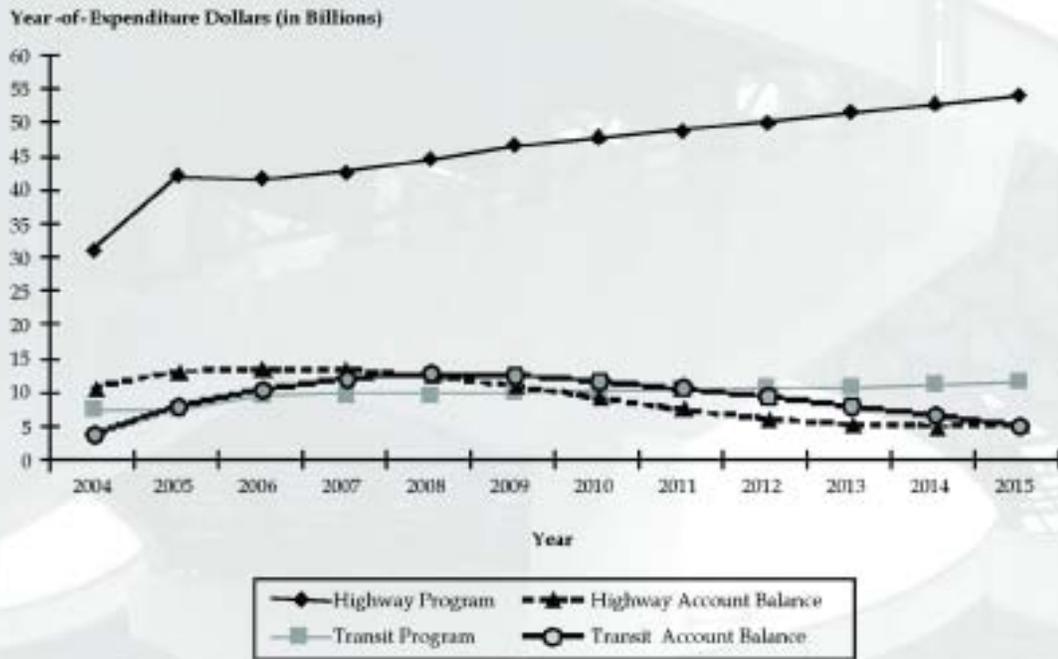
**Figure 1. National Gap Closing Potential of Short-Term Funding Options  
2005-2015 (Billions of YOE Dollars)**



**Figure 2. Federal Gap Closing Potential of Short-Term Funding Options Relative to “Maintain” and “Improve” Scenarios 2005-2015 (Billions of YOE Dollars)**



**Figure 3. Highway and Transit Program Levels and Account Balances**  
*Funding Levels Supportable through 2015 by Indexing Starting in 2005*  
*Plus HTF Interest Plus HTF Exemptions Elimination*  
*(Billions of YOE Dollars)*





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