

**NEW ISSUE - BOOK ENTRY ONLY**

**Ratings: See Ratings herein**

*In the opinion of Edwards Wildman Palmer LLP, Bond Counsel, based upon an analysis of existing law and assuming, among other matters, compliance with certain covenants, interest on the 2012 Series C Bonds is excluded from gross income for federal income tax purposes under the Internal Revenue Code of 1986 (the "Code"). Interest on the 2012 Series C Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. Under existing law, interest on the 2012 Series C Bonds is exempt from the New Hampshire personal income tax on interest and dividends. Bond Counsel expresses no opinion regarding any other tax consequences related to the ownership or disposition of, or the accrual or receipt of interest on, the 2012 Series C Bonds. See "Tax Exemption" herein.*

**\$110,180,000**  
**STATE OF NEW HAMPSHIRE**  
**Turnpike System Revenue Bonds**  
**2012 Series C**

**Dated: Date of Delivery**

**Due: As shown on the inside cover**

The 2012 Series C Bonds will be issued as fully registered bonds, and when issued will be registered in the name of Cede & Co., as nominee for The Depository Trust Company ("DTC"), New York, New York. So long as Cede & Co. is the registered owner of the 2012 Series C Bonds, principal and semiannual interest (payable February 1 and August 1, commencing February 1, 2013) are payable by The Bank of New York Mellon Trust Company, N.A., as Trustee and Paying Agent (the "Trustee"), to Cede & Co., as nominee for DTC. (See *Book-Entry Bonds* herein.) Purchasers shall acquire beneficial ownership interests in the 2012 Series C Bonds in the denominations of \$5,000 or integral multiples thereof. The 2012 Series C Bonds will be subject to redemption prior to maturity as described herein.

**The 2012 Series C Bonds are limited obligations of the State payable solely out of net revenues of the State of New Hampshire Turnpike System and are not general obligations of the State of New Hampshire or any political subdivision thereof, and neither the full faith and credit nor the taxing power of the State of New Hampshire or any political subdivision is pledged for the payment of the 2012 Series C Bonds. (See *Security for the Bonds* herein.)**

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MATURITY SCHEDULE - See Inside Cover

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The 2012 Series C Bonds are offered subject to the final approving opinion of Edwards Wildman Palmer LLP, Boston, Massachusetts, Bond Counsel, and to certain other conditions. Public Resources Advisory Group has acted as Financial Advisor to the State with respect to the 2012 Series C Bonds. Delivery of the 2012 Series C Bonds to DTC or its custodial agent is expected on or about August 30, 2012.

August 22, 2012

## MATURITY SCHEDULE

**\$110,180,000**  
**STATE OF NEW HAMPSHIRE**  
**Turnpike System Revenue Bonds**  
**2012 Series C**

<u>Due</u> <u>August 1</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Yield</u>	<u>CUSIP*</u> <u>644693</u>
2013	\$1,795,000	3.00%	0.30%	LS0
2014	1,845,000	4.00	0.54	LT8
2015	1,920,000	5.00	0.68	LU5
2016	2,015,000	5.00	0.86	LV3
2017	2,115,000	5.00	1.12	LW1
2018	2,225,000	5.00	1.48	LX9
2019	2,335,000	5.00	1.77	LY7
2020	2,450,000	5.00	2.03	LZ4
2021	2,575,000	5.00	2.24	MA8
2022	2,705,000	5.00	2.37	MB6
2023 <sup>†</sup>	2,840,000	5.00	2.51	MC4
2024 <sup>†</sup>	2,980,000	5.00	2.59	MD2
2025 <sup>†</sup>	3,130,000	5.00	2.67	ME0
2026 <sup>†</sup>	3,285,000	5.00	2.74	MF7
2027 <sup>†</sup>	3,450,000	5.00	2.81	MG5
2028 <sup>†</sup>	3,620,000	4.00	3.23	MH3
2029 <sup>†</sup>	3,765,000	4.00	3.30	MJ9
2030 <sup>†</sup>	3,915,000	4.00	3.36	MK6
2031 <sup>†</sup>	4,075,000	4.00	3.42	ML4
2032 <sup>†</sup>	4,240,000	4.00	3.48	MM2
2033 <sup>†</sup>	4,405,000	4.00	3.55	MN0
2034 <sup>†</sup>	4,585,000	4.00	3.62	MP5
2035 <sup>†</sup>	4,765,000	4.00	3.69	MQ3
2036 <sup>†</sup>	4,955,000	4.00	3.76	MR1

\$10,515,000 4.00% Term Bonds due August 1, 2038<sup>†</sup>, Yield 3.80%, CUSIP 644693MS9

\$23,675,000 4.00% Term Bonds due August 1, 2042<sup>†</sup>, Yield 3.83%, CUSIP 644693MT7

**Statement pursuant to New Hampshire Revised Statutes Annotated 421-B:20 for New Hampshire investors:**

**In making an investment decision investors must rely on their own examination of the issuer and the terms of the offering, including the merits and risks involved. These securities have not been recommended by any Federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this document. Any representation to the contrary is a criminal offense.**

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\* CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by Standard & Poor's Financial Services LLC on behalf of The American Bankers Association. The CUSIP numbers are included solely for the convenience of Bondholders and the State is not responsible for the selection or the correctness of the CUSIP numbers printed herein. CUSIP numbers assigned to securities may be changed during the term of such securities based on a number of factors, including, but not limited to, the refunding or defeasance of such securities or the use of secondary market financial products.

<sup>†</sup> Priced to first call date of August 1, 2022.

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No dealer, broker, salesperson or other person has been authorized by the State of New Hampshire to give any information or to make any representations, other than those contained in this Official Statement, and if given or made, such other information or representation must not be relied upon as having been authorized by the State of New Hampshire. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the 2012 Series C Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

This Official Statement is not to be construed as a contract or agreement between the State of New Hampshire and the purchasers or owners of any of the 2012 Series C Bonds. Any statements made in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended merely as opinion and not a representation of fact. The information and expressions of opinion contained herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in any of the information set forth herein since the date hereof.

This Official Statement is provided only in connection with the sale of the 2012 Series C Bonds by the State of New Hampshire pursuant to the Notice of Sale dated August 16, 2012 and may not be reproduced or used in whole or in part for any other purpose without the express written consent of the State Treasurer.

This Official Statement contains forecasts, projections and estimates that are based on current expectations. In light of the important factors that may materially affect the financial condition of the New Hampshire Turnpike System generally and other economic and financial matters, the inclusion in this Official Statement of such forecasts, projections and estimates should not be regarded as a representation by the State that such forecasts, projections and estimates will occur. Such forecasts, projections and estimates are not intended as representations of fact or guarantees of results.

If and when included in this Official Statement, the words “expects,” “forecasts,” “projects,” “intends,” “anticipates,” “estimates” and analogous expressions are intended to identify forward-looking statements as defined in the Securities Act of 1933, as amended, and any such statements inherently are subject to a variety of risks and uncertainties that could cause actual results to differ materially from those projected. Such risks and uncertainties include, among others, general economic and business conditions, changes in fuel prices, changes in political, social and economic conditions, regulatory initiatives and compliance with governmental regulations, litigation and various other events, conditions and circumstances affecting the New Hampshire Turnpike System, many of which are beyond the control of the State. These forward-looking statements speak only as of the date of this Official Statement. The State disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in the State’s expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

Neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in any of the information set forth herein since the date hereof. Any statements made in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended merely as opinion and not as representations of fact.

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# TURNPIKE SYSTEM

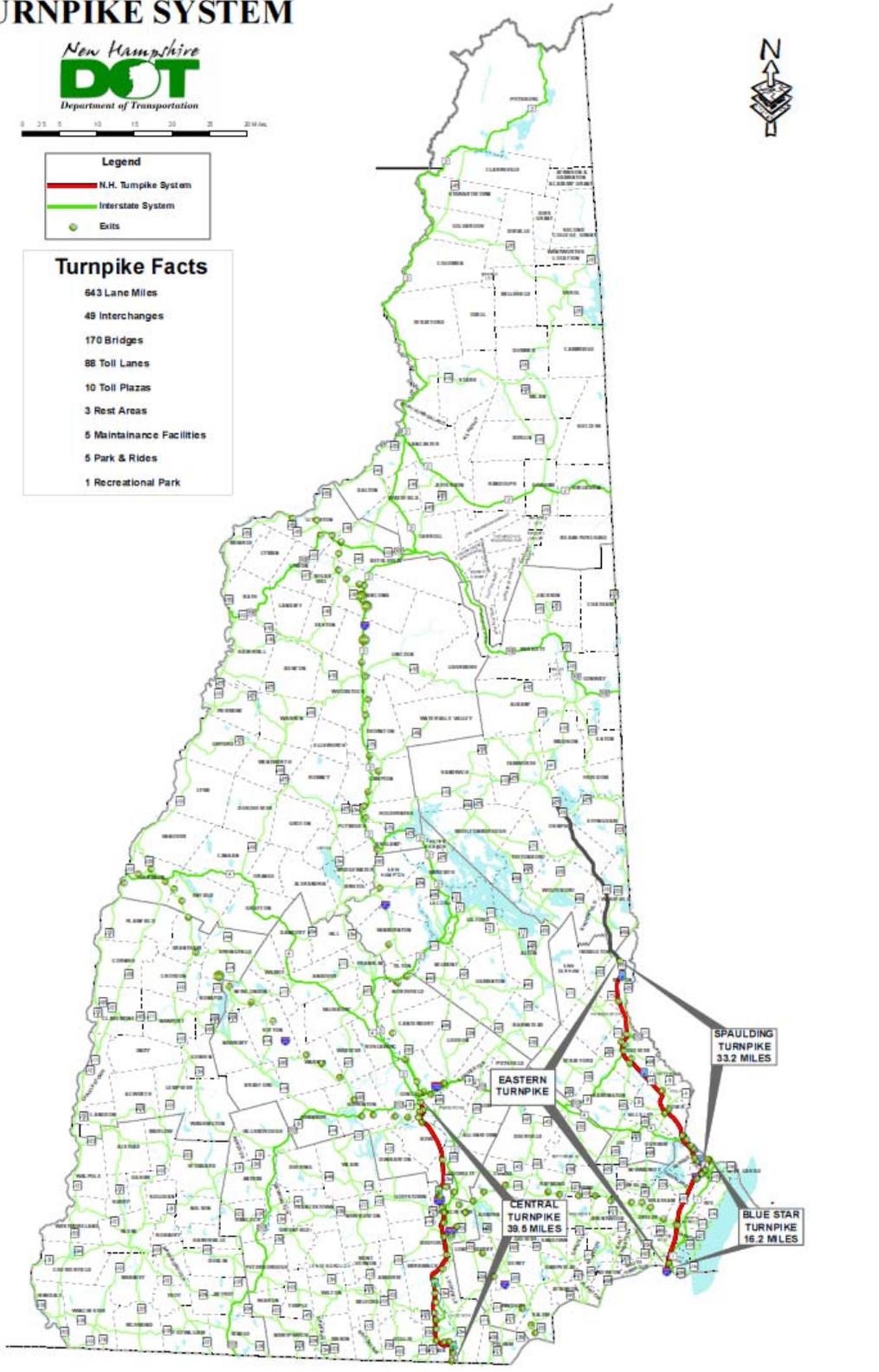


**Legend**

- N.H. Turnpike System
- Interstate System
- Exits

## Turnpike Facts

- 643 Lane Miles
- 49 Interchanges
- 170 Bridges
- 88 Toll Lanes
- 10 Toll Plazas
- 3 Rest Areas
- 5 Maintenance Facilities
- 5 Park & Rides
- 1 Recreational Park



June, 2012

**OFFICIAL STATEMENT**

**OF**

**THE STATE OF NEW HAMPSHIRE**

**\$110,180,000**

**TURNPIKE SYSTEM REVENUE BONDS**

**2012 SERIES C**

**INTRODUCTION**

This Official Statement, including the cover page and the Appendices hereto, is being distributed by the State of New Hampshire (the “State”) in order to furnish information in connection with the sale by the State of its Turnpike System Revenue Bonds, 2012 Series C, in the aggregate principal amount of \$110,180,000 (the “2012 Series C Bonds”).

The Bonds will be sold by competitive sale as set forth herein. See *Competitive Sale of the 2012 Series C Bonds* and Appendix G.

The 2012 Series C Bonds are authorized to be issued pursuant to Chapter 237-A of the New Hampshire Revised Statutes Annotated, as amended (the “Act”), and a general bond resolution (the “Bond Resolution”) of the State adopted by the Governor and Executive Council of the State (“Governor and Council”) on November 9, 1987, as amended and supplemented and as further supplemented by a Supplemental Resolution adopted by the Governor and Council on June 20, 2012. The State has authorized an aggregate of \$766,050,000 in Turnpike System Revenue Bonds to be issued under the Act (excluding Bonds issued for the purpose of refunding Outstanding Bonds) of which \$545,000,000 have been issued to date. See *Program Responsibility and Management – The Act*.

The 2012 Series C Bonds are being issued for the purpose of (i) funding a portion of the cost of acquiring, constructing and improving the New Hampshire Turnpike System (the “Turnpike System”) as a part of a multi-year program (the “Capital Improvement Program”) for the Turnpike System as authorized by the New Hampshire Legislature, (ii) funding certain reserves required to be established under the Bond Resolution and (iii) paying the costs of issuance of the 2012 Series C Bonds.

Following the issuance of the 2012 Series C Bonds on August 30, 2012, the 2012 Series C Bonds will be on parity with the then Outstanding Turnpike System Revenue Bonds, as follows:

<u>Series</u>	<u>Principal Amount Outstanding</u>
2002 Refunding Series	\$ 4,915,000
2003 Refunding Series	76,460,000*
2006 Refunding Series	11,200,000
2009 Series A	150,000,000
2009 Refunding Series B	55,230,000
2012 Refunding Series	<u>42,115,000</u>
Total	\$339,920,000

As used herein, except as otherwise noted, the term “Bonds” refers to all Bonds Outstanding under the Bond Resolution. The term “Outstanding” excludes Bonds which have been refunded through the issuance of Refunding Bonds as described under *Summary of Certain Provisions of the Bond Resolution – Refunding Bonds*.

The Turnpike System, as shown on the map on page iv, presently consists of approximately 89 miles of limited access highway, 36 miles of which are part of the U.S. Interstate Highway System. The Turnpike System comprises three limited access highways: the Blue Star Turnpike (I-95) and the Spaulding Turnpike (which together

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\* The State also sold its \$65,355,000 Turnpike System Revenue Bonds, 2012 Refunding Series B on February 23, 2012 on a delayed delivery basis. Such bonds are expected to be delivered on November 5, 2012 and will refund all of the 2003 Refunding Series Bonds other than \$3,310,000 maturing February 1, 2013.

are referred to as the Eastern Turnpike), and the Central Turnpike (also known as the F.E. Everett Turnpike and includes portions of U.S. Interstate Highways 93 and 293). The major cities located in the central and southern sections of the State are primarily served by the Turnpike System. The Blue Star segment of the Turnpike System is 16.2 miles in length and constitutes a portion of US Interstate Highway 95. It extends from the Massachusetts state line in Seabrook, New Hampshire to the Maine state line in Portsmouth, New Hampshire.

On August 25, 2009, pursuant to a legislative mandate (see Section 76 of Chapter 144, Laws of 2009), the Department of Transportation transferred a section of I-95 to the Turnpike System. The legislation authorized the Department of Transportation to convey the roadway to the Bureau of Turnpikes in exchange for \$120 million and on such other terms and conditions as the Commissioner of Transportation and the Bureau of Turnpikes agree. The legislation further provides that the amount payable to the Department of Transportation for deposit into the State Highway Fund shall be paid from the Turnpike System General Reserve Account over a period not to exceed twenty years with \$30 million (including interest) being paid in Fiscal Year 2010, \$20 million (including interest) being paid in Fiscal Year 2011 and the balance to be paid as agreed by the Commissioner of Transportation and the State Treasurer. The payment schedule in the resulting Transfer Agreement called for annual level payments of \$5.9 million through fiscal year 2029 accrued at an interest rate of 4%. In anticipation of the I-95 acquisition and implementation of the current Capital Improvement Program, the Governor and Council approved a \$.50 toll increase on the Hampton main line plaza effective July 1, 2009 that generates approximately \$11.6 million annually. See *The Turnpike System – Eastern Turnpike – I-95 Acquisition* and *Turnpike System – Historical Revenues and Expenditures*. The Transfer Agreement permits prepayment of any portion of the total remaining amount due. The budget for Fiscal Years 2012 and 2013 advances the I-95 payments by providing an additional \$20.1 million in each year for total payments in each year of \$26 million. These advanced payments were made in Fiscal Year 2012 and are expected to be made in Fiscal Year 2013, in each case from excess cash in the General Reserve Account at fiscal year-end. This will result in a reduced payment term of 10 years with annual payments of \$5.9 million due Fiscal Years 2014 through 2018 and a final payment of \$2.2 million due in Fiscal Year 2019. To date, \$76 million has been paid as scheduled in Fiscal Years 2010 through 2012.

The Spaulding Turnpike segment of the Turnpike System extends from Portsmouth, New Hampshire to Milton, New Hampshire. It is 33.2 miles in length and is the major artery for north-south travel in the eastern corridor of the State. The Central Turnpike extends for 39.5 miles from the Massachusetts state line in Nashua, New Hampshire to Exit 14 in Concord, New Hampshire. It constitutes a portion of US Interstate Highways 93 and 293.

The Capital Improvement Program is a multi-year program originally authorized by the New Hampshire Legislature in 1986 to improve and expand the Turnpike System. The expansion and improvement projects in the Capital Improvement Program are designed to provide safety improvements to the existing Turnpike System and increase the Turnpike System's capacity. See *The Turnpike System* and *Capital Improvement Program*. Through June 30, 2012 a total of \$681 million of bond proceeds, investment earnings and available toll revenues had been expended on Capital Improvement Program projects. The State currently estimates that the total cost of the Capital Improvement Program, including expenditures to date, is approximately \$1.031 billion through Fiscal Year 2018. The proceeds of the 2012 Series C Bonds, together with interest thereon, are anticipated to be used to finance approximately \$112 million of construction, right-of-way acquisition, engineering and administrative costs, to fund an additional deposit to the Debt Service Reserve Account and to pay costs of issuance. See *Capital Improvement Program*.

The 2012 Series C Bonds are limited obligations of the State and, under the terms of the Bond Resolution, are payable solely from the net revenues generated by the Turnpike System and from other funds specifically available therefor. See *Security for the Bonds*.

**The 2012 Series C Bonds are not general obligations of the State or any political subdivision thereof and neither the full faith and credit nor the taxing power of the State or any political subdivision thereof is pledged for the payment of the 2012 Series C Bonds. Additional Bonds ranking on a parity with or subordinate to the 2012 Series C Bonds may be issued from time to time under the Bond Resolution upon satisfaction of certain conditions set forth therein. See *Security for the Bonds – Additional Indebtedness*.**

Capitalized terms used herein and not otherwise defined have the meanings ascribed thereto in the Bond Resolution, and summary definitions of certain capitalized terms used herein are defined in the Glossary of Terms, attached hereto as Appendix F. Statements made herein with respect to the Act, the Bond Resolution and the 2012 Series C Bonds are qualified in their entirety by a reference to such documents, copies of which are available upon request from the State Treasurer. See *Summary of Certain Provisions of the Bond Resolution*.

Except as otherwise expressly noted herein, all financial information pertaining to Fiscal Years through 2011 has been derived from audited financial statements of the Turnpike System. Information for Fiscal Years 2012 and 2013 and later years is unaudited, preliminary or estimated, and is subject to change.

## THE 2012 SERIES C BONDS

### Description of the 2012 Series C Bonds

The 2012 Series C Bonds are being issued in the aggregate principal amount of \$110,180,000 maturing in the years and amounts, and shall bear interest at rates per annum (calculated on the basis of a 360-day year of 30-day months) as shown on the inside front cover of this Official Statement. The 2012 Series C Bonds will be dated their date of issuance. Interest on the 2012 Series C Bonds will be paid on February 1 and August 1 of each year, commencing February 1, 2013. The record date for the payment of interest shall be the fifteenth day of the calendar month preceding each interest payment date.

The 2012 Series C Bonds are being issued only as fully registered bonds and, when issued, will be registered in the name of Cede & Co., as nominee for the Depository Trust Company (“DTC”), New York, New York. DTC will act as securities depository for the 2012 Series C Bonds. Purchases of beneficial interests in the 2012 Series C Bonds will be made in book-entry form, in the denomination of \$5,000 or any integral multiple thereof. Purchasers will not receive certificates representing their interest in 2012 Series C Bonds purchased. So long as DTC or its nominee, Cede & Co., is Bondholder, payments of the principal of and interest on the 2012 Series C Bond will be made directly to such Bondholder. Disbursement of such payments to the DTC Participants (hereinafter defined) is the responsibility of DTC and disbursement of such payments to Beneficial Owners (hereinafter defined) is the responsibility of the DTC Participants and the Indirect Participants (hereinafter defined). See *Book-Entry Bonds*.

### Redemption Provisions

*Optional Redemption.* The 2012 Series C Bonds maturing on and before August 1, 2022 are not subject to redemption prior to maturity. The 2012 Series C Bonds maturing after August 1, 2022 are subject to redemption prior to maturity on and after August 1, 2022, at the option of the State, in whole or in part at any time, with maturities to be designated by the State (and by lot within a maturity as described below), at a price of 100% of their principal amounts, plus accrued interest to the redemption date.

*Mandatory Redemption.* The Bonds maturing on August 1, 2038 and August 1, 2042 (together, the “Term Bonds”) are also subject to mandatory redemption from sinking fund installments on August 1 in the years and in the principal amounts shown below:

#### Term Bonds due August 1, 2038

<u>Year</u>	<u>Principal Amount</u>
2037	\$5,155,000
2038 (final maturity)	5,360,000

#### Term Bonds due August 1, 2042

<u>Year</u>	<u>Principal Amount</u>
2039	\$5,575,000
2040	5,800,000
2041	6,030,000
2042 (final maturity)	6,270,000

Principal amounts to be redeemed in any year by mandatory redemption shall be redeemed at par (without premium), plus accrued interest to the redemption date, and shall be selected by lot from among the Term Bonds then subject to redemption. The State Treasurer may credit against any mandatory redemption requirement Term Bonds which have been purchased and cancelled by the State or have been redeemed and not theretofore applied as a credit against any mandatory redemption requirement.

*Partial Redemption.* In the event of a partial redemption of any maturity of the 2012 Series C Bonds, the identity of the beneficial owners whose beneficial interests in the 2012 Series C Bonds will be redeemed and the amount of any such redemption will be determined by DTC and its participants by lot in such manner as DTC and its participants deem appropriate.

*Notice of Redemption.* Notice of any redemption will be mailed to the registered owners of the 2012 Series C Bonds selected for redemption not more than sixty days nor less than thirty days prior to the date set for redemption. The redemption of any 2012 Series C Bond will not be affected by failure to mail such notice to the registered owner of any other 2012 Series C Bond. So long as DTC or its nominee, Cede & Co., is the registered owner of the 2012 Series C Bonds, all notices of any redemption will be made only to DTC or its nominee, Cede & Co. and in such manner as may be requested thereby. See *Book-Entry Bonds*. Following proper notice of the redemption of any 2012 Series C Bonds, if sufficient moneys are deposited with the Trustee for redemption, interest thereon ceases to accrue as of the redemption date

## BOOK-ENTRY BONDS

### General

**The information provided under this caption *Book-Entry Bonds – General* has been provided by DTC. No representation is made by any of the State or the Trustee as to the accuracy or adequacy of such information provided by DTC or as to the absence of material adverse changes in such information subsequent to the date hereof.**

The Depository Trust Company (“DTC”), New York, NY, will act as securities depository for the 2012 Series C Bonds. The 2012 Series C Bonds will be issued in fully-registered form registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully registered certificate will be issued for each maturity of the 2012 Series C Bonds, each in the aggregate principal amount of such maturity, and each such certificate will be deposited with DTC.

DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has Standard & Poor’s rating: AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com) and [www.dtc.org](http://www.dtc.org).

Purchases of securities deposited with DTC must be made by or through Direct Participants, which will receive a credit for such securities on DTC’s records. The ownership interest of each actual purchaser of each security deposited with DTC (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in securities deposited with DTC are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in securities deposited with DTC, except in the event that use of the book-entry system for such securities is discontinued.

To facilitate subsequent transfers, all securities deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of securities with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the securities deposited with it; DTC's records reflect only the identity of the Direct Participants to whose accounts such securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to DTC. If less than all of a maturity is being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed, unless other arrangements are made between DTC and the State.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to securities deposited with it unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the issuer of such securities or its paying agent as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on securities deposited with DTC will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the issuer of such securities or its paying agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC (nor its nominee), the issuer of such securities or its paying agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the issuer of such securities or its paying agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to securities held by it at any time by giving reasonable notice to the issuer of such securities or its paying agent. Under such circumstances, in the event that a successor depository is not obtained, physical certificates are required to be printed and delivered to Beneficial Owners.

The State may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, physical certificates will be printed and delivered to Beneficial Owners.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the State believes to be reliable, but the State takes no responsibility for the accuracy thereof.

## **Limitations**

For so long as the 2012 Series C Bonds are registered in the name of DTC or its nominee, Cede & Co., the State and the Trustee will recognize only DTC or its nominee, Cede & Co., as the registered Owner of such 2012 Series C Bonds for all purposes, including payments, notices and voting.

Because DTC is treated as the Owner of the 2012 Series C Bonds for substantially all purposes under the Bond Resolution, Beneficial Owners may have a restricted ability to influence in a timely fashion remedial action or the giving or withholding of requested consents or other directions. In addition, because the identity of Beneficial Owners is unknown to the State, to DTC and to the Trustee, it may be difficult to transmit information of potential

interest to Beneficial Owners in an effective and timely manner. Beneficial Owners should make appropriate arrangements with their broker or dealer regarding distribution of information regarding the 2012 Series C Bonds that may be transmitted by or through DTC.

Neither the State nor the Trustee shall have any responsibility or obligation with respect to:

- (i) the accuracy of the records of DTC, its nominee or any DTC Participant or Indirect Participant with respect to any beneficial ownership interest in any 2012 Series C Bonds;
- (ii) the delivery to any DTC Participant or Indirect Participant or any other Person, other than a registered Owner, as shown in the Bond Register, of any notice with respect to any 2012 Series C Bond;
- (iii) the payment to any DTC Participant or Indirect Participant or any other Person, other than a registered Owner, as shown in the Bond Register, of any amount with respect to the principal of, premium, if any, interest on, any 2012 Series C Bond; or
- (iv) any consent given or other action taken by DTC as registered Owner.

Further, neither the State nor the Trustee can provide any assurances that DTC, the DTC Participants and such other intermediaries that may exist between the State and the beneficial owners will serve and act in the manner described in this Official Statement.

Prior to any discontinuation of the book-entry system with respect to the 2012 Series C Bonds as hereinabove described, the State and the Trustee may treat DTC as, and deem DTC to be, the absolute Owner of the 2012 Series C Bonds for all purposes whatsoever, including, without limitation:

- (i) the payment of principal of, premium, if any, and interest on the 2012 Series C Bonds;
- (ii) giving notices of redemption and other matters with respect to the 2012 Series C Bonds;
- (iii) registering transfers with respect to the 2012 Series C Bonds; and
- (iv) the selection of 2012 Series C Bonds for redemption.

### **SOURCES AND USES OF FUNDS**

The proceeds from the sale of the 2012 Series C Bonds are expected to be applied as follows:

Sources	
Par Amount of 2012 Series C Bonds	\$110,180,000.00
Net Original Issue Premium	<u>9,016,486.00</u>
Total Sources of Funds	<u>\$119,196,486.00</u>
Uses	
Deposit to Construction Account*	\$112,000,000.00
Deposit to Debt Service Reserve Account	6,521,750.00
Costs of Issuance	325,172.32
Underwriter's Discount	<u>349,563.68</u>
Total Uses of Funds	<u>\$119,196,486.00</u>

\* A portion of this amount will be used to reimburse the Turnpike System for prior capital expenditures.

### **SECURITY FOR THE BONDS**

#### **Pledge of Revenues**

The Bonds, including the 2012 Series C Bonds, are limited obligations of the State. The principal of, redemption premium, if any, and interest on the Bonds are payable solely from and are equally and ratably secured by a pledge of Revenues (hereinafter defined), subject only to the payment of Operating Expenses (hereinafter defined), and monies and securities on deposit from time to time in all accounts and subaccounts established by the

Bond Resolution (except the Rebate Account) on the terms and in the manner provided in the Bond Resolution. **Revenues** means all tolls, rates, rents, fees, charges, receipts or other income derived or to be derived by the State from the ownership or operation of the Turnpike System, and all rights to receive the same. Proceeds of Bonds issued under the Act and of certain notes issued in anticipation of the receipt of Revenues are included in Revenues, but, unless otherwise provided by a Supplemental Resolution, Revenues do not include the proceeds of other borrowings by the State, or the proceeds of grants for limited purposes or of the disposition of property financed by such grants. **Operating Expenses** means the ordinary costs and expenses of the State for the operation, maintenance and repair of the Turnpike System, including working capital as provided in the Bond Resolution. Operating Expenses do not include the principal of and interest on bonds, notes or other evidences of indebtedness issued by the State for the purposes of the Turnpike System, Renewal and Replacement Costs (hereinafter defined) and depreciation.

All Bonds issued and outstanding under the Bond Resolution will be secured, equally and ratably without preference of any Bond over any other Bond, by the pledge created by the Bond Resolution and the covenants of the State made in the Bond Resolution. The State expects to issue additional bonds under the Bond Resolution on a parity with the 2012 Series C Bonds and all other outstanding Bonds to finance and refinance the Capital Improvement Program. See *Security for the Bonds – Additional Indebtedness and Capital Improvement Program*.

**Neither the full faith and credit nor the taxing power of the State or any political subdivision is pledged for the payment of the Bonds.**

The enforceability of the Bonds and the Bond Resolution may be limited by the exercise of judicial discretion in accordance with general equitable principles and by bankruptcy, reorganization, insolvency, moratorium and other laws affecting creditors' rights generally heretofore or hereafter enacted to the extent constitutionally enforceable.

The rights and remedies of Bondholders under the Bond Resolution and other matters are summarized under *Summary of Certain Provisions of the Bond Resolution*.

#### **Toll Rate Covenant**

The State has covenanted in the Bond Resolution that it will establish and collect tolls and charges for the use of the Turnpike System adequate at all times, with other available funds, to provide for the proper operation and maintenance of the Turnpike System and for the timely payment of the principal of and interest on all Bonds, notes or other evidences of indebtedness payable from the Revenues and all other required payments in connection with the Turnpike System.

Without limiting the generality of the foregoing, the State has covenanted that it will establish and collect tolls and charges sufficient so that in each Fiscal Year its Net Revenues (defined below) will be at least equal to the greater of: (a) 120% of Debt Service (as defined below); or (b) 100% of Debt Service plus the total amount of principal of and interest on all general obligation or other bonds, notes or other evidences of indebtedness (excluding principal of bond anticipation notes paid or to be paid from proceeds of bonds maturing after the end of the Fiscal Year) payable from Revenues during the Fiscal Year, and the additional amount, if any, required to be paid from the General Reserve Account to satisfy the Renewal and Replacement Requirement (hereinafter defined) for the Fiscal Year. **Net Revenues** means the Revenues (excluding (i) proceeds of Bonds and notes issued in anticipation of Bonds or of Revenues and (ii) proceeds of the sale or other disposition of all or any part of the Turnpike System, proceeds of insurance and condemnation awards received with respect to the Turnpike System (other than proceeds of use and occupancy insurance or any other insurance against loss of Revenues) and other items of an extraordinary and non-recurrent nature) after deducting Operating Expenses. **Debt Service** means with respect to each Fiscal Year the aggregate of the amounts to be set aside (or estimated to be required to be set aside) in the Debt Service Account in the Fiscal Year for the payment of the principal and sinking fund installments of and interest on Bonds, excluding debt service paid or to be paid from Bond proceeds or from any subsidy from the United States of America for the purpose. A failure to generate Net Revenues in accordance with the covenant described in this paragraph will not be considered a default by the State if the State is taking timely corrective action under the provisions described in the following paragraph.

The State has covenanted in the Bond Resolution that it will review the adequacy of its tolls and charges as soon as practicable after the end of each Fiscal Year. If this review indicates that the tolls and charges are, or will be, insufficient to meet the requirements described in the two preceding paragraphs or if it appears at any time that

the tolls and charges are or will be insufficient, the State has covenanted that it will forthwith cause an independent engineer (the "Independent Engineer") to make a study and to recommend within 90 days after the beginning of the then current Fiscal Year a schedule of tolls and charges which will provide Revenues sufficient to comply with the requirements described in the two preceding paragraphs in the following Fiscal Year and to restore any deficiency at the earliest practicable time, unless the Independent Engineer certifies that such a schedule of tolls and charges is impracticable at that time and the State therefore cannot comply with such requirements and recommends instead a schedule of tolls and charges to comply as nearly as practicable with the requirements. If the tolls and charges are or will be insufficient, the State will place the schedule of tolls and charges recommended by the Independent Engineer in effect not later than 180 days after the beginning of the then current Fiscal Year.

#### *Build America Bonds*

The State issued its \$150,000,000 2009 Series A Bonds (the "2009 Series A Bonds") as "Build America Bonds" pursuant to the American Recovery and Reinvestment Act of 2009 and elected to receive a subsidy payment ("Direct Payments") from United States Treasury equal to 35% of the taxable interest the State pays on the 2009 Series A Bonds. In order to receive the Direct Payments, the State is required to make certain filings with the Internal Revenue Service. If the State fails to make the required filings, it will not be eligible to receive the Direct Payments. Additionally, the proceeds of "Build America Bonds" have a number of limitations on their use. If the State were to use the proceeds of the 2009 Series A Bonds for expenditures other than capital expenditures, reasonably required reserve funds, and costs of issuance, the 2009 Series A Bonds would not be eligible for the Direct Payments. Direct Payments are treated as overpayments of tax, and accordingly are subject to offset against certain amounts that may be owed by the State to an agency of the United States of America. Finally, it is possible that the Direct Payments could be reduced or eliminated as a result of a change in federal law. To date, the State has received all Direct Payments when due and in the amounts requested by the State.

The Bond Resolution defines "Debt Service," for all purposes thereunder, as being net of any subsidy received from the United States of America. Accordingly, the required calculation of Debt Service for purposes of meeting the requirements for the issuance of Additional Bonds and the Debt Service Reserve Account Requirement will be net of any Direct Payments from the United States Treasury expected to be received with respect to the 2009 Series A Bonds.

The State covenanted in the applicable Supplemental Resolution to make all required filings in accordance with applicable rules of the United States Treasury in order to receive the Direct Payments contemporaneously with the payment of interest due on the 2009 Series A Bonds, and to deposit such payments, upon receipt, in the Revenue Account. The Bond Resolution requires that the State pay monthly from the Revenue Account to the Debt Service Account an amount equal to one-sixth of the amount of the interest coming due on the next interest payment date. Accordingly, the State will make monthly deposits to the Debt Service Account of the gross amount of interest due on the 2009 Series A Bonds. The deposit of the Direct Payments to the Revenue Account, when received, will reimburse the State for a portion of such interest.

#### **Debt Service Reserve Account Requirement**

The Bond Resolution establishes a Debt Service Reserve Account Requirement for the Bonds. The Debt Service Reserve Account Requirement is, as of any date of calculation, an amount equal to the maximum annual Debt Service during the then current or any future Fiscal Year on Outstanding Bonds; provided that in computing such requirement any Option Bonds Outstanding during such Fiscal Year shall be assumed to mature on their stated dates of maturity.

Under the Bond Resolution, the State may deposit a surety bond, insurance policy or letter of credit into the Debt Service Reserve Account to meet all or a part of the Debt Service Reserve Account Requirement. To date, the State has funded the Debt Service Revenue Account Requirement entirely in cash, which amount is invested in Permitted Investments in accordance with the Bond Resolution.

As of the date of issuance of the 2012 Series C Bonds, the amount on deposit in the Debt Service Reserve Account, \$39,856,120, will be at least equal to the Debt Service Reserve Account Requirement.

## Flow of Funds

The Bond Resolution establishes certain accounts and subaccounts. See *Summary of Certain Provisions of the Bond Resolution*. The State has covenanted in the Bond Resolution to deposit promptly all Revenues into the Revenue Account (other than the Revenues expressly required or permitted by the Bond Resolution to be credited to or deposited in any other account). The moneys in the Revenue Account are to be applied first to the payment of Operating Expenses and then to payments required by the Bond Resolution to be paid from the Revenue Account into the following accounts in the following order:

- (1) Debt Service Account, Interest Subaccount;
- (2) Debt Service Account, Principal Subaccount;
- (3) Rebate Account;
- (4) Debt Service Reserve Account;
- (5) Insurance Reserve Account;
- (6) Special Redemption Account; and
- (7) General Reserve Account.

The Bond Resolution also establishes a Construction Account.

## Renewal and Replacement Requirement

The Bond Resolution establishes a Renewal and Replacement Requirement with respect to each Fiscal Year, which Renewal and Replacement Requirement shall be an amount to be set forth in the Annual Budget, as determined by the State in its discretion, for Renewal and Replacement Costs for that Fiscal Year. **Renewal and Replacement Costs** are costs associated with major reconstruction, rehabilitation, renewals, replacements and extraordinary repairs necessary to the sound operation of the Turnpike System or to prevent loss of Revenues, but not costs associated with new construction, additions or extensions.

## Additional Indebtedness

### *Additional Parity Bonds*

Under the Bond Resolution the State may issue additional bonds (“Additional Bonds”) on a parity with the then Outstanding Bonds to pay Project Costs or to refund Bonds or other obligations issued for the purpose of paying Project Costs. With the exceptions provided below, the issuance of each series of Additional Bonds shall be subject to the following conditions:

- (1) If bonds are being issued to pay Project Costs:
  - (A) An Authorized Officer must certify as to the estimated completion date and Project Costs of the Project or Projects for which Additional Bonds are being issued; and
  - (B) The Independent Engineer must state whether, to the best of its knowledge, the construction, improvement or acquisition of any highway or other facility is being projected or planned which may be materially competitive with any part of the Turnpike System, and the estimated date of completion of such highway or other facility; and
  - (C) An Authorized Officer must establish that the Net Revenues for any period of 12 consecutive calendar months out of the 24 calendar months next preceding the issuance of the Additional Bonds equal or exceed the Net Revenue Requirement for such 12 calendar months; provided that if any adjustment of toll rates shall have been placed in effect during such 12-month period, such Net Revenues may reflect the Revenues which the Authorized Officer estimates would have resulted had such toll rate adjustment been in effect for the entire 12-month period; and
  - (D) The Independent Engineer must certify for the then current and each future Fiscal Year to and including the fifth full Fiscal Year after the estimated Completion Date of the Project, an estimate of Revenues and a review of Operating Expenses as projected by an Authorized Officer, giving effect to, among other factors, any adjustment of toll rates which shall have been placed in effect subsequent to the beginning of the current Fiscal Year, as if such toll rate adjustment had been in effect from the beginning of the Fiscal Year until the effective date of any subsequent adjustment, and any adjustment of toll rates provided by an Authorized Officer to the Independent

Engineer which, in the opinion of the Authorized Officer, would be necessary to comply with the toll rate covenant, as if such adjustment were to be in effect from its effective date as assumed by the Authorizing Officer; and

(E) An Authorized Officer must determine, on the basis of the certificate described in paragraph (1)(D), that (i) the estimated Net Revenues for the then current and each future Fiscal Year to and including the fifth full Fiscal Year after the estimated Completion Date of the Project equal or exceed the Net Revenue Requirement for each such Fiscal Year, and (ii) that the estimated Net Revenues for said fifth full Fiscal Year (I) equal or exceed one hundred twenty percent (120%) of the amount payable in the Maximum Annual Debt Service Year (as defined below) in respect of principal and sinking fund installments of and interest on the Series of Additional Bonds and all other Bonds Outstanding on the date of issuance of the Series of Additional Bonds, and (II) equal or exceed one hundred percent (100%) of the sum of (a) the amount payable in the Maximum Annual Debt Service Year in respect of principal and sinking fund installments of and interest on the Series of Additional Bonds and all other Bonds Outstanding on the date of issuance of the Series of Additional Bonds, (b) debt service on all general obligation or other bonds, notes or other evidences of indebtedness (excluding principal of bond anticipation notes to the extent they are to be paid from proceeds of bonds or other obligations maturing after the end of the Maximum Annual Debt Service Year) payable from Revenues during the Maximum Annual Debt Service Year, and (c) the additional amount, if any, required to be paid from the General Reserve Account to satisfy the Renewal and Replacement Requirement for said fifth Fiscal Year. In computing the Net Revenue Requirement and the amount described in subclause (ii) under this Clause, Variable Rate Bonds are deemed to bear interest at all times to the maturity thereof at a constant rate of interest equal to the Maximum Interest Rate, provided that to the extent that Variable Rate Bonds issued or to be issued include related select auction variable rate securities and residual interest bonds or other related issues which, taken together, are the equivalent of a fixed rate obligation of the State, such issues shall be aggregated and treated as a single issue of fixed rate Bonds. “**Maximum Annual Debt Service Year**” means the Fiscal Year, commencing with said fifth full Fiscal Year, in which the aggregate amount payable in respect of principal and sinking funds installments of and interest on (a) the Series of Additional Bonds and (b) all other Bonds Outstanding on the date of issuance of the Series of Additional Bonds is the greatest.

(2) (A) An Authorized Officer must certify that to the best of his or her knowledge and belief no Event of Default exists under the Bond Resolution and (B) the Trustee must certify that there is no Event of Default of which it has knowledge;

(3) Delivery to the Trustee of a certified copy of the Supplemental Resolution providing for the issuance of the Additional Bonds; and

(4) Delivery to the Trustee of an opinion of nationally recognized bond counsel, selected by the State and satisfactory to the Trustee, that the conditions precedent to the issuance of the Additional Bonds have been satisfied.

In connection with the issuance of Bonds to refund Bonds, the certificates described in paragraph (1) above are not required if any Authorized Officer certifies as to the Debt Service for each Fiscal Year in which Bonds are or will be Outstanding (a) with respect to the Bonds Outstanding immediately prior to the issuance of such refunding Bonds and (b) with respect to the Bonds to be Outstanding immediately thereafter, and demonstrates that the Debt Service computed for each Fiscal Year pursuant to clause (b) will not be greater than the Debt Service computed for that Fiscal Year pursuant to clause (a). The certificates described in paragraph (1) above shall be required in the case of Bonds issued to refund obligations other than Bonds (including the issuance of Bonds to retire notes issued in anticipation of Bonds) as if the Bonds were being issued for the Projects financed by the prior obligations.

The certificates described in paragraphs (1)(B), (1)(C), (1)(D) and (1)(E) above are not required for Bonds being issued to complete the payment of Project Costs of a Project for which Bonds have previously been issued, if (a) an Authorized Officer certifies that the aggregate Project Costs of the Project to be paid by the issuance of such Bonds (together with Project Costs paid from proceeds of any other Bonds issued for the Project pursuant to this provision) do not exceed ten percent (10%) of the total estimated Project Costs of the Project, and (b) the Independent Engineer certifies that estimated Net Revenues of the Turnpike System with the completed Project will exceed estimated Net Revenues of the Turnpike System without completion of the Project.

The certificates described in paragraphs (1)(B), (1)(C), (1)(D) and (1)(E) above are not required for Bonds being issued to pay Project Costs of a Project consisting of extraordinary repair, reconstruction or replacement of facilities of the Turnpike System that have been damaged, destroyed or lost in whole or in part, if the Independent Engineer certifies (a) that all available moneys in the Insurance Reserve Account have been or will be expended to

meet such Project Costs and (b) that, after giving effect to the application of all available moneys in the Insurance Reserve Account, the issuance of the Bonds is necessary to repair, reconstruct or replace the damaged, destroyed or lost property to the extent reasonably necessary for the proper conduct of the operations of the Turnpike System.

#### *Subordinated Obligations*

The State may also issue bonds, notes or other evidences of indebtedness for the purposes of the Turnpike System payable from the General Reserve Account and Revenues subordinate to the deposits and credits required to be made under the Bond Resolution and to the payments required for Operating Expenses, and may secure the bonds, notes or evidences of indebtedness by a pledge of the Revenues inferior to the pledge of the Revenues created by the Bond Resolution. Outstanding general obligation bonds issued for Turnpike System purposes are payable out of Revenues subject to the prior payment of amounts due and owing in respect of Outstanding Bonds. See *The Turnpike System – Management Discussion of Historical Revenues and Expenditures* for information regarding the obligation of the System to make certain payments to the State Highway Fund from the General Reserve Account in connection with the purchase from the State on August 25, 2009 of a section of I-95 in Portsmouth.

#### **Operation and Maintenance of System**

The State has covenanted in the Bond Resolution that it will operate, maintain and make improvements to the Turnpike System in accordance with prudent practice for this type of system. The Bond Resolution imposes requirements with respect to insurance (see *Risk Management-Insurance* below), annual budgets and the retention of Independent Engineers and also imposes restrictions on encumbrance of the Revenues and properties of the Turnpike System, all as summarized under *Security for the Bonds* and *Summary of Certain Provisions of the Bond Resolution*.

#### **Risk Management-Insurance**

Pursuant to the Bond Resolution, the State is required to maintain such insurance through insurance reserves or policies, as it deems prudent or necessary to protect the interests of the State and the Bondholders. The Bond Resolution requires the State to establish an account of the State (the “Insurance Reserve Account”) to be held and administered by the Treasurer which is currently funded at a level of \$3,000,000. In the event of any loss or damage to property of the Turnpike System, the State shall apply monies in the Insurance Reserve Account, to the extent monies are not available from a commercial insurance policy, as soon as practicable to repair and reconstruct or replace the damaged or lost property to the extent necessary for the proper operation of the Turnpike System.

The State is also required by the Bond Resolution to review on an annual basis the risks to the Turnpike System and the kind and amount of insurance in force and the amount on deposit in the Insurance Reserve Account. A report issued by the Commissioner of Insurance of the State describing the results of this study and providing for an adjustment to the required level in the Insurance Reserve Account for the ensuing Fiscal Year shall be delivered to the Treasurer within 60 days of the end of the prior Fiscal Year. At no time shall the Insurance Reserve Account requirement be less than \$3,000,000. Most recently, on August 6, 2012, the Insurance Commissioner certified that the \$3,000,000 reserve requirement remains adequate. If the State determines to cover certain risks to the Turnpike System by additional policies of insurance, such policies shall be in addition to the amount from time to time in the Insurance Reserve Account.

The State may issue Bonds pursuant to the Bond Resolution for the purpose of paying the costs, in excess of any amount in the Insurance Reserve Account plus any amounts available under insurance policies, for extraordinary repair, replacement or construction of certain facilities constituting a part of the Turnpike System which are damaged, destroyed or lost in whole or in part due to accident, act of God or the like, provided that the conditions as set forth in the Bond Resolution are met. See *Security for the Bonds – Additional Indebtedness-Additional Parity Bonds*.

State law provides that claims in tort for damages to persons or property brought against the State or any agency, including the Turnpike System, are limited to the greater of the proceeds of any insurance policy procured by the State or the sum of \$475,000 per claimant and \$3,750,000 per incident. The State currently maintains liability insurance for all Turnpike System vehicles and boiler insurance for specified building locations. No other insurance is currently in force.

The State has experienced no material casualty loss to the Turnpike System facilities since the Turnpike System's inception in 1950.

## **PROGRAM RESPONSIBILITY AND MANAGEMENT**

### **The Act**

The 2012 Series C Bonds are being issued under the authority granted by the Act. The Act provides for the issuance by the State Treasurer of revenue bonds of the State for the Turnpike System in such amounts as the Governor and the five-member Executive Council (the "Council") shall determine, from time to time, subject to the current statutory limit of \$766,050,000 (excluding Bonds issued for the purpose of refunding outstanding Bonds). As of the date of this Official Statement, approximately \$545,000,000 of this \$766,050,000 statutory limit will have been issued. Pursuant to the Act, Bonds may be secured by a resolution, by a trust or by a security agreement in a form determined by the State Treasurer with the approval of the Governor and Council.

The Act provides that Bonds issued thereunder constitute limited obligations of the State, and that the State has not pledged its full faith and credit for repayment of the Bonds, nor are the Bonds payable out of any other funds except for such other funds as provided in the Act. The Act further provides that any debt service fund, construction fund, debt service reserve fund, or other fund established in connection with the issuance of Bonds under the Act is to be kept separate from other moneys of the State.

Under the terms of the Act, the State pledges to and agrees with the Bondholders that until such Bonds, together with interest thereon, with interest on any unpaid installment of interest and all costs and expenses in connection with any action or proceedings by or on behalf of such holders, are fully met and discharged, or unless expressly permitted or otherwise authorized by the terms of each contract and agreement made or entered into by or on behalf of the State with or for the benefit of such holders, the State (a) will carry out and perform, or cause to be carried out and performed, each and every promise covenant, agreement or contract made or entered into by the State or on its behalf by or under the provisions of the Act and on its behalf to be performed and (b) will not issue any bonds, notes or other evidences of indebtedness, other than Bonds, having any rights secured by any pledge of or other lien or charge on the Revenues or any moneys or securities paid to or held by the State or the State Treasurer under the Act and shall not create or cause to be created any lien or charge on the Revenues or any such moneys or securities other than a lien and pledge thereon created by or pursuant to the provisions of the Act. See *Summary of Certain Provisions of the Bond Resolution*. Nothing in the Act, however, prevents the State from issuing evidences of indebtedness (1) which are secured by a pledge or lien that is expressly subordinate and junior in all respects to every lien and pledge created by or pursuant to the provisions of the Act or (2) for which the full faith and credit of the State is pledged and which are not expressly secured by any specific lien or charge on Revenues or any such moneys or securities or (3) that are secured by a pledge of or lien on moneys or funds to be derived on and after such date as every pledge or lien thereon created by or pursuant to the provisions of the Act are discharged and satisfied.

### **Executive Officers of the State**

The principal executive officers of the State are the Governor, the State Treasurer, the Secretary of State and the Executive Council, all of whom are elected biennially. The Governor is vested with the executive power of the State and is responsible for the faithful execution of all laws enacted by the Legislature and the management of the executive departments of the State. The State Treasurer and the Secretary of State are elected by joint ballot of the House and Senate. The Council is elected by the people, one Councilor from each of five Councilor districts in the State. The Council's chief function is to provide advice and consent to the Governor in the executive function of government. The Governor and Council can negate each other both in nominations and appointments of executive officers, and a substantial portion of the executive powers of the Governor are subject to the advice and consent of the Council. All contracts, including those related to the Capital Improvement Program and toll rate changes must be approved by the Governor and Council. The State Treasurer, pursuant to the Act, is empowered to issue bonds to finance improvements to the Turnpike System upon authorization by the Governor and Council, subject to the statutory debt limit.

### **Budget and Appropriation Process**

The Legislature meets annually but adopts its budget on a biennial basis. Prior to the beginning of each biennium, all departments of the State, including the Department of Transportation, are required by law to transmit

to the Commissioner of the Department of Administrative Services requests for capital expenditures, as well as estimates of their administration, operation and maintenance expenditure requirements for each Fiscal Year of the ensuing biennium.

Capital expenditure requests are summarized by the Commissioner of the Department of Administrative Services, who submits the summary to the Governor. After holding public hearings and further evaluation of selected projects, the Governor prepares a capital budget for submission to the Legislature.

In conjunction with the receipt of operating budget estimates, the Commissioner of the Department of Administrative Services prepares an estimate of the total income of the State for each Fiscal Year of the ensuing biennium. Based upon the expenditure estimates the Commissioner has received and the revenue projections the Commissioner has made, the Commissioner prepares a tentative budget for the ensuing biennium, which is transmitted to the Governor. The Governor then holds public hearings on the tentative operating budget and prepares the final budget proposal, setting forth the Governor's financial program for the following two Fiscal Years.

By February 15 of each odd-numbered year, both the capital and the operating budgets must be submitted to the Legislature for its consideration. A final budget is approved by the Legislature and presented to the Governor to be signed into law or vetoed. If the Governor vetoes the budget, it is returned to the Legislature for an override vote or further legislative action.

Once the budget becomes law, it represents the authorization for spending levels of each State department during the next two Fiscal Years. If the Governor determines that additional appropriations are necessary, the Governor may submit supplemental estimates of such appropriations to the Legislature for its approval.

In addition to the budget procedures set forth above, the State is required by the Bond Resolution to file with the Treasurer, for each Fiscal Year, an annual budget relating to the Turnpike System. This budget must be consistent with the biennial budget enacted by the Legislature.

### **Department of Transportation**

The Department of Transportation is administered by a Commissioner, an Assistant Commissioner and a Deputy Commissioner. The Commissioner, the Assistant Commissioner and the Deputy Commissioner are appointed by the Governor and are confirmed by the Governor and the Council for four-year terms. The Commissioner of the Department of Transportation has overall responsibility for the general supervision, control and direction on behalf of the Department of Transportation over all matters pertaining to location, alteration, construction, reconstruction and maintenance of the State's 4,269 miles of State highways and 2,129 bridges, including the Turnpike System.

The following individuals are the principal administrators of the Department of Transportation and the Capital Improvement Program:

*Christopher D. Clement, Sr.*, Commissioner of the Department of Transportation. Mr. Clement took office on September 14, 2011 as Commissioner of the New Hampshire Department of Transportation. Mr. Clement has extensive leadership experience in both the private and public sectors.

Mr. Clement served as Deputy Commissioner and Chief Operating Officer of the New Hampshire Department of Transportation from July 2008 to February 2010. Prior to becoming the Commissioner, Mr. Clement was the Director of the Governor's Office of Economic Stimulus.

Mr. Clement has extensive experience in the creation and implementation of strategic approaches to business processes, working with cross-functional work teams, and the development of strategic initiatives and meaningful performance measures. His private sector experience includes 19 years with Goss International, Inc. of Dover, New Hampshire, where he began as a Design Engineer and rose to the position of Director of Global Commercial Web Product Management.

A New Hampshire native, Mr. Clement earned a Bachelor's Degree in Mechanical Engineering Technology from the University of New Hampshire, and a Master's Degree of Business Administration from the New Hampshire College Graduate School of Business.

*David J. Brillhart, P.E.*, Assistant Commissioner of the Department of Transportation. The Assistant Commissioner serves as Chief Engineer for the Department of Transportation. Mr. Brillhart graduated from the University of New Hampshire with a B.S. degree in Civil Engineering (1978). He has been employed by the Department of Transportation since 1978 and performed various functions in the Bureaus of Bridge Design and Highway Design. He served as Assistant Director of Project Development and was appointed to Director in 2002. He was appointed Assistant Commissioner in 2004.

*Michael P. Pillsbury, P.E.*, Deputy Commissioner for the Department of Transportation. Mr. Pillsbury has over 30 years of experience in the field of construction and engineering management. He is responsible for strategic planning and development of financial, administrative and human capital programs, policy development and is the Department's liaison with the Department of Information Technology. Mr. Pillsbury is a graduate of the University of New Hampshire with a B.S. degree in Civil Engineering and is a licensed professional engineer in New Hampshire.

*William J. Cass, P.E.*, Director of Project Development, Department of Transportation. This Division is responsible for the planning, design, and construction of highway and bridge projects, including the Turnpike System Capital Improvement Program. Mr. Cass was appointed to his current position in 2007. Prior to that he served as the Assistant Director of Project Development for three years. He is Project Director, formerly Project Manager, for the I-93 reconstruction and widening project from Salem to Manchester, and has been involved with the project throughout its development. He has 25 years of experience in various design and management capacities for the Department of Transportation. He has a B.S. degree in Civil Engineering from the University of New Hampshire (1985).

*William P. Janelle, P.E.*, Director of Operations, Department of Transportation. The Director of Operations oversees maintenance of all State highways and bridges, and all the functions of the Bureau of Turnpikes. Mr. Janelle received an Associate's degree in Civil Technology from the University of New Hampshire in 1981 and a Bachelor of Science degree in Civil Engineering from New England College in 1984. Mr. Janelle was appointed to his current position in 2012. Prior to that he served the Department as Assistant Director of Operations, which included responsibility for the Department's emergency response coordination for Transportation and Public works events. He also served as Assistant Director of Project Development which involved overseeing, coordinating and prioritizing the Design and Construction process for the Department. Mr. Janelle also was the lead for the ARRA Transportation program for the Department. He has worked for the Department since 1992 and is a Licensed Professional Engineer in New Hampshire.

*Patrick K. McKenna*, Director of Finance, Department of Transportation. Mr. McKenna took office on November 17, 2010 as Director of Finance for the New Hampshire Department of Transportation. Mr. McKenna has held several leadership positions in the public, private and non-profit sectors, including, most recently, as the Chief Financial Officer of a statewide non-profit, and prior to that as the Chief Financial Officer of the United States Senate in Washington, D.C.

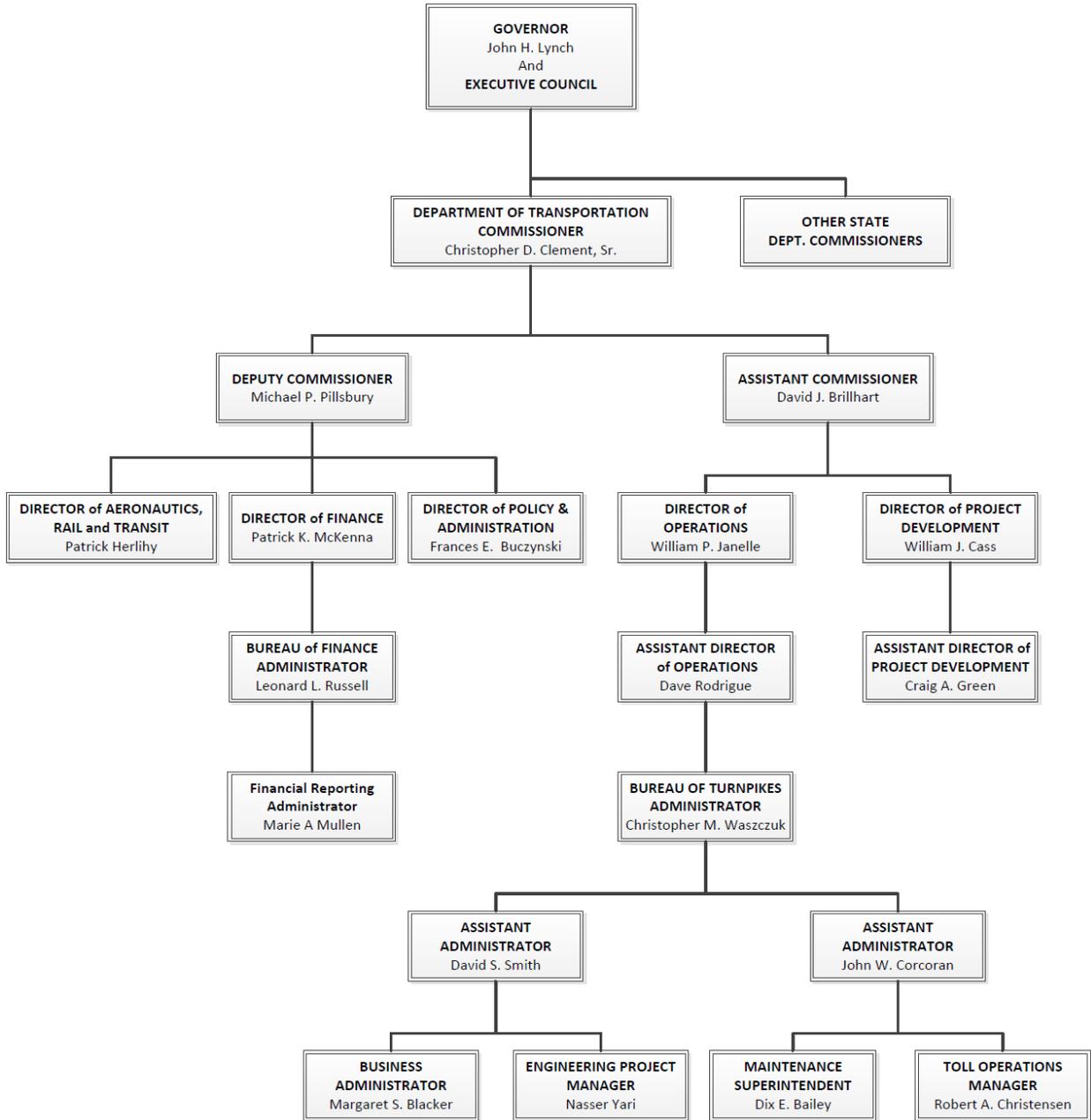
Mr. McKenna has a B.S. degree in Finance from Bentley University in Waltham, Massachusetts, and a M.S. in Management and Finance from the University of Maryland University College in College Park, Maryland.

*Leonard L. Russell, CPA*, Finance Administrator of the Department of Transportation. The Administrator directs and supervises the operations of the Division of Finance. Mr. Russell graduated from Southern New Hampshire University with a B.S. degree in Accounting and maintains a current license with the State as a certified public accountant. He has been employed by the Department of Transportation since 2006 and has twenty years experience with the State in budget, accounting, policy and procedures.

*Marie A. Mullen*, Administrator II, Financial Reporting and Analysis for the Department of Transportation. Ms. Mullen joined the Finance and Contracts Bureau in September 2009 as a Financial Analyst and was recently promoted to her current position. Prior to joining the Department of Transportation, she worked in various analytic and supervisory roles for high-tech, manufacturing and insurance companies within New Hampshire. Ms. Mullen graduated from Assumption College with a Bachelor of Arts degree in Accounting and later earned a Master's degree of Business Administration from the University of New Hampshire.

The following chart shows the organization of State government relating to the Turnpike System:

ORGANIZATION CHART



The Department of Transportation comprises five Divisions (Operations, Project Development, Finance, Administration, and Aeronautics, Rail and Transit) as described below.

*Operations*

The Division of Operations maintains and supervises the State's transportation network and maintains the Department of Transportation's equipment.

The Bureau of Turnpikes is within the Operations Division of the Department of Transportation. The organizational structure of the Bureau of Turnpikes consists of four major sections: Toll Operations, Maintenance, Engineering and Administration. All managers of the Turnpike sections report to the Administrator of Turnpikes who, in turn, reports to the Director of Operations of the Department of Transportation. As of June 1, 2012, of the 221 permanent full-time employee positions of the Bureau of Turnpikes, 133 are assigned to Toll Operations, 52 are assigned to the Maintenance section, 7 are assigned to the Engineering section and 29 are assigned to Administration. The Bureau of Turnpikes is responsible for maintenance and operation of the approximately 89-mile Turnpike System, which includes 643 lane miles, 170 bridges, 49 interchanges and 24 facilities, consisting of: 10 toll plazas, 5 maintenance facilities, 5 Park and Rides, 3 welcome areas and 1 recreational park. The Bureau of Turnpikes coordinates with the Project Development Division of the Department of Transportation, which is responsible for the Capital Improvement Program Projects relating to the Turnpike System.

*Christopher M. Waszczuk, P.E.*, Administrator of the Bureau of Turnpikes. Mr. Waszczuk was named the Administrator of the Bureau effective October 23, 2009, serving as the interim Administrator since June 1, 2009. Mr. Waszczuk began his career with the Department in September 1985 in the Highway Design Bureau. He left Highway Design in April of 1986 for a position in Bridge Design, where he spent the next 13 years. In January 1999, Mr. Waszczuk was promoted to Project Manager and in October 2005 to Chief Project Manager within Project Development. Mr. Waszczuk received his Bachelor of Science in Civil Engineering in 1983 from the University of Massachusetts at Amherst and is a registered Professional Engineer in the State of New Hampshire.

*John W. Corcoran, P.E.*, Assistant Administrator of the Bureau of Turnpikes. Mr. Corcoran became the Assistant Administrator of the Bureau of Turnpikes in October of 2006. He is responsible for overseeing the Toll Operations and Maintenance sections of the Bureau. Prior to joining the Bureau of Turnpikes, he had served as the Assistant Administrator of the Traffic Bureau from October of 2000. He began his career with the Highway Design Bureau in 1989 after receiving his Bachelor of Science in Civil Engineering from Clarkson University and is a registered Professional Engineer in the State of New Hampshire.

*David S. Smith, P.E.*, Assistant Administrator of the Bureau of Turnpikes. Mr. Smith became the Assistant Administrator of the Bureau of Turnpikes in August 2010. He is responsible for the Engineering and Business Administration sections within the Bureau. Prior to joining the Bureau of Turnpikes, he served for 18 years in various capacities within the Bureau of Highway Design in the Project Development Division of the Department. He received his B.S. degree in Civil Engineering from the University of New Hampshire and is a registered Professional Engineer in the State of New Hampshire. In July 2010, he received his M.S. degree in Finance from the Southern New Hampshire University.

*Margaret S. Blacker*, Business Administrator of the Bureau of Turnpikes. From 1989 to 1995, Ms. Blacker worked for the Department of Transportation's Bureau of Budget and Finance and was responsible for the preparation of audit-quality financial statements for the Turnpike System. After working for the Department's Bureau of Public Works as the Business Administrator from 1995 to 1998, she began working for the Bureau of Turnpikes, where she is responsible for financial management and analysis. Ms. Blacker has a B.S. degree in Accounting from Franklin Pierce College and completed her M.B.A. program with New Hampshire College in the spring of 2000.

*Nasser Yari, P.E.*, Engineering Project Manager of the Bureau of Turnpikes. Mr. Yari joined the Bureau of Turnpikes in July of 2005. Prior to this, he had worked with the Department of Transportation's Bureau of Construction as a Contract Administrator from 1985 to 2005. Mr. Yari is responsible for coordinating/assisting in Turnpike expansion projects and renewal-replacement projects for the Bureau of Turnpikes. He received his M.S. in Civil Engineering in 1986 and a B.S. in Civil Engineering in 1984 from the University of New Hampshire.

*Dix E. Bailey*, Maintenance Superintendent of the Bureau of Turnpikes. Mr. Bailey began his career with the Department of Transportation in 1984 as a laborer. He has held several positions in Project Development up to

and including Geological Exploration Superintendent before being promoted to his current position in February of 2005.

*Robert A. Christensen*, Toll Operating Manager of the Bureau of Turnpikes. Mr. Christensen became the Toll Manager in November 2007 following executive positions as Headmaster of Boxford Academy, Town Administrator of Weare, NH, and Senior Pastor of Christ Community Church. Mr. Christensen is responsible for all aspects of toll operations including both the E-ZPass electronic toll collection system and a workforce of over 280 full and part-time personnel. He holds the Certificate of Advanced Graduate Studies degree in Educational Leadership from Plymouth State University, Master of Arts in Religion from Liberty University, and the Post Graduate of Theology from Boston Baptist College. He earned the title of Certified Public Manager in 2005.

Toll Operations Section. The Toll Operations Section manages the toll collection activities at all toll plazas. Toll Operations is responsible for collecting and preparing all toll receipts for pickup by a security service. Processing of receipts is done by a banking institution. The bank counts and deposits the receipts daily in the Turnpike System account and provides data and reports to the Turnpike System. Turnpikes Administration Section (below) audits the toll collection data and presents the results of the audits to Toll Operations and Turnpike Management. All electronic E-ZPass transactions are processed by the customer service center, which provides monthly reporting of customer activity. The reporting of revenue is reviewed and audited by the Turnpike Administration Section.

There are presently ten toll plazas comprised of five main line plazas and five ramp plazas. There are a total of 88 lanes of toll operation on the Turnpike System of which 24 are dedicated E-ZPass lanes and four Open Road Tolling (ORT) lanes. The number of E-ZPass lanes is predicated on the expected E-ZPass usage. The Turnpike System has 94 lane sets of equipment, including equipment providing the capability for reversible lanes.

Maintenance Section. The Maintenance Section is responsible for the year-round maintenance of the entire Turnpike System and the operation of three welcome areas, two of which are located in Hooksett on the F.E. Everett Turnpike and one located in Seabrook on I-95. In addition, the Turnpike System maintains Hilton Park on the Spaulding Turnpike in Dover and five Park and Ride facilities located in Hampton, Hooksett, Dover, and two in Nashua.

Winter maintenance of the Turnpike System is primarily concerned with the removal of snow and ice from the roadways and toll plazas. Summer maintenance involves drainage cleanout, guardrail repairs, vegetation control, the repair of property damage, litter control and small maintenance improvement projects.

The Bureau of Turnpikes owns its own fleet of vehicles for maintenance activities. The Bureau of Turnpikes manages and operates approximately 230 pieces of motorized equipment, including, but not limited to, 46 plow trucks, 9 wheel-loaders, 3 skid steer loaders, 26 mowing tractors, 2 backhoes, a heavy sign truck, a heavy bridge crane truck, 2 street sweepers and a grader. In addition, during winter maintenance, plow and salting trucks are hired from private contractors on an as-needed basis to supplement the permanent fleet and facilitate the removal of snow and ice from the highways.

There are five maintenance facilities on the Turnpike System, which are located in Hooksett, Merrimack, Nashua, Hampton, and Dover. The heavy equipment mechanics, formerly Turnpike employees, are now under the direction of the Bureau of Mechanical Services. They utilize the Merrimack Maintenance Facility on the Central Turnpike and the North Hampton Satellite Garage and Dover Maintenance Facility on the Eastern Turnpike to maintain turnpike vehicles in good working condition. The Bureau of Turnpikes replaces major items of equipment (i.e. trucks, cars, pay loaders, tractors) in a timely manner in order to ensure that an efficient fleet of vehicles is available to maintain the Turnpike System.

Engineering Section. The Engineering section is responsible for the oversight and management of the Renewal and Replacement Program (see *The Turnpike System – Maintenance of the Turnpike System* below) as well as the Capital Improvement Program for the Turnpike System.

The section acts as an administrative liaison between the Bureau of Turnpikes and private contractors and designers. The section also undertakes design and plan reviews, and manages smaller-scale projects on the System. In addition, the Engineering section manages and coordinates the granting of encroachment permits on the Turnpike System.

Administration Section. The Administration section is responsible for the administration and financial activities of the Bureau of Turnpikes, including budget preparation, financial reconciliation, audit functions, accounts payable, accounts receivable and payroll. It accounts for the expenditure of the Turnpike System's operating funds as authorized by the State Legislature. These data flow into the Department of Transportation's Bureau of Finance and Contracts, and are processed and entered into the statewide accounting and budgeting system.

Other Services. Other Divisions and Bureaus in the Department of Transportation provide assistance and support to the Bureau of Turnpikes for its operations, particularly for the construction projects associated with the Capital Improvement Program, as well as programs of a continuing nature. These Divisions and Bureaus invoice the Bureau of Turnpikes for all services provided to the Bureau of Turnpikes.

A special bridge maintenance crew under the supervision of the Bridge Maintenance Engineer performs routine maintenance on the 170 bridges on the Turnpike System.

A special sign crew under the supervision of the Traffic Bureau Engineer performs routine sign maintenance on the Turnpike System.

The State Police patrol the Turnpike System, and costs for this service are reimbursed from Turnpike System funds. The State Police are supervised solely by the Department of Safety, and not by the Department of Transportation.

The Bureau of Mechanical Services provides the maintenance for the motorized fleet of vehicles at the Bureau of Turnpikes.

The Bureau of Traffic manufactures all signs for the Turnpike System, erects heavy signs, performs pavement marking and maintains traffic signals.

#### *Project Development*

The Division of Project Development is responsible for transportation engineering including planning, design, right of way acquisition, materials research and testing, and construction administration of all transportation projects. The Division is responsible for assuring that all highway projects and programs identified by the office of the Commissioner of the Department of Transportation are implemented, and for maintaining a coordinated management effort in carrying out the State's highway transportation programs, including the Capital Improvement Program for the Turnpike System.

#### *Finance*

The Division of Finance is responsible for all departmental (including Turnpike System) accounting, purchasing and budget control, property, contracts and grants management, data processing, assistance with departmental planning, inventory control, printing and issuance of permits, registrations and licenses. The Department of Transportation's Bureau of Finance and Contracts operates a computerized general ledger system that produces financial statements.

#### *Administration*

The Division of Policy and Administration is responsible for the development and coordination of policies and performance metrics to support and enhance the mission of the Department. The Human Resources Bureau, Office of Stewardship and Compliance, Office of Federal Labor Compliance, Office of Hearings and Legislation, Office of Public Information and Executive Office Administration are the programs assigned to the Division of Policy and Administration.

#### *Aeronautics, Rail and Transit*

The Division of Aeronautics, Rail and Transit has responsibilities involving several of the State's various modes of transportation, including aviation, rail, transit, bicycle, and pedestrian.

The Division bureaus have many similar functions, including statewide responsibility for federal and/or state aid for airports, railroad, public/mass transportation programs, and regulatory and safety inspection programs.

In addition to planning functions, the Division provides input and guidance to the many providers and users of the state's inter-modal transportation system.

## Personnel

### *Labor Relations*

A single labor organization, the State Employees Association of N.H. Inc. ("SEA") represents all State employees with the exception of certain law enforcement employees. This labor organization is affiliated with the Service Employees International Union as Local 1984, AFL-CIO, CLC (Canadian Labor Council). All Bureau of Turnpikes employees may join this organization. Labor relations between the Bureau of Turnpikes and its employees traditionally have been satisfactory. Strikes by State employees are illegal under State law.

Every two years a new collective bargaining agreement is negotiated, which provides certain rights and procedures to protect the interests of all State employees. The two-year agreement period coincides with the State's operating budget. The State reached agreement in 2011 with the SEA, the New Hampshire Troopers Association (NHTA) and the six New England Police Benevolent Association (NEPBA) bargaining units, including: Probation Parole Officers, Local 265; Probation Parole Officer Supervisors, Local 270; and NH Fish and Game Conservation Officers, Local 40; and NH Fish and Game Supervisory Officers, Local 45; Corrections Officers, Local 250; and Liquor Investigators, Local 260. The agreements expire on June 30, 2013. The complete text of the current collective bargaining agreements with the SEA, the NHTA and the NEPBA can be found on the Division of Personnel website under Labor Relations, at: <http://admin.state.nh.us/hr/sea.html>.

### *Pensions and Other Benefits*

All full-time classified State employees, including all full-time permanent Bureau of Turnpikes employees, are required to become members of and make contributions to the New Hampshire Retirement System (the "Retirement System"). In addition, the State makes contributions to the Retirement System based on percentage rates for each member's annual earnable compensation. These rates include a "normal contribution" rate and an "accrued liability contribution" rate and are based on biennial actuarial valuations.

Detailed information regarding the Retirement System, including, in particular, its funded status and aggregate unfunded liabilities are set forth in the State's Information Statement dated March 26, 2012 (the "Information Statement") under the heading "STATE RETIREMENT SYSTEM". Specific reference is made to portion of the Information Statement entitled "STATE RETIREMENT SYSTEM." The Information Statement was filed with EMMA on March 26, 2012 pursuant to the State's continuing disclosure obligations.

The Information Statement also contains information regarding other post-employment benefits, principally retiree health insurance costs. See "HEALTH CARE COVERAGE FOR RETIRED EMPLOYEES" therein. Chapter 224:342 and 343, Laws of 2011 also increased the retiree premium contribution from a fixed dollar amount of \$65 per month to 12.5% of the total monthly premium.

The Turnpike System incurred and is expected to incur the following approximate costs related to pension and health insurance in the Fiscal Years shown below:

<b>Expenses Payable During the Fiscal Year Ending June 30</b>	<b>Permanent Employee Pension</b>	<b>Permanent Employee Health</b>	<b>Permanent Employee Dental</b>	<b>Retiree Health</b>	<b>Total</b>
2011 (Actual)	\$938,286	\$2,835,842	\$172,253	\$609,279	\$4,555,660
2012 (Prel. unaudited)	\$833,893	\$2,586,908	\$176,198	\$1,042,628	\$4,639,386
2013 (Est.)	\$1,094,413	\$3,480,732	\$221,254	\$1,247,202	\$6,043,601

## THE TURNPIKE SYSTEM

### General Description

The Turnpike System as shown on the map on page iv presently consists of 89 miles of limited access highway, 36 miles of which are part of the U.S. Interstate Highway System, comprising a total of approximately 643 total lane miles. Since beginning operations in 1950, the Turnpike System has contributed to the development of the New Hampshire economy. It has also been a major factor in the growth of the tourist industry in the State. The Turnpike System comprises three limited access highways: the Blue Star Turnpike (I-95) and the Spaulding Turnpike, which are collectively referred to as the Eastern Turnpike and the Central Turnpike (also known as the F.E. Everett Turnpike). The major cities located in the central and southern sections of New Hampshire are primarily served by the Turnpike System. See *State Demographic and Economic Data within Turnpike System Audited Financial Statements for Fiscal Year 2011*, included by reference herein as set forth in Appendix C, for a general description of the State and its economy, including population, economic activity, employment, personal income, state and local taxation, housing, education, utilities, banking and transportation.

No food, gas or vehicle service facilities are located on the Turnpike System, with the exception of vending machines at the Hooksett and Seabrook rest areas which are operated by a private vendor and a state licensing agency for the Blind and Visually Impaired. Motorist services are located near most interchanges on the Turnpike System and are privately operated. State operated liquor stores are located at two rest areas on the Central Turnpike (I-93) and at two sites along the Blue Star Turnpike (I-95). The Bureau of Turnpikes does not receive any revenue from the liquor store operations, which are under the supervision of the State Liquor Commission, but receives nominal revenue from the vending installations.

### Eastern Turnpike

#### *Blue Star Turnpike (I-95)*

The Blue Star Turnpike segment extends from the Massachusetts state line in Seabrook, New Hampshire to the Maine state border in Portsmouth, New Hampshire. It is 16.2 miles long and constitutes a portion of I-95. The Blue Star Turnpike serves as the major connecting road between the states of Maine and Massachusetts. It also parallels the seacoast and, as such, is the major artery for tourist traffic to the New Hampshire coast from Massachusetts and Maine. The route also connects with several major highways in New Hampshire, including Route 101, Route 4 and the Spaulding Turnpike. Two toll plazas are located in Hampton, one for main line traffic and one for vehicles entering and leaving the Turnpike System at NH Route 101.

Hampton also has both a maintenance facility and a Park and Ride facility to encourage car pooling. The Seabrook Welcome Center provides a modern rest area, vending machines, and parking for motorists and commercial vehicles, allowing for the convenience of Turnpike System patrons.

#### *I-95 Acquisition*

Chapter 144 of the Laws of 2009 (“Chapter 144”) authorized the Department of Transportation to convey a 1.6-mile section of I-95, including the Piscataqua River Bridge, to the Bureau of Turnpikes in exchange for \$120 million and on such other terms and conditions as the Commissioner of Transportation and the Bureau of Turnpikes agree. The legislation further provides that the amount payable to the Department of Transportation for deposit into the State Highway Fund shall be paid from the Turnpike System General Reserve Account over a period not to exceed twenty years with \$30 million (including interest) being paid in Fiscal Year 2010, \$20 million (including interest) being paid in Fiscal Year 2011, and the balance to be paid as agreed by the Commissioner of Transportation and the State Treasurer. The Governor and Council approved a \$.50 toll increase on the Hampton main line plaza effective July 1, 2009 that generates approximately \$11.6 million annually that partially funded this acquisition.

The original plan for the \$120 million I-95 acquisition included payments of \$30 million and \$20 million in Fiscal Years 2010 and 2011, respectively, to be made from the excess cash in the General Reserve Account with subsequent annual payments of \$5.9 million through Fiscal Year 2029. The current budget advances the I-95 payments by providing an additional \$20.1 million in both Fiscal Years 2012 and 2013 for total payments in each year of \$26 million. These advanced payments were made in Fiscal Year 2012 and are expected to be made in Fiscal Year 2013, in each case from excess cash in the General Reserve Account at fiscal year-end. This will result

in a reduced payment term of 10 years with annual payments of \$5.9 million due Fiscal Years 2014 through 2018 and a final payment of \$2.2 million due in Fiscal Year 2019. To date, \$76 million has been paid as scheduled in Fiscal Years 2010 through 2012. The interest rate applicable to this obligation is 4.00%. All amounts are payable solely from the General Reserve Account and the obligation is subordinate to all obligations with respect to the Bonds.

This section of I-95 provides a critical link to the Maine Turnpike, and the traffic is principally turnpike traffic with the expectation that this segment would be maintained to the same standard as the rest of the Blue Star Turnpike (I-95).

Concurrent with the transfer, the Department advertised two projects to rehabilitate and renew the newly acquired section of I-95. The first project (Portsmouth 15648) involved pavement rehabilitation and resurfacing, replacement of existing deficient guardrail, modifications to the median drainage, and rehabilitation and preservation work on four I-95 bridge decks. Work started in July 2009 and is complete. The project cost totaled \$5.6 million and was funded with federal funds under the American Recovery and Reinvestment Act (ARRA) program. The second project (Portsmouth 14376) involved painting the Piscataqua River Bridge approaches carrying I-95 over the Pan Am Railroad, Ranger Way, and Preble Way. This project was completed in December 2011. The final project cost \$8.4 million and was funded with federal bridge aid funds. In accordance with the provisions in Chapter 144, the Piscataqua River Bridge is eligible for federal funds and state highway funds. In the event of emergency repairs or repair to damage from a catastrophic event, the Department of Transportation, rather than the Bureau of Turnpikes, shall remain liable for such repairs. The Bureau of Turnpikes is responsible for the routine maintenance of the bridge. This section of highway remains eligible for federal funds because no new toll plazas were constructed.

#### ***Hampton Open Road Tolling (ORT)***

The new highway speed electronic tolling lanes at the Hampton Toll Plaza on I-95 (Blue Star Turnpike) opened permanently for motorists on June 17, 2010. In Fiscal Year 2012 over 65% of all vehicles used the ORT lanes at the Hampton Toll Plaza, an increase from 62% in Fiscal Year 2011.

During its first year of operation, the ORT lanes at the Hampton Tolls have reduced traffic backups and improved service for E-ZPass customers, improved air quality by reducing emissions caused by idling, and reduced diversion to alternate routes by improving traffic flow. E-ZPass utilization growth at the Hampton plaza continues to lead the system.

The \$16.8 million ORT project converted six plaza lanes to four ORT lanes (two in each direction) while also adding one additional tollbooth in each direction. ORT lanes can process nearly five times as many vehicles as a conventional cash toll lane and 60 percent more traffic than a dedicated E-ZPass lane where motorists must slow down to pass through the lane. In addition to the ORT lanes, there are a total of 12 toll lanes in use (six northbound and six southbound) for both cash paying and E-ZPass customers.

The project was selected as the regional winner in the 2011 America's Transportation Awards competition under the On Time Small Project category. The America's Transportation Awards were created to acknowledge transportation improvements delivered by state departments of transportation "On Time", "Under Budget", and with "Innovative Management." Subsequent to the selection as a regional winner, the ORT project was identified as one of the "Top Ten" projects nationwide.

#### ***Route 107 Seabrook***

Final design engineering work is nearly complete for the planned widening of the Route 107 bridge over I-95 in Seabrook. The expansion is expected to greatly improve the evacuation capacity of Route 107 and reduce traffic backups and improve air quality. The Town of Seabrook and a private developer have agreed to fund approximately 40% or \$2.7 million of the \$6.9 million project, which was approved by the Governor and Executive Council in June 2012. Construction started in July 2012 and is expected to be substantially complete by October 2013.

### ***Spaulding Turnpike***

The Spaulding Turnpike segment of the Turnpike System, including the 11.2 mile Spaulding Turnpike extension, extends from the traffic circle in Portsmouth, New Hampshire to Exit 18 in Milton, New Hampshire. It is 33.2 miles long and is a part of the major north-south artery connecting the three major urban centers on the eastern side of the State. This segment of the Turnpike System connects the Blue Star Turnpike (I-95) to Route 16 (a major roadway to northern New Hampshire in the eastern portion of the State). It also connects the major cities of eastern New Hampshire (Portsmouth, Dover and Rochester) and intersects with several other major highways (State Routes 4, 11 and 125 and U.S. Route 202). It has two toll plazas located in Dover and in Rochester, a maintenance facility located in Dover and a Park and Ride facility at Exit 9 in Dover. Maintenance on the Spaulding Turnpike extension is provided by the Department of Transportation's Bureau of Highway Maintenance, which bills the Bureau of Turnpikes for services. In addition, for the convenience of the Turnpike System patrons, a Park and Ride is located at Exit 9 in Dover and a park with picnic facilities is provided at Hilton Park, also in Dover.

### **Central Turnpike (F.E. Everett)**

The Central Turnpike, commonly known as the F.E. Everett, extends from the Massachusetts state line in Nashua, New Hampshire to Exit 14 in Concord, New Hampshire. Its distance is 39.5 miles and, in part, constitutes portions of US Interstate Highways 93 and 293. The Central Turnpike connects three urban centers in New Hampshire (the cities of Concord, Manchester, and Nashua). The route also connects with the major East-West roads in New Hampshire (Route 101, Route 4 and I-89). Six toll plazas are located on the Central Turnpike: two at Hooksett (main line and ramp), a main line plaza in Bedford, and ramp plazas in Merrimack at Bedford Road, Exit 11 and Merrimack Industrial Interchange. There are maintenance facilities in Nashua, Merrimack and Hooksett. Park and Ride facilities are provided in Hooksett at Exit 11 and in Nashua at Exits 7 and 8.

In addition, two rest areas for information and rest room facilities are provided in Hooksett for the convenience of Turnpike System patrons. The Central Turnpike also had a Welcome Center at Exit 6 in Nashua, which was closed in November 2010 and reconstructed to provide a satellite Department of Safety, Division of Motor Vehicle (DMV) office and an E-ZPass Walk-In-Center (WIC). Although bus service to Boston was available from this facility as well as from the Park and Ride at Exit 8 via a trailer, both sites have been redeveloped. With the removal of the Exit 6 bus service, a new bus station was constructed at Exit 8 and opened in December of 2010. The new satellite DMV office and E-ZPass WIC was opened in June 2011.

### ***Hooksett Open Road Tolling***

Construction on the second ORT facility in New Hampshire began in April 2012. This facility will implement new highway speed electronic tolling lanes at the Hooksett Toll Plaza on I-93. The improvements also include the rehabilitation of the existing toll plaza, roadway widening and reconstruction, and bridge rehabilitation at three locations (I-93 bridges over Hackett Hill Road, Ramp A-B and Cross Road).

The introduction of ORT lanes at the Hooksett Tolls will reduce traffic backups, improve service for E-ZPass customers, improve air quality by reducing emissions, reduce energy usage, and decrease diversion to alternate routes by improving traffic flow.

The \$22.5 million Hooksett ORT project will convert six plaza lanes to four ORT lanes (two in each direction). An ORT lane can process nearly five times as many vehicles as a conventional cash toll lane and 60 percent more traffic than a dedicated E-ZPass lane which requires motorists to slow down to pass through the lane. In addition to the ORT lanes, there will be a total of 12 toll lanes in use (six northbound and six southbound) for both cash paying and E-ZPass customers. The project is scheduled to be substantially complete, and the ORT lanes operational by June 2013.

### ***Hooksett Rest Area Redevelopment***

In two successive transactions in June 2010, and June 2011, the Turnpike System purchased land at both the northbound and southbound portions of the Hooksett Rest Area from the New Hampshire Liquor Commission. The Liquor Commission retained ownership of the land (approximately 20,000 square feet) beneath the current liquor store buildings and the planned expansion of those buildings. The project proposes to redevelop the existing rest areas and State liquor stores, located north of the Hooksett Toll Plaza, into new full service area facilities with new State liquor stores. A request for proposals (RFP) to procure a developer/operator through a ground lease

arrangement was issued in March 2011. The new service areas are envisioned to offer major branded and/or locally recognized food concepts and to be anchored with new State liquor stores. Although these facilities are expected to be an attractive option for travelers on the Turnpike, the project is not expected to have an effect on traffic. Any potential added revenue to the Turnpike System is expected to be determined through the RFP process. In response to the RFP, one proposal was received that ultimately was determined to be inadequate and rejected by the Selection Committee on October 26, 2011. On December 20, 2011, the one bidder filed suit under RSA 91-A, the State's right-to-know law, arguing that the State failed to comply with the law in not producing documents and requested an injunction on the re-issuance of the RFP. This bidder also threatened to sue the State for failure to award the bid to it. On May 22, 2012, the Superior Court ruled that the State may invoke RSA 21-I:13-a(II) to prohibit production of any materials which will be used or relied upon to prepare a subsequent invitation to bid. The outcome of this matter cannot be predicted at this time. On July 17, 2012, the Turnpike System issued a request for qualifications (RFQ) to procure a developer/operator through a ground lease arrangement to redevelop the existing rest areas and State liquor stores into new full service area facilities with new State liquor stores. RFQ responses are due on September 24, 2012.

### ***New Bridges***

Five new bridges have been added and one single bridge discontinued on the Turnpike system as a result of the construction of the Spaulding Turnpike (NH 16) improvements. The bridges carry the Spaulding Turnpike over the mainline barrels and interchange ramps over the intersecting roads and water bodies. The new bridges completed in the fall of 2011 and spring of 2012 and bring the total number of Turnpike bridges to 170. All of the new bridges are located in Rochester.

### **Maintenance of the Turnpike System**

The Turnpike System (other than the Spaulding Turnpike extension) is maintained and repaired by the Bureau of Turnpikes of the State Department of Transportation. All maintenance and repair costs have been funded from turnpike operating revenues since the beginning of the Turnpike System in 1950. The Turnpike System funds Renewal and Replacement Costs from budgeted appropriations at levels based on independent engineer recommendations. In addition to the appropriations set aside for renewal and replacement, the balance of the Turnpike General Reserve Account and cash with the Treasurer as of June 30, 2012 was \$53.4 million, of which \$20.1 million will be used to fund the accelerated Fiscal Year 2013 I-95 payment referenced above. See *Introduction*. The General Reserve Account is used to fund Capital Construction Expenditures and can be used for unanticipated renewal and replacement costs.

Since 1986, the Bureau of Turnpikes has resurfaced an average of approximately 10% of the total lane miles of the Turnpike System each year, with the exception of Fiscal Years 2005 and 2006 (during which no resurfacing was performed), repaired and planned for the rehabilitation of at least one bridge each year, provided needed updating and repairs of the heating systems and emergency generators at all facilities, and performed other repairs as needed. The Bureau expects to continue to resurface sufficient lane miles annually in order to complete a full repavement cycle of the entire Turnpike System every ten years (the "Renewal and Replacement Program").

Due to the costs associated with the introduction of the E-ZPass program, the Bureau of Turnpikes deferred certain expenditures associated with Renewal and Replacement Costs during Fiscal Years 2005 and 2006. Since appropriations for Renewal and Replacement expenditures associated with Renewal and Replacement Costs do not lapse and can be carried forward to subsequent years, unspent prior Fiscal Year appropriations are available in future Fiscal Years.

The contracted independent engineering consultant, HNTB, Inc. (HNTB) completed a review and assessment of the Renewal and Replacement Program in January 2012. The assessment provided recommendations on program funding levels and provided insight on the condition of the Turnpike infrastructure. Condition of the Turnpike facilities was determined through visual inspections of infrastructure (pavements, bridges, guardrail, drainage, signing, etc.). HNTB deemed the Turnpike facilities to be in "good" condition, characterized as a state whereby the various components are in appropriate working order to provide the necessary level of service and require only the anticipated minimal maintenance that would be expected for the life cycle of the facility.

As a result of the HNTB assessment of the condition of the Turnpike facilities, the recommended funding for the Renewal & Replacement Program for Fiscal Years 2014 through 2019 is \$66,200,000, a reduction of approximately \$7,300,000 over this same period from the previous recommended total. Major expenditures are

planned for resurfacing, bridge rehabilitation, guardrail replacement, drainage repairs, bridge painting and toll plaza repairs. The following projects are planned for Fiscal Years 2014 through 2019 as part of the Renewal and Replacement Program at the \$66,200,000 funding level:

- Resurfacing on Central and Eastern Turnpike
- Deck Rehabilitation of the I-95 High Level Bridge at the Maine state line
- Rehabilitation of six (6) bridges
- Painting three (3) bridges on the Blue Star Turnpike
- Toll plaza rehabilitation
- Guard rail upgrades and replacements
- Safety rumble strips on roadway shoulders
- Toll plaza building rehabilitations
- Drainage replacement and repairs
- Replacement of overhead signs and sign structures

Historically there have been fluctuations in annual expenditures for the Renewal and Replacement Program. The number of lane miles requiring resurfacing varies from year to year. Beginning in Fiscal Year 1988, a Bridge Rehabilitation Program was initiated by the Department. The Department's Bridge Rehabilitation Program rehabilitates bridges on the Turnpike System that exhibit signs of deterioration and are not included as part of the Capital Improvement Program. In an effort to prolong their overall lifespan, bridges that are not funded through the Renewal and Replacement Program but that are part of the operating budget of the Bureau, may also receive continuing preventive maintenance and minor rehabilitation by the Turnpike Bridge Maintenance crew. The Department's Bridge Rehabilitation Program for the Turnpike System will rehabilitate at least one bridge annually and the program is expected to continue to address bridge rehabilitation requirements of the Turnpike System in order to maintain a sufficiency rating on all bridges of "good," or better. Bridges not included for repairs in the current Bridge Rehabilitation Program are either in a turnpike study area or are scheduled for replacement in the Capital Improvement Program.

The following table indicates the funds expended on a GAAP basis since Fiscal Year 2000 and projected expenditures for the Renewal and Replacement Program for the Turnpike System through Fiscal Year 2015. All information for Fiscal Years 2000 through 2011 is audited. Fiscal Year 2012 information is unaudited, preliminary and subject to change. Information for Fiscal Years 2013 through 2015 is projected and subject to change.

**RENEWAL AND REPLACEMENT EXPENDITURES**  
**Fiscal Years 2000 through 2015**  
**GAAP Basis and Budget (\$000's)**

<u>Fiscal Year</u>	<u>Amount</u>
2000	\$ 4,112
2001	5,928
2002	5,724
2003	7,058
2004	4,973
2005	3,114
2006	4,567
2007	8,552
2008	11,842
2009	7,805
2010	7,793
2011	14,309
2012	7,486*
2013	14,580†
2014	10,000‡
2015	8,900‡

\* Fiscal Year 2012 amount is preliminary, unaudited and subject to change.

† Fiscal Year 2013 includes the authorized budget amount of \$9.8 million plus a carryover from Fiscal Year 2012 of \$4.771 million.

‡ Recommended by HNTB Renewal and Replacement Assessment January 12, 2012.

## **Management's Discussion of the Turnpike System**

### *Condition of the Turnpike System Facilities*

The Department of Transportation believes that the Turnpike System continues to receive adequate preventive maintenance, allowing for facilities to be maintained in good condition. HNTB's Renewal and Replacement Program assessment dated January 12, 2012 reported the infrastructure of the System to be in generally good condition. The State continues to appropriate sufficient funds to provide for renewal and replacement of facilities as scheduled. These include such items as resurfacing of main line roadways and interchange ramps in addition to a Bridge Rehabilitation Program which includes bridge deck replacement and substructure repair.

The Department of Transportation believes that the current plans for operation and maintenance of the Turnpike System, together with the improvements under the Capital Improvement Program, will keep the Turnpike System operationally sound and its condition good to excellent.

All 170 bridge structures on the Turnpike System are inspected every two years and rated by the Department of Transportation's Bureau of Bridge Design in accordance with national bridge inspection standards. The Department's Bridge Rehabilitation Program from Fiscal Years 2014 through 2019 includes six bridges scheduled for rehabilitation and three scheduled for painting (the "Bridge Rehabilitation Program").

Funding for the Bridge Rehabilitation Program is provided through the Capital Improvement Program, the Renewal and Replacement Program and in some cases federal funding.

### *Renewal and Replacement Costs*

The Turnpike System did not expend the full amount of its Fiscal Years 2009 and 2010 appropriation for Renewal and Replacement Costs due to fluctuations in contract award timing and payment timing. In addition, the appropriation for Fiscal Year 2009 was increased by \$1 million to compensate for the effect of higher than expected pavement resurfacing costs. Because that appropriation occurred late in Fiscal Year 2009, it was carried forward to Fiscal Year 2010. Unspent appropriations are carried forward to be spent in future years. Fiscal Year 2011 expenditures were higher as a result of the delayed spending. The carry-forward to Fiscal Year 2012 was \$2.9 million, down from \$6.6 million in Fiscal Year 2011. Due to fluctuations in contract award timing and payment timing, the Turnpike System spent \$7.4 million in Fiscal Year 2012, which resulted in a carry-forward to Fiscal Year 2013 of \$4.8 million, of which approximately \$4.2 million are encumbered contractual amounts from Fiscal Year 2012.

The Department of Transportation projects that appropriations for Renewal and Replacement Costs will be sufficient to meet the needs of the Turnpike System and intends to continue funding in ensuing years to adequately maintain the infrastructure of the Turnpike System.

### *Historical and Projected Operating Expenses*

The Bureau of Turnpikes has projected Operating Expenses that are consistent with the historical expenses, and reflect a continuing commitment to cost effective management and operation. In the judgment of the Department of Transportation, the projected Operating Expenses provide a reasonable estimate of future costs.

### *Lean Staffing Initiative in Tolls*

The Bureau of Turnpikes, effective June 17, 2011, implemented a "Lean Staffing Model" for Toll Operations whereby scheduling guidelines were provided to toll supervisory staff to better align staffing at each toll facility with the projected cash lane traffic.

Results after 26 bi-weekly pay-periods in Fiscal Year 2012 (which typically constitute the end of the fiscal year) indicate nearly 17% fewer full-time and part-time hours worked as compared to Fiscal Year 2011. This results in total personnel cost savings of 15.3% or \$1.51 million system-wide. Accounting for the one additional pay-period (27th pay period) in Fiscal Year 2012, the savings in toll personnel costs from that budgeted in Fiscal Year 2012 were \$2.1 million.

The implementation of ORT, combined with lean staffing at the Hampton main line plaza, is expected to result in approximately 31% fewer full-time and part-time hours worked as compared to the same period in Fiscal

Year 2010 (prior to ORT). This results in personnel costs approximately 25% lower than Fiscal Year 2010, or a savings of approximately \$530,000 in this fiscal year.

### **Turnpike System Revenue and Traffic Trends**

Prior to June 30, 2005, toll revenue comprised five components: cash toll receipts, charge account payments, charge account interest, token sales revenue and miscellaneous income. With the implementation of the E-ZPass electronic toll collection program, cash and E-ZPass are the main components of toll revenue.

Rates of growth in toll revenues may differ from growth in toll transactions due primarily to (i) changes in toll rates, (ii) changes in amounts and utilization of the Turnpike System discount token and commercial charge programs and E-ZPass and (iii) a changing mix of vehicle classes. The last system-wide toll increase was instituted in October 2007. Tolls were increased only at the Hampton main line plaza effective July 1, 2009.

Passenger vehicles traveling the Turnpike System comprised approximately 94% of the total traffic during Fiscal Year 2012, with commercial vehicles at 6%. Until December 31, 2005, passenger vehicles could use Turnpike System tokens, which provided a 50% toll discount. Until September 30, 2005, commercial vehicles participating in the Turnpike System commercial charge program received a 30% discount. See *Toll Collection, Rates and Schedules*. The token and commercial charge discount programs were highly popular, with approximately 60% of passenger traffic using tokens and approximately 50% of commercial traffic using the commercial charge discount program during the twelve months ended June 30, 2005. As discussed in *Toll Collection, Rates and Schedules*, these discount programs have been terminated and replaced by E-ZPass electronic toll collection program, which offers a 30% discount for passenger vehicles and a 10% discount for commercial vehicles.

The table below shows annual toll transaction and revenue trends for the Turnpike System during the period beginning with Fiscal Year 1998 and ending with Fiscal Year 2012, with toll revenue presented on a cash basis, which differs from the Turnpike System Comprehensive Annual Financial Reports, which are reported on a GAAP basis. All information in this Official Statement for Fiscal Year 2012 is unaudited, preliminary and subject to change.

**ANNUAL TRAFFIC AND TOLL REVENUE TRENDS**  
**New Hampshire Turnpike System**

<u>Fiscal Year</u>	<u>Annual Toll Transactions</u>	<u>Percent Change from Prior Year</u>	<u>Annual Toll Revenues*</u>	<u>Percent Change from Prior Year</u>
2012 <sup>†</sup>	108,718,537	0.0%	\$116,844,000	0.2%
2011	108,723,856	0.4	116,659,180	0.5
2010	108,336,576	0.6	116,036,026	11.7
2009	107,653,154	-4.9	103,907,003	3.4
2008	113,186,722	-2.0	100,406,992	22.2
2007	115,457,650	0.8	82,175,322	7.2
2006	114,562,787	4.1	76,633,131	16.2
2005 <sup>‡</sup>	110,040,272	-0.5	65,956,309	0.3
2004 <sup>‡</sup>	110,573,506	0.5	65,780,607	2.2
2003	109,978,691	2.1	64,367,301	0.0
2002	107,729,932	4.0	64,371,208	4.6
2001	103,583,561	4.2	61,536,675	2.3
2000	99,363,028	5.7	60,166,815	5.4
1999	94,017,638	5.7	57,080,882	5.1
1998	88,987,246	4.7	54,298,452	4.1

\* Excludes charge account interest and miscellaneous income.

<sup>†</sup> Fiscal Year 2012 preliminary, unaudited totals.

<sup>‡</sup> Hampton toll plaza: One-way tolls September-October 2003 and July-October 2004.

Traffic and toll revenue growth began to flatten in Fiscal Year 2003, and the trend continued through Fiscal Year 2005. Many factors contributed to this slowdown in growth, including rising fuel costs, an economic slowdown in the Northeast, harsher winters (but less snow for winter recreation), and fewer travel trips following the terrorist attacks on September 11, 2001.

Revenue growth is higher than traffic growth in Fiscal Years 2004 and 2005, due to one-way toll collection at the Hampton toll plaza during September and October 2003, and July through October 2004. During these periods, tolls at this facility were doubled in the northbound direction, but traffic was only counted northbound and not southbound.

In Fiscal Year 2006, an upgrade to a more sophisticated, more accurate toll collection system likely caused an inflated increase in the transaction count (4.1% increase). Toll transactions decreased in Fiscal Years 2008 and 2009 primarily as a result of the economic slowdown and increasing gasoline prices. In addition, traffic diversion resulting from the system-wide toll rate increase effective October 22, 2007 adversely affected toll transaction counts in Fiscal Years 2008 and 2009.

In Fiscal Year 2006, the discounts on tolls changed with the conversion from token and commercial charge card programs to the E-ZPass program. Beginning July 2005, the discount on tolls was reduced from 50% to 30% for passenger vehicles and from 30% to 10% for commercial vehicles participating in the New Hampshire E-ZPass program. The conversion was completed in August 2005.

The commercial charge card program was effective through September 30, 2005 and tokens were accepted through December 31, 2005, at a discount of 30% and 50%, respectively. This impacted revenue in Fiscal Years 2006 and 2007, as the market share for E-ZPass continued to grow once these programs were discontinued and replaced with the lower discounted E-ZPass program.

The transition to E-ZPass and related upgrades to toll collection systems initially affected the Turnpike System's earnings and cash flows. The capital costs were largely funded using federal funds, thus minimizing impact to Turnpike finances. Operating start-up costs associated with E-ZPass were offset to some extent by the elimination of the token and commercial charge discount programs and efforts by the Turnpike System to reschedule

renewal and replacement projects and to control expenses generally. In addition, the Turnpike System planned the transponder distribution program with the assumption that transponder purchases would be capitalized; however, it was determined that the cost of the transponder purchases would be required to be charged to operating expense in the year of purchase. Therefore, due to the initial discount program, additional net expenditures of \$1.7 million and \$3.3 million were recorded in Fiscal Year 2005 and Fiscal Year 2006, respectively.

In Fiscal Year 2008, toll fares were increased on October 22, 2007 at the Hooksett main line Plaza, Bedford main line plaza, Rochester plaza, Dover plaza, Hampton main line plaza, and Hampton side plaza. This improved earnings and cash flow allowed acceleration of the Capital Improvement Program as well as the Renewal and Replacement Program to the level recommended by the independent engineer, HNTB, in October 2006.

Despite the decline in toll transactions in Fiscal Year 2009, toll revenue continued to increase in that year due to the full effect of the October 2007 toll increase.

On July 1, 2009, fares were increased at Hampton main line toll plaza to fund a portion of the purchase of a 1.6 mile section of I-95 and the current Capital Improvement Program, including the implementation of open road tolling at Hampton (and two other improvements to the Blue Star Turnpike), which was needed to relieve significant congestion issues and environmental concerns. Open Road Tolling (ORT) is the next generation of electronic tolling that allows drivers who have an E-ZPass device to pay their toll electronically without slowing down to pass through a conventional toll lane. ORT has reduced congestion and traffic delays as well as harmful vehicle emissions.

The Hampton main line toll rate increase drove a 11.7% increase in toll revenues on a modest 0.6% increase in toll transactions for Fiscal Year 2010 over Fiscal Year 2009.

The total toll transactions for Fiscal Year 2011 resulted in a gain of 0.4% in traffic and a gain of 0.5% in revenue over the previous Fiscal Year. Robust traffic growth in the first half of Fiscal Year 2011 was eroded in the second half by the impact of winter storms in January and February, along with high gas prices that materialized in April.

For Fiscal Year 2012, the total number of toll transactions was essentially flat and revenue was slightly higher (0.16%) as compared to Fiscal Year 2011. Modest growth elsewhere on the Turnpike System was eroded by reductions attributed to the opening of the Manchester Airport Access Road (MAAR), where a new interchange was constructed around the existing Bedford main line plaza to provide free access from the Central Turnpike (F.E. Everett) to the Manchester airport. The MAAR opened on November 11, 2011 and through June 30, 2012 has resulted in 1.2 million fewer transactions at the Bedford main line plaza or 11.1% less than the same period in the prior year. This is estimated to result in \$1.1 million less toll revenue at the Bedford location. In addition, the Merrimack Exit 12 ramp toll plazas have experienced a reduction of 208,399 transactions, which is valued at approximately \$88,000 in lost toll revenue. The other two Merrimack ramp plazas have experienced slight (0.8% at Exit 11) to good (20.2% at Exit 10) growth in traffic that has largely offset the losses experienced at Exit 12. Extracting the Bedford and Merrimack plazas, the rest of the Turnpike system has experienced growth of roughly 1.3% for Fiscal Year 2012.

#### *Traffic and Revenue Study*

In connection with the issuance of the 2012 Series C Bonds, Jacobs Engineering Group Inc. ("Jacobs") conducted the traffic and revenue study for the Turnpike System attached hereto as Appendix A. Jacobs analyzed historical traffic and revenue data for the entire Turnpike System to determine historical trends, and reviewed previous traffic and revenue projections and compared them to actual traffic and revenue data recorded by the Bureau. In addition, Jacobs reviewed the historical and proposed Turnpike System Capital Improvement Program, as well as historical and projected expenditures for the Turnpike System related to operations, maintenance, renewal and replacement, and toll processing.

#### *Central (F.E. Everett) Turnpike Region*

Major transportation improvement projects programmed for funding or recently completed that could affect volumes on the Central Turnpike are:

- Manchester Airport Access Road – This new road connected the Central Turnpike with the Manchester Airport via Londonderry. This project includes a new full interchange between the Central Turnpike and Route 3 in the vicinity of the Bedford main line toll plaza. This interchange is toll-free and provides a bypass around the Bedford main line toll plaza as well as toll-free access to the airport. The project has been completed and was opened for traffic on November 11, 2011. The Bedford main line Toll Plaza and Bedford Road Ramp Plaza (Exit 12) are exhibiting losses in toll transactions that are expected to continue to grow in the future as knowledge of this toll-free option grows over the next few years.
- Interstate 93 Widening –This project will provide two additional travel lanes in each direction over the 20-mile segment between the Massachusetts state line and Manchester, New Hampshire. When this project is completed (completion date undetermined at this time due to funding questions), it is possible that traffic will increase on sections of the Central Turnpike north of Manchester and possibly decrease south of Manchester, due to congestion relief on I-93. The State recently dedicated federal funding to cover a portion of the construction costs. However, there remains a \$250 million shortfall to complete the entire project.
- Manchester Interstate 293 Exit 4 Bridge Rehabilitation – This project, located in Manchester, includes the reconstruction of I-293 between NH 101 and Granite Street as well as the rehabilitation of five bridges. Construction is anticipated to begin in 2013. All construction is estimated to be completed in July 2016. This work could lead to a slight decrease in traffic during the construction period.
- Open Road Tolling (ORT) Implementation - ORT is planned at the Hooksett and Bedford main line toll plazas. Hooksett ORT construction is underway and is expected to be completed in the fall of 2013 with the ORT lanes scheduled to be operational in June of 2013. Bedford ORT is tentatively planned for construction in Fiscal Year 2015. Presently the Bedford ORT project is unfunded. It is estimated that during construction, traffic will not be adversely affected because the Bureau will maintain the necessary number of toll lanes in each direction. The purposes of ORT are to enhance the convenience of the tolling process, reduce congestion and pollution and generally make the Turnpike a more attractive alternative to motorists.
- Hooksett Rest Area Redevelopment - In two successive transactions in June 2010, and June 2011, the Turnpike System purchased land at both the northbound and southbound portions of the Hooksett Rest Area from the New Hampshire Liquor Commission. The Liquor Commission retained ownership of the land (approximately 20,000 square feet) beneath the current liquor store buildings and the planned expansion of those buildings. The project proposes to redevelop the existing rest areas and State liquor stores, located north of the Hooksett Toll Plaza, into new full service area facilities with new State liquor stores. A request for proposals (RFP) to procure a developer/operator through a ground lease arrangement was issued in March 2011. The new service areas are envisioned to offer major branded and/or locally recognized food concepts and to be anchored with new State liquor stores. Although these facilities are expected to be an attractive option for travelers on the Turnpike, the project is not expected to have an effect on traffic. Any potential added revenue to the Turnpike System is expected to be determined through the RFP process. In response to the RFP, one proposal was received that ultimately was determined to be inadequate and rejected by the Selection Committee on October 26, 2011. On December 20, 2011, the one bidder filed suit under RSA 91-A, the State's right-to-know law, arguing that the State failed to comply with the law in not producing documents and requested an injunction on the re-issuance of the RFP. This bidder also threatened to sue the State for failure to award the bid to it. On May 22, 2012, the Superior Court ruled that the State may invoke RSA 21-I:13-a(II) to prohibit production of any materials which will be used or relied upon to prepare a subsequent invitation to bid. The outcome of this matter cannot be predicted at this time. On July 17, 2012 the Turnpike System issued a request for qualifications (RFQ) to procure a developer/operator through a ground lease arrangement to redevelop the existing rest areas and State liquor stores into new full service area facilities with new State liquor stores. RFQ responses are due on September 24, 2012.
- Nashua Commuter Rail and Park and Ride – This project consists of the development of two Park and Ride facilities in Nashua for van pool, car pool, and commuter rail activities. This project is part of the development and start-up of a commuter rail service between Lowell, Massachusetts and Nashua, New Hampshire – commuter rail service currently exists between Lowell, Massachusetts and Boston,

Massachusetts. This service could potentially be extended to Manchester, New Hampshire. The effect of the commuter rail and Park and Ride facilities on the Turnpike System traffic is expected to be negligible. At this time, the locations of the facilities have not been finalized, but a location on Crown Street in downtown Nashua, a couple of miles east of the southern terminus of the Turnpike, is under consideration. The start and completion dates for this project are undetermined due to funding issues.

#### *Blue Star Turnpike Region*

Future planned transportation improvement projects that could affect traffic volumes on the Blue Star Turnpike include:

- Hampton Falls – Hampton I-95 Bridge Replacement over Taylor River – This project will replace the I-95 Bridge over the Taylor River near Hampton. Construction is expected to occur between November 2014 and October 2017. This project could temporarily decrease traffic on the Blue Star Turnpike as all traffic lanes would be impacted during construction.
- Route 1 and Route 1 Bypass Bridge Replacements – The Blue Star Turnpike (I-95), Route 1 Bypass, and Route 1 serve as the only three crossings over the Piscataqua River between Portsmouth, New Hampshire and Kittery, Maine. The Route 1 Memorial Bridge was closed permanently to vehicular traffic on July 27, 2011, with a replacement bridge to be built by July 2013. An RFP for the design of the Sarah Mildred Long Bridge replacement was recently issued; construction is targeted to begin in late 2014 and to be completed in November 2017. These projects may divert traffic to the Turnpike during construction.

#### *Spaulding Turnpike Region*

Planned transportation improvement projects that could affect traffic volumes on the Spaulding Turnpike include:

- Rochester Turnpike Widening – This project involves the widening of the Spaulding Turnpike between Exit 11 and Exit 16 in Rochester along with some bridge improvements. Construction began in December 2007 and widening between Exits 11 and 13 has been completed. The entire project is anticipated to be completed in October of 2013. Construction activities have resulted in only minor traffic losses in recent years, but this traffic is expected to return once the widening is complete. In addition, a small amount of traffic growth is expected due to the widening.
- Newington-Dover Turnpike Widening – This project involves the widening of the Spaulding Turnpike between Exit 3 and Exit 6. Construction began in September 2010 with the construction of the new Little Bay Bridge and continues with the award of the Newington construction contract. A third construction contract, to rehabilitate the existing Little Bay Bridges is funded and scheduled to start in 2014. Two other construction contracts (the Dover end and the General Sullivan Bridge, construction) are presently not funded and will require additional revenue to keep them on schedule. The planned completion date for the widening is in 2017. Similar to the Turnpike construction in Rochester, minor traffic losses are anticipated, recovering once construction is complete, and a small amount of traffic and revenue growth is expected after the roadway is fully widened.

### **Toll Collection, Rates and Schedules**

#### *Collection of Tolls and Control Procedures*

The Turnpike System uses an open barrier system of toll collection consisting of 10 toll plazas (5 main line and 5 ramps).

All plazas include “E-ZPass Only” lanes and attended lanes for all classes of traffic. Plazas remaining with automatic coin machine lanes for passenger cars with exact change are the Dover, Rochester and Merrimack ramp plazas.

The Turnpike System deployed the E-ZPass electronic toll collection system in July, 2005. Electronic toll collection permits a vehicle to pass through a toll plaza without stopping and collects the toll fare by electronic

communication. Benefits include convenience for patrons, increased plaza capacity, reduced congestion, reduced vehicle emissions and improved air quality, as well as the potential for other uses, such as enhanced traffic management. E-ZPass participants establish prepaid accounts that are charged for each toll transaction. Participants receive notice to replenish their accounts when account balances reach specified levels or, alternatively, participants can elect to have their accounts replenished automatically from specified credit card accounts. Participants purchase transponders that are mounted either on windshields or license plates. As a vehicle with a transponder passes through an E-ZPass toll lane, an antenna reads information from the transponder and charges the appropriate account. Participants also have the convenience of being able to use E-ZPass lanes at toll facilities in most northeastern states.

All electronic E-ZPass transactions are processed by a Customer Service Center (“CSC”). The CSC is generally a contracted agency that performs many functions and each function has a cost associated with it. The Turnpike System originally entered into a three year contract, renewable through 2016, with Affiliated Computer Services (ACS) of Newark, New Jersey to process E-ZPass transactions. In August 2011, the contract with ACS was extended through September 30, 2016. Some of the typical functions are:

- Opening and closing of accounts
- Maintaining the account information database
- Distribution of transponders
- Dispute resolution
- Receiving and posting to accounts prepaid toll revenue via cash, check, or credit card
- Debiting accounts based upon toll revenue charged to account holders (transponders)
- Processing of violations encountered in agency toll lanes including administrative violations
- Processing of speed violations
- Marketing

E-ZPass lanes opened at the Hooksett and Bedford toll plazas on July 11, 2005 and at the Hampton main line plaza on August 3, 2005. E-ZPass was deployed to all ramp and main line plazas by August 15, 2005. The initial deployment of transponders was a major undertaking. In order to encourage participation in the E-ZPass program and to enhance patron acceptance of E-ZPass as a replacement for the popular token and commercial charge discount programs, the Turnpike System initially offered transponders at a deeply discounted price of \$5.00 each. This price was below the actual cost of the transponders and resulted in very heavy demand for transponders. The discounted price was available between June 20 and August 2, 2005. Transponder prices were increased to \$23.85 for interior units and \$30.84 for exterior units effective August 3, 2005. As of September 26, 2005, the prices for interior and exterior transponders were \$24.61 and \$31.83, respectively. On May 1, 2008, the price was reduced to \$20.95 for interior transponders and increased to \$33.07 for exterior transponders. On April 1, 2012, the price was reduced to the Turnpike System’s actual purchase costs of \$8.90 for interior transponders and \$15.19 for exterior transponders. On June 1, 2012, the price for On the Go Transponder Kits was reduced from \$30.00 to \$25.00.

The implementation of E-ZPass represented a major change both for the Turnpike System and its patrons. The use of E-ZPass has grown significantly since it was deployed in Fiscal Year 2006, from 40% of toll transactions in October 2005 to nearly 66% at the end of Fiscal Year 2012. The Turnpike System will deploy E-ZPass lanes and attended lanes in accordance with the traffic demand. The toll rate increase in October of 2007 resulted in the elimination of many exact change lanes due to the \$1.00 fare. The Turnpike System has successfully deployed Open Road Tolling at the Hampton main line toll plaza with implementation on June 17, 2010.

In June 2008, Chapter 84 of the Laws of 2008 was enacted allowing the Department of Transportation to suspend the registration renewal privileges for New Hampshire registered vehicles with unpaid E-ZPass violations. The process officially started on July 27, 2009 and is expected to reinforce the current low violation rate, 0.19% as of April 2012, for E-ZPass traffic down from 0.40% in the previous fiscal year. Over time, the New Hampshire’s violation enforcement system collects approximately 85% of expected toll revenue.

On July 1, 2010, the Turnpike System instituted a new invoicing system to supplant the violation-based system. Unpaid transactions would be invoiced to customers and include the toll amount, as well as a processing fee of \$1.00 payable within 30 days. If payment is not received, a second invoice is forwarded to the customer for the toll amount and a \$1.50 processing fee payable within 30 days. If payment is not received after the subsequent 30 day period, the unpaid transaction becomes a violation subject to an administrative fee of \$25. As of June 21, 2012, based on data for Fiscal Year 2012 and discounting the most recent five months, the collection rate for unpaid transactions prior to becoming violations eligible for denial of registration renewal exceeds 66%. Over time, the invoicing and violation processes are expected to be revenue neutral with the inclusion of the invoicing and administrative fees, as well as accounting for leakage.

Pursuant to New Hampshire RSA 237:12, certain motor vehicles and operators, primarily government vehicles for employees and officials, are allowed toll-free passage on the Turnpike System. The State estimates that toll-free passage constitutes less than 0.8% of toll transactions on the Turnpike System.

Cash toll revenues are transported by a security service to a depository bank where they are sorted, processed and deposited to the Turnpike System account. This process of central cash counting only requires that the toll plazas place all toll revenues into secured money bags which are picked up by the security service. This process relieves the Turnpike System from costly equipment replacements, material purchases and personnel labor costs required for processing toll revenue.

The Bureau of Turnpikes uses internal control procedures based on vehicle classifications and axle counts to audit all toll lanes. In addition, the Bureau utilizes an Audit Supervisor and staff to review all toll attendant performance and toll operating procedures, and to conduct all tests and evaluations necessary to ensure the revenue collection system and the central cash operation perform in accordance with policy and procedures.

The internal auditor also reviews E-ZPass activity reported by the CSC, checking it against an independent count of traffic. Audits are performed on transponder inventory and sales, prepaid revenue activity, and credit card merchant and cash account reconciliations performed by the CSC. Transactions are also traced from the lane to the customer accounts to verify the validity of the transactions. Similar testing is performed on individual prepaid toll account balances and violations.

An audit committee reviews the results of toll attendant audits on a weekly basis. This committee is comprised of financial and toll management, audit supervisor and staff, and an internal auditor.

An independent auditor contracted by CSC performs an annual Statement on Standards for Attestation Engagements No. 16 (“SSAE 16”), “Reporting on Controls at a Service Organization” (AICPA, Professional Standards, AT Section 801). SSAE 16 is a widely recognized auditing standard developed by the American Institute of Certified Public Accountants (AICPA). A service auditor’s examination performed in accordance with SSAE 16 is widely recognized, because it represents that a service organization has been through an in-depth audit of their control objectives and control activities, including controls over information technology and related processes. The Department of Transportation takes an active role in reviewing the audit information and following up on the timely resolution of all audit findings.

In 1994, the Department of Transportation, Bureau of Turnpikes expanded the Hooksett Toll Plaza from 12 to 14 toll lanes. In 1997, the Hampton Ramp plaza was expanded from five to seven lanes and in Fiscal Year 2006, it was expanded to eight lanes. In Fiscal Year 2000, the Dover Toll plaza was expanded from 6 to 8 lanes to accommodate increased traffic volumes. In January 2004, the Bedford main line plaza was expanded from 10 to 12 lanes, and again to 13 lanes in December 2008. These toll plaza expansions were initiated as a result of the Department’s ongoing monitoring of the traffic at all toll facilities to ensure that traffic volumes are processed safely through all toll plazas. The monitoring process includes attention to peak period volumes and those generated by special events.

Chapter 309 of the Laws of 2000 eliminated the three proposed toll plazas originally scheduled for completion in Nashua in July of 2001. These toll facilities had been projected to raise approximately \$6 million in gross toll revenues in their first year. Even without these revenues, however, annual revenues continue to remain sufficient to fund operation and maintenance expenses and debt service, as well as a portion of the Capital Improvement Program.

## **Toll Rates**

The Commissioner of the Department of Transportation with the approval of the Governor and Council is authorized to establish toll rates for the Turnpike System. Tolls are set at levels at least sufficient to meet all obligations under the Bond Resolution, including operating expenses and maintenance costs and debt service on Bonds issued for Turnpike System purposes. State law expressly provides that a bond resolution authorizing turnpike revenue bonds may include provisions setting forth the duties of the State in relation to the fixing, revision and collection of tolls and that the State has pledged to perform all such duties as set forth in such bond resolution.

Several toll rate adjustments have been made since the commencement of the Turnpike System's operation to provide necessary revenue for expansion and improvement to, and continued operation and maintenance of the Turnpike System.

On October 16, 1989, toll rate increases were implemented on the entire Turnpike System. These adjustments, authorized by the Governor and Council, affected all users of the Turnpike System and provided a substantial increase in toll revenues. The toll rates were adjusted to increase toll revenue to meet increased operating, maintenance and rehabilitation costs, the debt service on Bonds issued and to be issued in conjunction with the Capital Improvement Program and other obligations.

The October 1989 toll rates for passenger vehicles were increased at all toll plazas an additional \$0.25 above the previous rate. Further, the adjustments included a reduction in the discount token program from 50% to 40% off the full fare. In addition, toll rates for commercial vehicles were increased, and a discount was implemented for participants in the commercial charge program that provided a discount of between 5% and 30% based on the total number of monthly charge transactions. At the same time, the toll rates were also authorized by the Governor and Council for two new toll plazas (Merrimack Industrial Interchange and Bedford Road) which opened in October and November, 1990, respectively.

In July 1990, the Governor and Council voted to restore the 50% token discount, which had been in effect from the mid-1970s until the October 1989 change to 40%. Prior to implementation, the Department of Transportation had studied the financial impact of the proposed change in discount and concluded that it would not adversely affect the ability to generate the revenue required to implement the Capital Improvement Program. On November 1, 1995, the Governor and Council voted to change the commercial charge discount from variable discount rates ranging from 5% to 30% to a fixed discount rate of 30%.

To establish a more equitable toll system, the Department of Transportation adopted a new vehicle classification system in October 1989. This classification system consisted of nine classes, four for passenger vehicles and the remainder for commercial vehicles. In July 1990, the classification system was expanded to twelve classes to provide special toll rates for dual wheel motor homes and pick-up trucks.

With the elimination of the token program and the implementation of the electronic toll collection system, the classification system was modified once again, effective January 1, 2006. The special rates for dual wheel motor homes and pick-up trucks was eliminated. This twelve vehicle classification system is still in use today, however, all dual wheel vehicles are now considered commercial vehicles.

In July 2005, the Turnpike System began deployment of E-ZPass lanes. As a part of the E-ZPass program implementation, the token and commercial charge discount programs were terminated. The commercial charge discount program was terminated effective September 30, 2005. Effective September 1, 2005, sales of discount tokens ceased, and tokens were no longer accepted after December 31, 2005. E-ZPass transactions for New Hampshire accounts provide a 30% discount for passenger vehicles and a 10% discount for commercial vehicles in accordance with State law in RSA 237:11, V.

On October 22, 2007, toll rate adjustments were authorized by the Governor and Executive Council, affecting all users of the Turnpike System. The toll adjustments increased the rates by \$0.25 for passenger vehicles and by \$.50 for commercial vehicle classes at the Hooksett main line plaza, Bedford main line plaza, and Dover, Rochester, and Hampton ramps. Rates at the Hampton main line plaza were increased by \$0.50 for passenger vehicles and by \$1.00 for commercial vehicles. These increases were projected to increase annual revenues by approximately \$23.5 million, which will allow the replacement of "Red List" bridges on the Turnpike System as well as other capital improvements to address safety, capacity, and condition needs.

Effective July 1, 2009, toll rate adjustments were authorized by the Governor and Executive Council increasing the rates at the Hampton main line plaza by \$0.50 for passenger cars and by \$1.00 for commercial vehicle classes. The additional annual revenues of approximately \$11.6 million allowed for the installation of Open Road Tolling at Hampton (and two other improvements to the Blue Star Turnpike), which was needed to relieve significant congestion issues and environmental concerns. The additional revenues have helped fund the purchase from the Department of Transportation of the 1.6 mile section of I-95, extending the Blue Star Turnpike completing the connection of the Blue Star Turnpike to the Maine state line in 2010 and 2011. See *The Turnpike System – Eastern Turnpike – I-95 Acquisition* and *Turnpike System – Historical Revenues and Expenditures*.

The following table sets forth the schedule of current toll rates:

**TURNPIKE SYSTEM TOLL RATE SCHEDULE  
EFFECTIVE July 1, 2009**

		2 axles - single rear tires	3 axles - single rear tires	4 axles - single rear tires	5 axles - single rear tires	2 axles - dual rear tires	3 axles - dual rear tires	4 axles - dual rear tires	5 axles - dual rear tires	6 axles - dual rear tires	7 axles - dual rear tires	8 axles - dual rear tires	9 axles - dual rear tires
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>
<b>Plaza</b>	<b>Fare Type/Class</b>												
<b>Hooksett Main</b>	Cash Fare	1.00	\$ 1.25	\$ 1.50	\$ 1.75	\$ 2.00	\$ 2.50	\$ 3.00	\$ 3.50	\$4.00	\$ 4.50	\$ 5.00	\$ 5.50
	E-ZPass Fare	\$0.70	\$0.88	\$1.05	\$1.23	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05	\$4.50	\$4.95
<b>Hooksett Ramp</b>	Cash Fare	0.50	0.75	1.00	1.25	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	E-ZPass Fare	\$0.35	\$0.53	\$0.70	\$0.88	\$0.90	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05
<b>Bedford Main</b>	Cash Fare	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	4.50	5.00	5.50
	E-ZPass Fare	\$0.70	\$0.88	\$1.05	\$1.23	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05	\$4.50	\$4.95
<b>Bedford Road</b>	Cash Fare	0.50	0.75	1.00	1.25	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	E-ZPass Fare	\$0.35	\$0.53	\$0.70	\$0.88	\$0.90	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05
<b>Exit 11</b>	Cash Fare	0.50	0.75	1.00	1.25	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	E-ZPass Fare	\$0.35	\$0.53	\$0.70	\$0.88	\$0.90	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05
<b>Merrimack Industrial</b>	Cash Fare	0.50	0.75	1.00	1.25	1.00	1.50	2.00	2.50	3.00	3.50	4.00	4.50
	E-ZPass Fare	\$0.35	\$0.53	\$0.70	\$0.88	\$0.90	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05
<b>Hampton Main</b>	Cash Fare	2.00	2.25	2.50	2.75	4.00	4.50	5.00	5.50	6.00	6.50	7.00	7.50
	E-ZPass Fare	\$1.40	\$1.58	\$1.75	\$1.93	\$3.60	\$4.05	\$4.50	\$4.95	\$5.40	\$5.85	\$6.30	\$6.75
<b>Hampton Side</b>	Cash Fare	0.75	1.00	1.25	1.50	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
	E-ZPass Fare	\$0.53	\$0.70	\$0.88	\$1.05	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05	\$4.50
<b>Dover Toll</b>	Cash Fare	0.75	1.00	1.25	1.50	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
	E-ZPass Fare	\$0.53	\$0.70	\$0.88	\$1.05	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05	\$4.50
<b>Rochester Toll</b>	Cash Fare	0.75	1.00	1.25	1.50	1.50	2.00	2.50	3.00	3.50	4.00	4.50	5.00
	E-ZPass Fare	\$0.53	\$0.70	\$0.88	\$1.05	\$1.35	\$1.80	\$2.25	\$2.70	\$3.15	\$3.60	\$4.05	\$4.50

## Turnpike System - Historical Revenues and Expenditures

The Turnpike System is part of the State primary government and is accounted for as an enterprise fund of the State. The financial information below for Fiscal Years 2008 through 2011 is derived from audited financial statements of the Turnpike System. The information for Fiscal Year 2012 is preliminary, unaudited and subject to change.

### STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS New Hampshire Turnpike System (in thousands) For the Fiscal Years ended June 30

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u> (preliminary)
<b><u>Operating Revenues</u></b>					
Tolls and Other Operating Revenue	\$104,204	\$106,757	\$118,403	\$118,688	\$118,665
<b><u>Operating Expenses</u></b>					
Personnel Services	10,623	11,135	11,352	11,438	10,447
Payroll Benefits	4,706	5,100	5,464	5,611	5,531
Enforcement	5,230	5,368	5,025	4,926	5,032
Renewal & Replacement	11,842	7,805	7,793	14,309	7,486
Supplies, Materials & Other	2,518	3,743	3,545	3,861	3,631
Equipment & Repairs	3,049	3,187	2,667	3,261	3,930
Indirect Costs	1,825	2,069	2,010	2,058	2,521
Heat, Light & Power	1,501	1,233	1,215	1,317	1,269
Bank & Credit Card Fees	1,689	1,734	2,037	2,293	2,226
Rentals	873	983	771	1,013	589
E-ZPass Processing Fees	4,287	5,117	5,259	5,771	5,252
Transponder Expense	821	693	769	790	798
Depreciation	17,575	15,179	15,970	21,004	18,251
Total Operating Expenses	66,539	63,346	63,877	77,652	66,973
<b><u>Operating Income</u></b>	37,665	43,411	54,526	41,036	51,692
<b><u>Non-Operating Revenues (Expenses)</u></b>					
Investment Income	2,546	836	2,108	164	130
Miscellaneous Income	325	140	194	3,589	3,420
Intra-entity Acquisition of Land and Bridge from Highway Fund (for Notes Payable)	0	0	(116,566)	0	
Intra-entity Acquisition of Land and Improvements from Another State Agency	0	0	(6,222)	(2,082)	
Loss on the Sale of Other Capital Assets	0	(3,995)	(952)	(166)	
Interest on Bonds and Note	(13,602)	(12,953)	(16,223)	(14,792)	(12,821)
Amortization on Bond Issuance Costs	(270)	(279)	(972)	(228)	(356)
<b>Total Non-Operating Revenues (Expenses)</b>	(11,001)	(16,251)	(138,633)	(13,515)	(9,627)
Change in Net Assets Before Capital Contributions	26,664	27,160	(84,107)	27,521	42,065
Capital Contributions	8,816	3,952	(406)	31,505	12,581
Prior Period Adjustment - Implement GASB 49	(3,600)				
Change in Net Assets	35,480	31,112	(84,513)	59,026	54,646
<b>Net Assets - July 1</b>	347,894	379,774	410,886	326,373	385,399
<b>Net Assets - June 30</b>	\$379,774	\$410,886	\$326,373	\$385,399	\$440,445

## Management Discussion of Historical Revenues and Expenditures

*Fiscal Year 2012 (projections based on June 30 pro-forma statements)*

Gross revenues (toll revenue, investment income, and miscellaneous) available for operating expenses, debt service, reserves and improvement projects are estimated to have been \$119.05 million, a projected decrease of less than 0.03% from Fiscal Year 2011.

Operating revenues (primarily toll revenue) in Fiscal Year 2012 are estimated to have been \$118.7 million, essentially flat as compared to Fiscal Year 2011 despite the impact of the opening of MAAR.

Operating expenses (excluding depreciation and funds for renewal and replacement and debt service) in Fiscal Year 2012 are estimated to have been \$41.2 million, a decrease of nearly 2.6% from the prior year. This decrease is primarily due to reductions in Personnel costs and benefits attributable to the lean staffing initiative in tolls and a 50% decrease in winter maintenance over 2011, due to cost reduction measures and a less severe winter.

Renewal and replacement expenses are estimated to have been \$7.4 million, an estimated decrease of 48% from the prior year and below the budgeted amount of \$9.2 million. The Fiscal Year 2011 increase was due to contractual obligations and available balances carried forward from prior years, and a more aggressive renewal and replacement program. Fiscal Year 2011 program expenditures included bridge rehabilitation, culvert repair, pavement resurfacing, signage, and toll plaza maintenance.

During Fiscal Year 2012, Capital Improvement Program expenditures paid from Turnpike funds totaled \$54,206,345.

Restricted assets at estimated fair value are segregated into the following accounts as of June 30:

	<u>2012</u>	<u>2011</u>
Revenue Bond Interest Debt Service Account	\$4,309,571	\$ 4,021,129
Revenue Bond Principal Debt Service Account	7,355,000	6,487,176
Revenue Bond Debt Service Reserve Account	33,334,388	34,376,930
Revenue Bond Construction Account	0	13,433,789
Revenue Bond Insurance Reserve Account	3,008,378	3,000,978
Total Restricted Assets	<u>\$48,007,337</u>	<u>\$61,320,002</u>

The amounts shown above are invested in Permitted Investments in accordance with the Bond Resolution.

### *Fiscal Year 2012 Review of Turnpike Capital Assets*

For several years, the annual audit of the Turnpike System has reported material weakness associated with challenges in accounting for and reporting capital assets. Management of the Department of Transportation, in a diligent effort to resolve this reporting issue and in advance of a state-wide effort to build an integrated asset management system, purchased and installed a basic fixed asset tracking system and dedicated staff time to an exhaustive review of Turnpike System infrastructure assets. During this review, the Department identified two capital improvement projects for which substantial engineering was completed, but for which construction has yet to be funded (two projects associated with the Circumferential Highway listed on page 47 as Project A10 and A11 and Exit 10 on the Spaulding Turnpike listed on page 48 as Project B7). Legislative authority for these projects remains in current law. Both projects were incorrectly transferred from Construction in Progress to Infrastructure, and resultant depreciation and capitalized interest were applied. Resultant cumulative adjustments to depreciation from this review are approximately an increase of \$1.1 million.

Current review and discussion with the Audit Division of the Legislative Budget Assistant has prompted the Department of Transportation to consider whether or not these projects, which originated in the 1980s, and have not been constructed, should continue to be valued on the Turnpike Statement of Net Assets. The position of the Department is that based upon the appropriation authority for each project that exists in current law, the assets should be considered temporarily impaired and per GASB 42 should not be written off. With this position, an accounting adjustment of \$26.9 million would be made to remove the assets from Infrastructure and place them back in Construction in Progress. No difference in Net Assets would be recorded.

If it is determined that the asset impairment is permanent, it would result in a write-down of the same \$26.9 million in infrastructure assets and recognition of a non-operating loss due to asset impairment on the Statement of Revenues, Expenses and Changes to Net Assets. Final audited financial statements are due by law by December 31, 2012 and discussions on this matter are ongoing.

The preliminary 2012 unaudited financial information presented herein is presented with the assumption of a temporary impairment of assets and is subject to change.

*Fiscal Year 2011*

Gross revenues (toll revenue, investment income, and miscellaneous) available for operating expenses, debt service, reserves and improvement projects totaled \$122.4 million, a 1.4% increase from Fiscal Year 2010. The increase in miscellaneous income was primarily due to the \$3.1 million interest subsidy received with respect to the 2009 Series A Build America Bonds.

Operating revenues (primarily toll revenue) in Fiscal Year 2011 were \$118.6 million, an increase of 0.2% from Fiscal Year 2010.

Operating expenses (excluding depreciation and funds for renewal and replacement and debt service) in Fiscal Year 2011 were \$42.3 million an increase of 5.5% from the prior year. This increase is primarily attributable to the heavy winter storms in 2011.

Renewal and replacement expenses were \$14.3 million, an 83.6% increase from the prior year and above the budgeted amount of \$9.8 million. The increase was due to contractual obligations and available balances carried forward from prior years, and a more aggressive renewal and replacement program. Fiscal Year 2011 program expenditures included bridge rehabilitation, culvert repair, pavement resurfacing, signage, and toll plaza maintenance.

To acquire the I-95 Piscataqua River Bridge and the 1.6-mile segment of I-95 owned by the Highway System, the Turnpike System issued a long term note with payments to be made to the Highway Fund. Interest will be paid at the State's borrowing rate over a maximum period of 20 years. The current interest rate on the note is 4%. However, the Commissioner of Transportation and the State Treasurer may agree from time to time to modify the payment schedule with respect to payments due to the State from and after July 1, 2011. During Fiscal Years 2010 and 2011, cash payments of \$30.0 million and \$20.0 million, respectively, were made to the Highway Fund. The annual maturities are as follows:

**DEBT SERVICE ON I-95 ACQUISITION FROM HIGHWAY FUND**  
(Amounts in thousands)

<u>Payable During the Fiscal Year Ending June 30,</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2011	\$15,350	\$4,650	\$20,000
2012	23,317	2,684	26,001
2013	24,262	1,738	26,000
2014	4,814	1,056	5,870
2015	5,009	861	5,870
2016	5,213	657	5,870
2017 through 2019	<u>13,163</u>	<u>699</u>	<u>13,862</u>
Total	\$91,128	\$12,345	\$103,473

See *The Turnpike System – Eastern Turnpike – I-95 Acquisition* for a description of the accelerated payment plan contained in the current budget but not reflected in the table above.

During Fiscal Year 2011, Capital Improvement Program expenditures paid from Turnpike funds totaled \$52,076,351.

For Fiscal Year 2011, the State reported the financial results of the Turnpike System as an enterprise fund within the State's Comprehensive Annual Financial Report for the fiscal year ending June 30, 2011.

Restricted assets at estimated fair value are segregated into the following accounts as of June 30:

	<u>2011</u>	<u>2010</u>
Revenue Bond Interest Debt Service Account	\$ 4,021,129	\$ 5,523,175
Revenue Bond Principal Debt Service Account	6,487,176	6,518,333
Revenue Bond Debt Service Reserve Account	34,376,930	34,376,637
Revenue Bond Construction Account	13,433,789	57,582,412
Revenue Bond Insurance Reserve Account	3,000,978	3,000,000
Revenue Bond General Reserve Account	*	2,000,000
Total Restricted Assets	<u>\$61,320,002</u>	<u>\$109,000,557</u>

\* Beginning in Fiscal Year 2011, the General Reserve Account is properly classified as an unrestricted asset with a balance of approximately \$61.9 million of Cash and Cash Equivalents at June 30, 2011.

The amounts shown above are invested in Permitted Investments in accordance with the Bond Resolution.

Based upon Gross Revenues, Direct Operating Expenses, Revenue Bond Debt Service Requirements, and Renewal and Replacement budgeted expenditures, the Revenue Bond Coverage Ratio was 2.28 and the All Obligations Coverage Ratio was 1.74. The required Fiscal Year 2011 payment on the note issued in connection with the I-95 acquisition (referenced above) did not require current year revenues because unrestricted net assets at June 30, 2010 (\$59.5 million) exceeded the amount of the payment. Accordingly, the payment was not included in the All Obligations Coverage Ratio for Fiscal Year 2011.

#### *Fiscal Year 2010*

Gross revenues (toll revenue, investment income, and miscellaneous) available for operating expenses, debt service, reserves and improvement projects totaled \$120,705,375, a 12.0% increase from Fiscal Year 2009.

Operating revenues in Fiscal Year 2010 were \$118,403,066, an increase of 10.9% from Fiscal Year 2009. The increase in operating revenues was driven largely by the toll rate increase at the Hampton main line plaza implemented on July 1, 2009. Investment income increased by \$1,271,812 primarily due to the interest rebate on the 2009 Series A Build America Bonds.

Operating expenses (excluding depreciation and funds for renewal and replacement) in Fiscal Year 2010 were \$40,114,120, a decrease of 0.6% from the prior year.

Renewal and replacement expenses were \$7,792,725, a 0.2% decline from the prior year and below the budgeted amount of \$9,600,000. The decline was due to fluctuations in contract activity and payment timing. In accordance with New Hampshire Revised Statutes Annotated 237:49-a, unspent budgeted amounts do not lapse and are carried forward into future fiscal years. Fiscal Year 2010 program expenditures included bridge rehabilitation, pavement resurfacing, signage, median barrier installation, bridge painting, and toll plaza maintenance. The increase in depreciation expense as compared to Fiscal Year 2009 was primarily due to the addition of the open-road tolling assets.

In Fiscal Year 2010, the Turnpike System recorded three non-operating expenses that included: (1) the purchase of the I-95 bridge from the State of New Hampshire (Highway Fund) which resulted in an intra-entity expense of \$116,564,606; (2) the purchase of the North and South Bound Hooksett Rest Areas from the State of New Hampshire (Liquor Commission) which resulted in an intra-entity expense of \$6,222,406 and (3) the sale of three contiguous parcels of Turnpike System owned land in Manchester, which resulted in a loss of \$953,200. The I-95 and Hooksett Rest Area asset values were recorded at the related party's net book value of \$3,435,394 (\$15,782,909 in cost and \$12,347,515 in accumulated depreciation) and \$277,594 (in cost), respectively.

To acquire the 1.6-mile segment of I-95 owned by the Highway System, the Turnpike System entered into a long term note with payments to be made to the Highway Fund. Interest will be paid at the State's borrowing rate over a maximum period of 20 years. The current interest rate on the note is 4%. However, the Commissioner of Transportation and the State Treasurer may agree from time to time to modify the payment schedule with respect to payments due to the State from and after July 1, 2011. During Fiscal Year 2010, a cash payment of \$30.0 million was made to the Highway Fund.

During Fiscal Year 2009, the Turnpike System sold a portion of land in Hudson (formerly known as Benson's), known to be contaminated with hazardous waste. As part of the sale, the Turnpike System agreed to remediate the hazardous waste at the site. For this pollution remediation obligation, the Turnpike System recognized a liability of \$3.0 million at June 30, 2009, which was reduced to \$2.2 million at June 30, 2010 as a result of a re-estimate by an independent consulting firm. There were no Pollution Remediation Obligation (PRO) payments made during Fiscal Year 2010 because the property owner, the Town of Hudson, has not determined the best use of the property.

Also during Fiscal Year 2010, the Turnpike System recognized a PRO liability of \$413,325 due to groundwater pollution at the Hampton Toll Plaza. Estimates used to quantify the cost of remediation include the cubic yards of material to be excavated and removed from the landfill and the removal of hazardous material.

During Fiscal Year 2010, Capital Improvement Program expenditures totaled \$70,220,523, including \$(406,432) reimbursed to State and federal highway sources and paid from Turnpike funds.

For Fiscal Year 2010, the State reported the financial results of the Turnpike System as an enterprise fund within the 2010 CAFR. Set forth below is information which updates items that were formerly included in the notes to the separate Turnpike System financial statements.

Restricted assets at estimated fair value are segregated into the following accounts as of June 30:

	<u>2010</u>	<u>2009</u>
Revenue Bond Interest Debt Service Account	\$ 5,523,175	\$ 3,608,424
Revenue Bond Principal Debt Service Account	6,518,333	5,425,417
Revenue Bond Debt Service Reserve Account	34,376,637	26,455,334
Revenue Bond Construction Account	57,582,412	0
Revenue Bond Insurance Reserve Account	3,000,000	3,000,000
Revenue Bond General Reserve Account	2,000,000	2,000,000
Total Restricted Assets	<u>\$109,000,557</u>	<u>\$40,489,175</u>

The amounts shown above are invested in Permitted Investments in accordance with the Bond Resolution.

The State Highway and Safety Departments, on behalf of the Turnpike System, have performed certain engineering and safety patrol activities. The Turnpike System reimbursed the cost of these activities, amounting to approximately \$7.0 million and \$6.7 million for Fiscal Years 2010 and 2009, respectively.

The State primarily retains the risk for losses, except where the provisions of law allow for the purchase of commercial insurance or where commercial insurance has been proven beneficial for the general public. Insurance claims have not exceeded insurance coverage in any of the last three Fiscal Years. There have not been any significant changes in insurance coverage from the prior year. The State provides self-funded health benefits to employees through plans in which claims are administered and paid by carriers. GASB Statement No. 10, Financial Reporting for Risk Financing and Related Insurance Issues, requires the Turnpike System to estimate and record a liability when the risk of loss to the Turnpike System is probable and the amount of loss can be reasonably estimated. Changes in the worker's compensation claims accrual recorded in the balance sheet in Fiscal Years 2010 and 2009 are presented in the following table. This liability is the Turnpike System's best estimate based on available information.

	<u>2010</u>	<u>2009</u>
Liability, beginning of year	\$2,045,000	\$2,318,000
Provisions for claims	36,000	0
Payments	(181,000)	(273,000)
Liability, end of year	<u>\$1,900,000</u>	<u>\$2,045,000</u>

#### *Fiscal Year 2009*

Gross revenues (toll revenue, investment income, and miscellaneous) available for operating expenses, debt service, reserves and improvement projects totaled \$107,731,816, a 0.6% increase from Fiscal Year 2008. Increases in Operating Revenue modestly exceeded the decline in investment income over the Fiscal Year.

Operating revenues in Fiscal Year 2009 were \$106,756,427, an increase of 2.4% from Fiscal Year 2008. The increase in operating revenues was driven largely by a 4.1% increase in toll revenue due to the full effect of the October 2007 toll rate increase. Investment income decreased by \$1,709,145 due primarily to lower cash and equivalent balances and lower interest rates.

Operating expenses (excluding depreciation and funds for renewal and replacement) in Fiscal Year 2009 were \$40,361,386, an increase of 8.7% from the prior year. Increases in personnel expenses and related payroll benefits along with increases in other administrative expenses and E-ZPass processing fees primarily drove the increase.

Renewal and replacement expenses were \$7,805,786, a 34.1% decline from the prior year and below the budgeted amount of \$10,040,000. The decline is due to fluctuations in contract activity and payment timing. In accordance with New Hampshire Revised Statutes Annotated 237:49-a, unspent budgeted amounts do not lapse and are carried forward into future fiscal years. The Fiscal Year 2009 program expenditures included bridge rehabilitation, pavement resurfacing, signage, median barrier installation, bridge painting and toll plaza maintenance.

The decline in depreciation expense as compared to Fiscal Year 2008 is primarily due to the one-time recognition in Fiscal Year 2008 of \$2,287,136 in current and prior year depreciation on one project that had not been depreciated in prior years.

In Fiscal Year 2009, the Turnpike system recorded a non-cash loss-on-sale of \$3,994,700 on the former Benson's property in Hudson. The Turnpike System sold the property in December, 2008, but retained the obligation to remediate the contaminated site. Accordingly, the pollution remediation liability was recognized at \$3,000,000 at June 30, 2009 in accordance with GASB 49. GASB 49 also required the restatement of the Turnpike System Balance Sheet for the Fiscal Year ending June 30, 2008 to account for any pollution remediation obligation existing, but unrecognized, at that time. Accordingly, a liability of \$3,600,000 was established for Fiscal Year 2008 and the Net Assets account was reduced by the same amount.

During Fiscal Year 2009, Capital Improvement Program expenditures totaled \$27,202,673, including \$3,951,943 from the State and federal highway sources, and the remainder from Turnpike sources.

For Fiscal Year 2009, the State reported the financial results of the Turnpike System as an enterprise fund within the 2009 CAFR. Set forth below is information which updates items that were formerly included in the notes to the separate Turnpike System financial statements.

Restricted assets at estimated fair value are segregated into the following accounts as of June 30:

	<u>2009</u>	<u>2008</u>
Revenue Bond Interest Debt Service Account	\$ 3,608,424	\$ 1,597,558
Revenue Bond Principal Debt Service Account	5,425,417	7,544,235
Revenue Bond Debt Service Reserve Account	26,455,334	26,455,334
Revenue Bond Insurance Reserve Account	3,000,000	3,000,000
Revenue Bond General Reserve Account	<u>2,000,000</u>	<u>2,000,000</u>
Total restricted assets	<u>\$40,489,175</u>	<u>\$40,597,127</u>

The amounts shown above are invested in Permitted Investments in accordance with the Bond Resolution.

Certain engineering and safety patrol activities have been performed by the State Highway and Safety Departments on behalf of the Turnpike System. The cost of these activities, amounting to approximately \$6.7 million and \$6.1 million for Fiscal Years 2009 and 2008, respectively, was reimbursed by the Turnpike System.

The Turnpike System primarily retains the risk for losses, except where the provisions of law allow for the purchase of commercial insurance or where commercial insurance has been proven beneficial for the general public. Insurance claims have not exceeded insurance coverage in any of the last three Fiscal Years. There have not been any significant changes in insurance coverage from the prior year. The Turnpike System provides self-funded health benefits to employees through plans in which claims are administered and paid by carriers. GASB Statement No. 10, Financial Reporting for Risk Financing and Related Insurance Issues, requires the Turnpike System to estimate and record a liability when the risk of loss to the Turnpike System is probable and the amount of loss can be

reasonably estimated. Changes in the worker's compensation claims accrual recorded in the balance sheet in Fiscal Years 2009 and 2008 are presented in the following table. This liability is the Turnpike System's best estimate based on available information.

	<u>2009</u>	<u>2008</u>
Liability, beginning of year	\$2,318,000	\$2,594,000
Provisions for claims	0	0
Payments	<u>(273,000)</u>	<u>(276,000)</u>
Liability, end of year	\$2,045,000	\$2,318,000

*Fiscal Year 2008*

Gross revenues available for operating expenses, debt service, reserves and improvement projects totaled \$107,074,414, a 19.8% increase over Fiscal Year 2007. Operating revenues in this period were \$104,204,193, an increase of 21.6% over 2007, primarily due to the toll rate increase that took effect on October 22, 2007. Investment income of \$2,546,000 decreased by \$737,000 from the prior year.

Operating expenses (excluding depreciation and funds for renewal and replacement) in Fiscal Year 2008 were \$37,122,849, an increase of 2.7% over the prior year.

Total operating expenses (including depreciation and funds for renewal and replacement) increased 13.9% to \$66,539,741 as Renewal and Replacement expenditures increased by \$3,290,000 resulting from the recommendations set forth in the Fiscal Year 2007 independent engineer's (HNTB) report, which called for an increased program going forward. The Fiscal Year 2008 program included bridge rehabilitation, signage, bridge painting, toll plaza maintenance and median barrier installation. The increase in depreciation, primarily due to the one-time recognition of \$2,287,136 in current and prior year depreciation on one project that had not been depreciated in prior years, was also a factor in the increase of operating expenses. Also contributing to the increase in operating expenses were an increase in personnel services and related employee benefits, and an increase in E-ZPass processing fees.

GASB 49 required the restatement of the Turnpike System Balance Sheet for the Fiscal Year ending June 30, 2008 in the amount of \$3,600,000 to account for any pollution remediation obligation existing, but unrecognized, at that time in connection with the sale of the Benson property in Hudson. For further discussion, see *Management Discussion of Historical Revenues and Expenditures – Fiscal Year 2010* above. During Fiscal Year 2008, Capital Improvement Program expenditures totaled \$17,975,477, including \$8,816,291 from State and federal highway sources.

## Debt Service Coverage

The following table shows debt service coverage for Fiscal Years 1996 through 2012 (2012, estimated, unaudited).

### SCHEDULE OF DEBT SERVICE COVERAGE RATIO

For the Fiscal Years 1996 - 2012

(Amounts in thousands)

Fiscal Year	Gross Revenues	Direct Operating Expenses	(A)	(B)	(A / B)	(C)	(D)	(B+C+D) Total	(A / (B+C+D))
			Net Revenue Available for Debt Service	Revenue Bond Debt Service Requirements	Revenue Bond Coverage Ratio	G.O. Bond Debt Service Requirements	Renewal & Replacement		All Obligations Coverage Ratio
2012	\$119,050	\$41,236 <sup>1</sup>	\$77,814	\$33,321 <sup>2</sup>	2.34	\$ 0	\$9,200	\$42,521	1.83 <sup>3</sup>
2011	119,314	42,339 <sup>1</sup>	76,975	33,745 <sup>2</sup>	2.28	599	9,800	44,144	1.74 <sup>3</sup>
2010	119,407	40,171 <sup>1</sup>	79,236	29,656 <sup>2</sup>	2.67	669	9,600	39,925	1.98 <sup>3</sup>
2009	107,660	40,361 <sup>1</sup>	67,299	25,873 <sup>2</sup>	2.60	1,597	10,040	37,510	1.79
2008	106,814	37,122 <sup>1</sup>	69,692	25,710	2.71	1,713	8,300	35,723	1.95
2007	89,054	36,158 <sup>1</sup>	52,896	28,078	1.88	2,985	6,047	37,110	1.43
2006	83,054	41,784 <sup>1</sup>	41,270	25,831	1.60	4,219	5,871	35,921	1.15
2005	68,318	30,041	38,277	27,003	1.42	4,246	5,700	36,949	1.04
2004	66,463	26,568	39,895	23,865	1.67	4,842	5,600	34,307	1.16
2003	67,086	24,505	42,581	24,749	1.72	5,183	5,700	35,632	1.20
2002	66,218	23,877	42,341	26,452	1.60	5,415	5,365	37,232	1.14
2001	63,981	21,352	42,629	25,352	1.68	5,696	5,431	36,479	1.17
2000	63,034	22,064	40,970	26,452	1.55	5,973	5,308	37,733	1.09
1999	59,257	18,794	40,463	22,286	1.82	6,304	4,119	32,709	1.24
1998	58,033	16,352	41,681	21,678	1.92	6,519	3,990	32,187	1.29
1997	55,714	17,231	38,483	21,597	1.78	6,747	3,000	31,344	1.23
1996	53,231	17,024	36,207	21,595	1.68	6,975	3,000	31,570	1.15

(1) Fiscal years 2006 through 2012 calculations of Direct Operating Expenses subtract out the entire amount of current year depreciation expense (Turnpikes, Federal, & Highway match portions). However, prior year calculations still reflect the historical practice of subtracting only the Turnpikes portion of depreciation expense.

(2) Beginning in Fiscal Year 2009, debt service requirement consists of total payments to the Debt Service Account as required by the Bond Resolution. Debt service requirement calculations in the previous fiscal years consisted of the actual principal and interest paid over the fiscal year. See independent auditors' report included by reference herein as set forth in Appendix C.

(3) Payments on the long-term note issued to acquire the I-95 Piscataqua River Bridge and a 1.6 mile segment of I-95 did not require current year revenues because unrestricted net assets at the beginning of the fiscal year (July 1) exceeded the amount of the payments. Accordingly, the payments were not included in the All Obligations Coverage Ratio.

### TURNPIKE SYSTEM INDEBTEDNESS

As of June 30, 2012, the Turnpike System had \$339,920,000 of Turnpike System Revenue Bonds Outstanding and no State of New Hampshire general obligation bonds to be paid from Turnpike System Revenues. The following table presents Outstanding Turnpike System Revenue Bond Debt Service in each fiscal year on an accrual basis. In addition to the amounts listed below, beginning in State Fiscal Year 2012 through Fiscal Year 2029, the Turnpike System is obligated to pay to the Department of Transportation for credit to the State's Highway Fund approximately \$5.9 million per year as a result of the acquisition of a portion of I-95. The State's operating budget for Fiscal Years 2012 and 2013 accelerates these payments by adding a \$20.1 million payment each year for a total payment of \$26 million in each of Fiscal Years 2012 and 2013. The accelerated payments will result in this debt being paid off in Fiscal Year 2019. The original schedule of payments agreed to between the Commissioner of Transportation and the State Treasurer was adjusted accordingly. These amounts are in addition to a total of \$50 million paid for this acquisition in Fiscal Years 2010 and 2011 from available amounts in the General Reserve Account of the Turnpike System. To date, \$76 million has been paid as scheduled in Fiscal Years 2010 through

2012. See *The Turnpike System – Management Discussion of Historical Revenues and Expenditures – Fiscal Year 2011*, and *The Turnpike System – Eastern Turnpike – I-95 Acquisition*.

**TURNPIKE SYSTEM DEBT SERVICE <sup>\*(1)</sup>**  
**For Fiscal Years 2013 through 2043**  
**(on an Accrual Basis)**

<b>Fiscal Year Ending June 30</b>	<b>Existing Debt Service</b>	<b>Debt Service on 2012 Series C Bonds</b>	<b>Total Debt Service Payable By Turnpike</b>
2013	\$33,118,643	\$5,599,804	\$38,718,447
2014	33,117,513	6,520,971	39,638,484
2015	33,122,303	6,521,750	39,644,053
2016	33,119,880	6,520,933	39,640,814
2017	31,454,803	6,520,163	37,974,966
2018	27,105,645	6,523,996	33,629,641
2019	27,107,280	6,523,204	33,630,484
2020	25,005,891	6,521,496	31,527,386
2021	20,413,329	6,523,642	26,936,971
2022	20,611,954	6,524,996	27,136,950
2023	20,434,849	6,524,871	26,959,720
2024	20,374,922	6,523,017	26,897,938
2025	14,138,852	6,523,767	20,662,619
2026	14,153,693	6,522,475	20,676,168
2027	14,168,239	6,523,038	20,691,276
2028	14,184,573	6,520,808	20,705,381
2029	14,203,617	6,520,783	20,724,400
2030	8,654,557	6,520,250	15,174,807
2031	8,663,313	6,523,317	15,186,630
2032	8,668,611	6,525,433	15,194,044
2033	8,676,136	6,521,383	15,197,519
2034	8,680,433	6,524,483	15,204,916
2035	8,689,575	6,521,683	15,211,258
2036	8,697,976	6,520,850	15,218,826
2037	8,703,578	6,522,450	15,226,028
2038	8,714,390	6,521,500	15,235,890
2039	8,721,427	6,521,950	15,243,377
2040	2,909,364	6,523,833	9,433,197
2041	-	6,522,167	6,522,167
2042	-	6,520,900	6,520,900
2043	-	543,400	543,400
	<u>\$485,615,345</u>	<u>\$195,293,313</u>	<u>\$680,908,658</u>

\* Totals may not add due to rounding.

(1) Net of direct payments expected to be received from the United States Treasury in the amount of 35% of the taxable interest payable by the State in connection with its \$150,000,000 Turnpike System Revenue Bonds, 2009 Series A (Federally Taxable - Build America Bonds - Direct Payment).

**CAPITAL IMPROVEMENT PROGRAM**

In 1986, the State Legislature adopted the State's first Ten-Year Capital Improvement Program for transportation in New Hampshire, including specific components relating to the Turnpike System. Every two years, this long term capital program is updated and revised. The Turnpike System component of the Ten-Year Plan, as

from time to time modified by the Legislature, is referred as the “Capital Improvement Program.” The current total estimated cost of the Capital Improvement Program, including expenditures to date, is approximately \$1.031 billion through Fiscal Year 2018, which the State has funded and intends to fund through Bond proceeds, investment earnings, available toll revenues and federal funds. As of June 30, 2012, over \$681 million had been expended on the Capital Improvement Program, of which amount, approximately \$545 million had been funded with proceeds of Bonds.

The State currently expects to issue \$50 million of new money Bonds in Fiscal Year 2015.

The Capital Improvement Program is intended to improve the safety, condition, and capacity of the Turnpike System. A summary of the major projects currently underway and future projects is as follows:

Projects underway or complete and open to traffic financed with Turnpike funds and anticipated Bond proceeds:\*

#### *Central Turnpike*

- Engineering and construction of an F.E. Everett Turnpike bridge over the Souhegan River in Merrimack (A18). (*complete and open to traffic*)
- Engineering, right-of-way acquisition, and construction of US Rte 3 bridge over the F.E. Everett Turnpike in Bedford (A20).
- Engineering and rehabilitation of an F.E. Everett Turnpike/I-93 bridges in Bow and Concord (A21).
- Engineering and construction, specifically on five bridges, of the F.E. Everett Turnpike through the Millyard area of Manchester (A22).
- Engineering and construction of F.E. Everett Turnpike bridge over Black Brook in Manchester (A23).

#### *Spaulding Turnpike*

- Engineering, right-of-way acquisition and construction in Rochester on the Spaulding Turnpike between Exits 11 through 16 with two additional lanes of travel added from Exit 12 to 16 (totaling approximately 18 new lane miles) (B10).
- Engineering and right-of-way acquisition in Newington and Dover on the Spaulding Turnpike including widening Little Bay Bridges and reconstructing Spaulding Turnpike in Newington (B12).
- Construction of the Dover portion of the Spaulding Turnpike and rehabilitation of the General Sullivan Bridge in Dover (B13).

#### *Blue Star Turnpike*

- Engineering and construction of the bridge on the Blue Star Turnpike carrying I-95 over the Taylor River in North Hampton and Hampton (C4).
- Repair and improve bridge on Route 107 over I-95 in Seabrook (C6).
- Construction of a sound wall on I-95 in Portsmouth (C7).

#### *System-wide*

- Implementation of Open Road Tolling at Hampton (*complete and open to traffic*), Hooksett and Bedford (D5).

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\* Letter and number at the end of each project denotes project reference under heading “Project Descriptions” hereafter.

The Dover portion of the Spaulding Turnpike and rehabilitation of the General Sullivan Bridge in Dover (B13) and the Bedford Open Road Tolling Project (portion of D5) are authorized but currently unfunded.

The planning and scheduling of projects for the Capital Improvement Program is a dynamic process with changing priorities, based in part on traffic growth, right-of-way acquisition needs, environmental constraints, and financial constraints. Such factors can also result in modification in cost as schedules of particular projects in the Capital Improvement Plan.

The State modifies the Capital Improvement Program from time to time in order to address particular needs of the Turnpike System, and prepares a monthly report to track the progress, expenditures, and estimated cost of the projects (for Fiscal Years 2008 through 2018) in the Program. The timing of particular projects listed above is subject to change as a result of various factors, including permitting and environmental issues that may arise, as well as other unforeseen factors.

The following is a brief description of the projects that comprise the Capital Improvement Program for the Turnpike System, including current costs estimates (which includes monies already spent) and projected completion dates. Projected construction costs for the Capital Improvement Program were based on estimated construction costs in the year of project advertising applying an annual inflation rate of 3%. The Department considers these construction estimates reasonable.

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Project Descriptions

<u>Central Turnpike</u>	<u>Description</u>	<u>Estimated Cost (Millions)</u>	<u>Completion Date</u>
Project A1	Preliminary engineering and right-of-way acquisition for Exits 8 and 11, including ramp toll facilities (Merrimack/Nashua).	\$1.3	December 1989 <sup>(1)</sup>
Project A2	Construction of new interchange at Exit 8 to relieve traffic congestion at Interchange 7 (Nashua).	\$10.1	June 1988 <sup>(1)</sup>
Project A3	Preliminary engineering and right-of-way acquisition for Exits 1 and 2 (Nashua).	\$26.2	June 2001 <sup>(1)</sup>
Project A4	Reconstruction of Exit 11 and construction of northbound “off” and southbound “on” ramp toll facilities (Merrimack).	\$11.0	July 1993 <sup>(1)</sup>
Project A5	Engineering, right-of-way acquisition, and construction of new mainline toll plaza (Bedford).	\$5.4	January 1989 <sup>(1)</sup>
Project A6	Engineering, right-of-way acquisition, and construction of a new interchange two miles south of Exit 11 (formerly Exit 8). Merrimack Industrial Park Interchange includes “off” and southbound “on” toll facilities (Merrimack).	\$22.4	October 1990 <sup>(1)</sup>
Project A7	Engineering, right-of-way acquisition and construction of Camp Sargent Road bypass. Project will interconnect Amherst Street in Nashua with the new interchange Project A6 (Merrimack).	\$8.2	December 1994 <sup>(1)</sup>
Project A8	Preliminary engineering and right-of-way acquisition for widening the Central Turnpike between Exits 3 and 7 (Nashua).	\$22.8	April 2002 <sup>(1)</sup>
Project A10	Engineering, right-of-way acquisition, and construction of a portion of the southern segment of the circumferential highway in Nashua.	\$42.3	July 2001 <sup>(2)</sup>
Project A11	Engineering and right-of-way acquisition of the northern segment of the circumferential highway (Nashua/Hudson/Litchfield).	\$32.1	June 2005 <sup>(1)</sup>
Project A12	Reconstruction of Exits 1 and 2 and construction of connector to the circumferential highway (Nashua).	\$59.4	August 2002 <sup>(1)</sup>
Project A13	Widening and reconstruction of Central Turnpike between Exits 3 and 7 (Nashua).	\$84.7	May 2002 <sup>(1)</sup>
Project A14	Engineering, right-of-way acquisition, and construction of Bedford Road Interchange including toll facilities (Merrimack).	\$6.9	November 1990 <sup>(1)</sup>
Project A15	Reconstruction of the Exit 5 Granite St Bridge with two new ramps (Manchester).	\$22.8	June 2006 <sup>(1)</sup>
Project A16	Study of feasibility of widening Central Turnpike between I-89 Interchange and Interchange I-393 (Bow/Concord).	\$0.1	August 1992 <sup>(1)</sup>
Project A17	Construction of southbound only toll facilities of Central Turnpike and southbound on-ramp at Exit 1 (Nashua).	\$0.4	<sup>(3)</sup>
Project A18	Engineering, right-of-way, and construction of F.E. Everett bridge over the Souhegan River in Merrimack.	\$16.0	July 2011 <sup>(1)</sup>
Project A19	Engineering and construction of the roadway approaches including expansion of the Bedford toll plaza (Merrimack-Bedford).	\$7.4	December 2004 <sup>(1)</sup>

<u>Central Turnpike</u>	<u>Description</u>	<u>Estimated Cost (Millions)</u>	<u>Completion Date</u>
Project A20	Engineering, right-of-way acquisition, and construction of US Rte 3 bridge over the F. E. Everett Turnpike in Bedford including widening from Merrimack to Bedford.	\$12.6	June 2013
Project A21	I-93 bridge re-decking for 4 bridges in Bow and Concord.	\$27.2	October 2015
Project A22	Rehabilitation of 5 bridges in the Manchester mill yard.	\$39.0	July 2016
Project A23	I-293 bridge rehabilitation over Black Brook between exit 6 and exit 7.	\$4.1	May 2020 <sup>(8)</sup>
<b><u>Spaulding Turnpike</u></b>			
Project B1	Engineering, right-of-way acquisition and reconstruction of the Gosling Rd Interchange (Newington/Portsmouth).	\$13.4	November 1993 <sup>(1)</sup>
Project B2	Safety improvements on the Spaulding Turnpike to include median guardrail and safety improvements (Dover/Rochester).	\$6.6	June 2002 <sup>(1)</sup>
Project B3	Expansion of Dover Toll Plaza (Dover).	\$1.5	July 2000 <sup>(4)</sup>
Project B4	Right-of-way acquisition in median of Spaulding Turnpike (Newington).	\$2.7	March 1993 <sup>(1)</sup>
Project B5	Engineering of by-pass around North Conway.	\$0.1	December 1990 <sup>(1)</sup>
Project B6	Dover/Somersworth Weeks traffic circle.	\$1.0	December 1994 <sup>(1)</sup>
Project B7	Engineering for design of Exit 10 on the Spaulding Turnpike (Dover).	\$4.1	June 2006 <sup>(1)</sup>
Project B8	Construction of Exit 10 on the Spaulding Turnpike (Dover).	--	Future Project <sup>(5)</sup>
Project B9	Reconstruction and right-of-way acquisition for Exit 6W/US Rte 4 (Scammell Bridge) (Dover).	\$13.0	November 1997 <sup>(1)</sup>
Project B10	Engineering, right-of-way acquisition, and construction of Exits 11 through 16 (Rochester).	\$128.5	October 2013
Project B11	Engineering, right-of-way acquisition, and construction of the Turnpike ramps at Exit 4 associated with NH 16/US (Newington/Dover).	\$13.4	June 2006 <sup>(1)</sup>
Project B12	Engineering, right-of-way acquisition, and construction of Newington-Dover; Little Bay Bridge widening and Newington construction	\$169.1	July 2017
Project B13	Dover, General Sullivan Bridge Construction <sup>(6)</sup>	\$73.2	September 2019
<b><u>Blue Star (Route I-95) Turnpike</u></b>			
Project C1	Expansion of Hampton Toll Plaza (Hampton/North Hampton).	\$2.4	July 1991 <sup>(1)</sup>
Project C2	Engineering and Construction of roadway widening of the approaches to the Hampton main line toll plaza (Hampton).	\$2.5	June 2003 <sup>(1)</sup>
Project C3	Engineering and construction for the widening of the Hampton ramp toll plaza and approaches (Hampton).	\$7.1	June 2006 <sup>(1)</sup>
Project C4	I-95, Replacement of the Taylor River Bridge on the Blue Star Highway and replacement or removal of the Taylor River Dam in Hampton at mile 3.6501	\$12.2	October 2017

<b><u>Blue Star (Route I-95) Turnpike</u></b>	<b><u>Description</u></b>	<b><u>Estimated Cost (Millions)</u></b>	<b><u>Completion Date</u></b>
Project C6	Repair and Improve bridge on Route 107 over I-95 in Seabrook	\$3.6	October 2013
Project C7	Construction of sound wall in Portsmouth	\$3.2	May 2013
Project D1	Administrative	\$37.1	on-going
Project D2	Consultant Studies.	\$0.8	on-going
Project D3	Electronic Toll Collection equipment including signs.	\$25.3	December 2005 <sup>(1)</sup>
Project D4	Intelligent Transportation deployment on the Blue Star and Spaulding Turnpikes.	\$2.3	on-going
Project D5	Construction of Open Road Tolling at the following locations:		
a)	Hampton	\$16.8	June 2011 <sup>(1)</sup>
b)	Hooksett	\$22.5	October 2013
c)	Bedford <sup>(6)</sup>	\$18.7	October 2016
Total		\$1,031.0 <sup>(7)</sup>	

(1) Actual completion date.

(2) The segment between Route 3A and the Central Turnpike is complete; the portion from Route 3A to Route 111 has been deferred.

(3) The Legislative authority to build the Nashua toll facilities was repealed in Fiscal Year 2001.

(4) Removed from the State's 10-year Highway Improvement Plan.

(5) The project has been placed "on hold" until further notice.

(6) A toll increase will be required to help fund these projects.

(7) Numbers may not add due to rounding.

(8) Project delayed pending completion of engineering study for exits 6 and 7 in Manchester.

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**CAPITAL IMPROVEMENT PROGRAM EXPENDITURES**  
**Fiscal Years 1986 Through 2014**

Set forth below is a table of Capital Improvement Program expenditures on an unaudited cash basis for Fiscal Years 1986 through 2009, on a GAAP basis for Fiscal Years 2010 and 2011, on a preliminary, unaudited basis for Fiscal Year 2012 and on a forecasted basis for Fiscal Years 2013 and 2014. The timing and amounts of capital expenditures are subject to change.

Fiscal Year Ending June 30	Capital Expenditures
1986	\$ 3,703,014
1987	12,846,330
1988	15,092,609
1989	34,183,782
1990	31,457,483
1991	25,308,194
1992	29,988,101
1993	33,941,502
1994	30,665,402
1995	40,452,057
1996	29,198,433
1997	24,917,835
1998	26,260,770
1999	30,544,034
2000	19,719,168
2001	10,148,747
2002	6,469,689
2003	10,242,505
2004	19,437,590
2005	20,503,930
2006	13,176,569
2007	8,514,987
2008	9,159,186
2009	23,250,730
2010	66,088,919
2011	51,613,827
2012	54,206,345
Actual	\$681,091,738
2013	85,810,000*
2014	\$48,800,000*
Estimated	\$134,610,000
Total	\$815,701,738

\* Estimated expenditures from the Turnpike System Priority Capital Improvement Program (Status Report-July 2012).

## **Contingencies**

Delays in obtaining the many necessary permits, licenses and approvals to commence construction are not unusual occurrences with major highway projects. It has been and continues to be the policy of the Department of Transportation that it will not award contracts for construction projects unless the requisite permits, licenses and approvals have been obtained.

Certain delays and cost increases have been experienced with some of the projects in the Capital Improvement Program. It is possible that ongoing and future projects in the Capital Improvement Program may experience similar delays or cost increases or that other unforeseen circumstances may arise. As a result, the estimated cost of completing projects within the Capital Improvement Program could increase, requiring the State to modify the Capital Improvement Program or take other action to address such increased cost. Changes in the Capital Improvement Program or other actions may also be required in the event that revenues are below projections.

In addition, completion of the Capital Improvement Program may require additional appropriations by the State Legislature, and possibly increases in toll rates, which are required to be approved by Governor and Council. The Capital Improvement Program may be expanded, contracted or otherwise changed by legislation in the future.

Increases in toll rates at existing facilities and the location and configuration of new toll facilities are matters that can be the subject of controversy. The State intends to pursue resolution of any such issues in a timely manner so that the assumed toll revenue sources will be in place. There is no new toll facility on the horizon needed. If any of the assumed additional revenue sources are not available as needed, alternatives would need to be pursued. Available alternatives would include, among other things, (i) implementing alternative revenue increases at existing toll facilities, (ii) funding Capital Improvement Program projects through other sources or (iii) curtailing expenditures within the Capital Improvement Program.

There are various bills pending before the State Legislature from time to time which relate to the Turnpike System covering subjects including changes in Turnpike System construction projects and the Turnpike System toll structure. Pursuant to RSA 237-A the State is obligated to perform the covenants made by it in the Bond Resolution, including, without limitation, the obligations regarding the establishment and collection of tolls as described under *Security for the Bonds - Toll Rate Covenant*. In the opinion of Bond Counsel, any legislation would be subject to the provisions of Article 1, Section 10 of the United States Constitution prohibiting any law impairing the obligation of contracts and therefore could not unconstitutionally impair the obligations of the State under the Bonds and the Bond Resolution, including its obligation under those covenants. The State does not believe that any legislation having this effect is likely to be enacted.

## **OTHER PLANNED CONSTRUCTION PROJECTS**

The Department of Transportation may construct new feeder roads to portions of the Turnpike System, and it maintains an ongoing program of maintenance and improvement for existing feeder roads.

The Department of Transportation may construct new feeder roads to portions of the Turnpike System, and it maintains an ongoing program of maintenance and improvement for existing feeder roads. The Manchester Airport Access Road project, which was opened to traffic on November 11, 2011, provides direct access to the airport and other proximity destinations for travelers heading north on the Central Turnpike without passing through the Bedford Tolls. The change in traffic patterns is projected to result in an average daily decrease of approximately 13,500 traffic transactions from the toll plazas in the Bedford-Merrimack corridor, which amounts to an approximate annual revenue loss of \$3.9 million. This represents approximately 3% of projected toll revenue for the Turnpike System in Fiscal Year 2014. However, the State's Ten-Year Transportation Improvement Plan does not include additional plans to construct competing roads that would (a) provide an alternative to travel on the Turnpike System or (b) have a material adverse impact on traffic on or revenue from the Turnpike System.

## **SUMMARY OF CERTAIN PROVISIONS OF THE BOND RESOLUTION**

The Bond Resolution contains terms and conditions relating to the issuance and sale of Bonds under it, including various covenants and security provisions, certain of which are summarized below. Certain provisions of the Bond Resolution are described under the caption *Security for the Bonds*. This summary does not purport to be

comprehensive or definitive and is subject to all of the provisions of the Bond Resolution, to which reference is hereby made, copies of which are available from the State Treasurer and the Trustee. This summary uses various terms defined in the Bond Resolution. Summaries of certain capitalized terms used herein are defined in the Glossary of Terms, attached hereto as Appendix F.

### **Bonds Authorized**

Under the Bond Resolution the State may issue Bonds which bear a fixed rate of interest (“Fixed Rate Bonds”), Bonds which provide for a variable interest rate (“Variable Rate Bonds”), Bonds which provide for mandatory redemption at the option of the registered owner (“Option Bonds”), or deep discount Bonds (“Original Issue Discount Bonds”). Following the issuance of the 2012 Series C Bonds, the only other Bonds then Outstanding will be \$4,915,000 of the 2002 Refunding Series Bonds, \$76,460,000 of the 2003 Refunding Series Bonds, \$11,200,000 of the 2006 Refunding Series Bonds, \$150,000,000 of the 2009 Series A Bonds, \$55,230,000 of the 2009 Refunding Series B Bonds and \$42,115,000 of the 2012 Series Bonds. As used herein, the term “Bonds” refers to all Bonds then Outstanding under the Bond Resolution. The term “Outstanding” excludes Bonds which have been refunded through the issuance of Refunding Bonds as described under *Refunding Bonds* below.

### **Bond Resolution to Constitute Contract**

The Bond Resolution constitutes a contract between the State and the Bondholders. The pledge made in the Bond Resolution with respect to the Bonds and the covenants and agreements therein are for the equal benefit and security of the holders of all Bonds, all of which, regardless of their time of issue or maturity, rank equally without preference, priority or distinction of any Bond over any other, except as expressly provided in the Bond Resolution.

### **Pledge of Bond Resolution**

The Bond Resolution pledges for the payment of the principal of, redemption premium, if any, and interest on the Bonds, the proceeds of the sale of such Bonds, the Revenues and all moneys and securities in all accounts and subaccounts established by or pursuant to the Bond Resolution, other than the Rebate Account, subject only to the application of Revenues for the payment of Operating Expenses in accordance with the terms of the Bond Resolution.

The Bonds are limited obligations of the State. Neither the full faith and credit nor the taxing power of the State or of any political subdivision thereof is pledged to the payment of the Bonds. See *Security for the Bonds – Pledge of Revenues*.

### **Additional Bonds**

The Bond Resolution authorizes the issuance of Bonds in one or more series without limitation as to amount except as limited by law (current statutory limit of \$766,050,000 excluding refunding Bonds) and the terms of the Bond Resolution. The Bond Resolution permits the issuance of Additional Bonds on a parity with all other then Outstanding Bonds for the purposes of paying Project Costs and refunding (directly or indirectly) Bonds or other obligations issued for the purpose of paying Project Costs. The 2012 Series C Bonds are being issued pursuant to the Bond Resolution provisions relating to Additional Bonds. Additional Bonds may be issued by the State only upon the filing with the Trustee of the certificates, opinions and documents described under the caption *Security for the Bonds - Additional Indebtedness - Additional Parity Bonds*.

### **Refunding Bonds**

The Bond Resolution permits the issue of one or more series of Bonds (“Refunding Bonds”) for the purpose of refunding Bonds. Refunding Bonds may be issued by the State only upon certifying that the Debt Service for each Fiscal Year in which Bonds are or will be Outstanding will not be increased as a result of the issuance of Refunding Bonds; provided that, in lieu of such certification, the State may file with the Trustee the certificates described in paragraphs (1)(A) through (1)(E) under the caption *Security for the Bonds - Additional Indebtedness - Additional Parity Bonds*.

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\* The \$65,355,000 2012 Refunding Series B Bonds, sold on February 23, 2012 on a delayed delivery basis, are expected to be delivered on or about November 5, 2012 and will refund all of the 2003 Refunding Series Bonds other than \$3,310,000 maturing February 1, 2013.

The above-described certificates shall be required in the case of Bonds issued to refund other obligations issued for the purpose of paying Project Costs as if the Bonds were being issued for the Projects financed by such other obligations.

### **Additional Security**

The Bond Resolution provides that in connection with the initial issuance of any Series of Bonds, the State may obtain letters of credit, lines of credit, insurance or similar obligations, agreements or instruments (“Additional Security”) securing or providing for the purchase of such Series of Bonds by the issuer of such Additional Security. The State may enter into agreements with the issuer of such Additional Security with respect to the adjustments of the interest rates or other provisions of the Series of Bonds secured thereby. The State may also agree to directly reimburse the issuers of Additional Security for amounts paid thereunder (“Reimbursement Obligations”) and such Reimbursement Obligations may be deemed to be Additional Bonds under the Bond Resolution and entitled to the same security as the Bonds upon payments of amounts thereunder.

### **Establishment of Accounts and Subaccounts**

The Bond Resolution establishes the following accounts and subaccounts all of which shall be held by the Treasurer, except as noted below:

- (1) Construction Account
- (2) Revenue Account
- (3) Debt Service Account, containing an Interest Subaccount and a Principal Subaccount (to be held by the Trustee)
- (4) Rebate Account (to be held by the Trustee)
- (5) Special Redemption Account (to be held by the Trustee)
- (6) Debt Service Reserve Account (to be held by the Trustee)
- (7) Insurance Reserve Account
- (8) General Reserve Account

### **Application of Bond Proceeds**

The application of the proceeds of each Series of Bonds is governed by the provisions of the applicable Supplemental Resolution providing for their issue. For a description of the application of proceeds of the 2012 Series C Bonds, see *Sources and Uses of Funds*. Each supplemental resolution shall designate the Bonds to be issued thereunder by an appropriate series designation and shall also specify: (a) the authorized principal amount of the Series of Bonds; (b) the purpose or purposes for which the Series of Bonds is being issued, and if the Bonds are being issued to pay Project Costs, the Project or Projects for which the Bonds are being issued; (c) the date of the Bonds; (d) the provisions for the sale of the Bonds; and (e) any other provisions required to be inserted by other provisions of the Bond Resolution.

### **Subordinate Lien Obligations**

Notwithstanding anything to the contrary in the Bond Resolution, the State may issue bonds, notes or other evidences of indebtedness for the purposes of the Turnpike System payable from the General Reserve Account and the Revenues, subordinate to the deposits and credits required to be made under the Bond Resolution and to the payments required for Operating Expenses, and may secure the bonds, notes or evidences of indebtedness by a pledge of the Revenues inferior to the pledge of the Revenues created by the Bond Resolution. The proceeds of the inferior obligations may be pledged as security for the inferior obligations free and clear of the lien of the Bond Resolution.

## Revenue Account

The State shall deposit all of the Revenues into the Revenue Account as promptly as practicable after receipt (other than the Revenues expressly required or permitted by the Bond Resolution to be credited to or deposited in any other account). Moneys in the Revenue Account shall be applied first to the payment of Operating Expenses and then, not later than the twentieth day of each month, except as described below, to the following purposes and in the following order:

- (1) for deposit in the Interest Subaccount of the Debt Service Account, an amount equal to one-sixth of the installment of interest next coming due plus, at any time, any amount required to pay interest on overdue principal;
- (2) for deposit in the Principal Subaccount of the Debt Service Account, an amount equal to one-twelfth of the installment of principal or sinking fund installment next coming due plus, at any time, any amount required to pay principal of Bonds which has been accelerated;
- (3) for deposit in the Rebate Account, such amounts and at such times as are required by supplemental resolution;
- (4) for deposit in the Debt Service Reserve Account, an amount, which together with other amounts on deposit in such Account, will equal the Debt Service Reserve Account Requirement;
- (5) for deposit in the Insurance Reserve Account from time to time, an amount, which together with other amounts on deposit in such Account, will equal the Insurance Reserve Requirement;
- (6) for deposit in the Special Redemption Account from time to time, such amounts as are required to pay accrued interest on the purchase or redemption of Bonds or to reimburse such Account for accrued interest already paid; and
- (7) for deposit in the General Reserve Account, the balance, if any, remaining after making the deposits required by paragraphs (1) through (6) above.

## Application of Funds and Accounts

The Bond Resolution provides that the proceeds of Bonds, Revenues and other moneys deposited in the various accounts and subaccounts under the Bond Resolution shall be applied as follows:

*Construction Account.* Amounts on deposit in the Construction Account shall be applied to the payment of the Project Costs of the respective Projects for which the Bonds are issued. Any balance in the Construction Account not required to pay Project Costs of a Project shall be deposited in the Debt Service Reserve Account to the extent necessary to cause the amount in such Account to equal the Debt Service Reserve Account Requirement and, as the State shall determine, the balance shall be transferred to the Special Redemption Account or be retained in the Construction Account for the purpose of paying Project Costs of other Projects.

*Debt Service Account.* Amounts on deposit in the Debt Service Account will be applied to the payment of principal (including sinking fund installments) of and interest on the Bonds.

The State may purchase Bonds from available funds and credit them against an installment of principal or sinking fund installment applicable to them at the applicable principal amount or sinking fund redemption price by delivering them to the Trustee for cancellation at least sixty (60) days before the principal due date or sinking fund installment date.

*Special Redemption Account.* The State may deposit in the Special Redemption Account any moneys not otherwise required by the Bond Resolution to be deposited or applied, including excess proceeds after the completion of a Project and proceeds of insurance or condemnation or other disposition of Turnpike System assets. Amounts in the Special Redemption Account may be applied by the Trustee at

the direction of the Treasurer to the redemption of Bonds or to the purchase of Bonds at prices not exceeding the earliest available redemption price (excluding accrued interest).

*Debt Service Reserve Account.* If at any time the amount on deposit and available therefor in the Debt Service Account is insufficient to pay an installment of interest or principal or a sinking fund installment when due, amounts in the Debt Service Reserve Account will be applied to the deficiency. If on the twentieth day of any month the amount on deposit in the Debt Service Reserve Account is in excess of the Debt Service Reserve Account Requirement, the excess shall be deposited in the Revenue Account unless the excess accrued prior to the Completion Date of a Project from the investment of proceeds of Bonds issued to finance or refinance the Project, in which case the excess shall be deposited in the Construction Account unless otherwise provided by a Supplemental Resolution. In lieu of any or all of the required deposits into the Debt Service Reserve Account, the State may cause to be deposited therein a surety bond, an insurance policy or a letter of credit in an amount equal to the difference between the Debt Service Reserve Account Requirement and the sums then on deposit in such Account, if any.

*General Reserve Account.* Amounts on deposit in the General Reserve Account shall be applied in the following order of priority: (1) to make up any deficiencies in payments from the Revenue Account required by the Bond Resolution; (2) to provide funds to pay Renewal and Replacement Costs to the extent necessary to meet the Renewal and Replacement Requirement for the then current Fiscal Year; (3) to pay general obligation bonds issued by the State for purposes of the Turnpike System; and (4) subject to the terms of any pledge securing any subordinate lien obligations issued in accordance with the Bond Resolution, for any other lawful purpose of the Turnpike System.

*Insurance Reserve Account.* The State has deposited the sum of \$3,000,000 into the Insurance Reserve Account, which amount will be available to insure against risks that would otherwise be covered by policies of insurance. The State will maintain the Insurance Reserve Account at the Insurance Reserve Requirement, which Requirement shall at all times be no less than \$3,000,000. If there is a deficiency in the amounts available in the Debt Service Account to pay an installment of interest or principal or a sinking fund installment when due, after first taking account of any transfers from the Debt Service Reserve Account and the General Reserve Account, the State shall make up the deficiency by transfer from the Insurance Reserve Account and the State shall reimburse the Insurance Reserve Account from the next available moneys in the Revenue Account after payment of Operating Expenses and after any required payments into the Debt Service Account, Rebate Account and Debt Service Reserve Account.

*Rebate Account.* There is to be established within the Rebate Account a subaccount to be known as the 2012 Series C Bonds Rebate Subaccount into which the sum of (i) any excess of (A) the aggregate amount earned on all Nonpurpose Investments (as defined in Section 148 of the Code), acquired with any Gross Proceeds (as defined in the Code), over (B) the amount which would have been earned if all Nonpurpose Investments in such accounts were invested at a rate equal to the yield on the 2012 Series C Bonds, plus (ii) any income attributable to the investment of any excess described in clause (i) above or this clause (ii) to be deposited. Within 45 days after the close of each bond year, the Treasurer shall compute and certify the amount of such excess, if any, for such bond year, and the Treasurer shall deposit such amount into the 2012 Series C Bonds Rebate Subaccount from the Revenue Fund.

If at the close of any bond year the amount in the 2012 Series C Bonds Rebate Subaccount exceeds the amount that would be required to be paid to the United States if the 2012 Series C Bonds were no longer Outstanding, upon certification thereof by the Treasurer, such excess shall promptly be paid to the Treasurer for deposit in the Revenue Account.

Within 60 days after the close of the fifth twelve-month period from the date of issuance of the 2012 Series C Bonds and at least once in each five-year period thereafter, the Treasurer shall cause to be paid to the United States the full amount then required to be paid under the rebate provisions of the Code. Within 60 days after the 2012 Series C Bonds are no longer Outstanding, the Treasurer shall cause to be paid to the United States the full amount then required to be paid under the rebate provisions of the Code as calculated by the Treasurer. If the amount in the 2012 Series C Bonds Rebate Subaccount is insufficient to pay the amount required to be paid, the Treasurer shall be liable to make up that deficiency from the Revenue Account no later than 15 days prior to each date on which a rebate payment is due.

The provisions described above shall be complied with by the State in order to meet the requirements of the Code such that interest on the 2012 Series C Bonds shall be and remain excludable from the gross income of the recipients thereof for federal income tax purposes; provided, however, that the State shall not be required to comply with any such provision with respect to the 2012 Series C Bonds in the event the State receives an opinion of nationally recognized bond counsel that compliance with such provision is no longer required to satisfy the requirements of the Code or that compliance with some other provision in lieu of a provision described above will satisfy said requirements in which case compliance with such other provision specified in such opinion shall constitute compliance with provisions described above.

### **Investment of Accounts**

Moneys in the Revenue Account and the General Reserve Account not needed for immediate disbursement may be invested by the Treasurer as permitted by law. Other moneys held by the Treasurer or by the Trustee under the Bond Resolution which are not needed for immediate disbursement shall, to the extent practicable and reasonable, be invested in Permitted Investments (as defined below) by the Treasurer in the case of accounts held by the Treasurer, or by the Trustee as directed by the Treasurer (or in the discretion of the Trustee if no direction is received from the Treasurer) in the case of other accounts, subject to the following:

- (1) The Permitted Investments must mature or be redeemable at the option of the holder at or before the time when the moneys are expected to be needed;
- (2) In the case of the Debt Service Reserve Account, the only Permitted Investments are direct and general obligations of, or obligations unconditionally guaranteed by the United States of America;
- (3) Moneys in several accounts may be invested in undivided interests in the same Permitted Investments if they are otherwise eligible for each of the several funds. Permitted Investments may be transferred in kind at fair market value from one account to another when transfers are required if they are eligible for the transferee account; and
- (4) In the event that invested moneys in an account are required for expenditure or transfer, the investments shall be sold or redeemed to the extent necessary, subject to the notice provisions of the Uniform Commercial Code to the extent applicable. Permitted Investments may be sold by one account to another if eligible for investment by the latter.

The term “**Permitted Investments**” means the following, to the extent permitted by New Hampshire Revised Statutes Annotated 6:7 and 6:8 as amended from time to time:

- (a) Defeasance Obligations;
- (b) bonds, notes or other evidences of indebtedness issued or guaranteed by the Banks for Cooperatives, Federal Intermediate Credit Banks, Federal Home Loan Bank System, Federal Land Banks, Farmers Home Administration, Student Loan Marketing Association, Federal National Mortgage Association or Government National Mortgage Association;
- (c) direct and general obligations of any state of the United States for the payment of the principal of and interest on which the full faith and credit of the state is pledged, provided that at the time of their purchase, such obligations are rated in either of the two highest rating categories by Moody’s Investors Service, Inc. and Standard & Poor’s Corporation;
- (d) interest-bearing deposit accounts, certificates of deposit or similar banking arrangements maturing within one year, which are either (i) fully insured by the Federal Deposit Insurance Corporation, or (ii) fully secured at all times by Defeasance Obligations, or (iii) with a bank or trust company that is rated in either of the two highest rating categories by Moody’s Investors Service, Inc. and Standard & Poor’s Corporation;
- (e) repurchase agreements, with a term of not more than one year or due on demand, relating to and fully secured by Defeasance Obligations with a bank or trust company, or with a government bond dealer reporting to, trading with, and recognized as a primary dealer by, the Federal Reserve Bank of New

York; provided that the market value of such securities is marked-to-market weekly and maintained at one hundred four percent (104%) of the repurchase price plus accrued interest specified in the agreement and that such securities are segregated from the unencumbered assets of such bank or trust company or government bond dealer; and provided further that the agreement shall expressly authorize the Trustee to liquidate the purchased securities in the event of the insolvency of the party required to repurchase such securities or the commencement against such party of a case under the federal Bankruptcy Code or the appointment of or taking possession by a trustee or custodian in a case against such party under the Bankruptcy Code; and

(f) investment agreements with a bank or bank holding company which is rated at their time of purchase in either of the two highest rating categories by Moody's Investors Service, Inc. and Standard & Poor's Corporation, which agreements have been approved for sale by a national securities exchange and all regulatory authorities having jurisdiction.

Permitted Investments may be purchased from or through the Trustee.

Except as set forth below or as otherwise provided in the supplemental resolution providing for the issuance of a Series of Bonds, all income from investments in any account established under the Bond Resolution (including net profit from the sale of any investment) shall accrue to and be held in the account. Income from investment of the Special Redemption Account shall be transferred to the Debt Service Account and credited against the amounts otherwise required to be deposited in the Debt Service Account. For the period until the Completion Date of a Project financed by Bonds (or until the Project is discontinued pursuant to the Bond Resolution) income accruing from investment of the proceeds of Bonds issued to finance or refinance the Project which have been deposited in the Debt Service Account, the Construction Account, and the Debt Service Reserve Account, shall be deposited in the Construction Account, or as otherwise provided by the supplemental resolution under which the Bonds are issued for the Project. The 1990 Series Supplemental Resolution provides that all such income accruing from investments in the Debt Service Account and the Debt Service Reserve Account shall be deposited in the Revenue Account. Any loss from investment of a fund or account shall be charged to the account but, unless otherwise made up, shall be set off against income from investment of the account which would otherwise be deposited in another account.

Except as otherwise provided in the Supplemental Resolution providing for the issuance of a Series of Bonds, investments shall be valued at cost (plus amortized discount or minus amortized premium but excluding accrued interest to the date of purchase) plus accrued interest to the date as of which they are valued unless the Treasurer or the Trustee determines that a lower valuation is necessary by reason of uncertainty of payment or anticipated loss on sale prior to maturity.

## **Covenants**

*Tolls and Charges.* See *Security for the Bonds – Toll Rate Covenant.*

*Annual Budget.* For each Fiscal Year the State shall file with the Treasurer an annual budget relating to the Turnpike System, which annual budget shall be consistent with the then current biennial budget enacted by the State Legislature. The State may at any time adopt and file with the Treasurer an amended or supplemental annual budget for the Fiscal Year then in progress. The annual budget shall show projected Operating Expenses, Debt Service, Renewal and Replacement Costs and other payments from the Revenue Account and the General Reserve Account and the Revenues to be available to pay the same.

*Independent Engineer.* The State shall retain one or more independent consulting engineers or engineering firms, having a national reputation for knowledge and experience in analyzing the operations of this type of system, to perform the duties of the Independent Engineer under the Bond Resolution.

*Operation, Maintenance and Improvement of the System.* The State shall operate and maintain the Turnpike System and make improvements to the same in accordance with prudent practice for this type of system.

*Insurance.* The State shall at all times maintain such insurance with respect to the Turnpike System, either through insurance reserves or through insurance policies, as it determines is prudent or necessary to protect the interests of the State and the bondholders. In the event of loss or damage to property covered by the insurance, the

State shall repair and reconstruct or replace the damaged or lost property as soon as practicable and to the extent necessary for the proper conduct of its operations and shall apply the proceeds of the insurance for that purpose to the extent needed. Any excess proceeds from property insurance shall be paid to the Trustee for deposit in the Debt Service Reserve Account to the extent necessary to cause the amount in the Debt Service Reserve Account to equal the Debt Service Reserve Account Requirement and the balance shall be deposited, as the State shall determine, in the Construction Account (for the purpose of paying Project Costs of Projects designated by the State) or the Special Redemption Account.

The State, acting through its Department of Insurance, shall annually review the kinds and amounts of insurance policies and self-insurance maintained by the State with respect to the Turnpike System and no later than sixty days after the end of each Fiscal Year shall deliver to the Treasurer a report describing the insurance then in effect and a certificate from the Commissioner of Insurance of the State setting forth the Insurance Reserve Requirement for the next Fiscal Year or any portion thereof. If at any time the Insurance Reserve Requirement shall be increased as described above or if as of the last business day of a Fiscal Year the balance in the Insurance Reserve Account shall be less than the Insurance Reserve Requirement for that Fiscal Year, the certificate required by the foregoing sentence shall also specify the dates and amounts of deposits to the Insurance Reserve Account during the next succeeding Fiscal Year so that no later than the last day of such next succeeding Fiscal Year the balance in the Insurance Reserve Account shall equal the Insurance Reserve Requirement as of that date.

*No Encumbrance or Disposition of the Revenues or Properties of the Turnpike System.* The State shall not sell, mortgage, lease or otherwise dispose of or encumber the Revenues or any properties of the Turnpike System, except that:

(1) the State may sell, lease, or otherwise dispose of for fair market value any portion of the properties of the Turnpike System which in the reasonable judgment of the State has become obsolete or worn out, or no longer used or useful, or which is to be or has been replaced by other property; and

(2) except as provided in paragraph (1), the State may also sell, lease, or otherwise dispose of for fair market value any portion of the properties of the Turnpike System upon filing with the Trustee a certificate (a) of the Independent Engineer stating that the sale, lease or other disposition is in accordance with prudent practice for this type of system and containing the statements required by paragraph (1)(D) under the caption *Security for the Bonds - Additional Indebtedness - Additional Parity Bonds*, and (b) of an Authorized Officer containing the statements required by paragraph (1)(E) thereunder, as if the date of the sale, lease or other disposition were a date of issuance of Bonds.

If any portion of the properties of the Turnpike System is taken by eminent domain, any moneys received by the State as a result shall be paid to the Trustee for deposit in the Debt Service Reserve Account to the extent necessary to cause the amount in the Debt Service Reserve Account to equal the Debt Service Reserve Account Requirement, and any balance shall be paid into the Revenue Account if the balance is not in excess of one percent (1%) of the principal amount of the Outstanding Bonds. If the balance exceeds that sum, it shall be deposited, as the State shall determine, in the Construction Account (for the purpose of paying Project Costs of Projects designated by the State) or the Special Redemption Account.

*Books of Account; Annual Audit.* The State shall keep proper books and accounts relating to the Turnpike System. Within one hundred eighty days after the end of each Fiscal Year, the State shall file with the Trustee an annual financial statement, certified by an independent certified or registered public accountant or an independent firm of certified or registered public accountants. The report of the auditor shall state whether there has come to the attention of the auditor in the course of its examination any Default under the Bond Resolution and, if so, the nature of the Default.

*Carrying Out Projects.* The State shall proceed with due diligence to carry out and complete the Projects financed by the issuance of Bonds. The State may, however, discontinue a Project prior to its completion by written notice to the Treasurer and the Trustee, with a certificate of an Authorized Officer stating that, by reason of change of circumstance not reasonably expected at the time of issuance of the Bonds, completion of the Project is no longer consistent with prudent practice for this type of system.

*Federal Income Tax.* Except as otherwise provided as to a Series of Bonds in the Supplemental Resolution providing for their issuance, the State shall not make any use of Bond proceeds or take any other action that would

cause the interest on a Series of Bonds to become included in gross income for federal income tax purposes, and shall not fail to take any other lawful action necessary for interest on a Series of Bonds to be or continue to be excluded from gross income for federal income tax purposes.

### **Events of Default; Acceleration of Maturities**

An “**Event of Default**” under the Bond Resolution means any one of the following events:

- (1) The State fails to make any payment of principal or redemption price of any of the Bonds when due, whether at maturity or by proceedings for redemption or otherwise.
- (2) The State fails to make any payment of interest on any of the Bonds when due and the failure continues for thirty (30) days.
- (3) The State fails to make any payment required to be made into any account held by the Trustee under the Bond Resolution and the failure continues for thirty (30) days.
- (4) The State sells, mortgages, leases or otherwise disposes of or encumbers the Revenues or any properties of the Turnpike System in violation of the Bond Resolution, or makes an agreement to do so.
- (5) Any part of the Turnpike System shall be damaged or destroyed to the extent of impairing its efficient operation and having a material adverse effect on Revenues and shall not be promptly repaired, replaced or reconstructed.
- (6) The State fails to perform any other covenant or agreement contained in the Bond Resolution and the failure continues for sixty (60) days after written notice to the State by the Trustee or to the State and the Trustee by the owners of not less than twenty-five percent (25%) in principal amount of the Outstanding Bonds.

Upon the occurrence of an Event of Default and so long as the default is not cured, either the Trustee or the holders of 25% in principal amount of the Outstanding Bonds, in addition to their other remedies under the Bond Resolution, may (by written notice to the State and the Trustee) declare the principal of all Outstanding Bonds, and the interest accrued thereon, to be due and payable immediately.

### **Payment of Funds to the Trustee; Application of Funds**

If an Event of Default occurs and has not been cured, the Treasurer, upon demand of the Trustee, will pay over to the Trustee the funds and investments in the Construction Account, and the Treasurer, upon demand of the Trustee, will pay over to the Trustee all Revenues on hand and all moneys and investments then held by the Treasurer in any funds and accounts held by it under this Bond Resolution and shall transfer to the Trustee, as received and in the form received, all subsequent Revenues. After a transfer of the moneys and investments in an account pursuant to the preceding sentence, the Trustee shall administer the account until all Events of Default have been cured.

If at any time the available funds are insufficient for the payment of the principal or redemption price and interest then due on the Bonds, the following accounts (other than funds held in trust for the payment or redemption of particular Bonds) shall be used in the following order:

- Debt Service Account
- Debt Service Reserve Account
- General Reserve Account
- Insurance Reserve Account
- Construction Account
- Special Redemption Account

and the State shall promptly restore from the Revenue Account any amount taken for this purpose from any account other than the Debt Service Account. The moneys shall be applied in the following order of priority:

*First*, to the payment of all unpaid interest then due on Bonds (including any interest on overdue principal and, to the extent permitted by law, interest on overdue interest at the same rate) in the order in which the same becomes due, and, if the amount available is sufficient to pay the unpaid interest which became due on any date in part but not in full, then to the payment of that interest ratably; and

*Second*, to the payment of the unpaid principal or redemption price of Bonds then due ratably without regard to when the same became due.

### **Other Remedies**

The Trustee may pursue any available remedy at law or in equity to collect the payment of principal or redemption price of and interest on the Bonds or to enforce the performance of any provisions of the Bonds or the Bond Resolution. The Trustee may maintain a proceeding even if it does not possess any of the Bonds or does not produce them in the proceeding.

The owners of a majority in principal amount of Outstanding Bonds may direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, but the Trustee may refuse to follow any direction that conflicts with law or the Bond Resolution, is unduly prejudicial to the rights of any bondholder, or would involve the Trustee in liability from its own funds.

### **Limitation on Suits**

A bondholder may bring an action at law to recover the principal or redemption price or interest due or overdue on its Bond or Bonds. A bondholder may pursue any other remedy at law or in equity with respect to the Bond Resolution or the Bonds only if:

- (a) the bondholder gives the Trustee written notice of a continuing Event of Default;
- (b) the owners of at least twenty-five percent (25%) in principal amount of Outstanding Bonds make a written request to the Trustee to pursue the remedy;
- (c) the bondholders making the request offer to the Trustee indemnity satisfactory to the Trustee against any loss, liability or expense;
- (d) the Trustee does not comply with the request within sixty (60) days after receipt of the request and the offer of indemnity; and
- (e) during the sixty (60) day period the owners of a majority in principal amount of Outstanding Bonds do not give the Trustee a direction inconsistent with the request.

### **Defeasance**

The obligations, pledge, covenants and agreements of the State under the Bond Resolution (other than the covenant with respect to federal Income Tax and its obligations with respect to defeasance) shall be discharged and satisfied as to any Bond for which there have been irrevocably set aside with the Trustee sufficient funds, or Defeasance Obligations certified by an independent public accounting firm of national reputation to be in such principal amounts, bearing interest at such rates and with such maturities as will provide sufficient funds to pay the principal or redemption price and interest when due on the Bond, and when all proper fees and expenses of the Trustee pertaining to the Bond have been paid or provided for to the satisfaction of the Trustee. An escrow account held by the Trustee as contemplated by this paragraph may be restructured to provide substitute Defeasance Obligations meeting the criteria set forth in the Bond Resolution, to the extent and as provided in the agreement establishing such escrow account.

Notwithstanding the foregoing, in the case of Bonds which are to be redeemed prior to their stated maturities, no deposit in accordance with the preceding paragraph shall operate as a discharge and satisfaction until the Bonds have been irrevocably called or designated for redemption and proper notice of the redemption has been given or provision satisfactory to the Trustee has been irrevocably made for doing so.

## **Amending the Bond Resolution**

*Without Consent of Bondholders.* The State, acting through the Governor and Council, may from time to time, with the written concurrence of the Trustee but without the consent of any bondholder, adopt Supplemental Resolutions (a) to provide for the issuance of Additional Bonds; (b) to make changes in the Bond Resolution which may be required to permit the Bond Resolution to be qualified under the Trust Indenture Act of 1939, as amended; and (c) for any one or more of the following purposes:

- (1) to cure or correct any ambiguity, defect or inconsistency in the Bond Resolution;
- (2) to add additional covenants and agreements of the State for the purpose of further securing the payment of the Bonds;
- (3) to limit or surrender any right, power or privilege reserved to or conferred upon the State by the Bond Resolution;
- (4) to confirm any lien or pledge created or intended to be created by the Bond Resolution;
- (5) to confer upon the bondholders additional rights or remedies or to confer upon the Trustee for the benefit of the bondholders additional rights, duties, remedies or powers; and
- (6) to modify the Bond Resolution in any other respect, provided that the modification shall not be effective until after the Outstanding Bonds affected by the modification cease to be Outstanding.

*With Consent of Bondholders.* With the written concurrence of the Trustee and the consent of the owners of not less than sixty-six and two thirds percent (66 2/3%) in principal amount of the Outstanding Bonds, the State may from time to time adopt Supplemental Resolutions for the purpose of making other changes in the Bond Resolution; provided, however, that without the consent of the owner of each Bond affected, no Supplemental Resolution shall:

- (1) change the maturity date for the payment of the principal of any Bond or the dates for the payment of interest on any Bond or the terms of the redemption of any Bond, or reduce the principal amount of any Bond or the rate of interest on any Bond or the redemption price of any Bond;
- (2) reduce the requirement of consents under this proviso for a Supplemental Resolution; or
- (3) give to any Bond preference over any other Bond.

It shall not be necessary that the consents of the bondholders approve the particular wording of the proposed Supplemental Resolution if the consents approve the substance. After the owners of the required percentage of Bonds have filed their consents with the Trustee, the Trustee shall mail notice to the bondholders. No action or proceeding to invalidate the Supplemental Resolution shall be instituted or maintained unless it is commenced within sixty (60) days after the Trustee has notified the State that it has mailed the notice to the bondholders.

## **COMPETITIVE SALE OF THE 2012 SERIES C BONDS**

After competitive bidding on August 22, 2012, the 2012 Series C Bonds were awarded to J.P. Morgan Securities LLC (the "Underwriter"). The Underwriter has supplied the information as to the public offering yields of the 2012 Series C Bonds set forth on the inside cover hereof. The Underwriter has informed the State that if all of the 2012 Series C Bonds are resold to the public at those yields, it anticipates the total Underwriter's compensation to be \$349,563.68. The Underwriter may change the public offering yields from time to time.

## **TAX EXEMPTION**

In the opinion of Edwards Wildman Palmer LLP, Bond Counsel to the State ("Bond Counsel"), based upon an analysis of existing laws, regulations, rulings, and court decisions, and assuming, among other matters, compliance with certain covenants, interest on the 2012 Series C Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 (the "Code"). Bond Counsel is of the

further opinion that interest on the 2012 Series C Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although Bond Counsel observes that such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income.

Bond Counsel is also of the opinion that, under existing law, interest on the 2012 Series C Bonds is exempt from the New Hampshire personal income tax on interest and dividends. Bond Counsel has not opined as to the taxability of the 2012 Series C Bonds or the income therefrom under the laws of any state other than New Hampshire. A complete copy of the proposed form of opinion of Bond Counsel to be delivered at Settlement is set forth in Appendix E hereto.

To the extent the issue price of any maturity of the 2012 Series C Bonds is less than the amount to be paid at maturity of such 2012 Series C Bonds (excluding amounts stated to be interest and payable at least annually over the term of such 2012 Series C Bonds), the difference constitutes "original issue discount," the accrual of which, to the extent properly allocable to each owner thereof, is treated as interest on the 2012 Series C Bonds which is excluded from gross income for federal income tax purposes and is exempt from the New Hampshire personal income tax on interest and dividends. For this purpose, the issue price of a particular maturity of the 2012 Series C Bonds is the first price at which a substantial amount of such maturity of the 2012 Series C Bonds is sold to the public (excluding bond houses, brokers, or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers). The original issue discount with respect to any maturity of the 2012 Series C Bonds accrues daily over the term to maturity of such 2012 Series C Bonds on the basis of a constant interest rate compounded semiannually (with straight-line interpolations between compounding dates). The accruing original issue discount is added to the adjusted basis of such 2012 Series C Bonds to determine taxable gain or loss upon disposition (including sale, redemption, or payment on maturity) of such 2012 Series C Bonds. Bondholders should consult their own tax advisors with respect to the tax consequences of ownership of 2012 Series C Bonds with original issue discount, including the treatment of purchasers who do not purchase such 2012 Series C Bonds in the original offering to the public at the first price at which a substantial amount of such 2012 Series C Bonds is sold to the public.

Bonds purchased, whether at original issuance or otherwise, for an amount greater than the stated principal amount to be paid at maturity of such Bonds, or, in some cases, at the earlier redemption date of such Bonds ("Premium Bonds"), will be treated as having amortizable bond premium for federal income tax purposes and for purposes of the New Hampshire personal income tax on interest and dividends. No deduction is allowable for the amortizable bond premium in the case of obligations, such as the Premium Bonds, the interest on which is excluded from gross income for federal income tax purposes. However, a Bondholder's basis in a Premium Bond will be reduced by the amount of amortizable bond premium properly allocable to such Bondholder. Holders of Premium Bonds should consult their own tax advisors with respect to the proper treatment of amortizable bond premium in their particular circumstances.

Other than as expressly stated herein, Bond Counsel expresses no opinion regarding any other federal tax consequences arising with respect to the ownership or disposition of, or the accrual or receipt of interest on, the 2012 Series C Bonds.

The Code imposes various requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the 2012 Series C Bonds. Failure to comply with these requirements may result in interest on the 2012 Series C Bonds being included in gross income for federal income tax purposes, possibly from the date of original issuance of the 2012 Series C Bonds. The State has covenanted to comply with such requirements to ensure that interest on the 2012 Series C Bonds will not be included in federal gross income. The opinion of Bond Counsel assumes compliance with these covenants. Certain requirements and procedures contained or referred to in the Bond Resolution and other relevant documents may be changed and certain actions (including, without limitation, defeasance of the 2012 Series C Bonds) may be taken or omitted under the circumstances and subject to the terms and conditions set forth in such documents. Bond Counsel has not undertaken to determine (or to inform any person) whether any actions taken (or not taken) or events occurring (or not occurring) after the date of issuance of the 2012 Series C Bonds may adversely affect the value of, or the tax status of interest on, the 2012 Series C Bonds.

Prospective Bondholders should be aware that from time to time legislation is or may be proposed which, if enacted into law, could result in interest on the 2012 Series C Bonds being subject directly or indirectly to federal income taxation, or otherwise prevent Bondholders from realizing the full benefit provided under current federal tax

law of the exclusion of interest on the 2012 Series C Bonds from gross income. To date, no such legislation has been enacted into law. However, it is not possible to predict whether any such legislation will be enacted into law. Further, no assurance can be given that any pending or future legislation, including amendments to the Code, if enacted into law, or any proposed legislation, including amendments to the Code, or any future judicial, regulatory or administrative interpretation or development with respect to existing law, will not adversely affect the market value and marketability of, or the tax status of interest on, the 2012 Series C Bonds. Prospective Bondholders are urged to consult their own tax advisors with respect to any such legislation, interpretation or development

Although Bond Counsel is of the opinion that interest on the 2012 Series C Bonds is excluded from gross income for federal income tax purposes and is exempt from the New Hampshire personal income tax on interest and dividends, the ownership or disposition of, or the accrual or receipt of interest on, the 2012 Series C Bonds may otherwise affect a Bondholder's federal or state tax liability. The nature and extent of these other tax consequences will depend upon the particular tax status of the Bondholder or the Bondholder's other items of income or deduction. Bond Counsel expresses no opinion regarding any such other tax consequences, and Bondholders should consult with their own tax advisors with respect to such consequences.

### **LITIGATION**

There is no controversy or litigation of any nature now pending or threatened, restraining or enjoining the issuance, sale, execution or delivery of the 2012 Series C Bonds, or in any way contesting or affecting the validity of the 2012 Series C Bonds or any proceedings of the State taken with respect to the issuance or sale thereof, or the pledge or application of any moneys or security provided for the payment of the 2012 Series C Bonds, or the existence or powers of the State with respect to the Turnpike System.

The State is not a party to any litigation or other proceeding pending or, to the knowledge of the State, threatened in any court, agency or other administrative body (either state or federal) which, if decided adversely to the State, would have a material effect on the financial condition of the Turnpike System.

### **RATINGS**

Fitch Ratings, Inc., Moody's Investors Services, Inc. and Standard & Poor's Ratings Services have assigned their municipal bonds ratings of "A" (outlook: stable), "A1" (outlook: stable) and "A+" (outlook: stable), respectively, to the 2012 Series C Bonds.

Each such rating reflects only the views of the respective rating agency, and an explanation of the significance of such rating should be obtained from such rating agency, at the following addresses: Moody's Investors Service, 7 World Trade Center at 250 Greenwich St., New York, New York 10007; Standard & Poor's Ratings Services, 55 Water Street, New York, New York 10041; Fitch Ratings, One State Street Plaza, New York, New York 10004. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. The above ratings are not recommendations to buy, sell or hold the 2012 Series C Bonds. There is no assurance such ratings will continue for any given period of time or that such ratings will not be revised downward or withdrawn entirely by the rating agencies, if in the judgment of such rating agencies, circumstances so warrant. Any such downward revision or withdrawal of such ratings may have an adverse effect on the market price of the 2012 Series C Bonds.

### **FINANCIAL ADVISOR**

Public Resources Advisory Group, New York, New York, is serving as Financial Advisor in connection with the issuance of the 2012 Series C Bonds. The Financial Advisor is an independent advisory firm and is not engaged in the business of underwriting, trading, or distributing municipal securities or other public securities. The Financial Advisor is not obligated to undertake to make an independent verification of, or to assume responsibility for the accuracy, completeness or fairness of the information contained in the Official Statement.

### **LEGALITY FOR INVESTMENT**

Under the laws of the State, the 2012 Series C Bonds are authorized investments for fiduciaries and may be legally deposited as security for public funds in the State.

## **CONTINUING DISCLOSURE**

The State has covenanted with the Trustee for the benefit of the holders of the 2012 Series C Bonds to provide certain financial information and operating data relating to the Turnpike System by not later than 240 days following the end of each Fiscal Year during which the 2012 Series C Bonds are outstanding (the "Annual Report"), and to provide notices of certain enumerated, significant events. The Annual Report and notices of significant events will be filed on behalf of the State with the Municipal Securities Rulemaking Board (the "MSRB") through its Electronic Municipal Market Access. The specific nature of the information to be contained in the Annual Report or the notices of significant events is summarized in Appendix D - "Form of Continuing Disclosure Certificate."

The State has never failed to comply in all material respects with any previous undertakings relating to its Turnpike System Revenue Bonds to provide annual reports or notices of significant events in accordance with the Rule, as defined in the Continuing Disclosure Certificate attached hereto as Appendix D.

It should be noted that the State had undertaken pursuant to the Rule with respect to its general obligation bonds to provide its financial statements for fiscal year 2006 to each repository established in accordance with the Rule by March 27, 2007, and on March 29, 2007 the State filed a notice of its failure to file such statements by the required date. The State's audited financial statements for fiscal year 2006 were filed on April 20, 2007.

It should be further noted that the State had undertaken pursuant to the Rule with respect to its general obligation bonds to provide its financial statements for fiscal year 2010 to the MSRB by March 27, 2011, and on March 28, 2011 the State filed its audited financial statements and a notice of its failure to file such statements by the required date.

## **LEGAL MATTERS**

Legal matters incident to the authorization and sale of the 2012 Series C Bonds are subject to the approval of Edwards Wildman Palmer LLP, Boston, Massachusetts, Bond Counsel, whose opinions will be dated the date of the issuance of the Bonds and will speak only as of that date. A form of the approving opinion of Edwards Wildman Palmer LLP is set forth in Appendix E hereto.

## **TURNPIKE SYSTEM FINANCIAL STATEMENTS**

The Turnpike System's financial statements for the Fiscal Year ended June 30, 2011, presented in accordance with generally accepted accounting principles, and the report of the State's independent auditors, the State of New Hampshire Office of Legislative Budget Assistant, with respect thereto ("2011 Financial Statements"), were filed on January 2, 2012 with the MSRB through its Electronic Municipal Market Access ("EMMA") system. Specific reference is hereby made to the 2011 Financial Statements. The 2011 Financial Statements are the most recently available audited financial statements and are also available on the State of New Hampshire Department of Transportation website at: <http://www.nh.gov/dot/media/publications.htm>. The 2011 Financial Statements are also included in the State's Comprehensive Annual Financial Report for the fiscal year ended June 30, 2011, which was filed on March 21, 2012 with the MSRB through EMMA and includes the report of the State's independent auditors, KPMG LLP. Neither the Office of Legislative Budget Assistant nor KPMG LLP has been engaged to perform and, in the case of the Office of Legislative Budget Assistant, has not performed, since the date of its report referenced above, any procedures on the financial statements addressed in that report. Neither the Office of Legislative Budget Assistant nor KPMG LLP has performed any procedures relating to this Official Statement.

**MISCELLANEOUS**

The financial data and other information contained herein have been obtained from the State's records and other sources which are believed to be reliable. However, no assurance can be given that any of the assumptions or estimates contained herein will be realized.

Neither this Official Statement nor any advertisement of the 2012 Series C Bonds is to be construed as a contract with the holders of the 2012 Series C Bonds. Any statements made in this Official Statement involving matters of opinion or of estimates, whether or not expressly so identified, are intended merely as such and not as representations of fact.

Additional information concerning the State or the Turnpike System may be obtained upon written request to the Office of the State Treasurer, State House Annex, Concord, New Hampshire 03301, or by calling (603) 271-2621.

State of New Hampshire

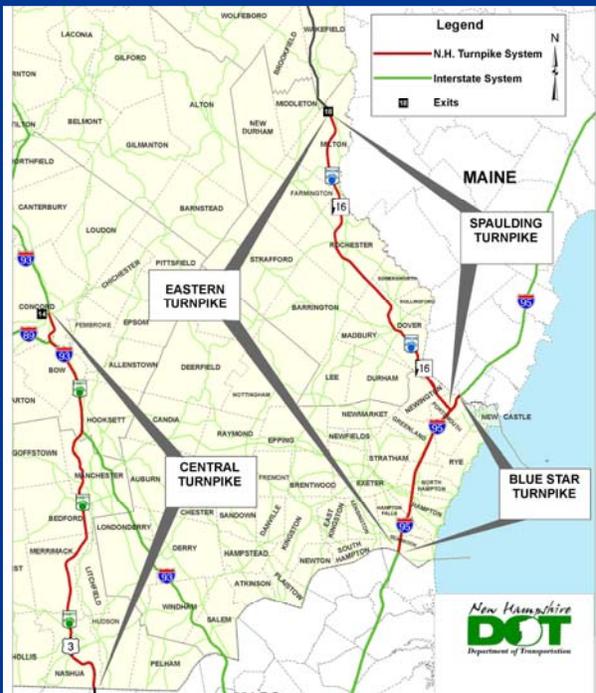
By:           /s/ Catherine A. Provencher            
*State Treasurer*

August 22, 2012

**TRAFFIC AND REVENUE STUDY**



Submitted to:  
**New Hampshire  
Department of Transportation**



## New Hampshire Turnpike System Traffic and Revenue Study

August 14, 2012



Submitted by:

Jacobs Engineering Group Inc.  
2 Penn Plaza, Suite 603  
New York, NY 10121

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## 1 EXECUTIVE SUMMARY

Jacobs Engineering was retained by the New Hampshire Department of Transportation (NHDOT) to conduct this traffic and revenue study for the New Hampshire Turnpike System (the “Turnpike System”). Jacobs analyzed historical traffic and revenue data for the entire Turnpike System to determine historical trends, correlated traffic with key economic indicators, and researched demographic data and other factors that have affected recent traffic and will affect future traffic. In addition, Jacobs reviewed the historical and proposed Turnpike Capital Improvement Program as well as historical and projected expenditures for the Turnpike System related to operations, maintenance, renewal and replacement, and toll processing.

All of this information and analyses were then used to develop a traffic and revenue model to estimate annual traffic and toll revenue for the ten-year period from Fiscal Year 2013 (i.e., July 2012 – June 2013) through Fiscal Year 2022. Fiscal Year (FY) 2012 and projected annual toll revenue is summarized in Table ES-1. These forecasts assume no future toll increases. They take into account the estimated loss in Central Turnpike toll traffic due to the free Manchester Airport Access Road interchange which opened in November 2011, as well as growth in traffic from the Merrimack Premium Outlets which opened June 14, 2012 and the Spaulding Turnpike widening project.

**Table ES-1: FY 2012 and Projected Annual Toll Revenue<sup>1</sup>, FY 2013-2022 (in millions)**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Total
2012 (Actual) <sup>2</sup>	\$ 43.2	\$ 58.3	\$ 14.6	\$ 116.1
2013	\$ 42.8	\$ 58.6	\$ 14.5	\$ 115.9
2014	\$ 43.1	\$ 59.1	\$ 14.5	\$ 116.7
2015	\$ 43.8	\$ 59.6	\$ 14.6	\$ 118.0
2016	\$ 44.4	\$ 60.2	\$ 15.0	\$ 119.6
2017	\$ 45.2	\$ 60.8	\$ 15.2	\$ 121.1
2018	\$ 45.9	\$ 61.3	\$ 15.5	\$ 122.6
2019	\$ 46.5	\$ 61.8	\$ 15.6	\$ 123.9
2020	\$ 47.2	\$ 62.3	\$ 15.7	\$ 125.2
2021	\$ 48.0	\$ 62.8	\$ 15.8	\$ 126.5
2022	\$ 48.7	\$ 63.3	\$ 15.9	\$ 127.8

<sup>1</sup>Does not include administrative fees or violation revenue

<sup>2</sup>Unaudited; does not include violation revenue

Note: Data will not necessarily add to totals because of rounding

The study also included the use of a financial model to estimate net revenues, operating costs, debt service requirements, and bond coverage ratios and cash reserves for the Turnpike System. The analysis of the financial plan showed that sufficient revenues will be generated to fund the proposed capital plan and to meet both the state’s bond resolution’s minimum debt service coverage requirements as well as the Turnpike’s internal minimum requirements for the ten-year forecast period, FY 2013-2022.

## **2 INTRODUCTION**

Jacobs was retained by NHDOT to conduct a traffic and revenue study for the Turnpike System. In conducting this study, historical traffic and revenue data for the entire Turnpike System were collected and analyzed to determine historical trends and travel characteristics. Previous traffic and revenue projections made by others were reviewed and compared to actual traffic and revenue data recorded by NHDOT.

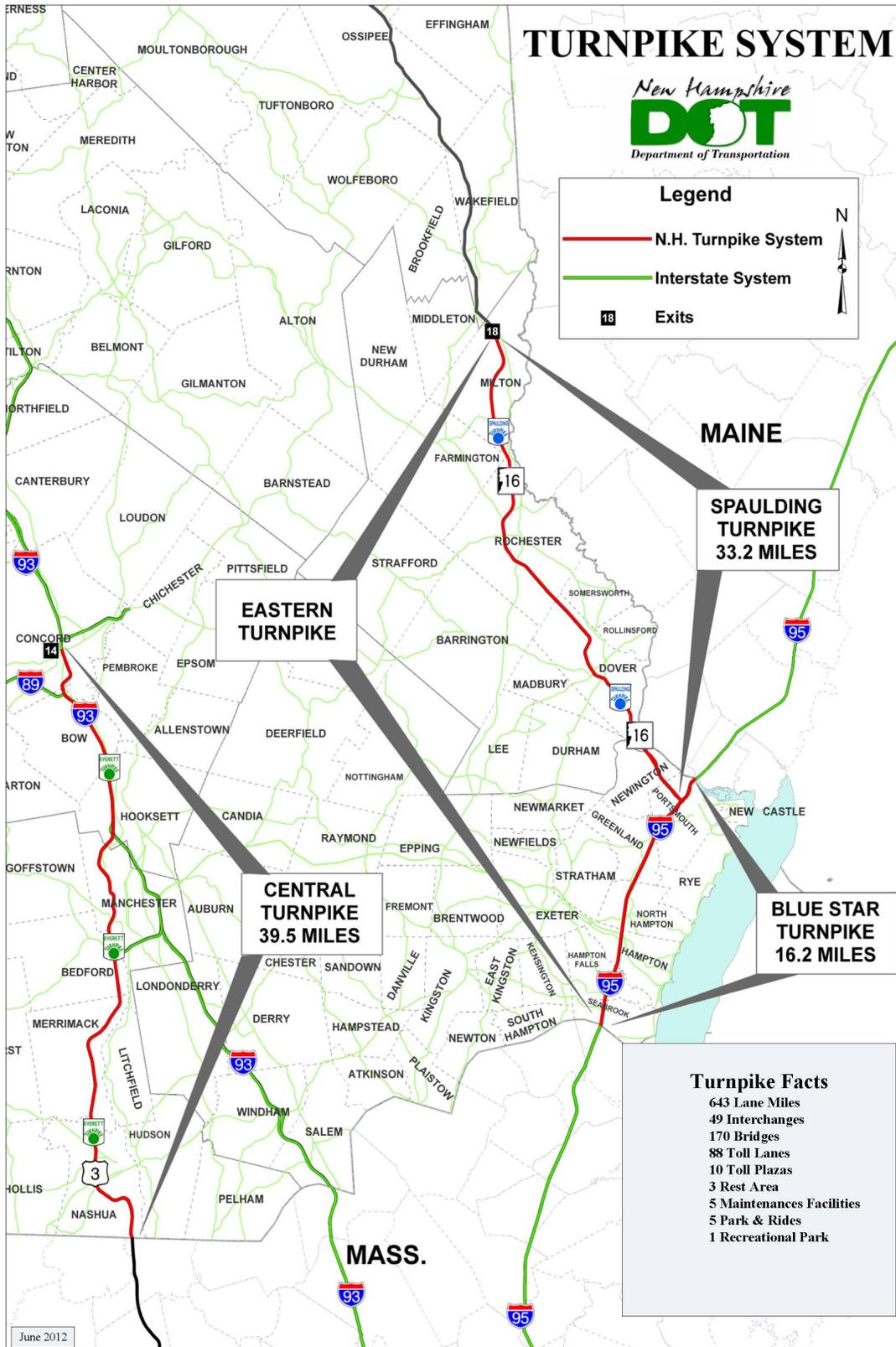
This study also included a review of the historical and proposed Turnpike Capital Improvement Program, as well as historical and projected expenditures for the Turnpike System related to operations, maintenance, renewal and replacement, and toll processing. An additional review was conducted for regional and national economic factors such as gross domestic product, fuel cost impacts, housing and employment. The study also examined feeder and competitive roads and their impact on traffic on the Turnpike System.

All of this information and analyses were then used to develop a traffic and revenue model to estimate annual traffic and toll revenue for Fiscal Years 2013 through 2022. The study also included the development of a financial model to estimate net revenues, operating costs, debt service requirements and bond coverage ratios. An assessment was made to determine whether the toll revenues would be sufficient to meet the Turnpike bond requirements.

## **3 DESCRIPTION OF NEW HAMPSHIRE TURNPIKE SYSTEM**

The current Turnpike System is an open barrier toll system comprised of 48 interchanges, 10 toll plazas, 87 toll lanes, and approximately 89 linear miles. The system is composed of three independent turnpike systems; the Central (F.E. Everett) Turnpike, the Blue Star Turnpike and the Spaulding Turnpike, as shown in Figure 1.

Figure 1: New Hampshire Turnpike System



The Central Turnpike, also known as the F.E. Everett Turnpike (or “FEET”) is the longest at 39.5 miles, extending from the Massachusetts state line in Nashua, New Hampshire to Exit 14 in Concord, New Hampshire. It comprises, in part, a portion of U.S. Interstate Highways 93 and 293 and connects the three largest cities in New Hampshire (Nashua, Manchester and Concord). The Central Turnpike also connects with major east-west highways such as NH 101, US 4 as well as Interstate 89. Currently there are two mainline toll plazas at Hooksett and Bedford, and 4 ramp plazas at Hooksett (I-93 Exit 11), Bedford Road (FEET Exit 12), Continental Boulevard (FEET Exit 11), and Merrimack Industrial Drive (FEET Exit 10).

The Blue Star Turnpike extends from the Massachusetts state line in Seabrook, New Hampshire to the Maine state line in Portsmouth, New Hampshire. It is 16.2 miles in length and constitutes a portion of Interstate 95. The Blue Star Turnpike connects with major highways that include NH 101 and US 4. There is a mainline toll plaza and an entry/exit (“side”) toll plaza on the Blue Star Turnpike, both located in the Town of Hampton.

The Spaulding Turnpike is 33.2 miles long, extending from Portsmouth, New Hampshire, to Exit 18 in Milton, New Hampshire. It is the major north-south road in the eastern portion of the state, and connects the Blue Star Turnpike to NH 16, which is the major roadway to northern New Hampshire along the eastern border of New Hampshire. It also connects the three major cities in eastern New Hampshire (Portsmouth, Dover and Rochester) and connects to several major highways that include US 4, NH 16, NH 125 and Interstate 95. There are two mainline toll locations at Dover and Rochester. The Spaulding Turnpike and Blue Star Turnpike are also collectively known as the Eastern Turnpike.

The major events that occurred in the development of the Turnpike System are summarized in Table 1, as follows:

**Table 1: Major Events on the NH Turnpike System**

Date	Activity
1950 (Jun. 24)	First toll plaza opens - Hampton (toll was 20¢ for a passenger car).
1955	Completion of the Nashua to Manchester segment of the Central Turnpike.
1955 (Aug. 21)	Merrimack Toll Plaza opens. Toll was 25¢ for a passenger car.
1955	Tokens authorized providing a 1/3 discount. Two types of tokens were authorized. An “A” token had a trip fare value of 10¢ and a “B” token had a trip fare value of 15¢. Tokens could be used by any class of vehicle.
1956	The Portsmouth to Dover segment of the Spaulding Turnpike was completed.
1956 (Oct. 3)	Dover Toll Plaza opens. Toll was 10¢ for a passenger car.
1957	Increase in toll rate at Dover Toll to 15¢ for a passenger car.
1957	The Manchester to Concord segment of the Central Turnpike was completed.
1957	The Dover to Rochester segment of the Spaulding Turnpike was completed.
1957 (Aug. 29)	The Rochester Toll Plaza opens. Toll was 15¢ for a passenger car.
1957 (Aug. 30)	The Hooksett Toll Plaza opens. Toll was 25¢ for a passenger car.
1961	The rate decreased at Dover Toll to 10¢ for a passenger car.

**Table 1: Major Events on the NH Turnpike System**

Date	Activity
1961 (Jun. 21)	Toll rate increased at Hampton Toll to 25¢ for a passenger car.
1972	Initiated charge program for commercial accounts. A 1/3 discount was provided in the program.
1975 (Jul. 1)	Toll rate increase at Hampton Toll to 40¢ for a passenger car.
1977	Eastern Turnpike (I-95) widened from 4 to 8 lanes.
1977 (Feb. 1)	Reconstruction and relocation of Hampton Toll completed with new ramp and mainline plazas opened to traffic.
1977 (Apr. 1)	Toll rates at Hooksett and Merrimack Tolls increased to 40¢ for a passenger car. Discontinued the sale of "A" tokens. Tokens restricted to two axle or four tire vehicles. Eliminated the 1/3 discount for commercial charge accounts.
1979 (Aug. 23)	Tolls eliminated at the Hampton Ramp Toll Plaza.
1979	Central Turnpike widened from 4 to 6 lanes from the junction of I-93/I-293 in Hooksett to I-93/I-89 in Bow.
1979 (Dec. 3)	Reconstruction completed on new Hooksett Toll Plaza ramp and mainline barrier.
1979 (Dec. 3)	Toll rates increased as follows. Merrimack, Hooksett & Hampton (main) 50¢ for a passenger car. Dover 15¢ for a passenger car. Rochester 20¢ for a passenger car.
1979 (Dec. 3)	Discount for commuter tokens increased to 50%.
1981 (Jul. 1)	Toll reinstated on the Hampton Ramp Toll Plaza.
1981 (Aug. 20)	Spaulding Turnpike Extension opened from Rochester to Milton.
1986 (Dec. 1)	Automated truck charge system initiated.
1987 (Apr. 15)	Toll rates increased at Dover & Rochester Toll to 25¢ for a passenger car.
1987 (Jul. 1)	Toll increased at Hampton Toll (mainline to 75¢ and ramp to 40¢ for a passenger car).
1987 (Oct. 28)	Toll reduced at Hampton Toll (mainline to 50¢ and ramp to 25¢ for a passenger car).
1987	Exit 8 Interchange, Nashua, New Hampshire. The first project to be completed in the Ten Year Plan to expand and improve the New Hampshire Turnpike System (Chapter 203, Laws of 1986) was the Exit 8 Interchange in Nashua, New Hampshire that opened to traffic in June 1987.
1988 (Jan. 1)	Toll increased at Hampton Main Toll to 75¢ for passenger cars, Hampton Ramp remains at 25¢.
1989 (Jan. 4)	Merrimack Toll Plaza (Mainline and Ramps) closed. On this date, the Merrimack Toll Plaza discontinued collection of tolls and was dismantled.
1989 (Jan. 4)	Bedford Toll Plaza opened to traffic.
1989 (Jan. 4)	Exit 11 Ramp (Temporary) Toll Plaza opened to traffic. On this date, the Exit 11 Toll Plaza opened to traffic replacing the dismantled Merrimack Toll (Ramps).

**Table 1: Major Events on the NH Turnpike System**

Date	Activity
1989 (Oct. 16)	General toll rate increase for entire Turnpike System. Increase of 25 cents at each plaza for passenger cars. Substantial increase for commercial vehicles (to recognize weight on turnpike infrastructure). Discount for commercial charge program 5% to 30% graduated. Discount for commuters decreased from 50% to 40%.
1990 (Jul. 11)	Commuter discount (Tokens) revised from 40% to 50%. Change in commercial charge discount (5-30%) applies to total transactions monthly.
1990 (Oct. 2)	Merrimack Industrial Interchange Toll Plaza opened to traffic.
1990 (Nov. 29)	Bedford Road Interchange Toll Plaza opened to traffic.
1991 (Feb. 4)	"Honor System" Toll Collection Began at Exit 11 Toll Plaza. Initiated unattended toll collection at Exit 11 Toll Plaza between the hours of 9 PM and 5 AM daily.
1991 (May 15)	Hampton Main Toll Plaza expansion completed.
1991 (Aug. 30)	Cheshire Toll Bridge began operation by the Bureau of Turnpikes.
1991 (Oct. 1)	Bedford Toll Plaza Toll Collection System Conversion.
1991 (Nov. 18)	Exit 11 Interchange Toll Plaza opens to traffic.
1991 (Dec. 1)	Hampton Main Toll Plaza Toll Collection System Conversion.
1992 (Feb.)	Hampton Ramp Toll Plaza Toll Collection System Conversion.
1992 (Apr. 1)	Dover Toll Plaza Toll Collection System Conversion.
1992 (Jun. 1)	Rochester Toll Plaza Toll Collection System Conversion.
1992 (Aug. 3)	Cheshire Bridge closed for rehabilitation.
1992 (Nov. 14)	Exit 11 Toll Plaza Toll Collection System Conversion.
1993 (Aug. 9)	"Honor System" Toll Collection begins at Cheshire Toll Bridge.
1993 (Jul. 30)	Exit 11 Interchange (Merrimack) completed as part of the Capital Improvement Program.
1993 (Nov. 18)	Gosling Road Interchange on the Spaulding Turnpike opened.
1993 (Dec. 20)	"Honor System" Toll Collection begins at Exit 10 and Exit 12.
1994 (Jun.)	Two seasonal toll lanes added to Hooksett Main Toll Plaza.
1994 (Jun.)	Hampton Main Toll Plaza changed to all-attended operation.
1994 (Nov. 1)	Increased discount in Commercial Charge Program to 50%.
1995 (Jul. 30)	Changes at Hampton Main Toll Plaza adding one reversible lane (replacing standard ACM lane) allowing 10 operational lanes in one direction of travel for the first time.
1995 (Aug. 4)	Initiated Tandem Toll Collection at Hampton Main Toll Plaza.
1995 (Aug. 14)	"Honor System" Toll Collection began at Hooksett Ramp Toll Plaza.
1995 (Aug. 14)	"Bi-directional" Toll Collection began at Rochester Toll Plaza.

**Table 1: Major Events on the NH Turnpike System**

Date	Activity
1995 (Aug. 14)	"HOV" (High Occupancy Vehicle) Test began at Bedford Toll.
1995 (Oct.)	Reactivated Automatic Toll Lanes at Hampton Main Toll.
1995 (Nov. 1)	Truck charge card discount set at a flat 30% rate.
1996 (May)	Hampton Main Toll Plaza converted to entirely attended operation with all automatic lane equipment taken out of service.
1997 (Jun.)	Expanded Hampton Ramp Toll Plaza from 5 to 7 toll lanes.
1997 (Nov.)	Ended a two-year HOV Test at Bedford Toll Plaza.
2000 (Jul. 19)	Expansion of Dover Toll Plaza complete.
2001 (Jul. 1)	Toll collection ceased at Cheshire Toll Bridge - per legislation.
2002 (Apr. 5)	Rochester Toll Plaza staffing changed back to conventional staffing.
2002	Completed the 5 <sup>th</sup> lane project at the Hampton Toll Plaza on I-95.
2003 (Jul. 23)	Opened an additional lane for the first time at the Hooksett Ramp toll facility.
2003 (Aug. 21)	One-way toll collection test initiated at the Hampton Toll Plaza.
2003 (Nov. 1)	Two-way tolling returns to Hampton Main Toll Plaza for the winter months.
2004 (Jan. 9)	Hampton Ramp Toll Plaza converted to all attended capability.
2004 (Jan. 29)	Two new toll lanes, one north and one south, at Bedford Toll Plaza, were opened to revenue collection.
2004 (Jun. 30)	One-way toll collection reinstated at the Hampton Toll Plaza.
2004 (Oct. 21)	Two way tolling returns to Hampton Main Toll Plaza.
2005 (Mar.)	Hampton Ramp converted to an all attended plaza just like Hampton Main.
2005 (Apr. 12)	Hooksett Ramp converted back to a 24/7/365 plaza.
2005 (Jul. 11)	The first NH toll facilities to be converted to <b>E-ZPass</b> – Hooksett Main, Hooksett Ramp and Bedford Toll. Cars with NH <b>E-ZPass</b> tags receive a 30% discount from cash (compared to a 50% discount for tokens) and trucks with NH <b>E-ZPass</b> receive a 10% discount from cash (compared to a 30% discount with the Commercial Charge program). Non-New Hampshire <b>E-ZPass</b> tagholders pay the cash rates.
2005 (Jul. 18)	Phase Two of <b>E-ZPass</b> conversion takes place: Merrimack Ramp Toll Plazas (Exits 10, 11 and 12).
2005 (Aug. 2)	Phase Three of <b>E-ZPass</b> deployed at Hampton Main and Hampton Ramp.
2005 (Aug. 3)	The price of transponders increased from \$5.00 to \$23.85 each.
2005 (Aug. 15)	Phase Four of <b>E-ZPass</b> deployed at Dover and Rochester Toll Plazas.
2005 (Sept. 1)	NH Turnpike Token Sales cease per HB 2 of the FY 2006/FY 2007 biennial budget.
2005 (Sept. 26)	Price of transponders increased – from \$23.85 to \$24.61 for flat packs

**Table 1: Major Events on the NH Turnpike System**

Date	Activity
2005 (Sept. 30)	Commercial Charge Program ends at 11:59:59. Magnetically encoded card system replaced by <b>E-ZPass</b> .
2006 (Jan. 1)	NH Turnpike Tokens (B) are no longer accepted as valid toll fare payment per state law. Staffed ACM lanes from 1-1 through 1-9-2006 to ensure that motorists were aware that tokens are no longer accepted.
2007 (Oct. 22)	New toll rate implemented at Dover \$0.50-\$0.75; Rochester \$0.50-\$0.75, Hampton Ramp \$0.50-\$0.75; Bedford and Hooksett \$0.75-\$1.00; and Hampton Main \$1.00-\$1.50
2008 (May 1)	New terms, conditions, application and transponder price change went into effect. Price changed for interior tag from \$24.61 to \$20.95, and exterior tag from \$31.83 to \$33.04
2008 (Jun. 9 & 16)	Granite Street ramps open to traffic at Exit 5 in Manchester
2009 (Jun. 30)	HB 391 passes, authorizing the Turnpike Bureau to purchase the 1.6 miles of I-95 from the Portsmouth Traffic Circle to the Maine border, and authorizing the following projects: Hampton Open Road Tolling (“ORT”), Bedford ORT, Hooksett ORT, Portsmouth I-95 Soundwall, Seabrook NH 107 Bridge over I-95 and the Dover segment of the Newington –Dover Projects.
2009 (Jul. 1)	New toll rate implemented at Hampton Main \$1.50 – \$2.00
2010 (Jun. 17)	ORT lanes opened at Hampton Main plaza, allowing high-speed toll collection for <b>E-ZPass</b> customers
2011 (Nov. 11)	Manchester Airport Access Road opens, connecting to the Central Turnpike near the Bedford Main plaza. Vehicles using this road avoid all tolls in the Bedford/Merrimack area.
2012 (Apr. 1)	<b>E-ZPass</b> transponder prices changed. Price dropped for interior tag from to \$20.95 to \$8.90, and exterior tag from \$33.04 to \$15.19.
2012 (Jun. 14)	Premium Outlets, with 100 stores and more than 400,000 square feet, opens adjacent to Exit 10 in Merrimack, increasing toll transactions at the Exit 10 ramp.

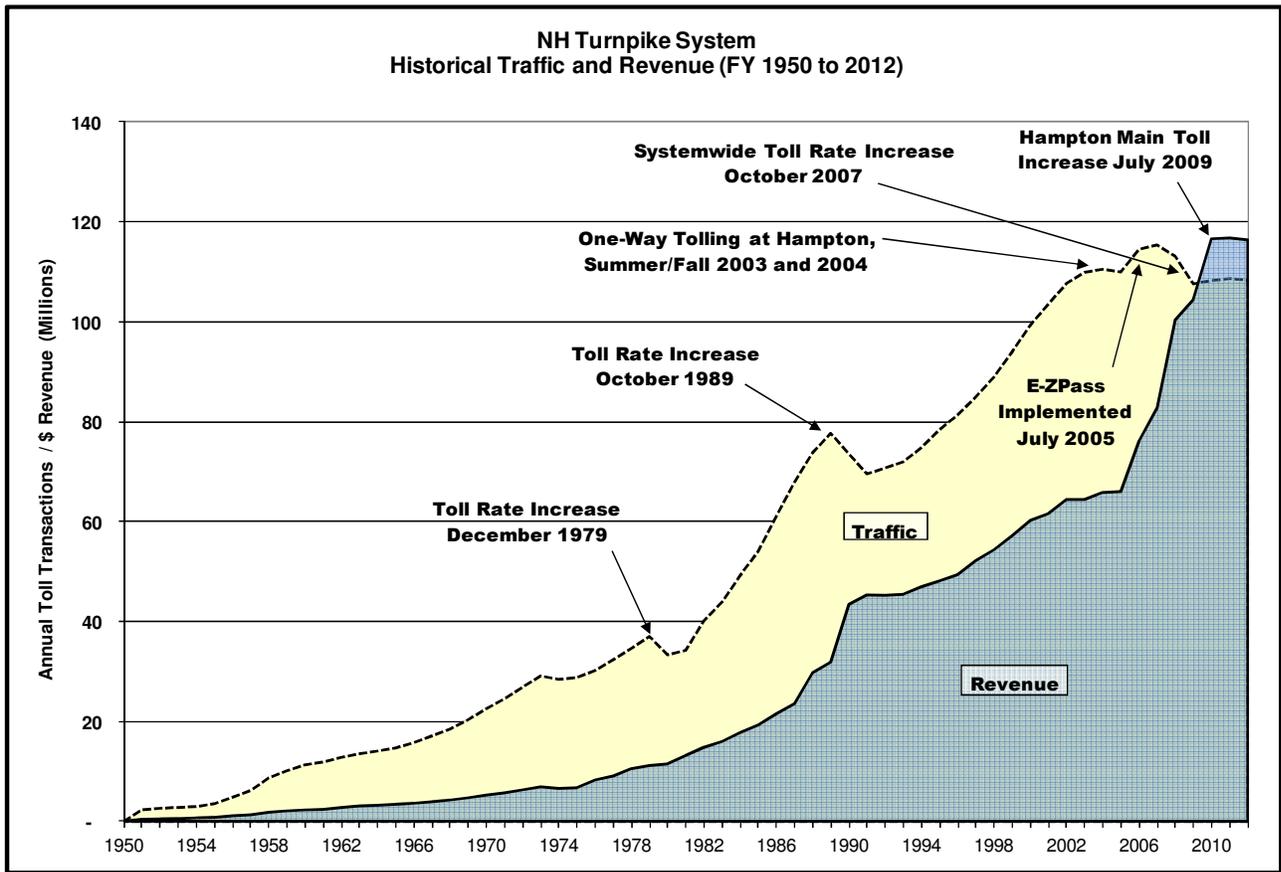
## 4 HISTORICAL TRAFFIC AND REVENUE

This section discusses historical traffic and toll revenue trends of the Turnpike System.

### 4.1 HISTORICAL TOLL TRANSACTIONS AND TOLL REVENUE TRENDS

Figure 2 illustrates toll transactions and revenue for the entire Turnpike System for FY 1950 through FY 2012. Both toll transaction and revenue graphs are generally upward sloping throughout time, indicating that toll transactions and revenues have generally increased consistently across the Turnpike System. The graph shows that there were some short periods where toll transactions decreased but later recovered, and these appear to coincide with economic recessions and toll rate increases. Revenues generally increased across the Turnpike System, although the growth was relatively flat for some short time periods. Tolls were last increased systemwide in October 2007; the toll increases prior to that were in October 1989 and December 1979. After the 1989 toll increase, both traffic and revenue increased steadily until 2005. In July 2005, **E-ZPass** was implemented on the Turnpike System, and the toll discount was lowered from 50 percent to 30 percent for passenger cars and from 30 percent to 10 percent for commercial vehicles. NHDOT stopped accepting tokens (which provided a 50 percent discount for passenger cars) in January 2006. The October 2007 toll increase – 25 cents for cars and 50 cents for trucks at most locations – brought about a small decline in traffic but a significant increase in toll revenue. In FY 2009, traffic continued to decrease but revenue increased over the previous year due to the October 2007 toll increase, though some of the traffic decrease could also be attributed to economic conditions, gas prices, and factors that caused traffic levels to flatten, then decrease, throughout the nation (as further discussed in Section 7.2). The Hampton Main Plaza saw a toll increase from \$1.50 to \$2.00 which had little effect on traffic but increased revenues at that location. In November 2011 the Manchester Airport Access Road opened, causing some losses in traffic and revenue at the Bedford Plaza primarily due to traffic to and from the south having free access into the airport; the FY 2012 losses are shown later in this report in Table 12 on page 69.

**Figure 2: NH Turnpike System Historical Toll Transactions and Toll Revenue Trends, FY 1950-2012**



#### 4.2 TOLL TRANSACTION TRENDS

Table 2 summarizes the annual toll transactions between FY 1991 and FY 2012 for each of the three Turnpikes as well as the entire Turnpike System. Annual toll transactions have generally increased every year across the Turnpike System. However, Blue Star Turnpike transactions decreased in both FY 2004 and FY 2005 due to the inability to count southbound traffic data at the Hampton Toll Plaza during the one-way tolling experiments conducted by NHDOT in the summer/fall of 2003 and 2004. More recently, the diversion caused by the October 2007 toll increase contributed to both the FY 2008 and 2009 decrease in Turnpike traffic, and the Central Turnpike’s new free interchange with the Manchester Airport Access Road contributed to some toll traffic loss in the Bedford area (also see Table 12 on page 69).

**Table 2: NH Turnpike System Annual Toll Transactions (in millions), FY 1991-2012**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Total System
1991	32.5	23.4	13.7	69.6
1992	33.2	23.6	14.0	70.8
1993	33.5	24.0	14.5	72.0
1994	34.7	24.8	15.4	74.9
1995	35.9	26.1	16.5	78.5
1996	37.2	27.0	17.2	81.4
1997	38.9	28.1	18.0	85.0
1998	40.6	29.4	19.0	89.0
1999	42.6	31.4	20.0	94.0
2000	45.3	33.2	20.9	99.4
2001	47.6	34.0	22.0	103.6
2002	49.3	35.8	22.6	107.7
2003	50.5	36.4	23.1	110.0
2004 <sup>1</sup>	52.2	34.6	23.8	110.6
2005 <sup>1,2</sup>	53.9	32.2	23.9	110.0
2006 <sup>2</sup>	54.6	36.6	23.3	114.6
2007	54.7	37.4	23.4	115.5
2008 <sup>3</sup>	53.8	36.6	22.8	113.2
2009	51.5	34.7	21.4	107.7
2010 <sup>4</sup>	51.9	35.3	21.1	108.3
2011	52.4	35.3	21.1	108.7
2012 <sup>5</sup>	51.5	35.8	21.5	108.7

<sup>1</sup> One-way tolling at Hampton Main Toll Plaza

<sup>2</sup> Conversion to new toll system and implementation of **E-ZPass**

<sup>3</sup> General toll Increase October 22, 2007

<sup>4</sup> Hampton Main toll Increase July 1, 2009

<sup>5</sup> FY 2012 toll transactions are preliminary estimates and are unaudited.

**Notes:**

Non-paying transactions (valid and violations) are included in these numbers.

Data will not necessarily add to totals because of rounding.

Between FY 1991 and FY 2003, total toll transactions across the entire Turnpike System increased annually by an average of 3.9 percent per year. After that time there was a period of flattened traffic for several years, through about 2007, followed by a 2.0 percent decrease in FY 2008. Traffic continued to decline another 4.9 percent in FY 2009 both as a result of the mid-FY 2008 toll increase and the economic downturn. This was followed by low growth rates of 0.6 percent in FY 2010 and 0.4 percent in FY 2011. There was no overall growth from FY 2011 to FY 2012, mainly due to usage of the free Manchester Airport Access Road interchange on the Central Turnpike. Toll transactions on the individual Turnpikes increased at an average annual rate of 2.2 percent on the Central Turnpike and Spaulding Turnpike, and 2.0 percent on the Blue

Star Turnpike during the FY 1991 to FY 2012 time period; however, from FY 1991 to FY 2006, these average annual growth rates had been 3.5, 3.0, and 3.6 percent, respectively.

Historical toll transaction trends between FY 1950 and FY 2012 are illustrated in Figure 3 with volumes indexed to FY 1991 values. From this graphic, we can observe that the three general toll rate increases occurred close to periods of economic recessions, and in all cases, toll traffic transactions decreased. Transaction growth also slowed down during the other economic recession periods.

**Figure 3: NH Turnpike System Historical Toll Transactions Trends, FY 1950 to 2012**

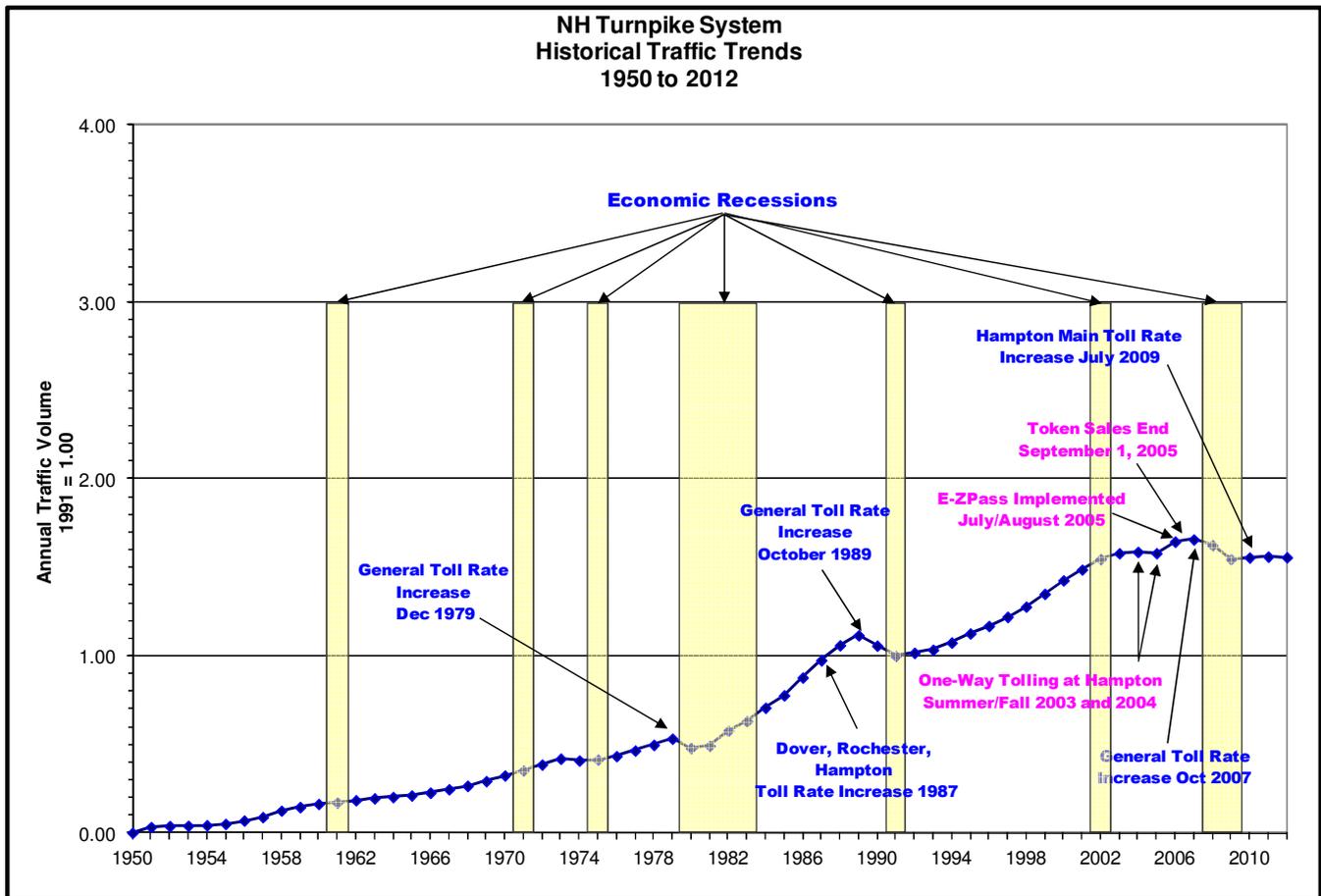
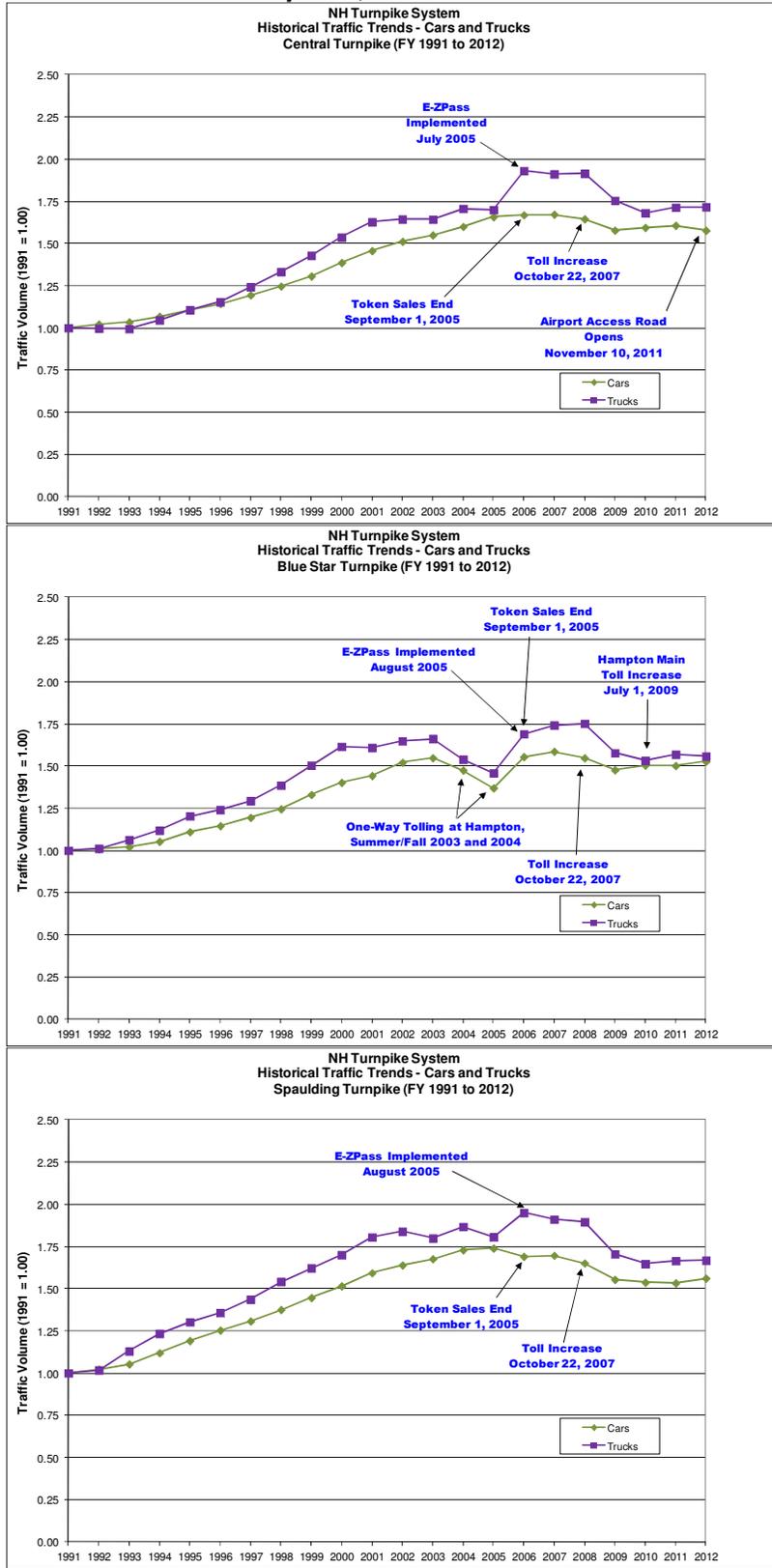


Figure 4 shows the historical toll transaction trends for cars and trucks on each of the three Turnpikes for the FY 1991-2012 period. The three turnpikes exhibited similar patterns in car traffic, growing steadily from FY 1991 through the early 2000s, followed by flat growth in FY 2006 and 2007 and declines in FY 2009 and 2010. Annual traffic between FY 2010 and FY 2012 remained virtually unchanged. The Central and Spaulding Turnpikes, both serving more local than long-distance traffic, had flat to declining truck growth in 2006 through 2008, while the Blue Star Turnpike – more of a long-haul route – had increasing truck traffic from FY 2006 through 2008. All three facilities had a sharp decline in trucks in FY 2009 due to the downturn in the economy and FY 2008 toll increases. Similar to the car traffic, the truck traffic has changed very little in the past three to four years.

**Figure 4: Historical Toll Transaction Trends for the Central, Blue Star and Spaulding Turnpikes, FY 1991-2012**



### 4.3 TOLL REVENUE TRENDS

Annual toll revenues for each of the three Turnpikes as well as the entire system are summarized in Table 3 for the period FY 1991 to FY 2012.

**Table 3: NHDOT Annual Toll Revenues, FY 1991-2012 (in millions)**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Total System
1991	\$18.9	\$20.8	\$5.5	\$45.3
1992	\$18.9	\$20.7	\$5.5	\$45.2
1993	\$18.8	\$20.8	\$5.7	\$45.4
1994	\$19.5	\$21.4	\$6.0	\$46.9
1995	\$19.8	\$22.2	\$6.2	\$48.1
1996	\$20.4	\$22.5	\$6.4	\$49.3
1997	\$21.6	\$23.8	\$6.7	\$52.2
1998	\$22.5	\$24.8	\$7.1	\$54.3
1999	\$23.6	\$26.1	\$7.4	\$57.1
2000	\$25.0	\$27.5	\$7.7	\$60.2
2001	\$26.0	\$27.5	\$8.0	\$61.5
2002	\$27.5	\$28.6	\$8.2	\$64.4
2003	\$27.3	\$28.7	\$8.4	\$64.4
2004 <sup>1</sup>	\$28.1	\$29.1	\$8.6	\$65.8
2005 <sup>1,2</sup>	\$28.7	\$28.4	\$8.8	\$65.9
2006 <sup>2</sup>	\$33.6	\$32.3	\$10.1	\$76.0
2007	\$36.7	\$34.8	\$11.1	\$82.6
2008 <sup>3</sup>	\$42.9	\$43.4	\$14.1	\$100.3
2009	\$43.5	\$46.3	\$14.7	\$104.4
2010 <sup>4</sup>	\$44.0	\$58.1	\$14.5	\$116.6
2011	\$44.2	\$58.2	\$14.4	\$116.7
2012 <sup>5,6</sup>	\$43.3	\$58.8	\$14.6	\$116.6

<sup>1</sup> One-way tolling at Hampton Main Toll Plaza

<sup>2</sup> Conversion to new toll system and implementation of **E-ZPass**

<sup>3</sup> General toll Increase October 22, 2007

<sup>4</sup> Hampton Main toll Increase July 1, 2009

<sup>5</sup> The free Manchester Airport Access Road interchange on the Central Turnpike opened November 11, 2011

<sup>6</sup> FY 2012 toll revenues are preliminary estimates and are unaudited.

**Notes:**

FY 1991-2006 reported figures are derived from the Turnpike System's internal, monthly traffic and revenue report, which is prepared from information from the Turnpike System's **E-ZPass** and toll collection system vendors and does not include other income such as property sales. Fiscal Years 2006-2011 figures are derived from the Turnpike System's internal accounting system and do not include property sales or other income. FY 2012 figures are unaudited and are derived from the Turnpike System's internal, monthly traffic and revenue report. All revenue figures exclude charge account interest and miscellaneous income. Source: NHDOT.

Data will not necessarily add to totals because of rounding.

The table shows that annual toll revenues have generally increased each year across the Turnpike System throughout the period shown. The first large increase in toll revenues occurred between FY 2005 and FY 2006 due to the implementation of **E-ZPass** on the Turnpike System and discontinuation of token usage, which coincided with a decrease in the toll discount rate. In FY 2008, there was another significant increase in revenues - \$17.7 million or 21.4 percent over FY 2007— due to the October 2007 toll increase, and FY 2009 also saw a revenue increase of 4.1 percent due to this toll increase. The July 1, 2009 toll increase at the Hampton Main Plaza increased systemwide revenue by 11.6 percent in FY 2010 compared to the previous year. There has been little change in total system revenue between FY 2010 and FY 2012. While some revenue loss was experienced on the Central Turnpike in FY 2012 due to the opening of the free Manchester Airport Access Road interchange on November 11, 2011, most of this loss was absorbed by growth on the rest of the Turnpike System.

Between FY 1991 and FY 2012, toll revenues increased annually by an average of 4.6 percent across the entire Turnpike System. The individual turnpikes experienced annual revenue growth rates of 4.0 percent on the Central Turnpike, 4.7 percent on the Spaulding Turnpike, and 5.1 percent on the Blue Star Turnpike.

Figure 5 shows historical annual toll revenues between FY 1950 and FY 2012. This graphic shows that total systemwide toll revenues generally showed little to no growth during all periods of economic recession. The exceptions were the economic recession in the early 1980s when revenue actually increased, and the recent recession, due to the general toll increase in October 2007 and the Hampton Main toll increase in July 2009. Annual revenues were flat in FY 2002 through FY 2005, partially a result of the one-way tolling experiment conducted at the Hampton Main toll plaza during the summer/fall of 2003 and 2004. Annual revenues also remained flat from FY 2010 through FY 2012.

**Figure 5: NH Turnpike System Historical Toll Revenues, FY 1950 to 2012**

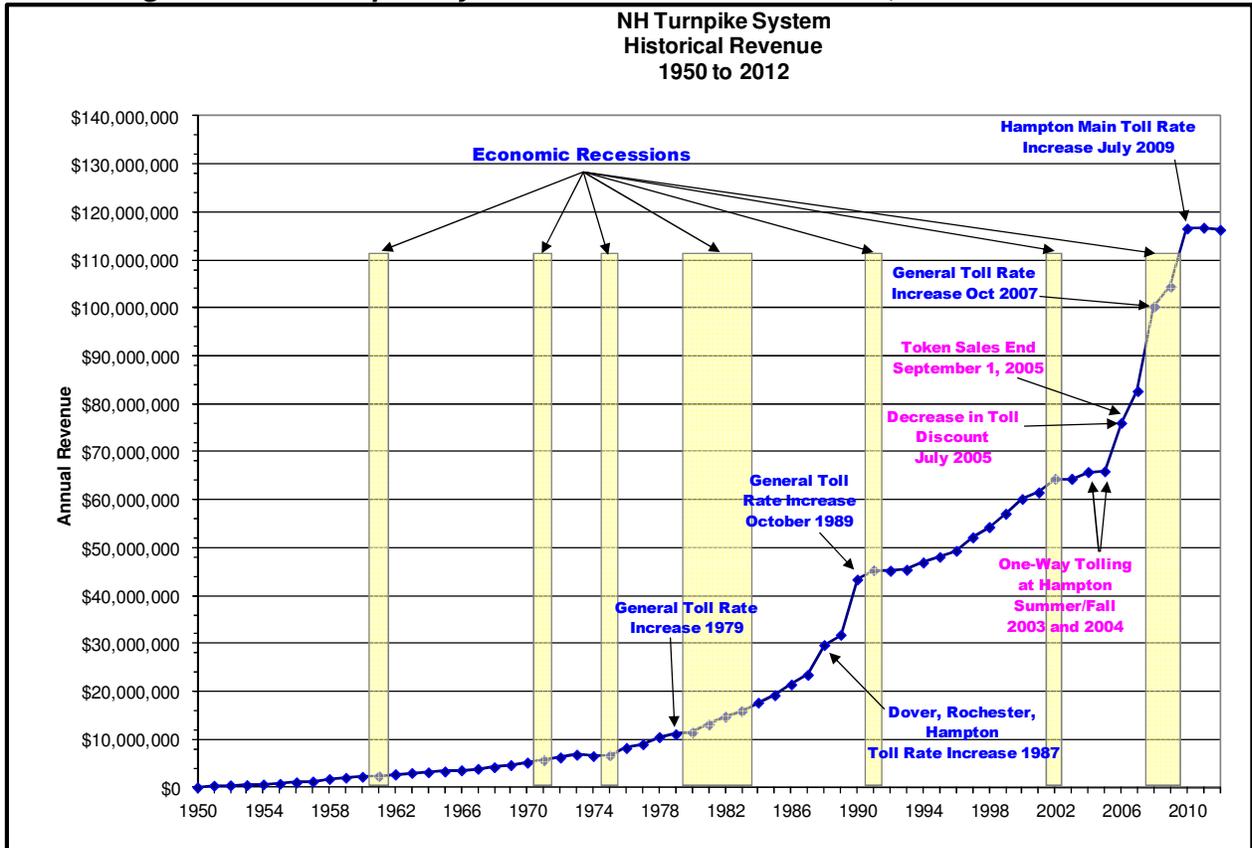
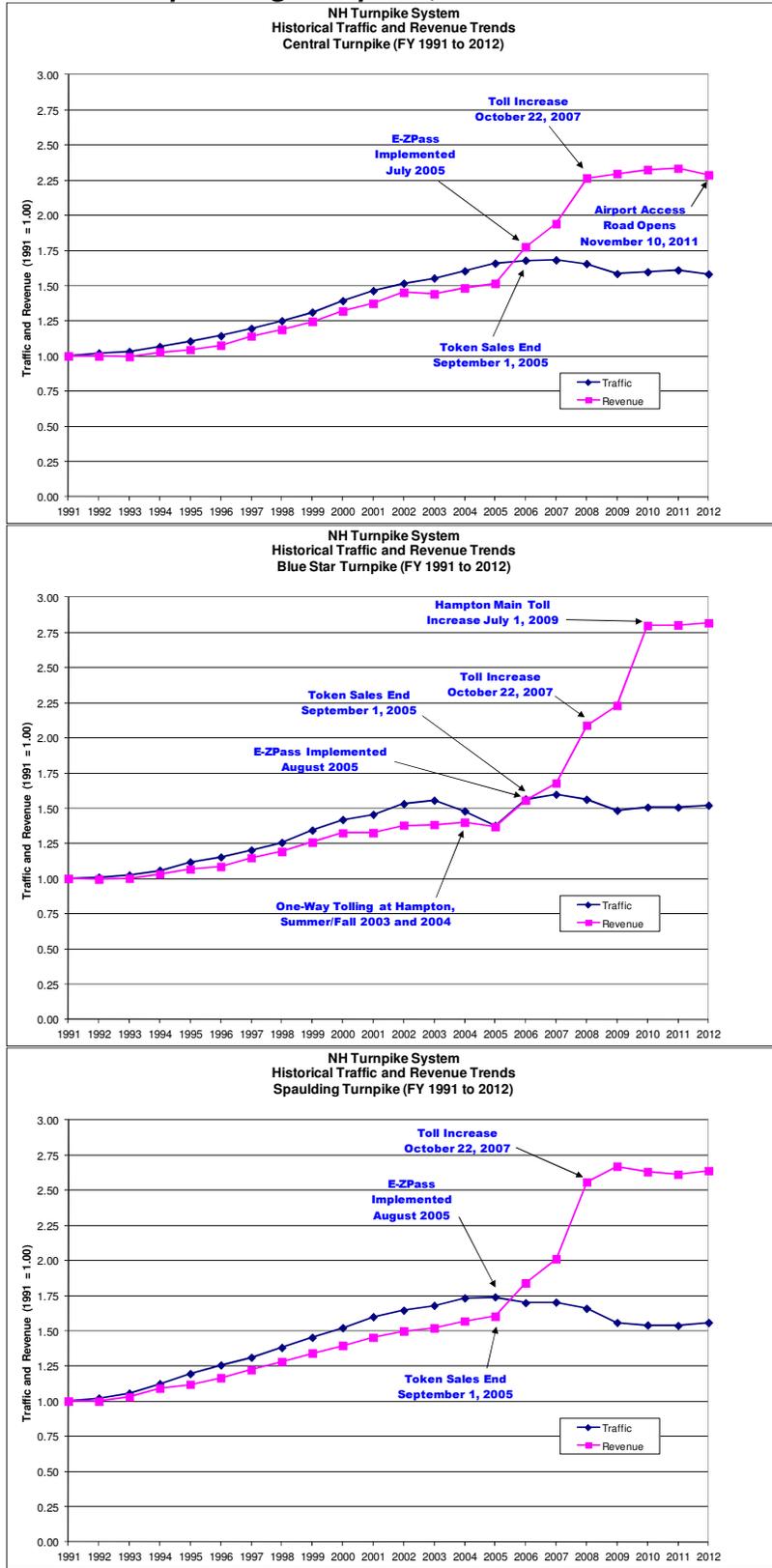


Figure 6 shows historical toll transaction and revenue trends for each of the three Turnpikes for the FY 1991 to FY 2012 period. For the first two-thirds of the time period shown, total toll revenue generally increased consistently on each turnpike, with a small decrease on the Blue Star Turnpike in FY 2005. Also, toll revenues on the Blue Star Turnpike experienced very little growth between FY 2002 and FY 2005, due in part to the one-way tolling experiment. Recently, all three Turnpikes experienced a flattening (FY 2005 or 2006 through 2007) and then a decline (FY 2008-2009) in traffic after the October 2007 toll increase. Traffic since FY 2009 has remained flat on all three turnpikes. Toll revenues grew at a greater rate than usual in the past half decade due to **E-ZPass** implementation and the end of token sales in FY 2006 (increasing the tolls for discounted trips), and the October 2007 toll increase. The Blue Star Turnpike saw another sharp increase in revenue when tolls at Hampton Main were increased again in July 2009.

**Figure 6: Historical Toll Transaction and Revenue Trends for the Central, Blue Star and Spaulding Turnpikes, FY 1991-2012**



**4.4 COMPARISON OF ACTUAL TOLL REVENUES TO RECENT PROJECTIONS**

Jacobs previously projected traffic and revenue on the Turnpike System for the November 2009 bond issuance. Table 4 compares Jacobs' projections against the actual toll revenues collected by the Turnpike System for the fiscal years 2010 through 2012. Note that both the actual and projected revenues below do not include adjustments for violation revenues, and are therefore slightly less than the revenue numbers shown previously in Table 3.

**Table 4: Actual Toll Revenues vs. 2009 Projections, FY 2010-2012 (in millions)**

Fiscal Year	Projected Revenue	Actual Revenue
2010	\$111.7	\$115.8
2011	\$112.2	\$116.3
2012	\$113.4	\$116.1

*Note: Violation revenues not included in both projected and actual revenues*

Actual toll revenues for FY 2010 and 2011 were 3.7 percent over the forecast. Jacobs had estimated a loss in traffic at the Hampton Main toll plaza due to the toll increase there at the beginning of FY 2010; in fact, there was no traffic loss. In 2012, the actual traffic was 2.4 percent over Jacobs' forecast.

Jacobs did not include the effects of the free Manchester Airport Access Road Interchange in the above forecast for FY 2012; at that point it had been anticipated that the interchange would open at the beginning of FY 2013. In these 2009 projections, Jacobs had estimated a toll revenue loss of \$3.5M in FY 2013 due to the Airport Access Road. In actuality, the loss was about \$1.6M for the partial year (233 days) the interchange was open in FY 2012. If the interchange were open for all of FY 2012, following the trend line of recent traffic losses at the Bedford/Merrimack toll plazas the revenue loss would have been about \$2.7M. Jacobs had overestimated the revenue loss by some 30 percent. Since the Airport Access Road has now been open for more than eight months, Jacobs has more ability to project future revenue losses associated with this new interchange, as discussed in Section 9.2.3.

## 5 REVIEW OF PROPOSED CAPITAL IMPROVEMENT PROGRAM

This section presents a review of the Turnpike System's historical and proposed capital improvement program for the 20-year period FY 2003-2022 as shown in Table 5 below.

**Table 5: Historical and Proposed NHDOT Capital Expenditures, FY 2003-2022 (in millions)**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Other Projects <sup>1</sup>	Total Turnpike	Unfunded Projects <sup>2</sup>
2003	\$5.5	\$1.2	\$2.5	\$1.0	<b>\$10.2</b>	
2004	\$12.0	\$0.4	\$4.0	\$3.0	<b>\$19.4</b>	
2005	\$1.2		\$0.2	\$19.0	<b>\$20.5</b>	
2006	\$2.5		\$1.9	\$8.8	<b>\$13.2</b>	
2007	\$2.0			\$6.5	<b>\$8.5</b>	
2008	\$0.4	\$0.2	\$7.4	\$3.0	<b>\$11.0</b>	
2009	\$6.5	\$0.2	\$18.5	\$0.5	<b>\$25.8</b>	
2010	\$9.8	\$11.8	\$42.0	\$3.1	<b>\$66.6</b>	
2011	\$7.2	\$4.3	\$40.0	\$1.3	<b>\$52.9</b>	\$0.02
2012	\$12.9	\$0.4	\$33.4	\$1.0	<b>\$47.7</b>	\$0.02
<b>Total ('03-'12)</b>	<b>\$60.0</b>	<b>\$18.5</b>	<b>\$149.9</b>	<b>\$47.3</b>	<b>\$275.7</b>	<b>\$0.0</b>
2013	\$25.0	\$1.8	\$47.3	\$11.7	<b>\$85.8</b>	\$0.15
2014	\$20.9	\$3.3	\$23.2	\$1.5	<b>\$48.8</b>	\$3.0
2015	\$18.7	\$2.3	\$33.6	\$0.5	<b>\$55.1</b>	\$19.0
2016	\$14.8	\$3.3	\$21.8	\$0.5	<b>\$40.4</b>	\$32.5
2017		\$3.3	\$0.6	\$0.5	<b>\$4.4</b>	\$25.1
2018		\$1.6		\$0.5	<b>\$2.1</b>	\$12.0
2019					<b>\$0.0</b>	
2020					<b>\$0.0</b>	
2021					<b>\$0.0</b>	
2022					<b>\$0.0</b>	
<b>Total ('13-'22)</b>	<b>\$79.3</b>	<b>\$15.6</b>	<b>\$126.5</b>	<b>\$15.2</b>	<b>\$236.6</b>	<b>\$91.7</b>

<sup>1</sup> Miscellaneous Turnpike System Projects funded with Federal Aid and matched with Turnpike funds, and/or Systemwide projects.

<sup>2</sup> Bedford ORT Project and a portion of the Newington-Dover Spaulding Turnpike Expansion Project.

**Notes:**

-Central Turnpike Projects include: Souhegan River Bridge, Bow-Concord I-93 Bridge Redecking, Manchester Reconstruction Exit 4 Millyard Bridges, Bedford US 3 Bridge and Hooksett ORT

-Blue Star Turnpike Projects include: I-95 Taylor River, Hampton ORT, Seabrook I-95 Bridge Widening, and Portsmouth I-95 Soundwall

-Spaulding Turnpike Projects include: Rochester Roadway Expansion Exits 11-16, Newington-Dover Little Bay Bridges and Roadway Expansion Exits 3-6

-Data will not necessarily add to totals because of rounding.

Over the ten-year period FY 2003-2012, Turnpike System-funded capital expenditures totaled \$275.7 million. The largest share of this - \$149.9 million - was spent on Spaulding Turnpike projects. Funding sources for these projects include toll revenues, other Turnpike System revenues and Turnpike System bond proceeds. Turnpike System-funded capital expenditures are programmed at a total of \$236.6 million over the FY 2013-2022 period, 0.86 times the

expenditures of the previous ten-year capital program. Not included in these numbers are a total of \$41.4 million in federal funds (\$31.4 million in federal earmark funds) designated for the Newington-Dover Little Bay Bridges project.

After the completion of the turnpike expansion in Nashua in the late 1990s, the ten-year capital improvement program had few major projects with the exception of the implementation of **E-ZPass** and the construction of the Granite Street interchange in Manchester. The toll rate increase in 2007, the first since 1989, has allowed the capital improvement program to move forward with the expansion of the Spaulding Turnpike in Rochester along with several other major turnpike projects. These are improvement projects that are considered to be priorities to address nineteen (19) red listed bridges and improve safety and congestion on the Turnpike System.

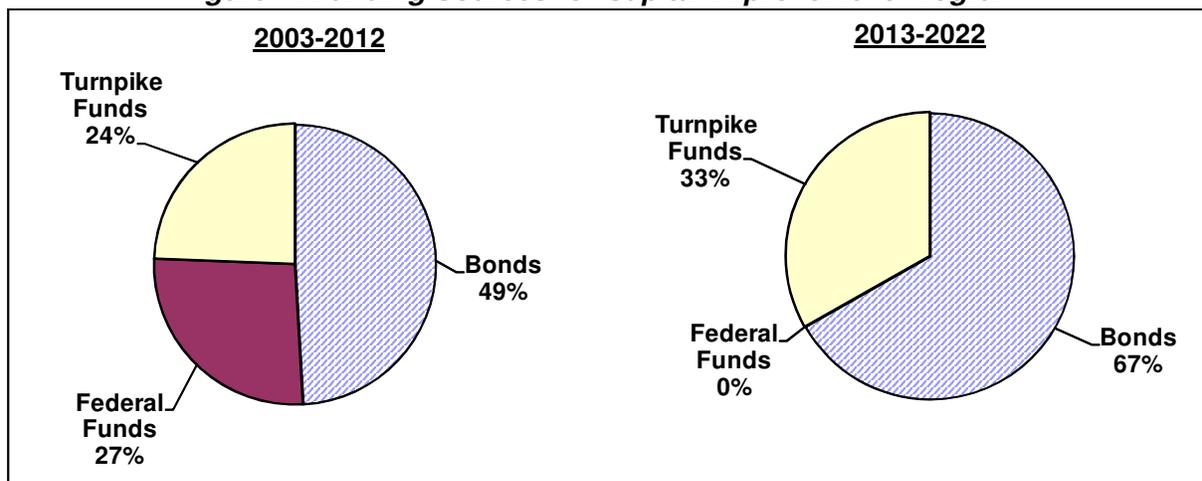
The majority of the Turnpike System capital expenditures over the next ten years – approximately 53 percent - will be for projects on the Spaulding Turnpike, including widening and improvements from Exits 3 to 6 and Exits 11 to 16, as well as Newington-Dover Little Bay Bridges (this is in addition to the federal funding).

Upcoming capital expenditures on the Central Turnpike include the Bow-Concord I-93 Bridge Replacement at Exit 12, Manchester Reconstruction of Exit 4 Millyard Bridges, Bedford US 3 Bridge Replacement and Hooksett ORT. Capital expenditures on the Blue Star Turnpike include the I-95 Taylor River Bridge project, Seabrook I-95 Bridge Widening, and the Portsmouth I-95 Soundwall.

A portion of the Spaulding Turnpike Newington-Dover Expansion Project as well as the Central Turnpike’s Bedford ORT project are legislatively authorized but currently unfunded by Turnpike System revenues.

Figure 7 shows how the capital plan was funded in the past ten years versus how it will be funded over the next ten years. The shares of funding by Turnpike System bonds and Turnpike System funds are both expected to grow, while there will be no projects funded by federal funds in future years.

**Figure 7: Funding Sources for Capital Improvement Program**



## 6 REVIEW OF HISTORICAL AND PROJECTED OPERATION, MAINTENANCE, RENEWAL AND REPLACEMENT, AND DEBT SERVICE EXPENDITURES

This section presents a review of historical and projected Turnpike System operational expenditures that consist of administrative costs, toll operations costs, maintenance costs, state police enforcement costs, welcome centers and rest areas, renewal and replacement (R&R) costs, toll processing costs, and payment for the new section of the Blue Star Turnpike (I-95). It also includes a review of the Turnpike System's historical and projected debt service expenditures.

Administrative costs include administrative salaries, benefits, expenses, equipment, indirect costs, cleaning, utilities, travel costs and audit expenses.

Toll operations costs include toll operations salaries, benefits, expenses, utilities, toll system warranty, equipment and travel costs.

Maintenance costs include maintenance salaries, benefits, expenses, rents and lease costs, utilities, equipment and travel costs.

Renewal and replacement costs are construction projects to preserve, maintain and upgrade the existing infrastructure i.e. paving, signing, guardrail, bridge rehabilitation, building and toll plaza repairs, bridge painting etc.

Toll processing costs include banking and credit card fees, **E-ZPass**-related costs (customer service center expenses, walk-in center expenses, Interagency Group (IAG) organizational dues, violation processing expenses, and vehicle registration look-up fees), toll system maintenance expenses through a vendor, and transponder purchases and replacement.

**6.1 TOLL PROCESSING COSTS**

Table 6 summarizes historical and projected NHDOT toll processing expenses for the period FY 2003 through 2022.

**Table 6: Toll Processing Costs, FY 2003-2022 (in millions)**

Fiscal Year	Banking/ Credit Card Fees	E-ZPass CSC Costs	Toll Maintenance Costs	E-Zpass Transponder Expenses	Total Toll Processing Costs
2003	\$0.8		\$0.5		\$1.3
2004	\$0.8		\$0.5		\$1.3
2005	\$0.9	\$0.7	\$0.5	\$1.6	\$3.7
2006	\$1.5	\$3.7	\$0.1	\$5.5	\$10.8
2007	\$1.4	\$3.8	\$1.2	\$1.0	\$7.4
2008	\$1.7	\$4.3	\$1.0	\$0.8	\$7.8
2009	\$1.8	\$5.1	\$1.3	\$0.7	\$8.9
2010	\$2.1	\$5.3	\$1.6	\$0.8	\$9.8
2011	\$2.2	\$5.8	\$1.8	\$0.8	\$10.6
2012 <sup>1</sup>	\$2.1	\$5.7	\$1.5	\$0.5	\$9.8
Total ('03-'12)	\$15.3	\$34.4	\$10.0	\$11.7	\$71.4
2013	\$2.3	\$6.9 <sup>2</sup>	\$1.8	\$3.3 <sup>2</sup>	\$14.3
2014	\$2.4	\$5.1	\$1.7	\$0.8	\$10.0
2015	\$2.5	\$5.3	\$2.1	\$0.6	\$10.5
2016	\$2.6	\$5.5	\$2.1	\$0.6	\$10.8
2017	\$2.6	\$5.6	\$2.2	\$0.6	\$11.0
2018	\$2.7	\$5.7	\$2.2	\$0.6	\$11.3
2019	\$2.8	\$5.8	\$2.3	\$0.6	\$11.5
2020	\$2.8	\$6.0	\$2.3	\$0.6	\$11.8
2021	\$2.9	\$6.2	\$2.4	\$0.6	\$12.1
2022	\$3.0	\$6.4	\$2.5	\$0.6	\$12.4
Total ('13-'22)	\$26.6	\$58.6	\$21.7	\$8.9	\$115.7

<sup>1</sup> Amounts are preliminary and unaudited

<sup>2</sup> Includes tag swap costs which may be deferred to FY 2014 and FY 2015

Note: Data will not necessarily add to totals because of rounding

Turnpike System toll processing costs increased relatively slowly from \$1.3 million in FY 2003 to \$3.7 million in FY 2005 primarily due to \$1.6 million in **E-ZPass** transponder purchases. In FY 2006, toll processing costs further increased to \$10.8 million mainly due to \$5.5 million in **E-ZPass** transponder purchases and \$3.7 million in **E-ZPass** customer service center costs. Transponder purchase costs dropped to \$0.5-\$0.8 million in the FY 2009-2012 period as the market became more saturated.

NHDOT estimates that approximately \$115.7 million will be spent on toll processing between FY 2013 and FY 2022, with **E-ZPass** customer service center costs accounting for \$58.6 million or 51 percent. Approximately \$8.9 million in transponder purchases is estimated over the ten-year period FY 2013-2022; this includes transponder replacement costs. NHDOT recovers the

transponder costs from selling the transponder to the customer at cost: private cars are charged \$8.90 for an interior or \$15.19 for an exterior **E-ZPass** tag. A “tag swap” to replace transponders that will have reached the end of their useful life is budgeted to occur in FY 2013 but may be deferred to fiscal years 2014 and 2015 as evidence is showing that the transponders purchased in 2005 are lasting 8.5 to 9 years.

**6.2 OPERATING EXPENDITURES**

Table 7 summarizes historical and projected NHDOT expenses for the 20-year period FY 2003 through FY 2022.

**Table 7: Historical and Projected NHDOT Operating Expenditures, FY 2003-2022 (in millions)**

Fiscal Year	Admin.	Toll Ops.	Maint- enance	State Police Enforce- ment	Toll Process- ing	Welcome Centers & Rest Areas <sup>1</sup>	Turnpike Funding of DOT - HWY	O&M Lapse <sup>2</sup>	Total O & M	R&R <sup>3</sup>	I-95 Payments from General Reserve	I-95 Advance Payment	Add'l R&R	Total Operating Expenses
2003	\$4.4	\$8.5	\$7.2	\$3.8	\$1.3				\$25.2	\$7.3				\$32.5
2004	\$4.7	\$8.7	\$6.5	\$3.9	\$1.3				\$25.1	\$5.1				\$30.2
2005	\$4.4	\$9.3	\$7.5	\$4.1	\$3.7				\$29.0	\$3.3				\$32.3
2006	\$4.8	\$9.6	\$8.8	\$4.5	\$10.8				\$38.5	\$4.3				\$42.8
2007	\$5.0	\$9.8	\$8.0	\$5.0	\$7.4		\$0.9		\$36.1	\$8.6				\$44.7
2008	\$4.1	\$10.3	\$8.8	\$5.2	\$7.8		\$0.9		\$37.1	\$11.8				\$48.9
2009	\$4.5	\$10.5	\$9.8	\$5.4	\$8.9		\$1.2		\$40.3	\$7.8				\$48.1
2010	\$5.7	\$10.9	\$7.6	\$5.0	\$9.8		\$1.1		\$40.1	\$7.8	\$30.0			\$77.9
2011	\$6.3	\$10.9	\$8.6	\$4.9	\$10.6		\$1.0		\$42.3	\$14.3	\$20.0			\$76.6
2012 <sup>4</sup>	\$8.5	\$9.7	\$6.8	\$5.0	\$9.8	\$1.2	\$0.8		\$41.8	\$7.3	\$5.9	\$20.1		\$75.1
Total (03-'12)	\$52.4	\$98.2	\$79.6	\$46.8	\$71.4	\$1.2	\$5.9	\$0.0	\$355.5	\$77.6	\$55.9	\$20.1	\$0.0	\$509.1
2013	\$8.5	\$12.0	\$9.7	\$5.6	\$14.3	\$1.2	\$2.1	-\$2.5	\$51.0	\$9.8	\$5.9	\$20.1	\$4.7	\$91.5
2014	\$8.4	\$12.4	\$10.0	\$5.7	\$10.0	\$1.3	\$2.1	-\$2.5	\$47.4	\$10.0	\$5.9			\$63.3
2015	\$8.4	\$12.7	\$10.3	\$5.8	\$10.5	\$1.3	\$2.2	-\$2.5	\$48.7	\$8.9	\$5.9			\$63.5
2016	\$8.3	\$13.1	\$10.6	\$5.9	\$10.8	\$1.3	\$2.2	-\$2.5	\$49.8	\$9.7	\$5.9			\$65.4
2017	\$8.1	\$13.5	\$11.0	\$6.1	\$11.0	\$1.3	\$2.3	-\$2.5	\$50.8	\$12.2	\$5.9			\$68.9
2018	\$8.0	\$13.9	\$11.3	\$6.2	\$11.3	\$1.4	\$2.3	-\$2.5	\$51.9	\$12.3	\$5.9			\$70.1
2019	\$7.9	\$14.3	\$11.7	\$6.3	\$11.5	\$1.4	\$2.4	-\$2.5	\$53.0	\$10.1	\$2.2			\$65.3
2020	\$8.1	\$14.6	\$11.9	\$6.4	\$11.8	\$1.4	\$2.4	-\$2.5	\$54.2	\$10.4				\$64.6
2021	\$8.2	\$14.9	\$12.1	\$6.6	\$12.1	\$1.5	\$2.5	-\$2.5	\$55.4	\$10.7				\$66.1
2022	\$8.4	\$15.2	\$12.4	\$6.7	\$12.4	\$1.5	\$2.5	-\$2.5	\$56.6	\$11.0				\$67.7
Total (13-'22)	\$82.3	\$136.6	\$111.0	\$61.3	\$115.7	\$13.7	\$23.0	-\$25.0	\$518.6	\$105.2	\$37.6	\$20.1	\$4.7	\$686.2

<sup>1</sup> Included in Maintenance through 2011

<sup>2</sup> O&M lapse is a self-imposed reduction in operating expenditures (both budgeted and projected) due to savings projected from the lean staffing initiative in toll operations

<sup>3</sup> Does not include \$4.7M carry-forward of additional R&R available for expenditure

<sup>4</sup> FY 2012 amounts are preliminary and unaudited

Notes:

The dollar values shown from 2003 to 2012, provided by Finance & Contracts, are on the GAAP basis (General accepted accounting principles), and the dollar values from 2013 to 2022, from the Bureau of Turnpike's O&M model, are on a cash basis.

All numbers are tied to the Operating and Maintenance Report (Bureau of Turnpikes), except for certain financial categories which tie to the Comprehensive Annual Financial Reports.

Data will not necessarily add to totals because of rounding.

The Turnpike System total annual operating expenditures (Operating and Maintenance, Renewal and Replacement and I-95 Payments Costs) over the past ten years ranged from a low of \$30.2 million in FY 2004 to a high of \$77.9 million in FY 2010; FY 2012 operating expenditures were \$75.1 million. Total operating expenditures amounted to \$509.1 million over the ten-year period FY 2003-2012 and about 19 percent or \$98.2 million was spent on toll operations. The large increase in operating expenses in FY 2006 was largely due to implementation of **E-ZPass**. Total annual operating expenditures increased by \$10.5 million or about 33 percent from FY 2005 to 2006, with \$5.5 million due to the purchase of new **E-ZPass** transponders and by \$29.8 million or some 62 percent from FY 2009 to FY 2010 due to payments from the Bureau of Turnpikes' General Reserve Fund for the acquisition of a portion of I-95 into the Blue Star Turnpike.

Turnpike System renewal and replacement expenditures also increased in recent years, from a low of \$3.3 million in FY 2005 to a high of \$14.3 million in FY 2011.

Total operating expenditures for the period FY 2013-2022 are projected to total \$686.2 million, about 1.35 times the expenditures of the previous ten year period. Factors that contribute to this projected increase include more lane miles to maintain due to the recent acquisition of an additional part of I-95, the purchase of new and replacement **E-ZPass** transponders, a more robust renewal and replacement program, and higher fuel, maintenance, and operation costs.

Operation and maintenance expenditures are budgeted to provide for unforeseen costs; the amount not spent - the lapse - is shown in Table 8 over the ten-year period from FY 2003 through 2012. The net lapse has ranged from \$2.3 million in FY 2005 to \$8.3 million in FY 2011. Over the last three years, the Bureau of Turnpikes averaged a net lapse of \$6.8 million. Of these funds, Turnpike System renewal and replacement funds are carried forward to the following year; all other lapses for operating expenses return to retained earnings or the Bureau of Turnpikes' General Reserve Account.

**Table 8: Historical Lapse, FY 2003-2012**

Fiscal Year	Lapse	Transfer to Retained Earnings	Net
2003	\$3,000,124		\$3,000,124
2004	\$3,085,133	\$1,044,000	\$2,041,133
2005	\$2,317,726	\$1,518,500	\$799,226
2006	\$2,648,078	\$2,015,000	\$633,078
2007	\$3,068,083	\$2,058,500	\$1,009,583
2008	\$4,719,937	\$1,008,950	\$3,710,987
2009	\$4,735,298		\$4,735,298
2010	\$6,048,294		\$6,048,294
2011	\$8,267,563		\$8,267,563
2012	\$6,218,459	\$75,000	\$6,143,459
Total ('03-'12)	\$44,108,695	\$7,719,950	\$36,388,745

**6.3 DEBT SERVICE REQUIREMENTS**

Table 9 presents historical and scheduled debt service requirements for the period FY 2003-2022.

**Table 9: Historical and Scheduled Debt Service Expenditures, FY 2003-2022 (in millions)**

Fiscal Year	Existing Revenue Bonds <sup>1</sup>	FY 2013 Revenue Bonds	FY 2015 Revenue Bonds	Total Revenue Bond Debt Service	BABs Interest Subsidy	Net Total Revenue Bond Debt Service	General Obligation Bonds
2003	\$24.7			\$24.7	\$0.0	\$24.7	\$5.2
2004	\$23.9			\$23.9	\$0.0	\$23.9	\$4.8
2005	\$27.0			\$27.0	\$0.0	\$27.0	\$4.3
2006	\$25.8			\$25.8	\$0.0	\$25.8	\$4.2
2007	\$28.1			\$28.1	\$0.0	\$28.1	\$3.0
2008	\$25.7			\$25.7	\$0.0	\$25.7	\$1.7
2009	\$25.9			\$25.9	\$0.0	\$25.9	\$1.6
2010	\$30.9			\$30.9	-\$1.3	\$29.6	\$0.7
2011	\$36.9			\$36.9	-\$3.1	\$33.8	\$0.6
2012	\$36.4			\$36.4	-\$3.1	\$33.3	
Total ('03-'12)	\$285.3	\$0.0	\$0.0	\$285.3	-\$7.6	\$277.7	\$26.1
2013	\$35.8	\$3.5		\$39.3	-\$3.1	\$36.2	
2014	\$35.4	\$6.9		\$42.3	-\$3.1	\$39.2	
2015	\$35.4	\$6.9	\$1.4	\$43.7	-\$3.1	\$40.6	
2016	\$35.4	\$6.9	\$2.9	\$45.2	-\$3.1	\$42.1	
2017	\$33.7	\$6.9	\$2.9	\$43.5	-\$3.1	\$40.4	
2018	\$29.4	\$6.9	\$2.9	\$39.2	-\$3.1	\$36.1	
2019	\$29.4	\$6.9	\$2.9	\$39.2	-\$3.1	\$36.1	
2020	\$28.1	\$6.9	\$2.9	\$37.9	-\$3.1	\$34.8	
2021	\$20.3	\$6.9	\$2.9	\$30.1	-\$3.1	\$27.0	
2022	\$20.6	\$6.9	\$2.9	\$30.4	-\$3.1	\$27.3	
Total ('13-'22)	\$303.5	\$65.6	\$21.7	\$390.8	-\$31.3	\$359.5	\$0.0

<sup>1</sup> Assumes 2012 Series B bonds are delivered on Nov 5, 2012

Note: Data will not necessarily add to totals because of rounding.

Historical total revenue bond debt service payments ranged from a low of \$23.9 million in FY 2004 to a high of \$36.9 million in FY 2011. Over the ten-year period FY 2003-2012, the cumulative total revenue bond debt service was \$285.3 million. The historical BABs interest subsidy over this ten-year period totaled \$7.6 million, resulting in a net total revenue bond debt service of \$277.7 million. Furthermore, there were \$26.1 million in general obligation bonds paid during FY 2003-2012.

Scheduled total revenue bond debt service expenditures are projected to range over the period FY 2013-2022 from \$30.1 million in FY 2021 to \$45.2 million in FY 2016. The cumulative total revenue bond debt service payment over this period is estimated to be \$390.8 million or about 37 percent more than the previous ten-year period. The majority of this amount will be for existing revenue bond payments. Over the ten year forecast period FY 2013-2022, the total BABs interest subsidy is estimated to total \$31.3 million, resulting in a net total revenue bond debt service of \$359.5 million.

The proposed revenue bond terms are: 30-year bond, 4.00 percent interest and a semi-annual fixed payment amortization schedule.

## 7 REVIEW OF REGIONAL AND NATIONAL SOCIOECONOMIC FACTORS

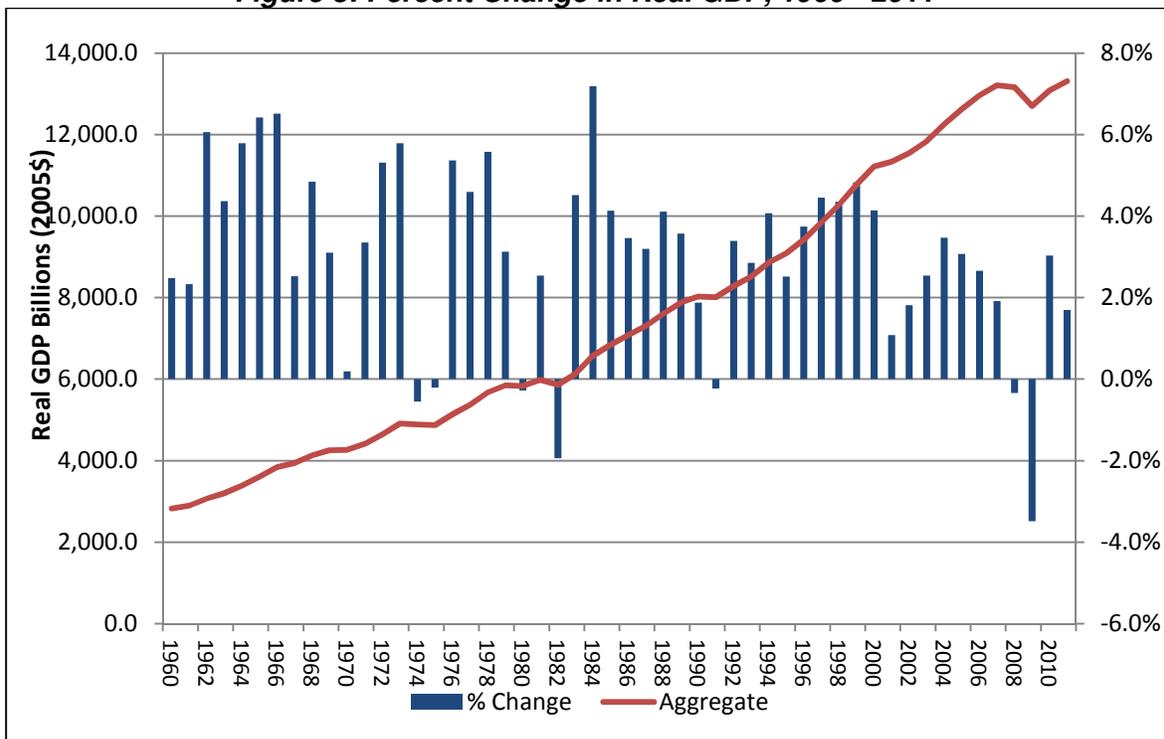
During the course of this study, Jacobs analyzed key socioeconomic factors related to the growth in traffic and toll revenues for the New Hampshire Turnpike. Factors that are relevant to the long term background growth of traffic on the facilities were studied, as was the relationship of traffic to specific economic indices for passenger car and truck traffic. Jacobs also researched the possible causes of why people in the U.S. are driving less, and what this means for the future of road travel. In addition, Jacobs conducted extensive background research into the specific dynamics of past economic recessions in order to better understand the current phenomenon and to aid in giving context to the most recent economic downturn when compared with past recessions. The analyses are summarized in the following sections.

### 7.1 U.S. ECONOMIC OUTLOOK

#### 7.1.1 Recent Macroeconomic Trends

From 2000 to 2010, real Gross Domestic Product (GDP) and industrial production in the U.S. increased by an average of 1.8 percent and 0.6 percent per year, respectively. This includes the recession that began and ended in 2001 and the most recent recession, which began in December 2007 and officially ended in June 2009. This recession has been more severe compared to previous recessions, resulting in zero growth in real GDP and a 3.3 percent decrease in industrial production in 2008. Real GDP decreased by 2.6 percent in 2009, but recovered in 2010 with a 2.9 percent annual increase. Due to a lag in economic activity, industrial production index decreased by 13.5 percent in 2009, but rebounded solidly in 2010. Real GDP increased by 1.7 percent in 2011. During the first quarter of 2012, real GDP increased at annualized rate of 1.9 percent. Figure 8 compares year-over-year changes in real GDP since 1960.

**Figure 8: Percent Change in Real GDP, 1960 - 2011**

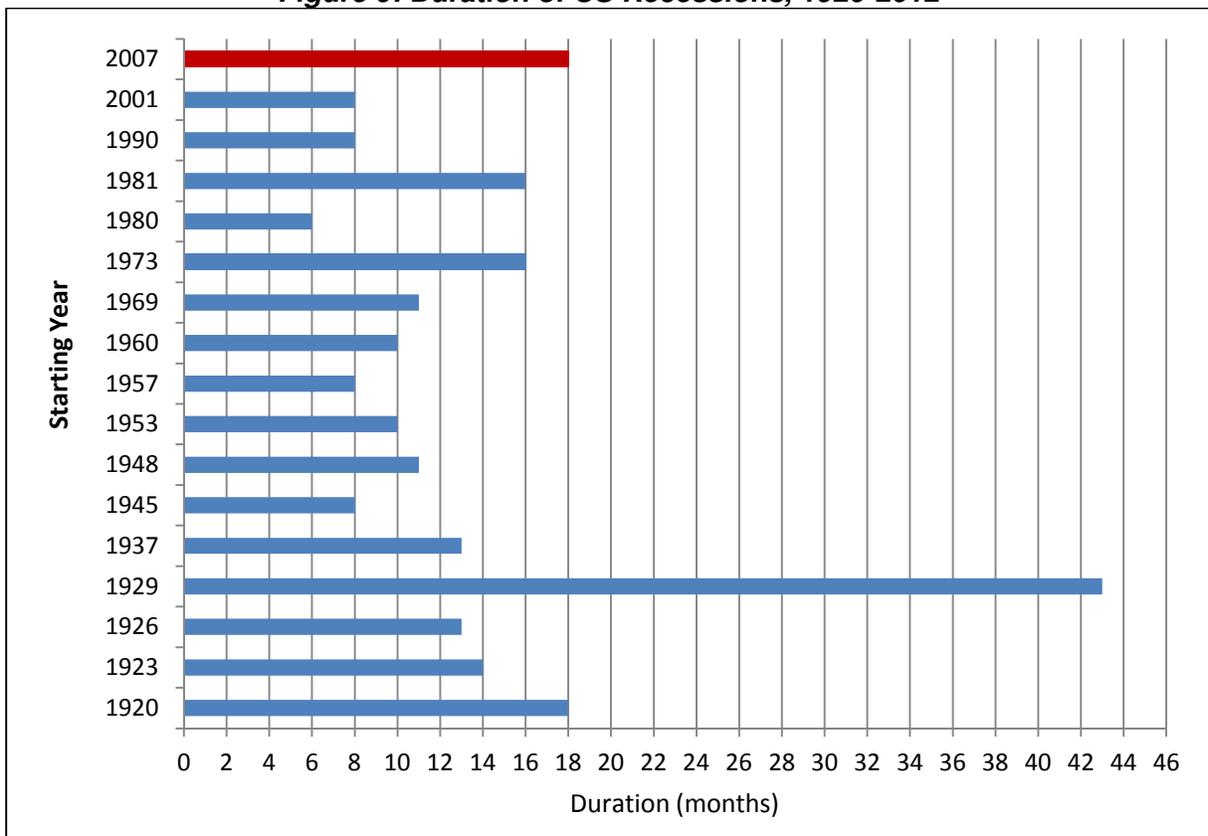


Source: U.S. Bureau of Economic Analysis (BEA)

Recessions are technically defined as two consecutive quarters of negative growth. In determining whether a recession has taken place, the National Bureau of Economic Research (NBER) can include other factors in its analysis. According to the NBER, the most recent recession lasted 18 months, making it the longest economic downturn since the Great Depression, as shown in Figure 9. Additionally, this recession is comparable to and may possibly exceed the recessions of the early 1970s and early 1980s in duration and severity. Economic downturns that have occurred after the Great Depression have typically been triggered by a contracting monetary supply (typified by higher interest rates) or an external shock (e.g. sudden rise in oil prices, political turmoil, etc.) resulting in a decrease in consumer confidence, economic growth, and employment. Once expansionary conditions are in place, then post-recessionary periods have been characterized by rapid, strong and sustained increases in GDP and employment.

In contrast, the recent recession was caused by the near collapse of the financial sector, the lack of available credit, the end of the asset price “bubble” in real estate, and high consumer debt levels. During 2008 and 2009, housing prices within the S&P/Case-Shiller 10-City Index decreased by 11 percent and 19 percent, respectively (see Figure 10). Due to a lag, outstanding consumer credit declined by 6 percent from \$2.6 trillion to \$2.4 trillion from 2009 to early 2011, as shown in Figure 11. In particular, securitized asset pools decreased precipitously—from \$682 billion to \$127 billion from 2008 to 2011.

**Figure 9: Duration of US Recessions, 1920-2012**

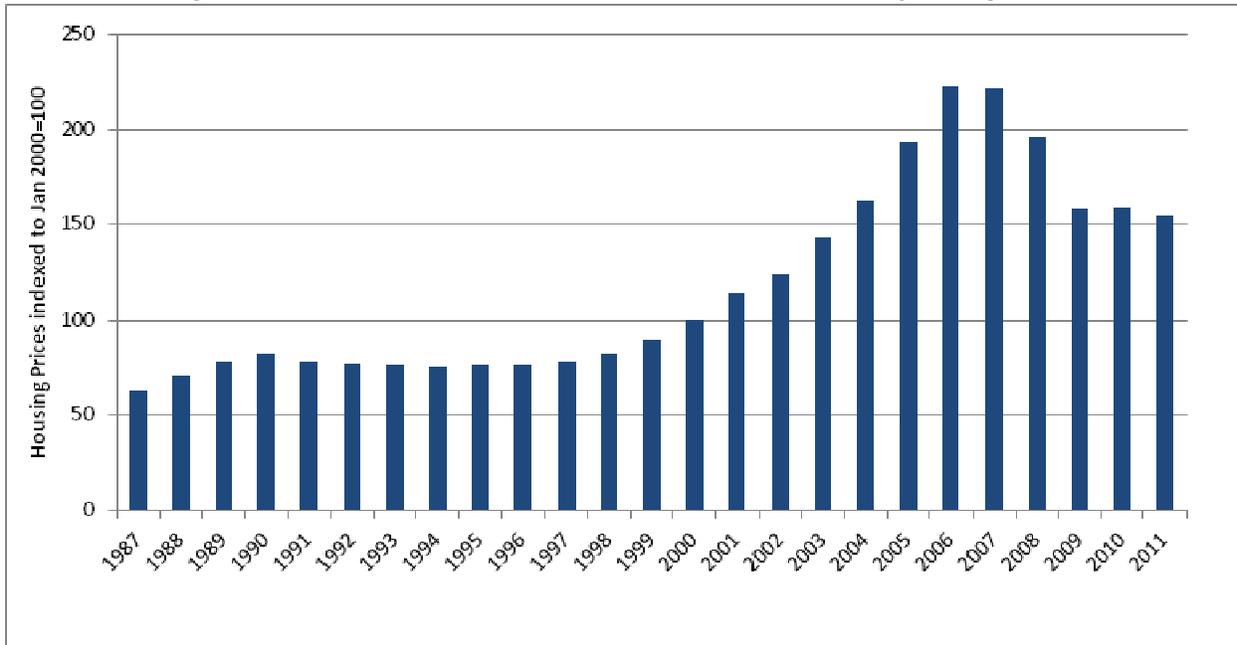


Source: National Bureau of Economic Research (NBER)

These conditions relating to the market for credit are more similar to the underlying causes of the Great Depression. Recent economic research indicates that the root causes of these

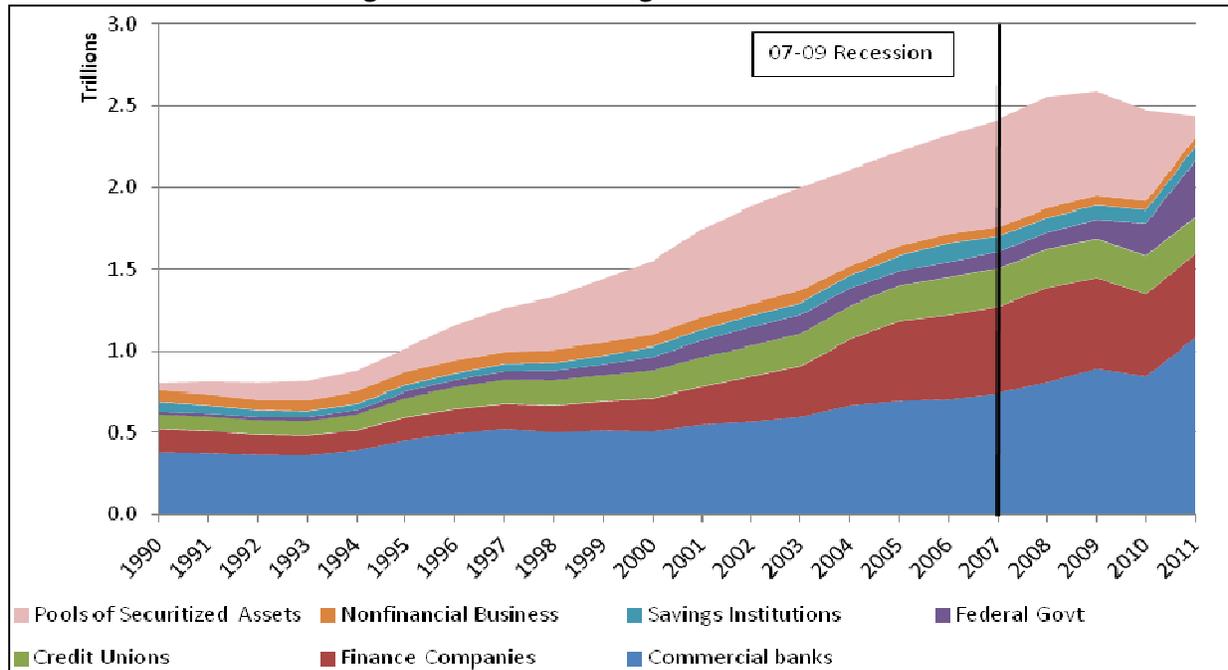
contractions lead to weaker and fragile recoveries until the financial sector stabilizes, asset prices recover, and deleveraging by consumers and businesses is concluded. Consequently, economic growth is expected to be relatively sluggish with high unemployment over longer periods of time.

**Figure 10: S&P/Case-Shiller Home Price Index, 10-City Composite**



Source: S&P Indices and Fiserv

**Figure 11: Outstanding Consumer Credit**



Source: U.S. Federal Reserve Bank

### **7.1.2 Long-Term Structural Trends**

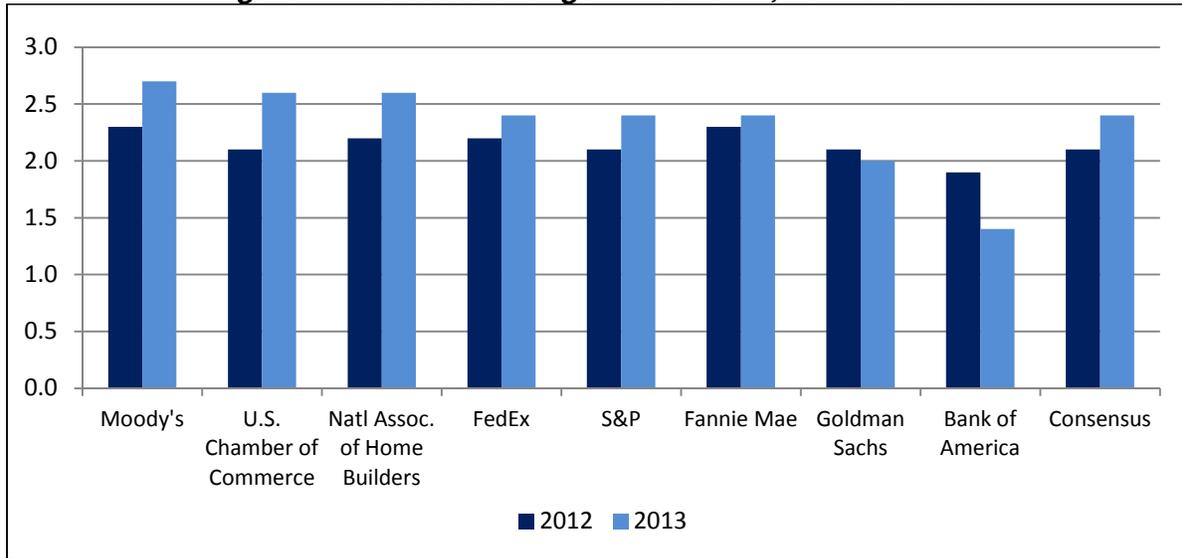
Even prior to the recent recession, there have also been a number of long-term structural trends in the U.S. and internationally which have encumbered economic growth and employment creation. First, there have been significant productivity improvements in the form of advances in information technology, computing power, transportation, and communications. Initially, these advances encouraged the transfer of manufacturing facilities and jobs to areas with higher unemployment and lower wages. This also shifted the engine for economic growth from manufacturing (from 31 percent of GDP in 1970 to 23 percent GDP in 2010) to services (from 32 percent of GDP in 1970 to 47 percent of GDP in 2010). These trends intensified after the technology boom of the 1990s and the subsequent bust that took place during the early 2000s, which encouraged the rapid and widespread expansion of inexpensive communications technologies and further flattened factor and wage costs. Increasingly, this has led to the outsourcing of professional services. For example, X-rays can be evaluated or financial statements can be prepared cheaply and rapidly almost anywhere in the world where technical capacity exists. It is expected that this structural trend will continue in the medium term.

Second, there has been a restructuring of the international economy with traditional trading partners (Europe and Japan) generating a decreasing share of global GDP, while other economies including Brazil, Russia, India and China (“the BRIC countries”), comprising a larger share of the global economy. For the U.S., this has resulted in greater competition not just in manufacturing, but also in professional services. A third trend has been the aging of the U.S. population—the median age has increased from 29.5 in 1960 to 37.2 in 2010. This trend has also taken hold in Europe and Japan and is expected to eventually impact China due to its one-child policy. Finally, there has been a rapid and significant expansion in consumer credit, which has reached unsustainable levels during the previous decade. These factors tend to further dampen economic growth and employment over the short-term.

### **7.1.3 Short-Term Economic Forecast**

In early 2012, there was modest enthusiasm with respect to economic growth and employment, which has decreased slightly as the year has progressed. Forecasts prepared in June 2012 have captured a slight reduction in forecasts in real GDP. The median of selected economic forecasts provided by financial institutions and industry analysts for real GDP in June 2012 (see Figure 12) was 2.1 percent, down from 2.2 percent median estimated at the start of the year. The spread among forecasts (50+ observations) is relatively small, ranging from 1.8 percent to 2.5 percent. For 2013, the consensus forecast was that real GDP would increase by 2.4 percent, albeit with a wider range—1.4 percent to 3.4 percent. Factors that may negatively impact real GDP in the short-term include the following: (1) recessionary conditions in Europe due the weak fiscal position of Greece, Portugal, Spain, and Italy; (2) signs of decreased economic growth in Brazil and China; (3) currently scheduled budget cuts and/or tax increases at the end 2012; and (4) increased tensions in the Middle East.

**Figure 12: Forecast Change in Real GDP, 2012 and 2013**



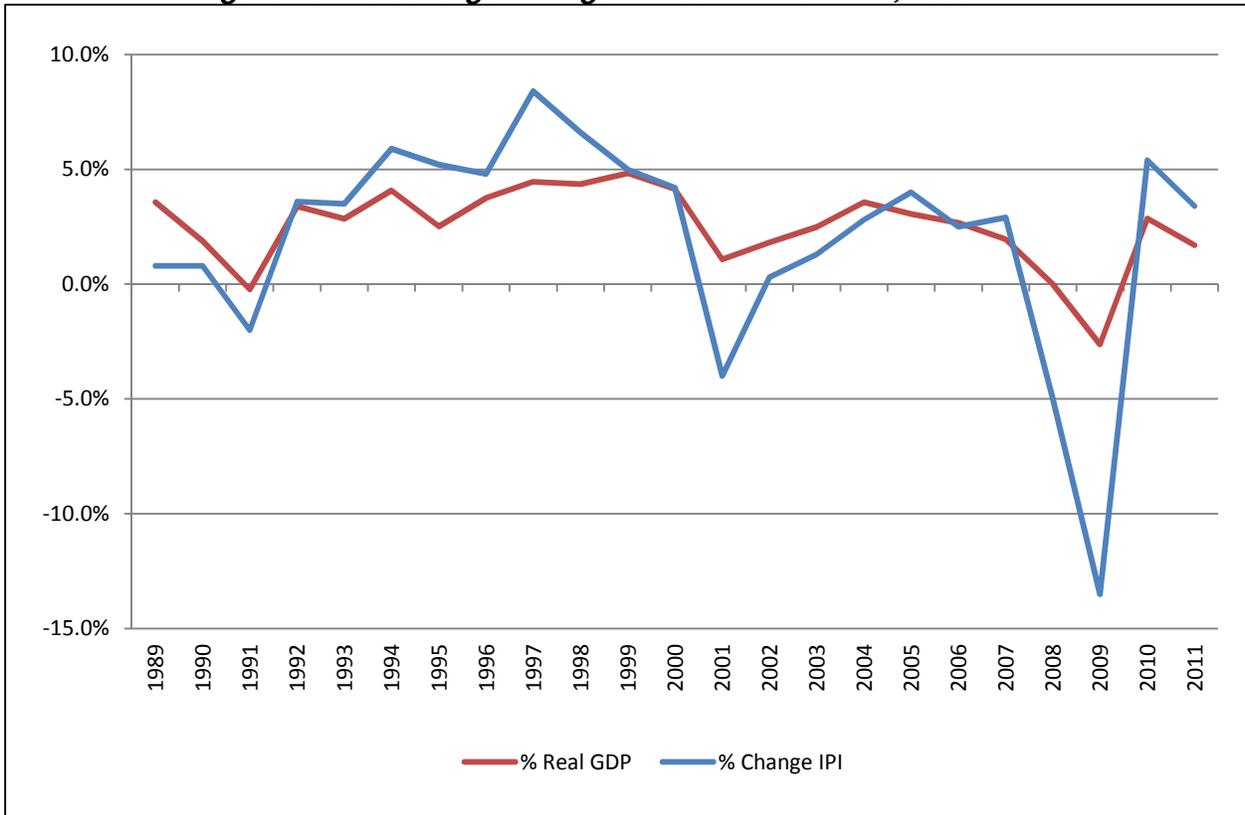
Source: Blue Chip Economic Indicators (BCIE)

The yield curve remains positive with short term interest rates (0-12 months) on U.S. Treasuries trading at or near zero and the interest rates on 10-year U.S. Treasuries trading at 2.69 percent (as of July 2, 2012). The market for crude oil remains strong with the \$/barrel price at just below \$84/barrel, representing a decrease from \$106/barrel in March 2012. Barring an unforeseen event in the international political environment, the Energy Information Administration (EIA)'s forecast prepared in June 2012 anticipates that crude oil price will fluctuate between \$88/barrel to \$98/barrel from July 2012 through 2013.

#### 7.1.4 Industrial Production

Changes in U.S. industrial production have historically moved in tandem with GDP, albeit with steeper decreases during recessions and larger increases during recovery periods. During the lowest point of the 2001 recession, the Industrial Production Index (IPI) decreased by 4.0 percent, as shown in Figure 13. Due to the severity of the most recent recession, IPI declined 13.5 percent in 2009. Since then, IPI has recovered increasing by 5.4 percent and 3.4 percent during 2010 and 2011, respectively. Despite this recovery, the gross value of the IPI for “Final Products and Non-Industrial Supplies” is at 97 percent of its 2007 peak.

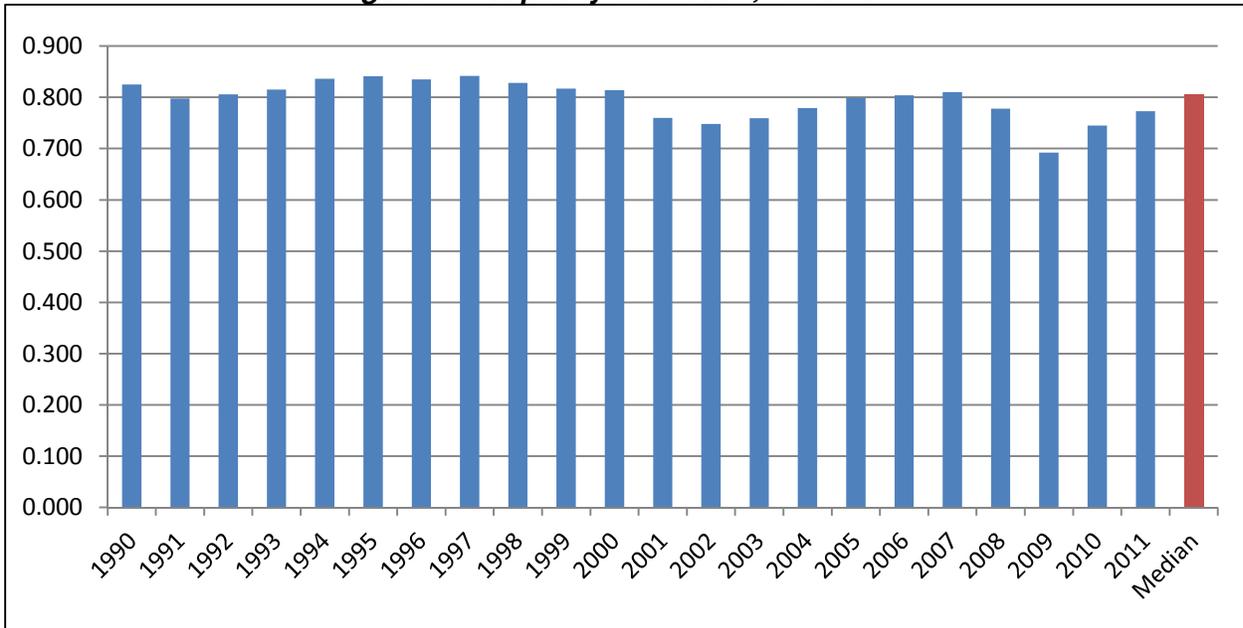
**Figure 13: Percentage Change in Real GDP and IPI, 1989-2011**



Source: U.S. Federal Reserve Bank

Similar to the IPI, the utilization of U.S manufacturing capacity also decreased significantly in 2009, as seen in Figure 14, declining to 0.692. Since then, capacity utilization has recovered to 0.773. Notwithstanding, capacity utilization is currently 95 percent of the historical median value, 0.805, from 1990 to 2011.

**Figure 14: Capacity Utilization, 1990-2011**

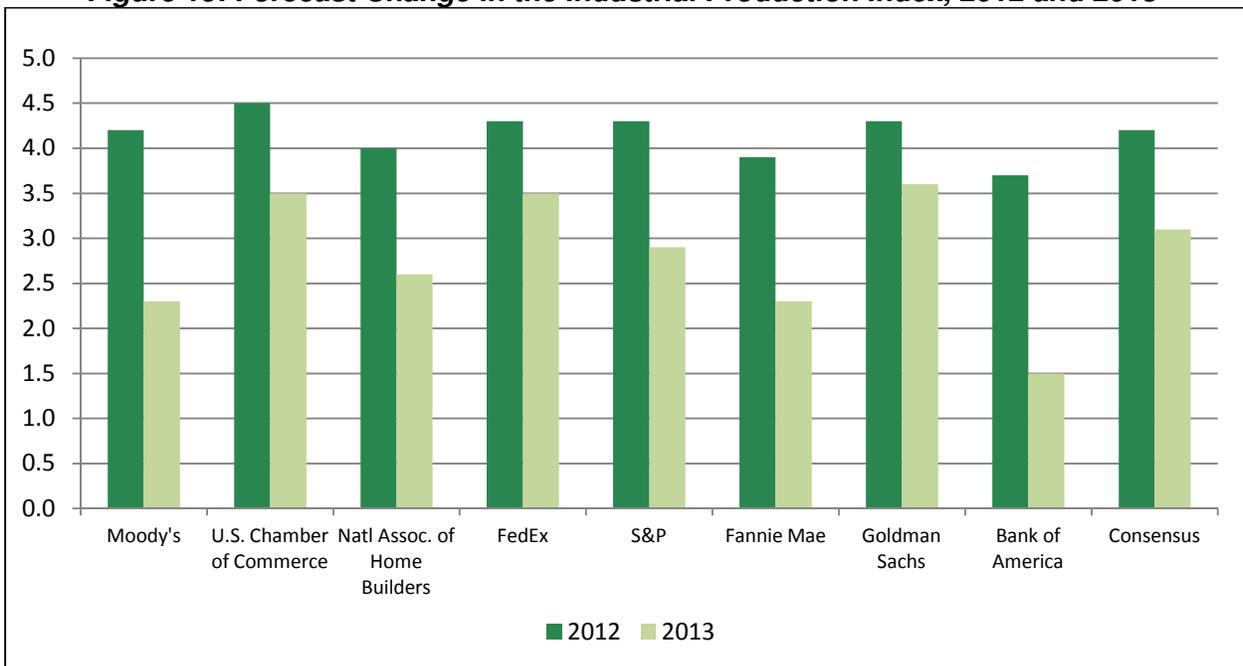


Source: U.S. Federal Reserve Bank

**7.1.5 Industrial Production Forecasts**

Based on forecasts developed by financial institutions and industry analysts, the Industrial Production Index (IPI) is forecasted to increase by 4.2 percent in 2012 and 3.1 percent in 2013. This slower forecast likely captures the decrease in exports due to the recessionary conditions in Europe and slower growth in emerging markets, including Brazil and China. Selected forecasts are shown in Figure 15.

**Figure 15: Forecast Change in the Industrial Production Index, 2012 and 2013**



Source: Blue Chip Economic Indicators (BCIE)

### 7.1.6 Employment

At the beginning of 2008, the national unemployment rate was 5.0 percent. By October 2009, unemployment peaked at around 10.0 percent. During 2008 and 2009, total employment decreased by 3.2 percent each year. Total employment started to recover in subsequent months with a 0.9 percent increase in 2010 and a 1.5 percent increase in 2011. The unemployment rate has decreased gradually to 8.2 percent by June 2012. Long-term forecasts of employment tend to differ, depending on varying considerations of the potential impact of long-term structural trends, such as advances in information technology, the outsourcing, an aging population, etc. The U.S. Congressional Budget Office (CBO) has forecasted that employment would return to historical levels by 2015. However, other institutions and economic analysts are predicting historically high levels of unemployment in the U.S. through 2015 and beyond. In any event, the most recent recession has had a more severe impact on employment, especially compared to previous downturns other than the Great Depression. Similar to the Great Depression, the decrease in employment levels has been steeper and the recovery has taken a relatively long time to take hold.

### 7.1.7 Age of the Population

Since 1960, the median age of the population in the United States has increased from 29.5 years to 37.2 years. As part of this general trend, there are following component trends:

- The non-adult population (0 to 17 years) decreased from nearly 36 percent of the total population in 1960 to 24 percent in 2010;
- The 18 to 44 age group, which has historically driven the most vehicle miles traveled (VMT) per capita, increased from 35 percent of the total population in 1960 to 43 percent in 1990. However, this age group comprised 37 percent of the total population in 2010;
- The 45 to 64 age group shrank slightly between 1960 and 1990 (from 20 percent to 19 percent), but increased to 26 percent of the population in 2010.
- The 65+ age group increased from 9 percent of the total population in 1960 to 13 percent in 2010.

The aging of the population is one of the major factors contributing to slower traffic growth; this is discussed further on page 39.

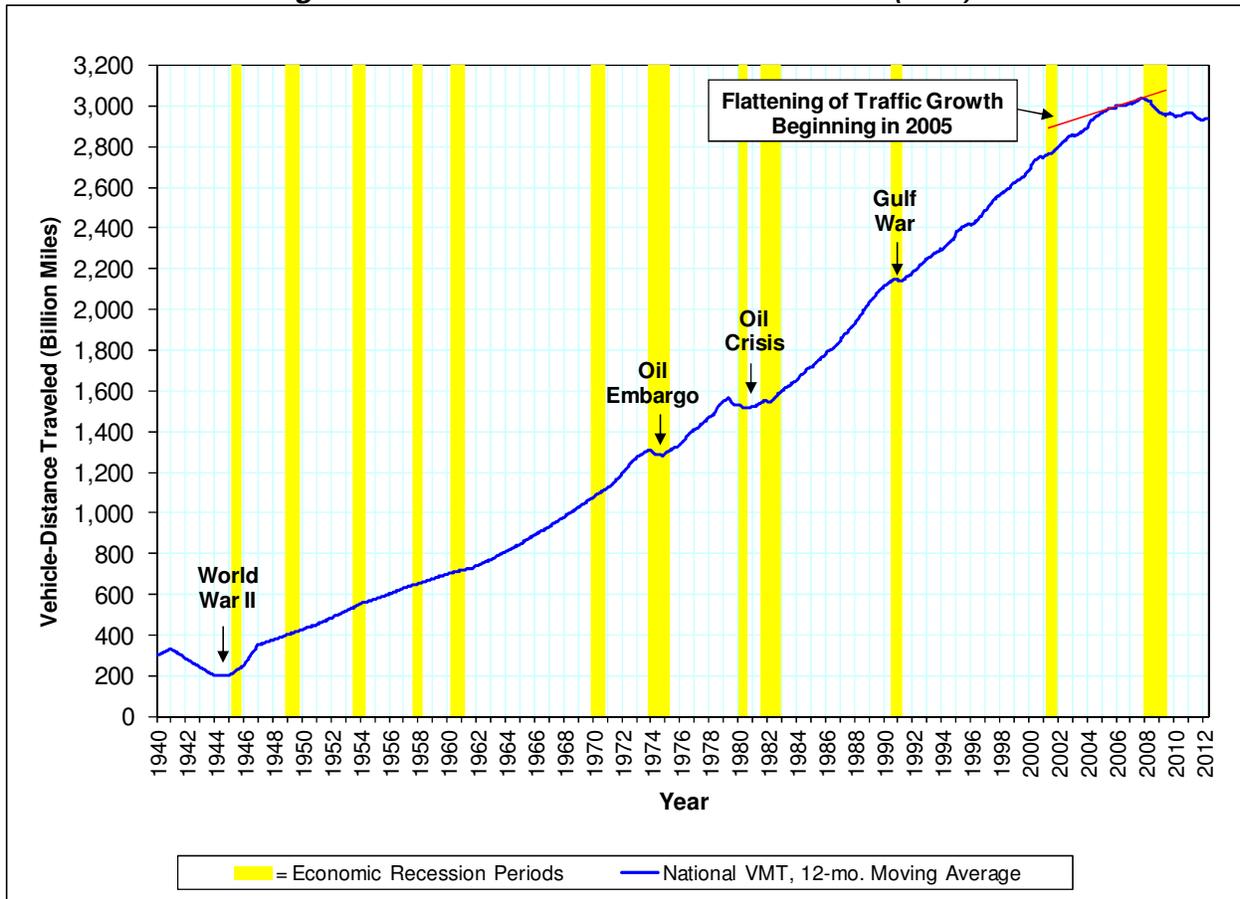
## 7.2 NATIONAL TRENDS IN VEHICLE MILES TRAVELED

The United States has experienced a never before seen flattening, then drop, in vehicle-miles traveled (VMT) on its highways over the past several years. A reduction in VMT means less revenue – in the form of gas tax or tolls - for funding transportation projects. Jacobs reviewed and compiled available reports and data to investigate the possible factors contributing to this phenomenon.

Figure 16 depicts the 12-month moving total of national travel mileage from 1940 through the spring of 2012 on all U.S. highways. As seen in this figure, there were temporary reductions in VMT during World War II, oil crises and economic recessions. Despite these temporary “dips”, the VMT continued to grow rapidly over the years. It shows that, in recent years, with the exception of short, flat periods during the 1991 and 2001 recessions (each less than one year), VMT grew at a steady pace through about 2005. VMT then grew at a much slower pace through 2008. The increase in gas prices and the downturn in economic activity that took hold

in late 2008 resulted in a significant reduction in total national travel mileage after December 2007 peak. While VMT declined throughout 2008, it has remained flat in 2009 until the summer months, when there was a slight increase over the previous year. This perceived growth was due in part to the large reduction in summer gas prices from 2008 to 2009. Since the recession ended, there have been slight increases and decreases in VMT from month to month that may have been caused by large fluctuations in gas prices.

**Figure 16: US Annual Vehicle Miles Traveled (VMT)**



Source: FHWA

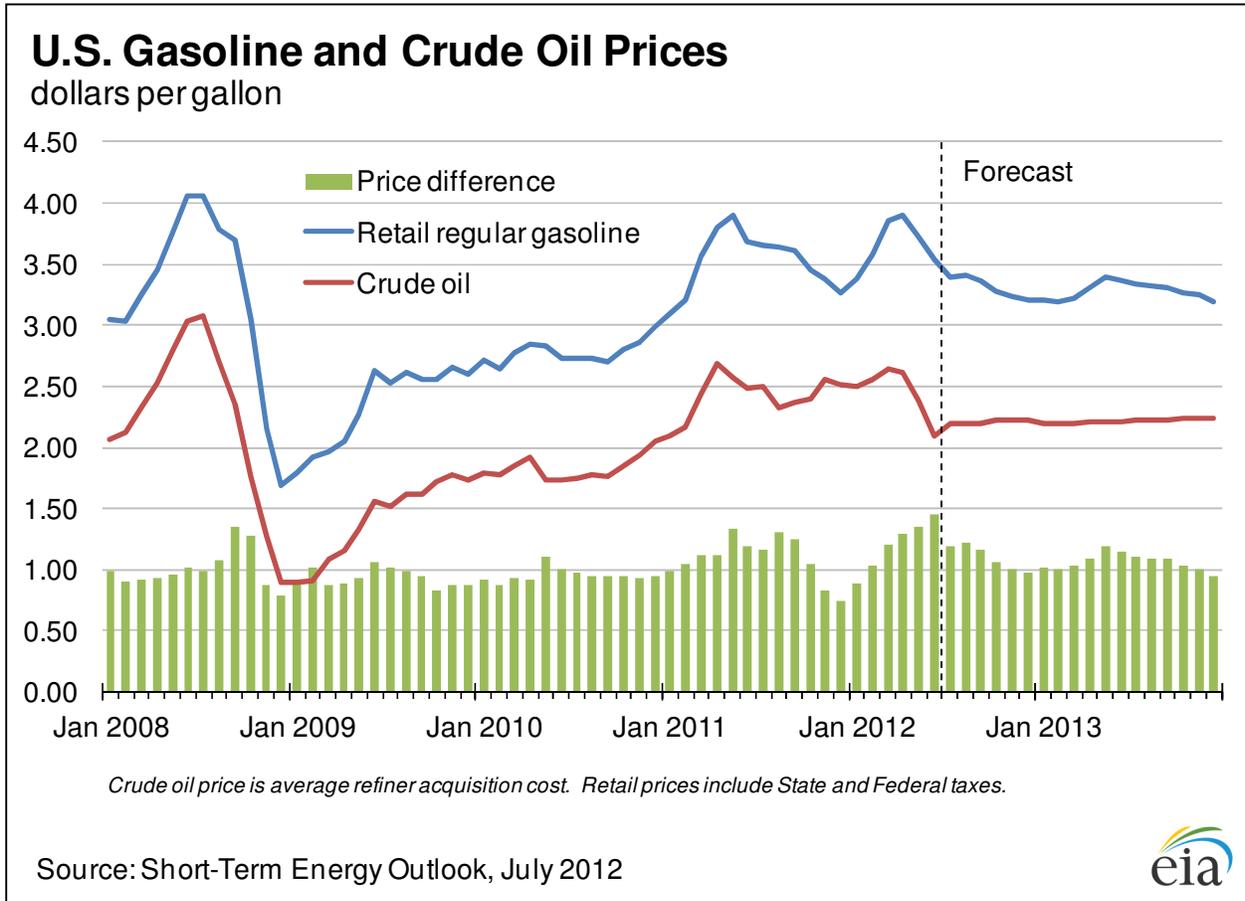
### 7.2.1 Fuel Cost Impacts on Travel

A number of factors may have caused the recent drop in VMT; the jump in gas prices is often cited as a key factor. During the period of rapid oil and gasoline price increases in the summer of 2008 experts in the toll forecasting field tried to bring some perspective to the phenomenon by formulating opinions as to how motorists would modify their driving habits in lock step with price escalations. This same exercise is currently being conducted once again as the wildly fluctuating prices take hold of the economy. This is particularly important to toll road agencies as they attempt to plan for the future. In this section, we will take a look at historical and forecasted gasoline prices, our view of the motorists' perception of the fluctuating prices, historical traffic data in the face of such fluctuations and finally what the future may hold for motorists and toll road operators.

Figure 17 presents the historical and projected gasoline and crude prices from the US Energy

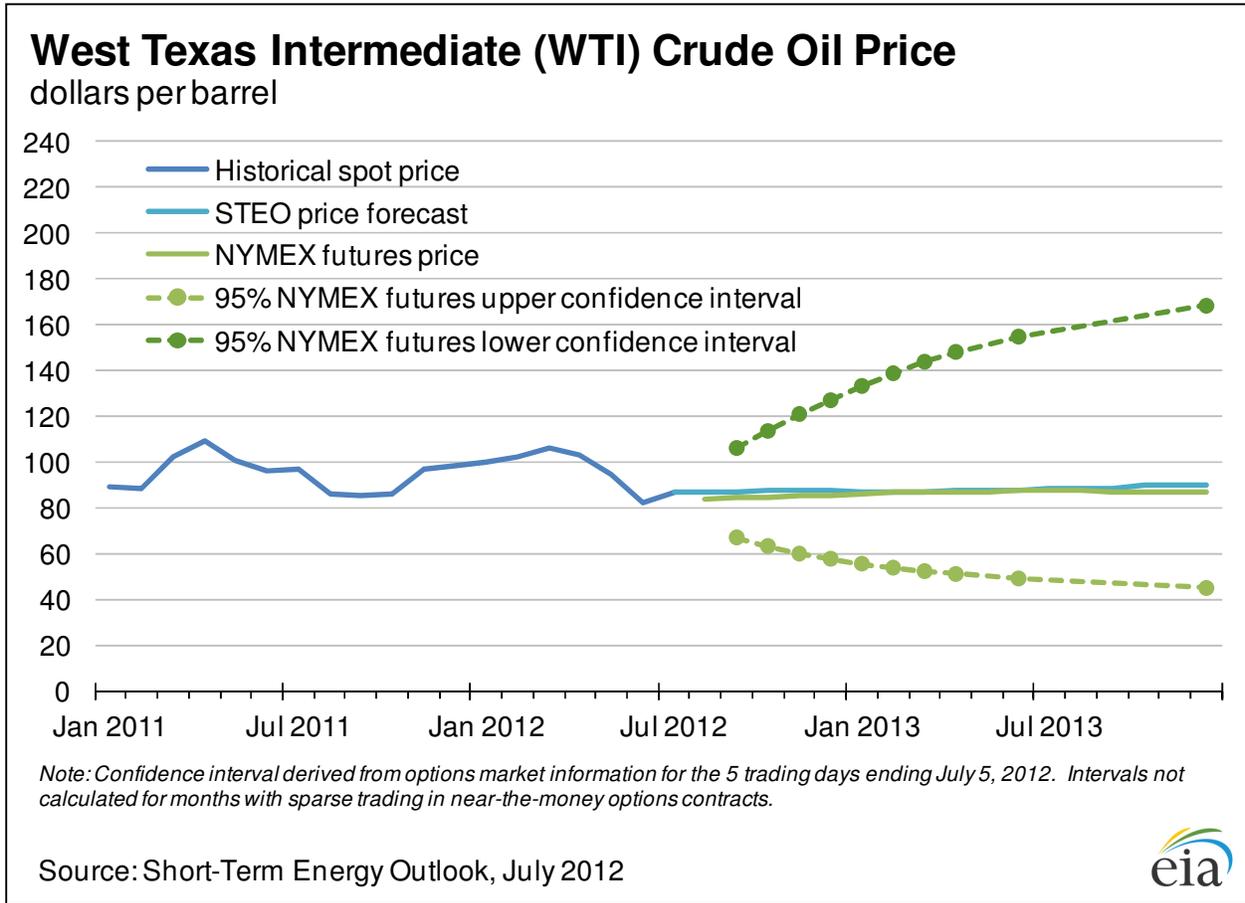
Information Administration (EIA). The graph illustrates the peaking of gasoline prices in the summer of 2008, the precipitous drop in late 2008, and the subsequent rise to another price spike in May 2011. Prices declined by throughout the summer and fall of 2011, reaching a low point in December 2011, followed by a sharp increase in April 2012. In recent months, prices have dropped again. In their July 2012 report, the U.S. Energy Information Administration projects prices to continue declining to about \$3.25 in early 2013, peaking again in May 2013 at about \$3.40, followed by a gradual decline, keeping in line with the typical seasonal fluctuations, but not reaching as high as the recent price spikes.

**Figure 17: Historical and Projected US Gasoline and Crude Oil Prices, EIA**



This relatively static forecast of future oil and gas prices may be reassuring, however, what this graph does not show is the level of uncertainty in these projections. Figure 18 presents the projection of West Texas Intermediate Crude Oil Price. The base projection is obviously similar to that of Figure 17, but it is the possible range of this price that is disconcerting. Based on the options markets the 95 percent confidence interval for WTI is between 92 percent more to 50 percent less than current estimates for January 2013. With a wide range of possible future prices of oil and gasoline, projecting traffic volumes has become an increasingly difficult task.

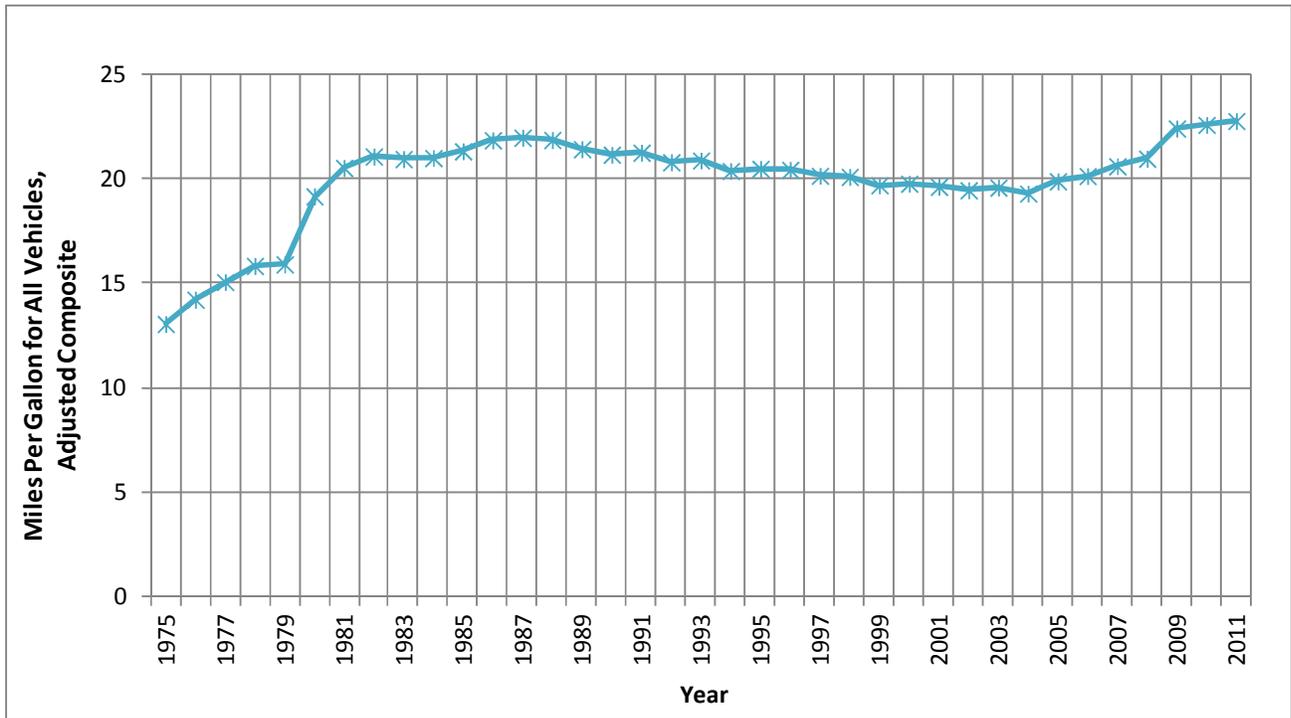
**Figure 18: Historical and Projected Crude Oil Prices with Confidence Range, EIA**



Another consideration is the decreasing reliance on oil and gasoline as the fuel for our vehicles with the increasing fuel efficiency of vehicles, as shown in Figure 19. The sharp increase in fuel efficiency in the late 1970s was caused by the oil crisis and the trend toward buying smaller, more fuel-efficient vehicles. A gradual decline in average MPG from 1987 through 2004 occurred as larger vehicles and SUVs became more popular. From 2005 through today that trend was again turned around, and today vehicles are more fuel-efficient than ever. This means that, generally speaking, gas prices today do not have as large an effect on drivers as it did ten years ago.

Also to consider in this discussion is the emergence and growth of hybrid and electric vehicles in the marketplace. These alternate fuel vehicles, while they of course rely on some sort of fuel source, may not be so dependent on oil in the future and a wider range of energy options from natural gas, coal, nuclear and possibly renewable sources such as solar and wind. It has been estimated that electric vehicles could constitute up to 35 percent of the market by 2025. Though these predictions vary widely by source, what is important to understand is the potential for mitigation of rising oil prices by motorists.

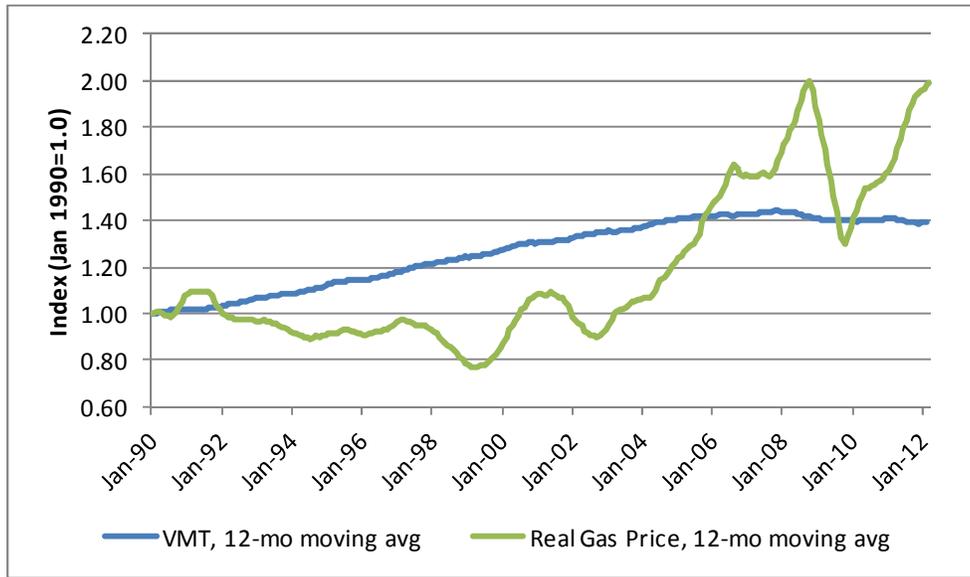
**Figure 19: Historical Fuel Efficiency, 1975-2011**



Source: epa.gov

To understand the potential impact of future gas prices on traffic we can look at historical reactions. Figure 20 presents historical VMT across the United States as compared to gasoline prices from 1990 through today. Both the VMT and real gas prices represent a 12-month moving average to remove any seasonality factors; all data are indexed to the 12 months ending January 1990. While the Great Recession began in the fall of 2008, there was still a flattening, then decline, in vehicle miles that started several years before. This may be partially attributed to rising gas prices. The continuation of the decline, post-fall 2008, would be more attributable to the economic meltdown, as gas prices dropped significantly by early 2009. Gas prices have generally increased since then, and VMT has slightly declined. Due to the recession and slow recovery period, it has been difficult to pinpoint the elasticity of travel as it relates to gas prices, however, we can roughly estimate about a 5 percent loss in VMT nationwide due to the doubling in gas prices from 2003 through today.

**Figure 20: National VMT vs. Real Gas Prices, 12-Month Moving Average, 1990-2012**



Continuously high gas prices could permanently modify the typical American's perception of our assumed right to drive our vehicles in the manner to which we are accustomed. There are, of course, a number of longer term strategies that could be undertaken to help offset the effects of oil/gasoline price peaking, including some of the following:

- Mandatory as well as voluntary increases in fuel efficiency
- Increased transportation mode choice shifts,
- Regulation of pricing
- Increased taxation
- Rationing
- Increased production and use of non-petroleum fuels.

In addition there are a number of new technologies that might help replace oil consumption in transportation thus mitigating the continued dependence on oil and the resultant price rises on gasoline. These include some of the following:

- The use of Ethanol and Biodiesel fuels,
- Coal and Biomass Gas-to-liquid (GTL)
- Natural Gas
- Advanced Vehicle Technologies which should include:
  - increasing the efficiency of the internal combustion engine,
  - continued proliferation of hybrid electric and plug-in hybrid electric vehicles,
  - continued ongoing work to improve the efficiency of conventional vehicles, and
  - continued work on the use of Hydrogen Fuel Cell Vehicles.

All of these envisioned efforts depend on the continued subtle changes in the market forces on the speculation of futures related to oil prices; gradual, less dramatic rises in the price of oil crude per barrel; already anticipated resources which dictate supply and demand, and finally, the mitigation of all the natural forces of weather and other "acts of God" on the availability of crude oil on which to run our economic engines. What is not envisioned, and cannot be

sustained for a very long period of time, is that nothing is done to mitigate our oil dependency while waiting for one or more of the changes mentioned above to become anything more than a “subtle change” and enter the realm of dramatic, unavoidable or unanticipated.

What is equally certain is that the future continues to be unknown, and that over the next few years increases in oil prices caused by disruptions to supply and demand, natural disaster or artificially speculative market forces, will not only change our driving behavior, but ultimately become a very significant challenge to an increasingly global economy. The measurement of how dramatically each rise in the price per barrel of oil makes on travel beyond the currently-known relationships is, of course, related to the specifics of individual markets.

### **7.2.2 Discretionary Travel, Telecommuting and the Internet**

The advent and widespread usage of high-speed internet over the past fifteen years has brought about a whole new information age whereby many people now use it as the main tool for the retrieval and exchange of information, social communication, entertainment, and the purchase of goods and services. In theory, increased internet usage makes some vehicle trips unnecessary. According to the Federal Communications Commission (FCC), the share of U.S. households with broadband internet increased from 4 percent in 2000 to 64 percent in October 2009. According to Nielsen Online, Americans currently spend an average of nearly 60 hours per month on the internet or about two hours per day. A 2000 study by the Stanford Institute for the Quantitative Study of Society (SIQSS) included a survey of more than 4,000 adults nationwide, which sought to evaluate how the internet has affected society. This study revealed that with more time spent online, there is a decrease in social contact, time spent commuting, and time spent shopping. More recent studies indicate that people are often spending more time communicating with friends online or through text messaging rather than driving to see them (see Figure 23 on page 42). These studies suggest that increases in internet speed and usage have likely caused a decrease in discretionary travel.

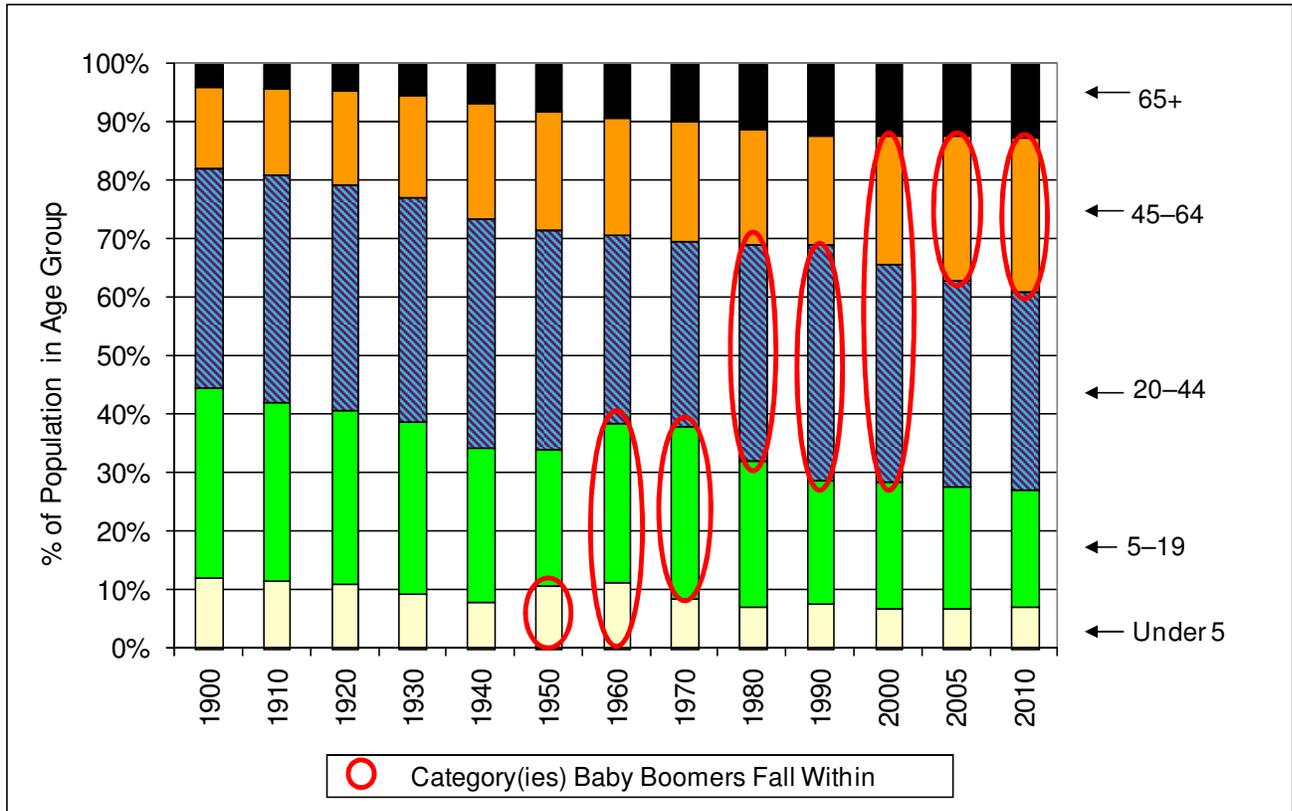
An increase in telecommuting may have also caused a small decrease in national VMT. Individuals who work from home save on the time and expense of commuting. With the widespread availability of cell phones, high-speed internet service, and laptop computers, it has become increasingly easier for work in certain employment sectors, e.g. sales, management, professional services, and information technology, to be conducted from home. The Dieringer Research Group, Inc. in their February 2009 survey brief, *“Telework Trendlines 2009,”* found that the number of employees telecommuting at least once a month doubled from 17 million in 2001 to 34 million in 2008. Nearly 14 million workers in 2008, which constituted 9 percent of the labor force, telecommuted almost every day. The decrease in trips to the office likely had a small effect on the decline in VMT.

Technology has also made it possible to use public transportation more effectively; smartphone applications allow people to determine when the next bus or train will arrive.

### **7.2.3 Age Groups and Travel**

Changing demographics are also affecting VMT growth. Figure 21 shows how the population within each U.S. age group changed from 1900 to 2010. The post-World War II baby boom brought about a significant spike in birth rates between 1946 and 1964. However, the percentage of the population in the 20 to 44 age group, which typically produces the most VMT, has declined since 1990. At the same time, the 45 to 64 age group and the 65+ age groups have steadily increased in size.

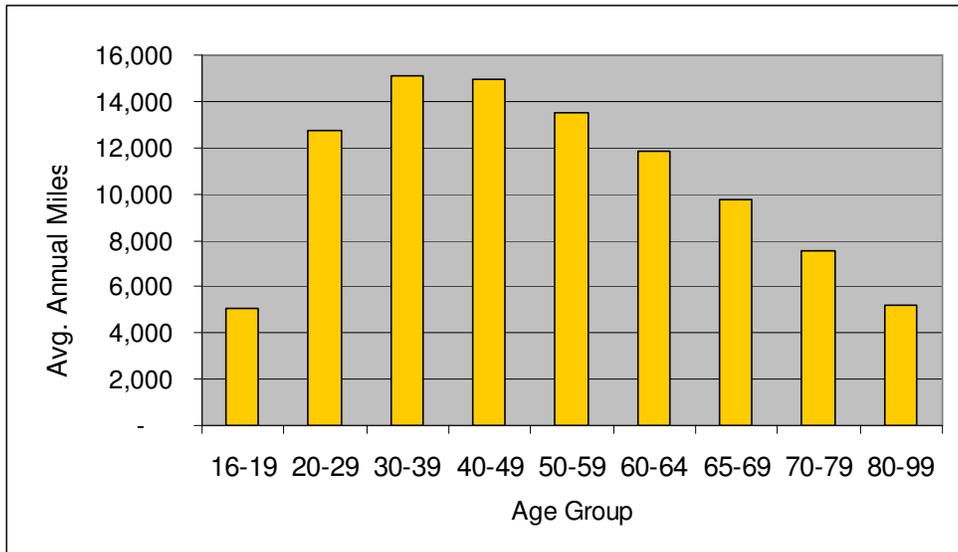
**Figure 21: US Population Distribution by Age Group**



Source: US Census

Based on previous studies, individuals tend to gradually drive less as they age, especially after the age of 40. Figure 22 summarizes the results from the 2009 National Household Travel Survey on the average VMT per person by age group. With the aging of the population as shown in the previous charts, the average VMT per person had been decreasing over the past decade. This, plus increased longevity, is expected to have a long-term effect on VMT; traffic growth is not expected to return to the rates achieved in the 1980s and 1990s.

**Figure 22: Average VMT per Person by Age Range, 2009**

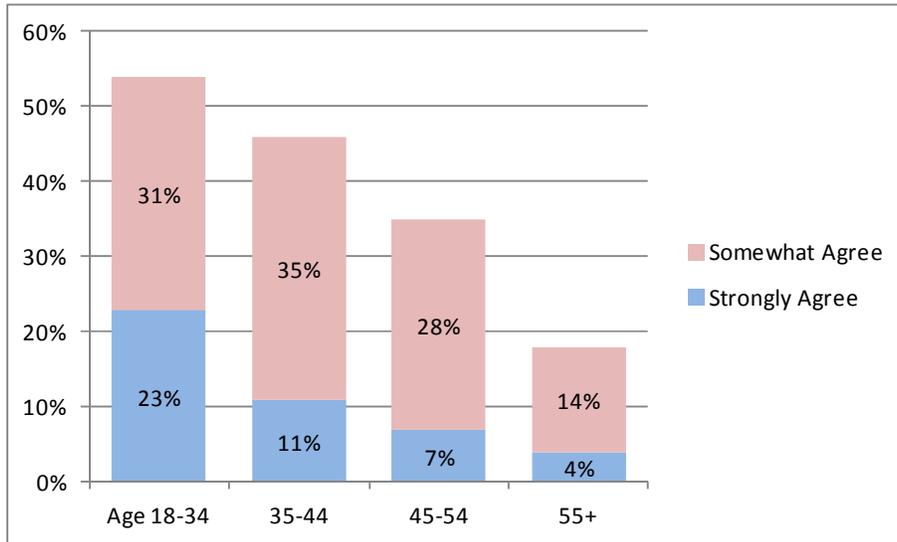


Source: 2009 National Household Travel Survey, U.S. Department of Transportation

The figure also shows that teenagers and 20-somethings (aka, the “Millennial Generation”) drive fewer miles per capita than people in their 30s, 40s, and 50s. As numerous studies have been conducted in the couple of years in an attempt to understand the decline in nationwide VMT, it has become more and more apparent that younger people – those in their teens and 20s – are also driving significantly less than their age group did in years past. According to a recent study by the University of Michigan Transportation Institute, a significantly smaller proportion young people have a driver’s license today than their counterparts in the early 1980s.

As previously stated in this section, technology has made many driving trips unnecessary, and nowhere is that more apparent than with the younger generation. Results of a 2010 survey conducted by KRC Research for Zipcar (see Figure 23) show that nearly a quarter of people age 34 and under strongly agree with the statement “With access to social networking sites such as Facebook and Twitter, text messaging and online gaming, I sometimes choose to spend time with friends online instead of driving to see them.” Another 31 percent of this age group agrees somewhat with this statement. As the age of the surveyed group increases, fewer people agree with this statement.

**Figure 23: Survey Respondents who Stated They Sometimes Choose to Spend Time with Friends Online Instead of Driving to See Them**



Source: Survey by KRC Research and Zipcar

In addition, the survey showed that Millennials have made a conscious effort to drive less and take public transportation more than older generations. A higher percentage of Millennials stated that they drive less to protect the environment, and prefer to live in walkable, smart-growth communities compared to their older counterparts.

Another demographic factor affecting VMT is female participation in the workforce. It rose dramatically from 38 percent in the mid-1960s to a maximum of about 60 percent in 2000. This was a contributor to the large growth in VMT over this time period, but because it is no longer increasing, its effects on VMT will no longer be seen.

These demographic factors, combined with higher, more volatile gas prices and the reduced necessity of travel due to internet access, imply that VMT growth in general will not return to the levels it had reached in the 1980s and 90s. However, at specific locations there may be periods of higher growth due to local development or other economic activities.

### 7.3 REVIEW OF NEW HAMPSHIRE SOCIOECONOMIC FACTORS

This section discusses historical and forecasted economic conditions for the state of New Hampshire, including population and employment trends, income, housing, tourism, commuter trends, and the age of the population.

#### 7.3.1 The New Hampshire Economy

Changes in economic growth in New Hampshire and in the New England region have largely mirrored the U.S. as a whole. The economic downturn in early 2001 impacted the state's economy more severely and for a longer duration compared to the rest of the U.S. In the years between recessions, economic output in New Hampshire increased by an average of 2 percent from 2002 to 2007. Real GSP (Gross State Product in 2005\$) decreased by 0.7 percent in 2008 and 1.9 percent in 2009. Economic activity began to recover in 2010, outpacing the New England region and the rest of the U.S. Real GSP increased by 4.3 percent in 2010 and 1.5

percent in 2011. Figure 24 compares the changes in GDP among New Hampshire, New England, and the entire U.S.

**Figure 24: Annual Percent Change in Real GDP, 1998-2011**

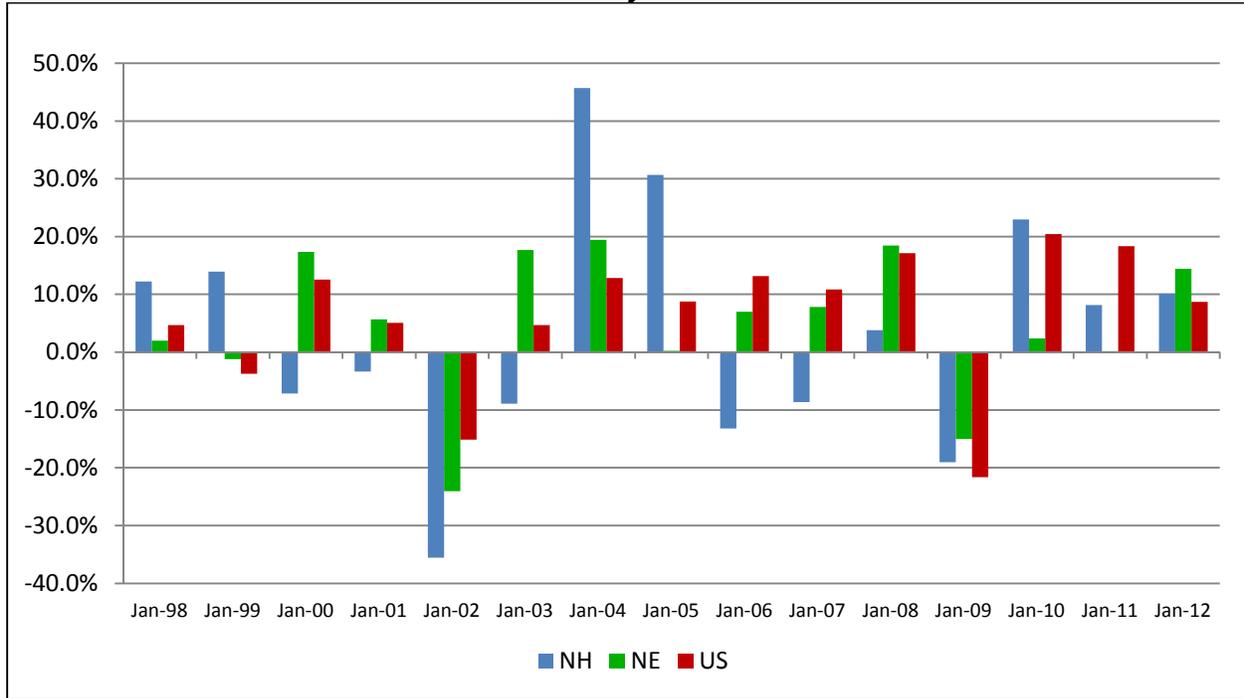


Source: U.S. Bureau of Economic Analysis, U.S. Department of Commerce

Leading sectors of New Hampshire’s economy include finance, insurance, and real estate (25 percent of real GSP), manufacturing (17 percent), wholesale and retail trade (16 percent), health care (10 percent), government (10 percent) professional and management services (9 percent), and information services (4 percent). These sectors account for over 90 percent of New Hampshire’s economy. Manufactured goods produced in New Hampshire include computer and electronic components, appliance and electrical components, paper products, fabricated metal products, machinery, chemicals and chemical products, textiles, and food products.

Because industrial production data at the state level is not readily available, manufacturing exports produced in New Hampshire and in the New England region were used as a proxy. Manufacturing activity in New Hampshire generally follows regional and national patterns as Figure 25 shows. Manufacturing exports from New Hampshire declined in 2006 and 2007 prior to the recent recession. Consequently, manufacturing employment decreased by an average annual rate of 3.2 percent from 2006 to 2011. Manufacturing exports from New Hampshire increased slightly in 2008 before decreasing by 19.0 percent during 2009. However, the value of year-to-year manufacturing exports has recovered, increasing by 23.0 percent, 8.2 percent, and 10.1 percent in 2009, 2010, and 2011, respectively. In its May 2012 forecast, the New England Economic Partnership (NEEP) forecasted that manufacturing employment is expected to increase by an annual average growth rate of 0.4 percent per year through 2016.

**Figure 25: Year-to-Year Percent Change in Manufacturing Exports, January 1998-January 2012**



Source: U.S. Federal Reserve Bank of Boston

Another important trend in recent years has been the modest in-flow migration of residents with relatively high levels of educational attainment, driving growth and employment in the hi-tech manufacturing and health care industries. In 2009, the New Hampshire Center for Public Policy studies found that hi-tech manufacturing accounted for 19 percent of wages in the state. Hi-tech manufacturing has historically been clustered in the Seacoast area (including Portsmouth) and near Dartmouth University, but is also starting to take hold in Cheshire and Hillsborough counties. Additionally, the Seacoast and Dartmouth College areas are also major centers for biomedical research. Another important sector of the state’s economy is tourism, as New Hampshire attracts visitors from neighboring states and Canada throughout the year. New Hampshire is a popular location for second homes, which can increase the level of seasonal employment.

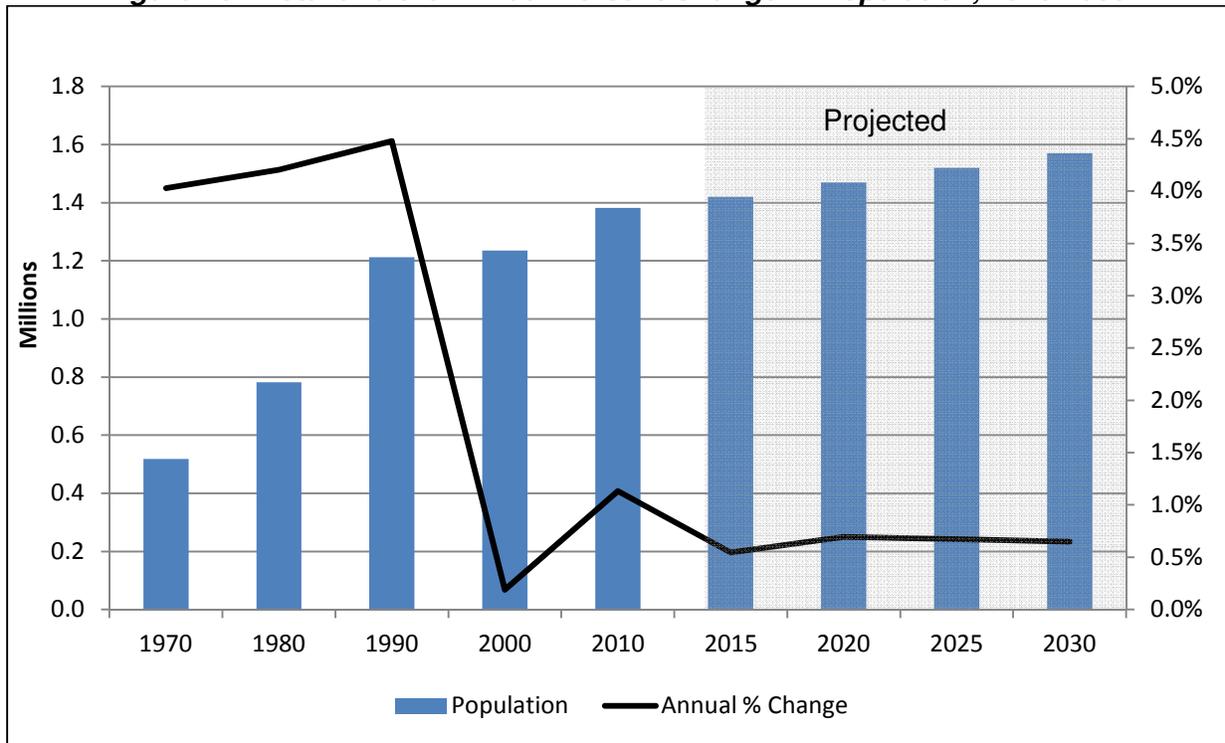
The short-term economic outlook for New Hampshire is for stronger economic growth relative to the U.S., as a whole. Forecasts for real GSP prepared by the New England Economic Partnership (NEEP) in May 2012 estimate that statewide GSP will increase by an annual average rate of 3.4 percent per annum from 2012 to 2016. Additionally, NEEP forecasts that real economic output will increase by 2.8 percent per annum for the New England region. A review of statewide trends relating to population, employment, income, commuting patterns, and tourism activity are described in greater detail in the subsequent paragraphs.

**7.3.2 Population**

From 1970 to 1990, total population in New Hampshire increased from 512,000 residents to 1,212,000, representing an average annual increase of 4.3 percent or 35,000 new residents per year. From 1990 to 2010, population increased by average of 0.1 percent per year, adding roughly 9,000 residents each year. Historically, population growth has been driven by in-state

migration to New Hampshire from neighboring states, particularly Massachusetts. During the 1990s and the 2000s, in-state migration slowed, while out-of-state migration, (e.g. to Sunbelt states) increased. Population forecasts developed by the New Hampshire Office of Energy and Planning (OEP) and Garth Fletcher estimate that the State's total population will increase to 1,570,000 by 2030, representing an annual average growth rate of 0.5 percent/annum. Based on this forecast, it is estimated that the New Hampshire will add an average of 9,400 residents each year. Historic and future projected population growth is presented in Figure 26.

**Figure 26: Total and the Annual Percent Change in Population, 1970-2030**



Sources: U.S. Census Bureau, New Hampshire Office Energy and Planning, and Garth Fletcher

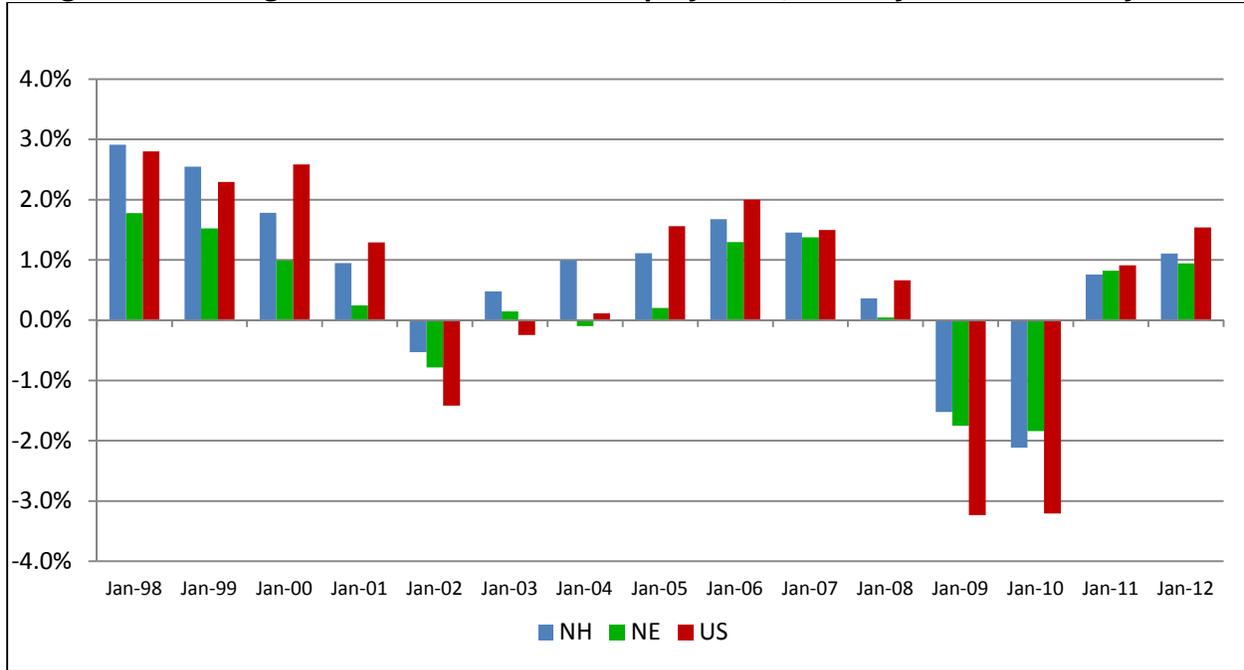
### 7.3.3 Employment

Population growth and national economic conditions have had a strong influence on employment levels in New Hampshire. Total employment increased by an average annual growth rate of 1.0 percent from 1992 to 2012. This overall growth rate factors in the impact of the early 1990s recession and recovery, the dotcom boom and bust, the events of 9/11, the 2007-09 recession, and the subsequent slow recovery period. Total statewide employment increased by approximately 151,000 jobs from 1992 to 2008, representing an average growth rate of 1.2 percent. During this period, employment growth in New Hampshire outpaced that of the New England region, which recorded an average annual growth rate of 0.7 percent. Nationally, total employment increased by annual average rate of 1.4 percent during this period.

Mirroring national conditions, total employment in New Hampshire decreased by 25,000 jobs from 2008 to 2010. Employment levels decreased at commensurate levels throughout New England with a 1.8 percent decrease in total employment in both 2008 and 2009, resulting in a reduction of roughly 260,000 jobs. Total employment in the State and in the region began to recover in 2010 with approximately 13,000 new jobs added in New Hampshire from January 2010 to May 2012. In percentage terms, total employment in the State increased by 0.8 percent

in 2010 and 1.1 percent in 2011. Figure 27 compares the year-to-year employment growth among New Hampshire, New England, and the U.S. as a whole.

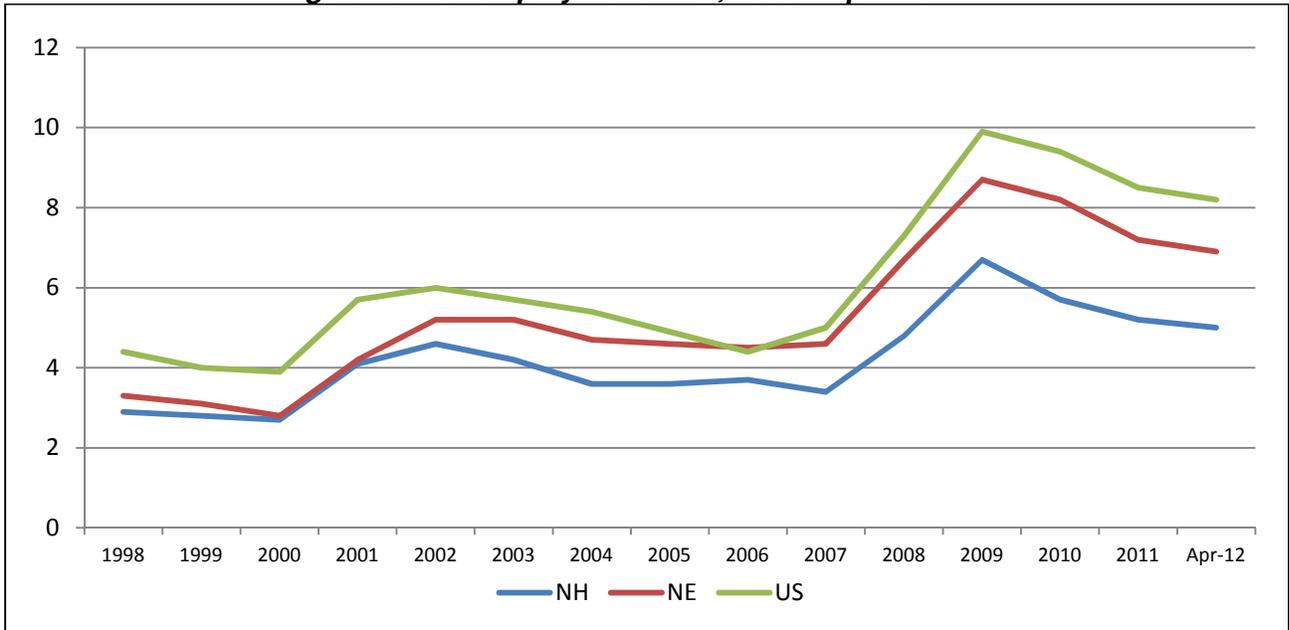
**Figure 27: Change in Total Year-to-Year Employment , January 1998 to January 2012**



Sources: Bureau of Labor Statistics, U.S. Department of Labor

Despite tracking closely with national trends, the statewide and regional unemployment rates have remained below the national average. In the months leading up to the recent recession, the unemployment rate in New Hampshire was 3.4 percent, which was below the regional rate of 4.6 percent and the national rate of 5.0 percent. In 2009, the statewide and regional unemployment rates peaked at 6.7 percent and 8.7 percent, respectively. Since then, unemployment levels in New Hampshire and in the region have decreased steadily. As of April 2012, the statewide unemployment rate was 5.0 percent, the regional rate was 6.9 percent, and the national rate was 8.2 percent. Comparisons are shown in Figure 28.

**Figure 28: Unemployment Rate, 1998 - April 2012**



Source: Bureau of Labor Statistics (BLS), U.S. Department of Labor

In 2011, the trade, transportation, and utility sectors accounted for 21 percent of total employment in the State. The next largest sectors for employment were health and education (18 percent of total employment), government (15 percent), professional and management services (11 percent), and manufacturing (11 percent). Although comprising a relatively small percentage of total employment, the construction sector was especially impacted by the recent recession. After declining by an average annual rate of 5.7 percent from 2006 to 2011, construction employment is expected to rebound due to a forecasted increase in new housing permits—from 2,200 permits per year to the historical average of 6,000 permits per year. Professional and health care services are also expected to increase in the short term.

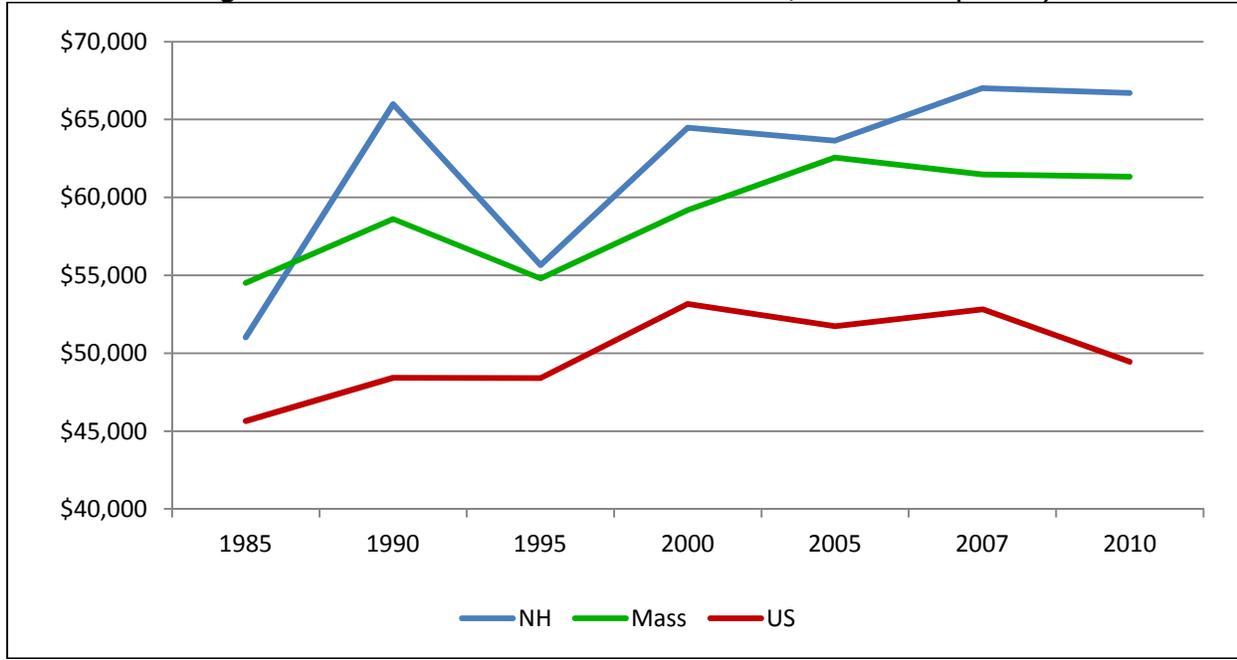
Recent projections published by the New England Economic Partnership (NEEP) in May 2012 anticipate that total employment in New Hampshire will increase by 1.6 percent annum from 2012 to 2016. Regionally, NEEP forecasts that employment will increase by 1.2 percent per year during this period. The Economic and Labor Market Information Bureau within the New Hampshire Employment Security (NHES) office predicts that employment growth will be concentrated in the service sectors. Professional, scientific and technical services, health care services, educational services, and wholesale trade are expected to increase during forecast period. Outside of the services sector, the construction is expected to rebound with an increase of 4,200 jobs. However, manufacturing employment is expected to decrease by roughly 4,000 jobs.

### 7.3.4 Income

New Hampshire consistently ranks relatively high in the United States in terms of income. In 2010, New Hampshire ranked first with a median household income with \$66,707. In real terms, median household income increased by an average annual rate of 1.1 percent from 1985 to 2010. This growth rate takes into account the decline in real household income at the state level during the mid-1990s as well as national economic trends. The annual change in median household income in New Hampshire exceeded neighboring Massachusetts (0.5

percent/annum) and the United States as a whole (0.3 percent/annum) during this period. Real household income has declined in New Hampshire since the onset of the recent recession. Nationally, real median household income has decreased steadily since 2000. Figure 29 compares New Hampshire real median household income to Massachusetts and the entire U.S.

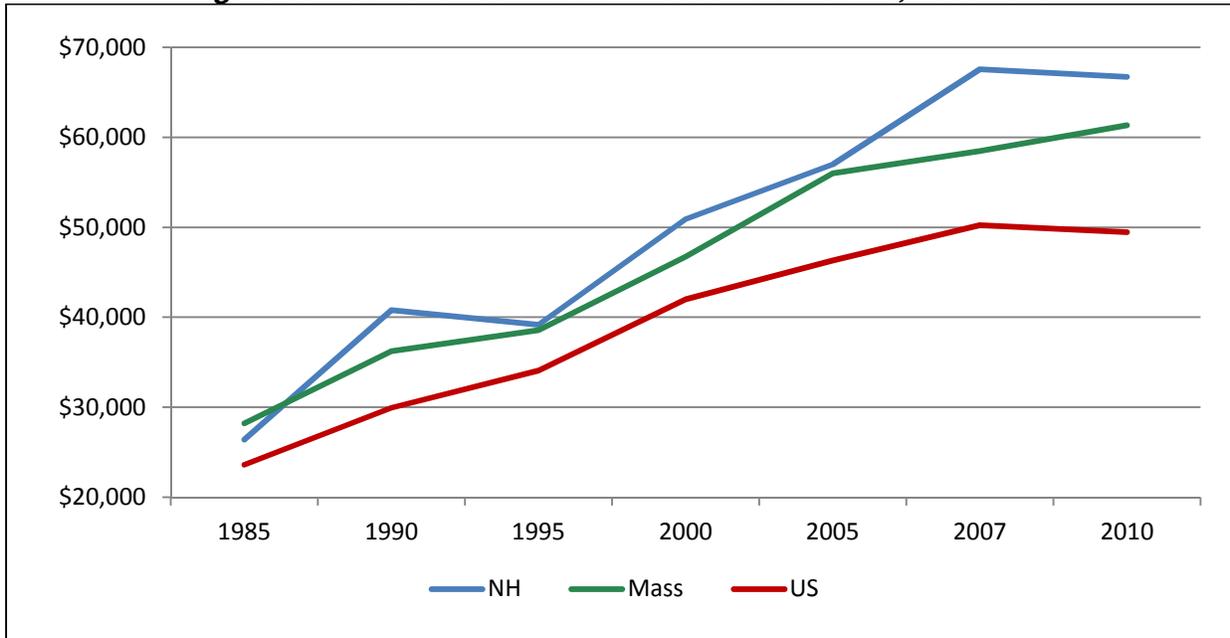
**Figure 29: Real Median Household Income, 1985-2010 (2010\$)**



Source: U.S. Census Bureau

In current year (i.e., nominal) dollars, median household income in New Hampshire increased by 3.8 percent per year from 1985 to 2010, which also exceeded that of nearby states and the national average. During this period, median household income in Massachusetts and in the U.S. increased by 3.2 percent and 3.0 percent per annum, respectively. Since the start of the recent recession, median household income in current year dollars decreased slightly in New Hampshire and in the United States, but increased somewhat in Massachusetts. Figure 30 compares New Hampshire household income in current year dollars to that of Massachusetts and the entire U.S.

**Figure 30: Current Year Median Household Income, 1985-2010**



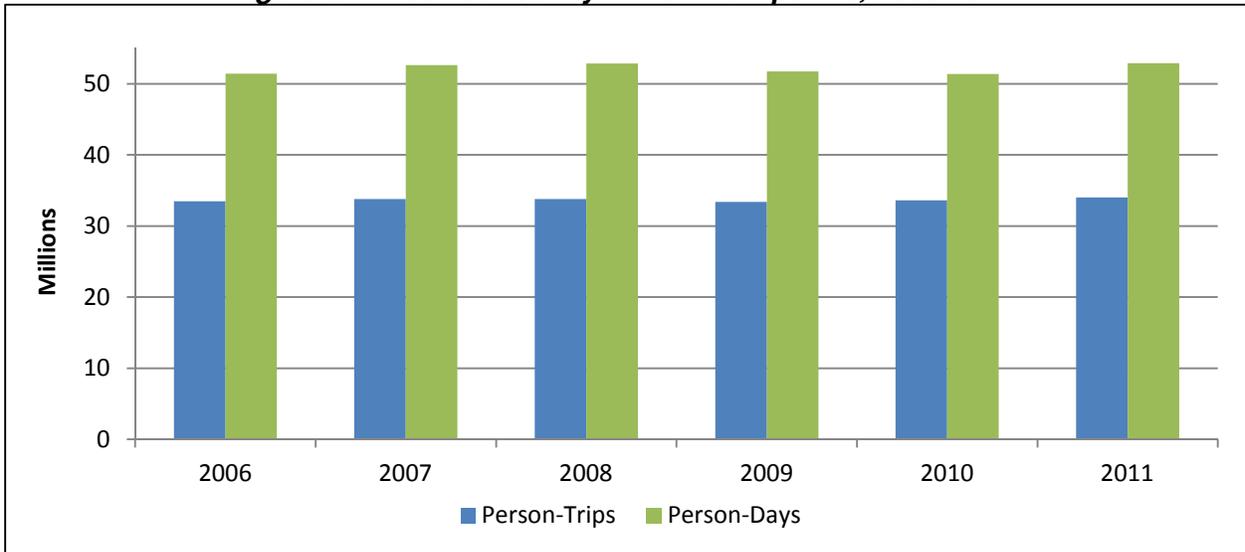
Source: U.S. Census Bureau

### 7.3.5 Travel and Tourism

According to the state's Division of Travel and Tourism Development, New Hampshire ranks as one of the top ten states with respect to the importance of tourism to the state economy. Visitors to New Hampshire were far more likely to be on a leisure trip, rather than on a business trip. Tourism is driven, in large part, by outdoor seasonal attractions, such as skiing during winter months. There are also periodic attractions, such as NASCAR races and Bike Week. Tourism levels are generally affected by prevailing economic conditions, fuel and travel costs, and weather conditions. Because New Hampshire has no sales tax, many residents from neighboring states often travel to New Hampshire for retail shopping; the newly-opened Merrimack Premium Outlets is attracting shoppers from nearby Massachusetts. The increase in the Canadian dollar relative to the US dollar also led to an increase in visitors from Canada.

The most recent recession had a moderate impact on tourist activity in New Hampshire, as seen in Figure 31. During FY09, there was a 1.2 percent decrease in the person-trips and 2.1 percent decrease in person-days. The number of person trips rebounded in FY10, while the number person-days continued to decline. This is indicative of shorter stays and reduced tourist spending as a result of weakened economic conditions. During FY11, there were 34.0 million trips, an increase of 1.2 percent from the previous year. Person-days also began to recover in FY11, increasing by 2.9 percent during the previous year. The seasonal breakdown in FY 11 was the following: summer, 39.5 percent of total visitor days; fall, 22.7 percent; winter, 18.4 percent; and spring, 19.3 percent.

**Figure 31: Tourist Activity in New Hampshire, 2006-2011**



Sources: New Hampshire Division of Travel and Tourism Development and Institute of New Hampshire Studies at the Plymouth State University

### 7.3.6 Commuting Trends

The Bedford mainline toll plaza and the three ramp toll plazas are located in Hillsborough County, while the Hooksett toll plazas are located in Merrimack County. The Hampton Main and Hampton Ramp toll plazas are located in Rockingham County, while the Dover and Rochester toll plazas are located in Strafford County. These areas have experienced a noticeable change in commuting trends, as shown in Table 10. Average commuting time in New Hampshire increased from 21.5 minutes in 1990 to 25.5 minutes in 2010. At the county level, there was a marked increase in average commuting time in most New Hampshire counties. From 1990 to 2000, there was also marked increase in the percentage of commuters that drove alone, especially in Hillsborough and Rockingham counties. Statewide, the percentage of commuters that drove alone was 81 percent in 2010.

**Table 10: New Hampshire Commuting Trends by County**

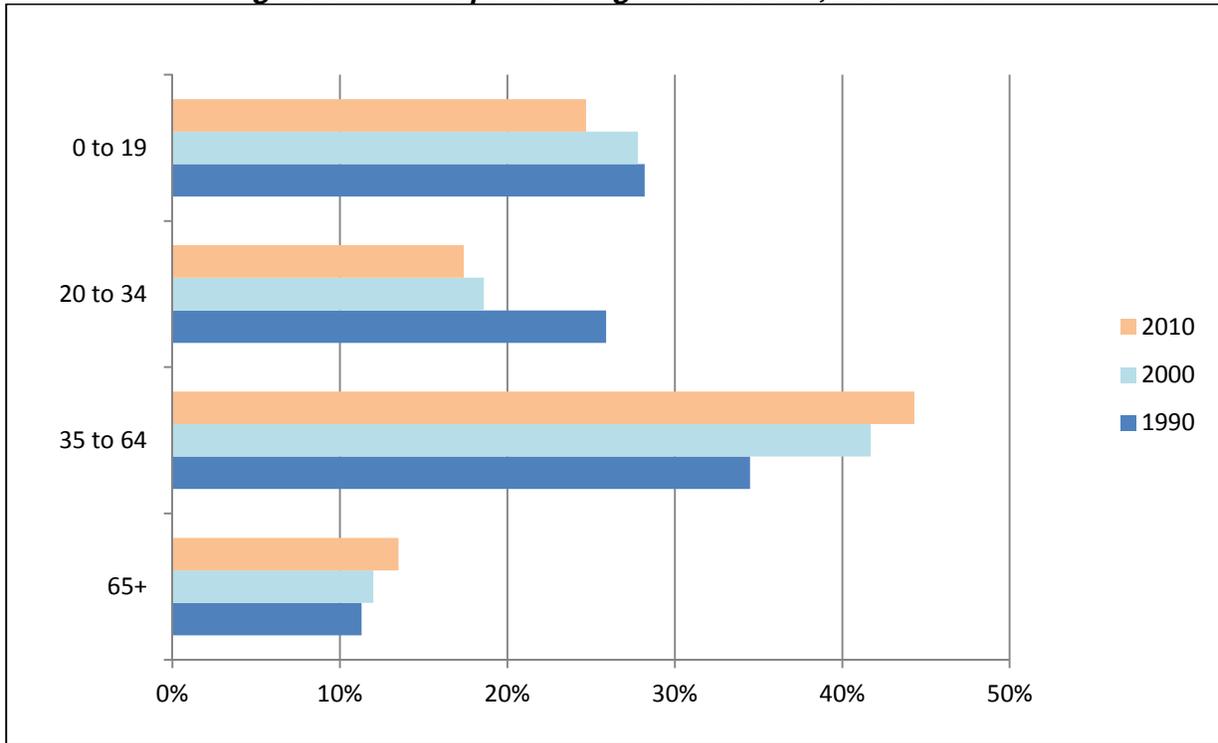
NH County	1990		2000		2010	
	% Drive Alone	Travel Time	% Drive Alone	Travel Time	% Drive Alone	Travel Time
Belknap	80	20.5	80	24.8	83	24.4
Carroll	77	19.6	80	26.0	81	24.9
Cheshire	80	18.1	80	22.3	77	21.4
Coos	70	14.5	80	19.3	78	22.0
Grafton	70	17.1	70	21.3	74	20.8
Hillsborough	66	22.5	83	25.5	82	25.6
Merrimack	N/A	21.5	81	24.3	83	25.0
Rockingham	67	25.5	85	28.6	81	28.8
Strafford	79	21.5	80	24.1	78	25.1
Sullivan	N/A	18.9	N/A	23.2	79	24.3
New Hampshire	N/A	21.5	81	25.3	81	25.5

Sources: U.S. Census Bureau and the New Hampshire Employment Security (NHES) office

### 7.3.7 Age of the Population

Similar to national trends, the median age of the population in New Hampshire is aging, albeit at a faster rate. In 1990, the median age in New Hampshire was 32.8 years, increasing to 37.1 years in 2000. By the 2010 Census, New Hampshire had a median age of 41.1 years, making it 4<sup>th</sup> oldest state in the U.S. behind Maine (42.7 years), Vermont (41.5 years), and West Virginia (41.3 years). Florida, which is typically associated with having a high elderly population, had a median age of 40.7 years. Figure 32 shows the proportion of New Hampshire population in each of the four main age groups for the years 1990, 2000 and 2010. The 0-19 age group has declined from 28 percent of the total population in 1990 to 25 percent in 2010. More dramatically, the 20-34 age group has decreased from 26 percent in 1990 to 17 percent in 2010. During this period, the 35-64 age group has increased from 35 percent to 44 percent and 65+ age group has increased from 11 percent to 14 percent from 1990 to 2010.

**Figure 32: NH Population Age Distribution, 1990 - 2010**



Sources: U.S. Census Bureau and the Southern New Hampshire Planning Commission

#### 7.4 HISTORICAL TRAFFIC AND ECONOMIC RECESSIONS

The recent recession in the United States lasted from December 2007 to June 2009. This recession is reflected in all transportation and economic indicators, but is seen most clearly in the number of vehicle-miles traveled (VMT) on highways. This is explicitly visible in Figure 16, (shown earlier on page 34), which shows the flattening of the VMT curve around 2005 with a significant drop in 2008. Though the recession has officially been declared over in 2009, the U.S. remains in a state of flat economic growth, which has been reflected in the flat VMT over the past three years.

Jacobs has analyzed the current economic situation as it compares to major historical recessions in the past century. The most significant declines in historical VMT during the past half-century were at three (3) points in time: during the 1970s and 1980s oil crises and in the early 1990s during the Gulf War. In 2006 and 2007, VMT remained nearly the same as late 2005 levels, peaking slightly in November 2007, and by March 2008 it began to decline. By early 2009 traffic was 2.3 percent below the previous year's, and by late summer of 2009 some improvement was seen; September 2009 numbers were down just 0.9 percent from the previous year. As stated previously, some of this improvement may be due to the large reduction in gas prices from the summer of 2008 to the summer of 2009. The year-over-year VMT continued to decline until October 2010, with slight increases thereafter through May 2011. Since then, VMT has begun another slow decline. The low levels of VMT in April 2012 have not been seen since 2004.

December 2007 officially marked the beginning of the most recent economic recession, herein

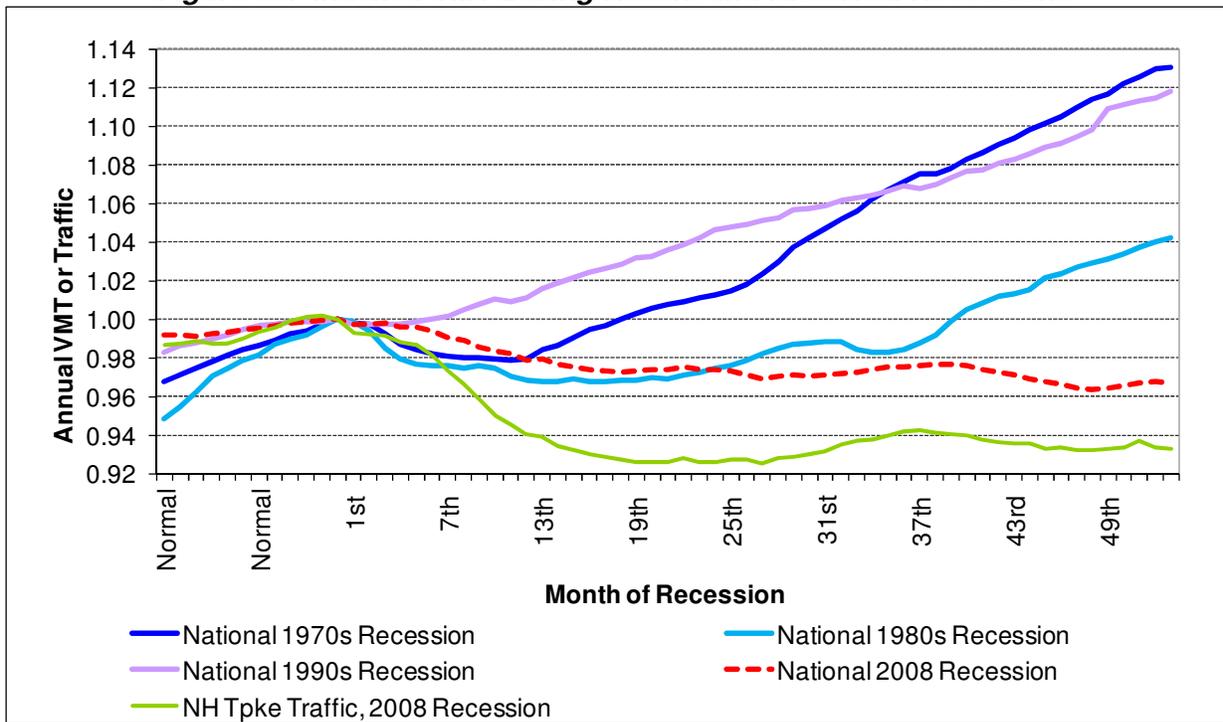
referred to as the “2008 recession”. The 2008 recession VMT is illustrated as the dashed trend line in Figure 33 and Figure 34, which was indexed from November 2007. The New Hampshire monthly transactions, based on an average of the previous twelve months to remove seasonality, have also been indexed to November 2007; these are represented by the thin green line in the charts. New Hampshire transactions have historically followed national VMT trends, however, due to the overlap of the October 2007 toll increase and the onset of the recent economic recession, the graphs illustrate that New Hampshire has seen a deeper dive in Turnpike traffic than the national VMT trends over the first year or so after the toll increase. After this point, NH transactions followed national VMT trends.

### 7.4.1 Comparative Recession Analysis

Jacobs reviewed traffic characteristics exhibited during past economic recessions to the most recent recession on a national level. The purpose of these comparisons is to develop additional guidance in forecasting future traffic growth trends as the economy improves. We have selected the recessions of the 1970s, 1980s and 1990s for comparison purposes. Other recessions like that of 2001/2002 were much smaller in duration and magnitude than the current recession and were not included in the analysis. The three (3) recessionary periods were indexed based on their respective peak points so that they could be compared against the VMT during and after the most recent recession.

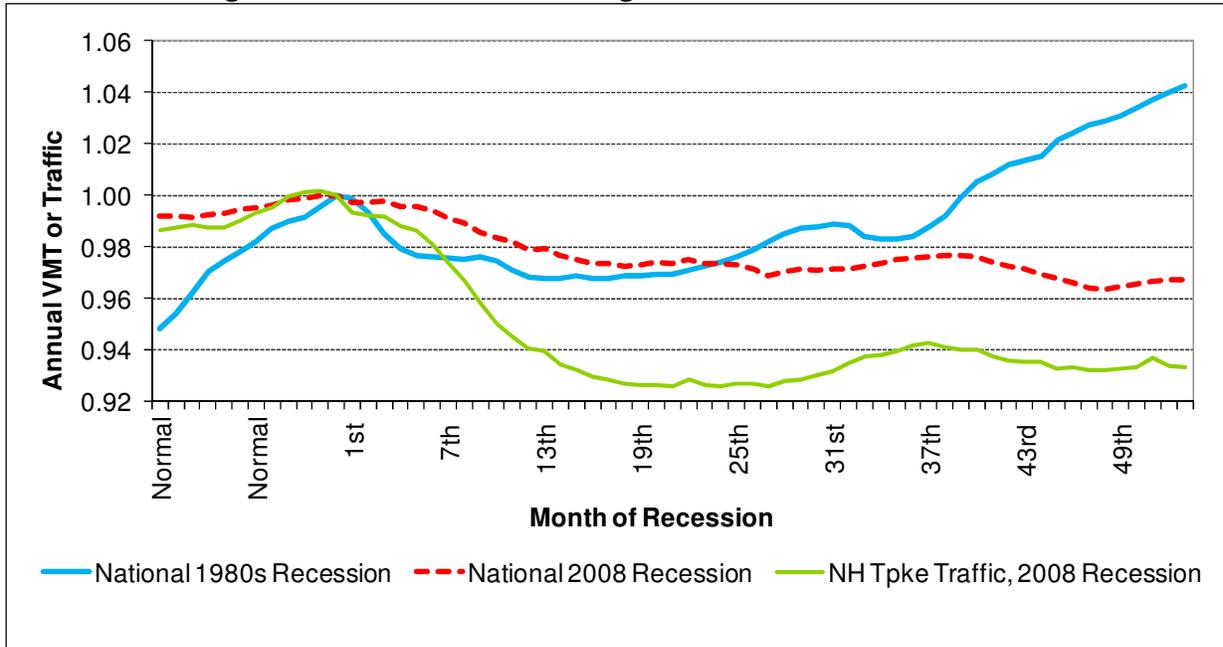
Figure 33 is a plot of traffic indexed to the first month of the four most recent significant national recessions. National traffic is based on VMT at the national level. The trend of the recent recession most closely matches that of the 1980’s recession.

**Figure 33: Indexed VMT During Recent and Historical Recessions**



Examining traffic trends from the early 1980s recession, shown in Figure 34, it can be seen that traffic in the 1980s began its final recovery after about 36 months. The period of recent economic weakness (2008 recession), represented by the dotted line, indicates a significantly longer recovery period for VMT than during the early 1980s recession, as it has been more than 53 months without apparent signs of recovery.

**Figure 34: Indexed VMT During 2008 and 1980s Recessions**



**7.4.2 NH Forecasted Traffic and Its Relationship to Economic Recessions**

There is still a great deal of uncertainty in the direction that the current economy is heading. While almost three years ‘officially’ out of the recession, the economy continues to lag expectations, with recent continual downgrading of expected GDP growth in the near term. In fact, in a consensus of economic opinions from *Blue Chip Economic Indicators*, a clearinghouse of over 50 economic forecasting entities, it is now anticipated that the GDP growth for 2012 to be 2.1 percent and for 2013 to be 2.4 percent, lower than what had been forecasted during the previous several months. Additionally, unemployment rates continue to come in at or over those projected by a majority of economists, with little to no betterment forecast for the remainder of 2012 or into 2013.

Concerning VMT, examining traffic trends during and after the 1970’s, 1980’s, and 1990’s recessions, it can be seen that traffic began its final recovery between 20 and 36 months after the beginning of each respective recession. The current period of recent economic weakness (the 2008 recession), indicates that even after more than 50 months, that there still has been no turnaround to positive VMT growth. In fact, current VMT levels are at the same level as in 2004.

Therefore, while the economy is, by definition, in recovery, it is important to understand the slowness of this recovery and its impact on traffic. This continued recovery has been so-far jobless, with slow GDP growth, and with very delayed VMT growth.

## **8 TRANSPORTATION PROJECTS RELATIVE TO THE NH TURNPIKE SYSTEM**

This section identifies the existing feeder and competitive (diversionary) roads to the New Hampshire Turnpike System and includes future transportation projects slated for New Hampshire that may affect traffic on the System.

### **8.1 FEEDER ROADS**

Several roadways direct traffic, or feed, into the Turnpike System. The classification of these roadways varies from interstate highways to arterials and collectors. Some of the feeder roads to the Central Turnpike are:

- US Route 3 from Massachusetts
- I-93
- I-293
- I-89
- NH Route 101A
- NH Route 130
- NH Route 111
- Somerset Parkway
- Industrial Drive
- Continental Boulevard
- Bedford Road
- East Dunstable Road
- Manchester Airport Access Road (Raymond Wieczorek Drive)

For the Blue Star Highway, some of the feeder roads are:

- I-95 from Massachusetts
- I-95 from Maine
- NH Route 107
- NH Route 101
- NH Route 33
- Spaulding Turnpike
- Market Street

For the Spaulding Turnpike, some of the feeder roads are:

- I-95, the Blue Star Highway
- US Route 4
- NH Route 108
- NH Route 55
- NH Route 125
- US Route 202
- NH Route 11

### **8.2 COMPETITIVE ROADS**

Several roadways compete with the Turnpike System, varying from arterials to collectors. We identified the following parallel routes as the most likely free alternatives for each New Hampshire Turnpike segment:

- Central Turnpike – US Route 3 / NH 3A
- Spaulding Turnpike – Dover Point Rd / NH 9 / NH 108
- Blue Star Turnpike – US Route 1

### 8.2.1 Central Turnpike Parallel Routes - US Route 3 and NH 3A

US Route 3 and NH 3A are parallel routes to the Central Turnpike (see Figure 35). From Nashua, US Route 3 is located west of the Merrimack River until it crosses the river via the Queen City Bridge in Manchester. US Route 3 then continues north along the east side of the river, cutting through downtown Manchester until the route crosses the river again in Concord to run through downtown Concord. NH 3A follows the Merrimack River along the eastern side from Massachusetts and joins I-293 at Exit 2 in Manchester where it crosses the river and continues north along I-293 until it diverges from I-293 at Exit 7. NH 3A then continues north along the west side of the river to Concord where it converges with US Route 3 when US Route 3 crosses back over from the Merrimack River.

The areas of congestion along US Route 3 are generally focused around Webster Street / Elm Street in downtown Manchester to the Budweiser Plant located in Merrimack (FEE Turnpike Exit 10, Merrimack Industrial). An alternative route to US Route 3 to bypass Manchester would be to take I-93 Exit 9 from the north to I-293 southbound and reconnect with US Route 3 at Exit 3.

US Route 3 intersects four times with the Central Turnpike along the route. The four turnpike exit interchanges are:

- Exit 13 – I-93 / FEE Turnpike in Concord
- Exit 4 – I-293 / FEE Turnpike in Manchester
- Exit 3 – I-293 / US Route 3 / NH 3A Interchange
- Exit 7 – FEE Turnpike / NH101A / US Route 3 split in Nashua

NH 3A intersects with the Central Turnpike along these turnpike junctions:

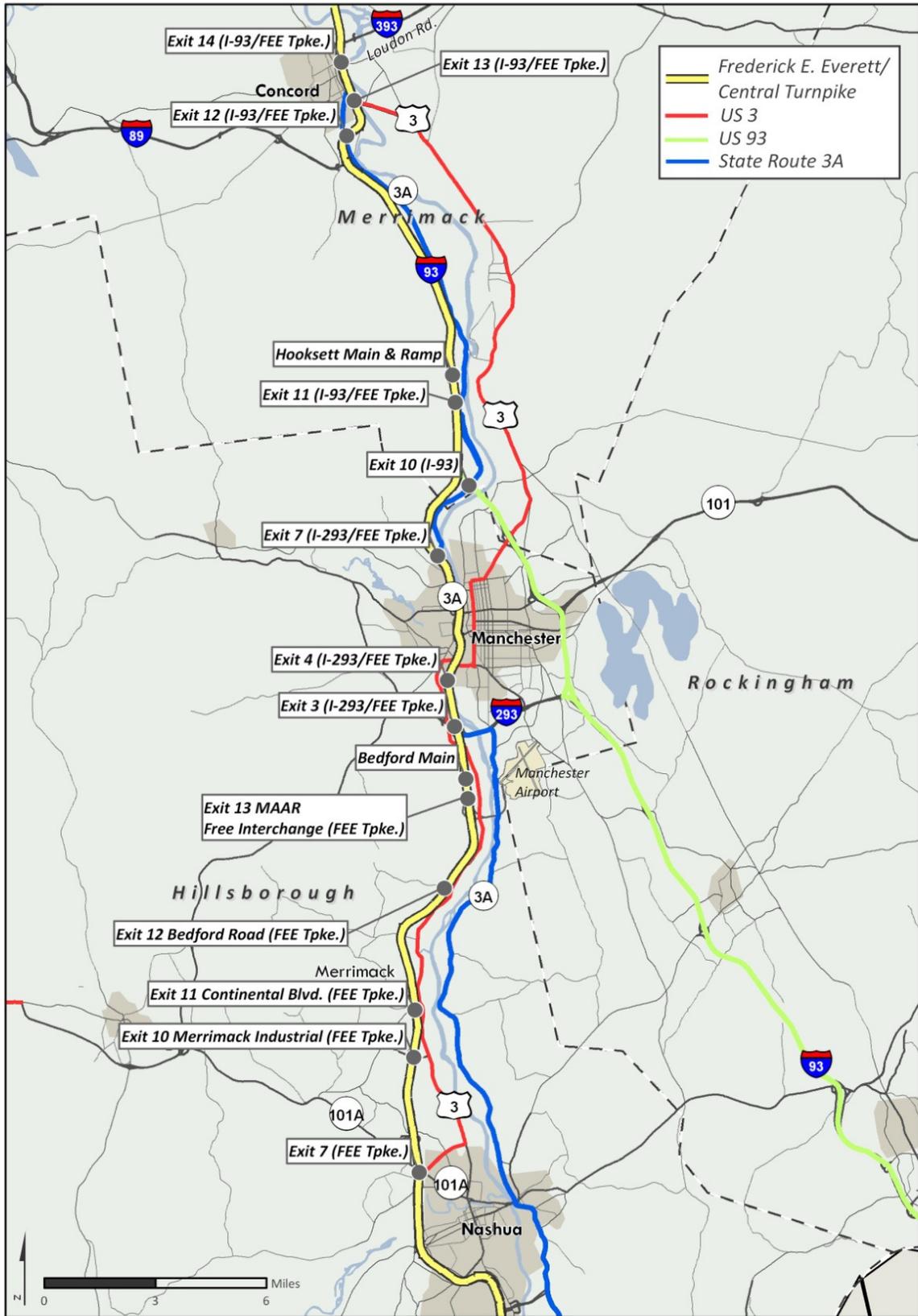
- Exit 12 – I-93 / FEE Turnpike in Concord
- Exit 11 – FEE Turnpike in Hooksett (Hooksett Ramp Toll Plaza)
- Exit 7 (NB Exit only) – I-293 / FEE Turnpike in Manchester
- Exit 3 – I-293 / US Route 3 / NH 3A Interchange

NH 3A intersects I-93 at Exit 10, which is just south of the I-93 junction with the FEE Turnpike.

US Route 3 runs parallel to the Central Turnpike from Nashua to Manchester and drivers going to or from Merrimack can use this alternate route to avoid the Merrimack ramp toll plazas (Merrimack Industrial, Exit 11 and Bedford Road). Drivers traveling on the Central Turnpike can avoid the Bedford Toll Plaza by using the recently built Manchester Airport Access Road (Raymond Wieczorek Drive, FEE Turnpike Exit 13). Drivers can easily take this exit (from both northbound and southbound directions), make a series of short turns, and re-enter the Turnpike, thus bypassing the Bedford Toll Plaza.

NH 3A runs parallel to the Central Turnpike and is an alternate route that can be taken to avoid the Hooksett Toll Plaza. The Central Turnpike is toll free between Exit 3 (FEE Turnpike junction with I-293) in Bedford and Exit 10 (FEE Turnpike junction with I-93) just north of Manchester. NH 3A connects to the Turnpike at Exit 11 in Hooksett, at Hackett Hill Road where the Hooksett Ramp Toll Plaza is situated as well as at Exit 12 in Concord.

Figure 35: Central Turnpike and Parallel Routes



A longer alternate route to the Central Turnpike would be a composite route consisting of the US Route 3 and NH 3A routes from the state line to Concord. Though toll-free, the US Route 3 / NH 3A option is a slower, more congested route than the Central Turnpike, with numerous signalized intersections.

A driver traveling between Exit 3 (FEE Turnpike at I-293) in Manchester and Exit 7 (FEE Turnpike at NH 101A / US Route 3) in the north Nashua area would take approximately 11 minutes on the Central Turnpike versus about 26 minutes on the parallel US Route 3.

In the Concord area, a driver traveling between Exit 14 (FEE Turnpike at Loudon Road) and Exit 10 (FEE Turnpike at I-93) on the Central Turnpike would take approximately 11 minutes whereas it would take about twice as long to make the trip on the parallel NH 3A (approximately 22 minutes).

Travel times runs were conducted to estimate the length of time it would take for a driver to bypass the Bedford Toll Plaza by using the Manchester Airport Access Road. Results show that this total movement would add approximately 3 to 4 minutes to the total travel time on the Central Turnpike. It takes less time to make this diversion when traveling northbound compared to traveling southbound.

### **8.2.2 Spaulding Turnpike Parallel Routes - Dover Point Rd / NH 9 / NH 108**

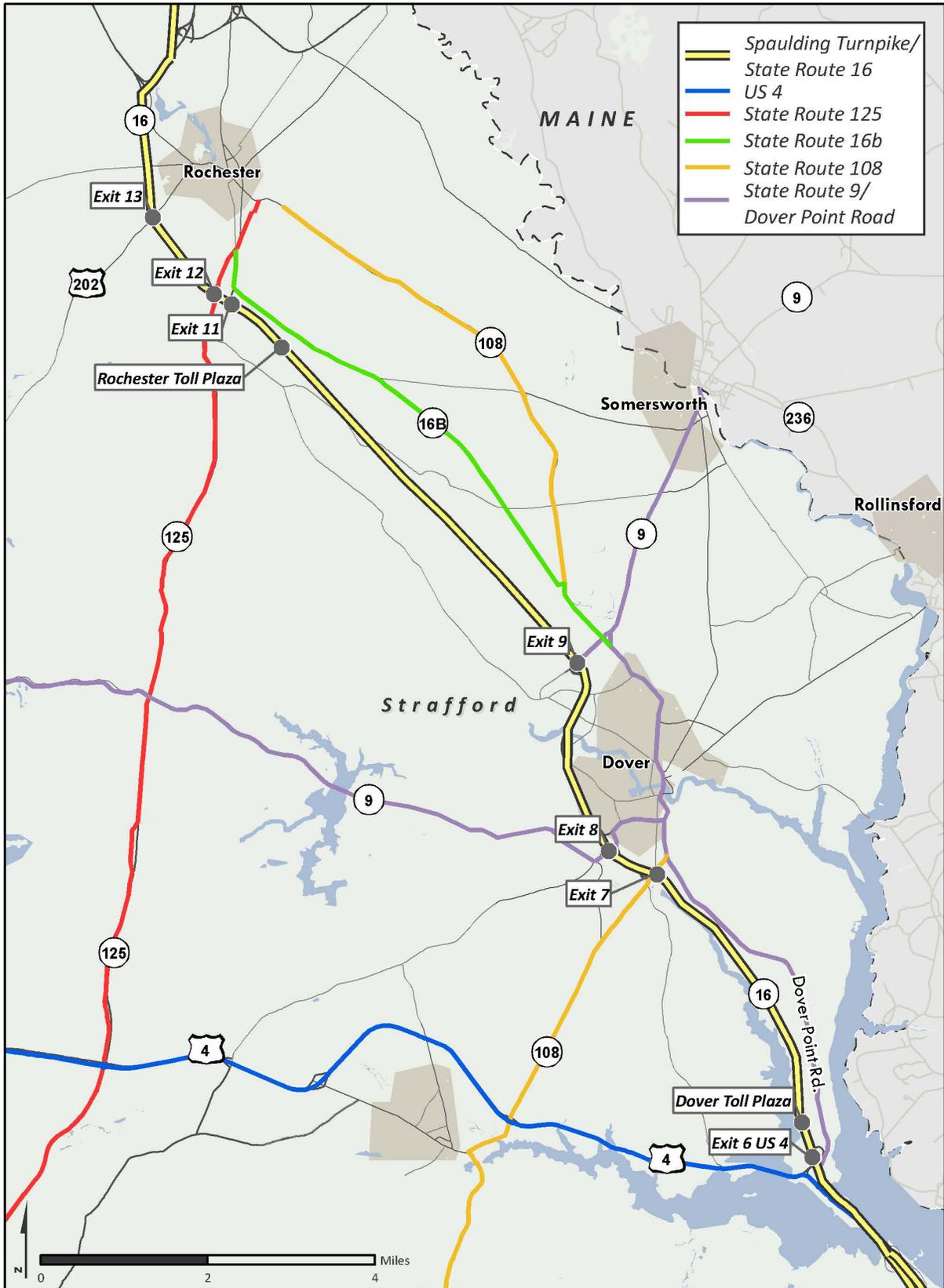
The combination of Dover Point Road, NH 9, and NH 108 make up a parallel route that can be used as an alternative to taking the Spaulding Turnpike (see Figure 36). Dover Point Road runs parallel with Spaulding Turnpike (NH 16) beginning just south of Exit 6 and ending at NH 108 in downtown Dover, where Exit 7 also intersects with NH 108. The Dover Mainline Toll Plaza is located between Exits 6 and Exit 7. The travel route path similarity to the Dover Toll Segment makes Dover Point Road a viable alternate route to bypass the toll plaza.

Travel time run comparisons in the Dover area between Exit 6 and Exit 8 showed that vehicles that use Dover Point Road would take approximately 2.5 to 3.5 minutes longer than if they used the Spaulding Turnpike (8.5 minutes on Dover Point Road versus 5 to 6 minutes on the Turnpike).

NH 108 traverses through downtown Dover and joins with NH 9, which leads to Spaulding Turnpike Exit 8. The two routes share the same travel path until they intersect with NH 16A and the Spaulding Turnpike at Exit 9. NH 108 continues to travel at a parallel path with the Rochester Toll Segment while NH 9 diverts away. NH 108, a major arterial through route in the region, runs along Rochester Hill Road and connects Dover with Rochester.

Travel time run comparisons in the Rochester area between Exit 8 and Exit 12 showed that vehicles that use the combined NH 9 / NH 108 route would take more than double the time than if they used the Spaulding Turnpike (21 to 22 minutes on NH 9 / NH 108 versus 8 to 9 minutes on the Turnpike).

Figure 36: Spaulding Turnpike and Parallel Routes



### **8.2.3 Blue Star Turnpike Parallel Route - US Route 1**

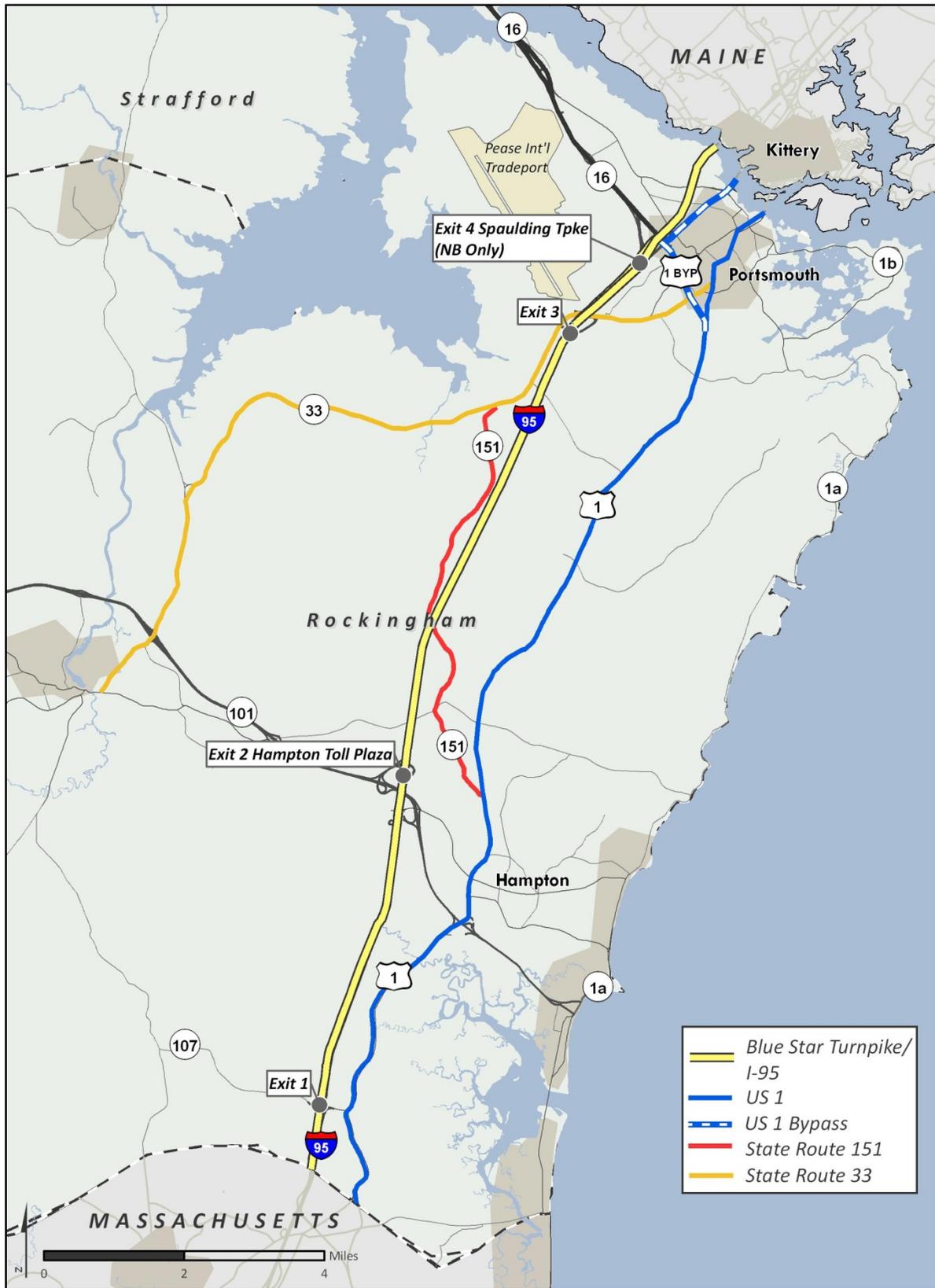
The best alternate route to the Blue Star Turnpike is US Route 1. Like US Route 3 in Merrimack, US Route 1 was the only major north-south arterial before the Turnpike was built. US Route 1 is the only accessible route that allows a bypass of the Hampton Toll Plaza (Exit 2) from Massachusetts (see Figure 37). Starting at Blue Star Turnpike Exit 1 Junction, US Route 1 runs parallel with the Turnpike and reconnects with the Blue Star and Spaulding Turnpikes at Portsmouth Circle. The next toll-free interchange access to the Blue Star Turnpike after the Hampton Main Toll Plaza is 6.9 miles, where NH 33 carries commercial traffic from the Pease International Tradeport.

Travel time runs in the Hampton area between Exit 1 (NH 107) and Exit 6 (NH 16) revealed that the use of the alternate route of US Route 1 would take more than twice as long at 24 to 30 minutes compared to the Blue Star Turnpike which would take approximately 13 minutes.

### **8.2.4 Summary of Alternate Routes**

A review of the alternate routes suggest that at all toll locations on the entire New Hampshire Turnpike System, there are often alternate routes for those choosing not to pay a toll. For longer trips, free alternative routes are not preferable, due to their slower speeds, varying degrees of congestion, and often, traffic signals. In the Merrimack area, however, there were only one to two minute variations in travel time on tolled and free routes for short, local trips. The local ramp toll facilities appear to be primarily used by long distance trips either beginning or terminating at locations in relatively close proximity to these exits.

Figure 37: Blue Star Turnpike and Parallel Routes



### 8.3 POTENTIAL FUTURE TRANSPORTATION PROJECTS

There are several potential highway projects scheduled for completion in the forecast period that may impact traffic volumes on the NH Turnpike System. These projects were drawn from the Turnpike System Priority Capital Program and the Ten-Year Improvement Plan for 2013 to 2022, as well as from regional Transportation Improvement Programs (TIPs) developed by the largest metropolitan planning organizations (MPOs) in the state. Projects from the Priority Capital Program are identified by the State Number in parentheses for clarification. Under the American Recovery and Reinvestment Act of 2009 (ARRA), New Hampshire received approximately \$129 million for highway and road projects, which is commensurate to annual federal spending for highway infrastructure in New Hampshire. ARRA funding was provided for work related to the Manchester Airport Access Road and widening I-93. Potential future highway and rail projects that can potentially impact traffic on the NH Turnpike System are summarized in the following sections.

#### 8.3.1 Central (Everett) Turnpike Region

Major transportation improvement projects programmed for funding or recently completed that could affect volumes on the Central Turnpike are:

- Manchester Airport Access Road – This new road connects the Central Turnpike with the Manchester Airport via Londonderry, and includes a new full interchange between the Central Turnpike and Route 3 in the vicinity of the Bedford Mainline Toll Plaza. This interchange is toll-free, providing a bypass around the Bedford Mainline Toll Plaza as well as toll-free access to the airport. This project has been completed and open to traffic since November 11, 2011, and the Bedford Mainline Toll Plaza, Bedford Road ramp (Exit 12), and Continental Blvd. (Exit 11) plazas are exhibiting losses in toll transactions that will continue to grow out into the future as knowledge of this toll-free option grows over the next couple of years.
- Interstate 93 Widening – This widening project will provide two additional travel lanes in each direction over the 20-mile segment between the Massachusetts State Line and Manchester, NH. When this project is completed, it is possible that traffic will increase on sections of the Central Turnpike north of Manchester and possibly decrease south of Manchester, due to congestion relief on I-93. Completion is currently expected in the year 2022 or after. The state recently received federal funding that will cover a portion of the project construction costs. However, a \$250 million shortfall to complete the I-93 construction still exists.
- Manchester Interstate 293 Exit 4 Bridge Replacements (14966) – This project, located in Manchester, includes the reconstruction of I-293 between NH 101 and Granite Street as well as the rehabilitation or replacement of five bridges. Work is expected to begin in 2013. All construction is estimated to be completed in July 2016. This work could lead to a slight decrease in traffic during construction period.
- Nashua Commuter Rail and Park & Rides – This project consists of the development of two Park & Ride facilities in Nashua for van pool, car pool, and commuter rail activities. This project is part of the development and start-up of a commuter rail service between Lowell, MA and Nashua, NH—commuter rail service currently exists between Lowell, MA and Boston, MA. This service could potentially be extended to Manchester, NH. The effect of the commuter rail and park and rides on turnpike traffic would be negligible. At this time, the location of the facilities have not been finalized, but a location on Crown Street in downtown Nashua – a couple miles east of the southern terminus of the Turnpike – is under consideration. The start and completion dates for this project are undetermined as there are

several issues to be addressed prior to further development of the project; however funding is programmed as part of the Congestion Mitigation and Air Quality (CMAQ) Improvement Program from FHWA. Additionally, in April 2012 the City of Nashua resolved to accept the available funding under the "Local Project Administration" program to support the project in the future.

- Open Road Tolling (ORT) Implementation – ORT is planned at the Hooksett and Bedford mainline toll plazas. Hooksett ORT is currently under construction and is expected to be completed in the fall of 2013 (the ORT lanes are expected to be open to traffic by June 2013), while Bedford ORT is tentatively planned for FY 15. ORT at Bedford is currently unfunded. It is estimated that traffic will not be adversely affected because the Bureau will maintain the necessary number of toll plaza lanes in each direction during construction. Once completed, the Department of Transportation believes the Turnpike will be a more attractive alternative to motorists.
- Hooksett Rest Area Redevelopment – This project proposes to redevelop the existing northbound and southbound rest areas and State liquor stores, which are located north of the Hooksett Toll Plaza into new service area facilities with new State liquor stores. The Turnpike System purchased the rest area properties from the State Liquor Commission in 2010 and 2011 with the exception of the footprint of the future expanded liquor stores. A request for qualifications (RFQ) to procure a developer/operator through a ground lease arrangement was recently issued on July 17, 2012 with the new service areas envisioned to offer major branded and/or locally recognized food concepts and anchored with new State liquor stores. Although these facilities are expected to be an attractive option for travelers on the Turnpike, the project is not expected to have an effect on traffic or toll revenue.

### **8.3.2 Blue Star Turnpike Region**

Future planned transportation improvement projects that could affect traffic volumes on the Blue Star Turnpike include:

- Hampton Falls – Hampton I-95 Bridge Replacement over Taylor River (13408B) – This project will replace the I-95 Bridge over the Taylor River near Hampton. Construction is expected to occur between November 2014 and October 2017. This project could temporarily decrease traffic on the Blue Star Turnpike as all traffic lanes would be impacted during construction.
- Route 1 and Route 1 Bypass Bridge Replacements – The Blue Star Turnpike (I-95), Route 1 Bypass and Route 1 serve as the only three crossings over the Piscataqua River between Portsmouth, NH and Kittery, ME. Route 1's Memorial Bridge was closed permanently to vehicle traffic on July 27, 2011, with a replacement to be built by July 2013. An RFP for the design of the Sarah Mildred Long Bridge replacement was recently issued; construction is targeted to begin in late 2014 and be completed in November 2017. These projects may divert traffic to the Turnpike temporarily during construction.

### **8.3.3 Spaulding Turnpike Region**

Planned transportation improvement projects that could affect traffic volumes on the Spaulding Turnpike include:

- Rochester Turnpike Widening (10620G-L) – This project involves the widening of the Spaulding Turnpike between Exit 11 and Exit 16 in Rochester along with some bridge improvements. Construction began in December 2007 and the widening between Exits 11 and 13 is already complete. The full project is anticipated to be finished in October 2013.

Construction activities have resulted in only minor traffic losses in recent years, but this traffic is expected to return once the widening is complete. In addition, a small amount of traffic growth (and therefore revenue growth) is expected due to the widening.

- Newington-Dover Turnpike Widening (11238) – This project involves the widening of the Spaulding Turnpike between Exit 3 and Exit 6. While some of the bridgework is under construction, and construction begins on the Newington section in the fall of 2012, the full widening project has not been fully funded. It is currently contemplated that a future toll increase could be used to fund the remainder of the project and keep the project on schedule. The planned completion date for the widening is in 2017. Similar to the turnpike in Rochester, minor traffic losses are expected, recovering once construction is complete, and a small amount of traffic and revenue growth is expected after the roadway is fully widened.

Nearly \$450 million in funded capital improvements that began in 2008 and extend over ten years will have a positive effect on the New Hampshire Turnpike System, in terms of customer satisfaction and safer, less-congested travel. In terms of traffic and revenue, the improvements will allow room for the growth that has been projected.

## 9 TRAFFIC AND REVENUE PROJECTIONS, FY 2013-2022

This section discusses the methodologies and assumptions used in projecting traffic and revenue for the New Hampshire Turnpike System. It presents the traffic and revenue projections for FY 2013 through 2022.

### 9.1 TOLL RATES

#### 9.1.1 Assumed Toll Rates

No toll increases have been assumed during the forecast period. Table 11 shows the cash and **E-ZPass** toll rates for cars and Class 8 trucks.

**Table 11: Toll Rates on the New Hampshire Turnpike System**

Turnpike	Toll Plaza	Car (Class 1) Tolls		5-Axle Truck (Class 8) Tolls	
		Cash	E-ZPass	Cash	E-ZPass
Central Turnpike	Hooksett Main	\$ 1.00	\$ 0.70	\$ 3.50	\$ 3.15
	Hooksett Ramp	\$ 0.50	\$ 0.35	\$ 2.50	\$ 2.25
	Bedford Main	\$ 1.00	\$ 0.70	\$ 3.50	\$ 3.15
	Bedford Road	\$ 0.50	\$ 0.35	\$ 2.50	\$ 2.25
	Exit 11	\$ 0.50	\$ 0.35	\$ 2.50	\$ 2.25
	Exit 10/Merrimack Industrial	\$ 0.50	\$ 0.35	\$ 2.50	\$ 2.25
Blue Star Turnpike	Hampton Main	\$ 2.00	\$ 1.40	\$ 5.50	\$ 4.95
	Hampton Side	\$ 0.75	\$ 0.53	\$ 3.00	\$ 2.70
Spaulding Turnpike	Dover Toll	\$ 0.75	\$ 0.53	\$ 3.00	\$ 2.70
	Rochester Toll	\$ 0.75	\$ 0.53	\$ 3.00	\$ 2.70

#### 9.1.2 Reasonableness of Tolls / Comparison to Other Facilities

Figure 38 compares the passenger car toll rates in cents per mile on the Blue Star, Spaulding and Central Turnpikes to other various **E-ZPass** toll roads in the northeastern U.S. Standard peak period rates are shown for each facility. A second rate is shown for facilities that offer discounted **E-ZPass**. The Blue Star Turnpike has the highest passenger car per mile toll rate of the three New Hampshire Turnpikes, but there are still seven major **E-ZPass** toll facilities that have higher toll rates. The Central Turnpike and Spaulding Turnpikes are among the toll facilities with low passenger car toll rates. The neighboring Massachusetts Turnpike indicates a lower rate, but that includes some 50 free miles for passenger cars in Western Massachusetts. It can be said that the New Hampshire Turnpike passenger car toll rates are reasonable compared to rates at other **E-ZPass** toll facilities.

**Figure 38: Passenger Car Toll Rates per Mile on Select E-ZPass Toll Facilities as of August 2012**

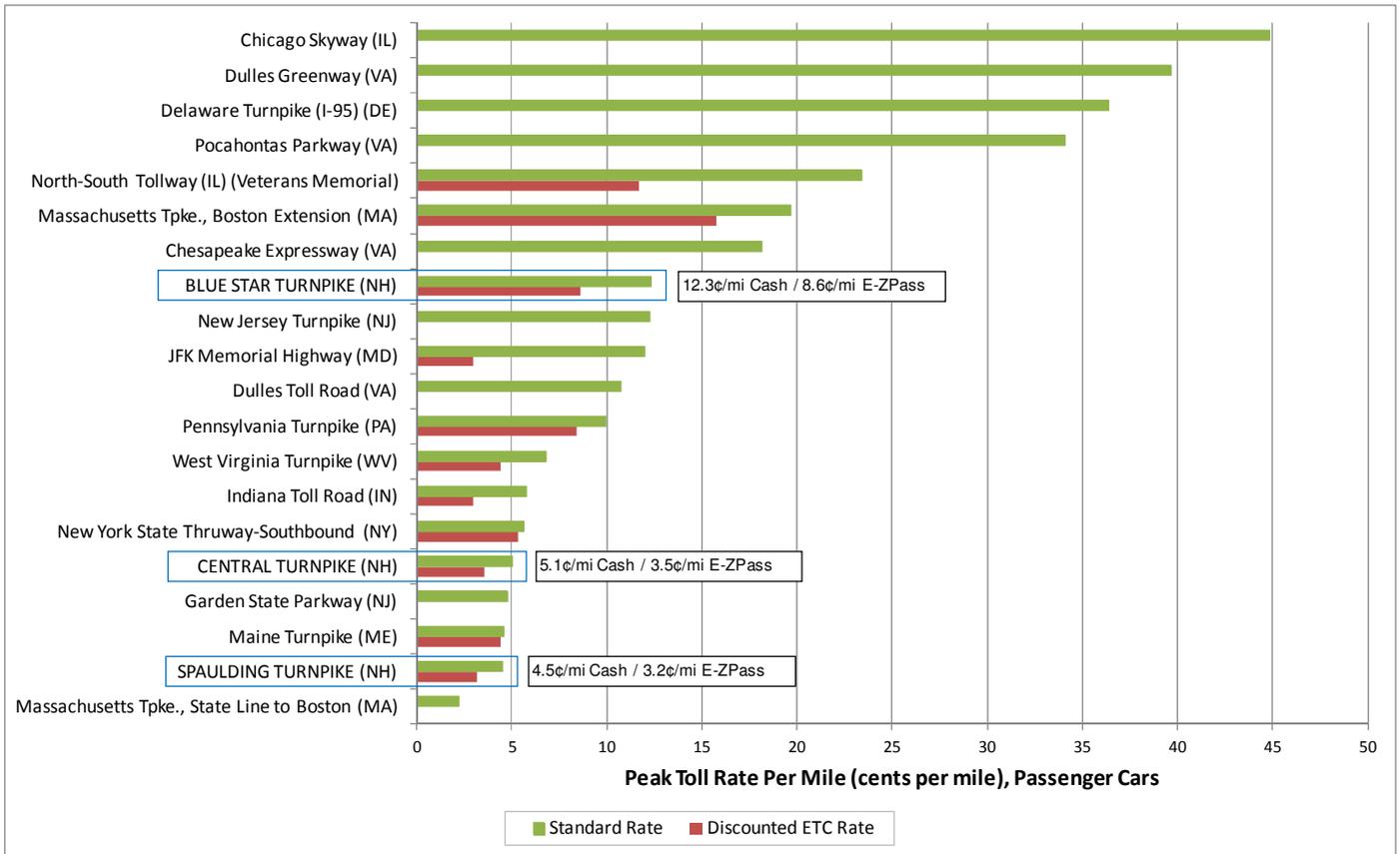
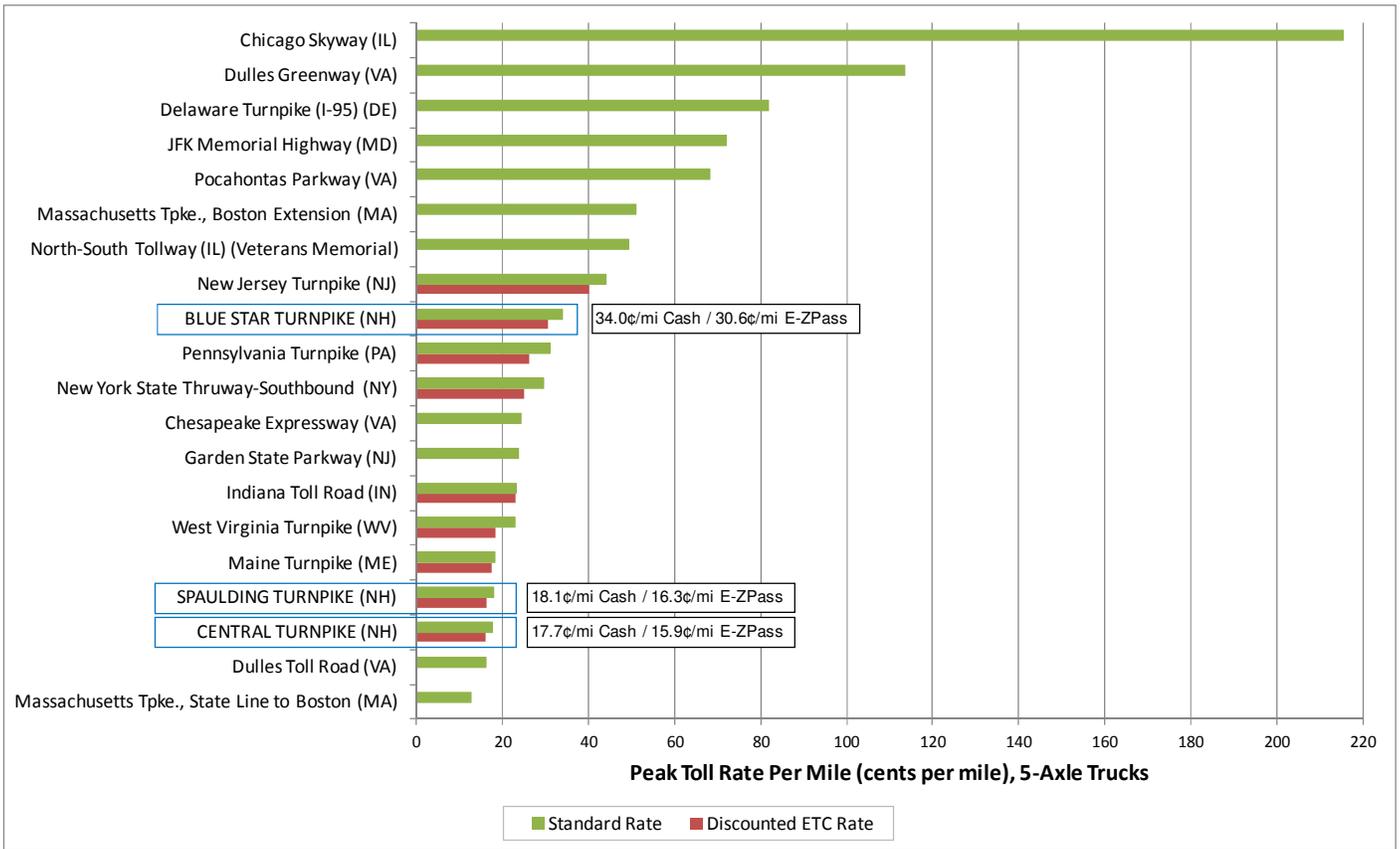


Figure 39 shows a similar comparison for 5-axle vehicles. Again, the Blue Star Turnpike has the highest toll rates of the three New Hampshire toll facilities; there are eight major **E-ZPass** toll facilities that have higher 5-axle truck toll rates. Both the Central and Spaulding Turnpikes are among the toll facilities with low commercial toll rates. It can be said that the New Hampshire Turnpike commercial vehicle toll rates are reasonable compared to other **E-ZPass** toll facilities.

**Figure 39: Commercial Vehicle Toll Rates on Select E-ZPass Toll Facilities as of August 2012**



## 9.2 METHODOLOGY USED FOR PROJECTIONS

### 9.2.1 Correlation to Economic Factors

The first step in developing the traffic and revenue projections was to develop a base of FY 2002 through FY 2012 toll transactions. Historical car toll transaction growth was then correlated to gross domestic product (GDP) and historical truck growth was correlated to increases in the U.S. total industrial production (IPI).

Future car and truck toll transactions were projected separately by applying the historical correlations to projected GDP and total IPI growth rates estimated by industry experts in the *Blue Chip Economic Forecasts*. It is expected that traffic growth throughout the forecast period will not be as high as it was from the 1990s through about 2003, due to such factors as Baby Boomers retiring, young people driving less and new technology making road travel less necessary, as discussed in Chapter 7 of this report. Therefore, some dampening was also applied to traffic growth rates over the forecast years.

### 9.2.2 E-ZPass Market Shares

**E-ZPass** market shares were then projected for each facility separately for cars and trucks, and these market shares were applied to obtain projected cash and **E-ZPass** transactions. The market share projections were based on observing the growth in **E-ZPass** market share over the past several years. A maximum market share for each facility was assumed to be reached

by FY 2018. Most of the growth in market share would be in the first few years of the forecast, with gradually less growth in market share in each subsequent year until the maximum is reached.

Additionally, as **E-ZPass** tags that are issued by the New Hampshire DOT (“Home”) are assessed a lower toll rate than other **E-ZPass** tags (“Away”), it was necessary to estimate future “Home” versus “Away” **E-ZPass** customers to calculate toll revenue correctly. In recent years, the “Home” share of **E-ZPass** trips has declined slightly, as other states such as Ohio and Rhode Island installed electronic tolling technology at their facilities and began issuing **E-ZPass** tags. We assumed that the future ratio of “Home” to “Away” transactions would stay the same as it is today, and not continue to decline. This may be a slightly conservative assumption, as a declining “Home” share means an increasing “Away” share, and “Away” **E-ZPass** traffic is not charged the discounted rate.

The one exception to this assumption is the Exit 10/Merrimack Industrial plaza. Because of the recent opening of the Merrimack Premium Outlets, these south-facing ramps are seeing an influx of new traffic from areas to the south, especially Massachusetts, which is only about ten miles away. Though about 64 percent of **E-ZPass** transactions were made by drivers with “Home” tags for the whole of FY 2012, data after the outlets opened indicates that now only about 60 percent of **E-ZPass** transactions are “Home”, likely due to an influx of shoppers from neighboring Massachusetts. Because “Home” **E-ZPass** transactions are charged \$0.35 while “Away” transactions are \$0.50, this has a small positive effect on toll revenue. The smaller share of “Home” vehicles was applied to the future year forecasts at Exit 10.

The average cash and **E-ZPass** toll rates were then applied to the projected annual cash and **E-ZPass** transactions, respectively, in order to determine total cash and **E-ZPass** toll revenues for the period FY 2013-2022.

### 9.2.3 System Changes and Developments

Some recent and future changes to the New Hampshire Turnpike System and its environs were also considered in the forecasts, including the opening of the Manchester Airport Access Road with its free interchange on the Turnpike, the opening of the Merrimack Premium Outlets, widening of the Spaulding Turnpike, and open-road tolling (ORT) at several plazas throughout the system.

The free Manchester Airport Access Road interchange on the Central Turnpike, which opened on November 11, 2011, allows some vehicles to avoid toll plazas by entering/exiting there instead. Drivers from the south entering from or exiting at this new interchange no longer pass through a toll plaza. Some drivers who formerly exited at Bedford Road (Exit 12) or Continental Boulevard (Exit 11) now exit at the new interchange to avoid the toll, and others have discovered that it is possible to avoid the Bedford Mainline toll by exiting the Turnpike, using the new ramp and a section of Route 3, and re-entering the Turnpike. Jacobs compiled weekly traffic data by plaza from the opening of the interchange through mid-June of 2012; this data shows that the traffic loss at each of the three toll plazas has been growing over time. This was expected, as more and more drivers discover that the new, free interchange exists. Jacobs compared traffic after the opening of the Airport Access Road to the previous year’s, and used a trend-line formula to estimate future losses. It was assumed that traffic losses would continue at the same rate as they have been since the Airport Access Road opened through the start of FY 2014, and then they would flatten out. Table 12 shows the resulting average daily traffic and annual revenue losses by plaza resulting from the trend-line analysis. Note that these losses

are the difference between the current state – with the Manchester Airport Access Road interchange built – and a scenario without the interchange. The annual revenue losses due to the Airport Access Road are expected to increase from \$1.6M in FY 2012 to \$3.4M in FY 2013 and \$3.9M in FY 2014. Since the interchange was only open for 233 days of FY 2012, the annual revenue loss is significantly less in FY 2012 than the following years.

**Table 12: Estimated Losses in Average Daily Toll Transactions / Annual Revenues (\$M) at Bedford/Merrimack Plazas due to Manchester Airport Access Road Interchange<sup>1</sup>**

Fiscal Year	Continental Blvd. Exit 11	Bedford Road Exit 12	Bedford Main	Total Loss in Transaction/Revs
2012 <sup>2</sup>	150 / \$0.0	1,200 / \$0.1	6,800 / \$1.5	8,150 / \$1.6
2013	700 / \$0.1	1,800 / \$0.3	8,900 / \$3.0	11,400 / \$3.4
2014-2022 <sup>3</sup>	1,100 / \$0.2	2,200 / \$0.3	10,200 / \$3.4	13,500 / \$3.9

<sup>1</sup>Compared to a “No Airport Access Road” condition

<sup>2</sup>The 2012 estimate considers that the MAAR is only opened for part of the Fiscal Year (233 days).

<sup>3</sup>FY 2014 losses shown; in following years, after this point the losses are assumed to increase minimally, at the same rate as toll transaction and revenue growth at each toll plaza (i.e., about 1.5% per year).

Some of the loss in Central Turnpike toll transactions to the Airport Access Road is being mitigated by the gains in traffic from the new outlet center. The Merrimack Premium Outlets opened on June 14, 2012 adjacent to Exit 10 of the Central Turnpike. With over 100 stores, over 5 million visitors are anticipated annually. Initial weekly data since the outlets opened reveals an average increase of 4,200 car transactions per day over last year’s traffic at the Exit 10 ramp tolls. Jacobs believes this traffic will ramp up to about 4,500 average cars per day in FY 2013 and 6,000 cars per day in FY 2014 and thereafter. For comparison, VHB, Inc. completed a traffic study for the outlets in 2007, estimating about 9,000 additional vehicles per day at Exit 10 due to the outlets. The Bedford Main and Bedford Road (Exit 12) plazas, while losing traffic due to the Manchester Airport Access Road, saw some of that traffic return after the outlets opened. At Bedford Main, it is estimated that the outlets will increase car traffic by about 950 per day in FY 2013 and 1250 per day in FY 2014. The Bedford Road (Exit 12) toll plaza’s car traffic is estimated to increase by about 350 per day in FY 2013 and 450 per day in FY 2014 due to the outlets, based on recent trends. Jacobs is also estimating some reduction in trucks from FY 2012 to FY 2013 at the Bedford/Merrimack plazas since construction at the outlets is essentially completed, and it is expected that the number of delivery vehicles to the outlets will be less than the number of large vehicles during construction.

NHDOT is currently widening the Spaulding Turnpike by one lane per direction in the Rochester area, and will, in the next year or so, also begin widening the Turnpike and Little Bay Bridges in the Dover area. Jacobs has projected small losses in traffic (0.5 to 1.5 percent) during the construction phase at the nearby toll barriers, with traffic recovery soon after the project is completed. In addition, since the reconstructed roadway will have new capacity, Jacobs has forecasted modest additional increases in traffic at each barrier of totaling 3.5 percent over two to three years after construction is completed. While this project is not fully funded under current toll rates, this is not expected to have any impact on future revenues.

Open-road tolling (ORT) was completed at the Hampton Main Plaza in June of 2010, and has been planned for two other mainline toll plazas. ORT allows **E-ZPass** customers to drive at highway speeds without stopping or slowing down through the tolling zone. Traditional tollbooths are available off to the side for those customers preferring to pay their tolls via cash. ORT lanes are scheduled to open in June 2013 at the Hooksett Barrier. At the Bedford Mainline Plaza, ORT is planned in FY 2015 though this project is currently unfunded. While with ORT there is some “leakage” (i.e., uncollected revenue from unread **E-ZPass** tags, or violations), an analysis of Hampton Main data revealed that the leakage was negligible, and that there was likely enough growth in traffic due to a better level-of-service through the plaza to cover any leakage loss. Therefore, at the two other barriers where ORT is planned, the ORT was assumed to have no effects on traffic and revenue forecasts.

**9.3 TOLL TRANSACTION PROJECTIONS BY TURNPIKE**

The FY 2012 and projected annual toll transactions on the New Hampshire Turnpike System during the period FY 2013-2022 are presented in Table 13. For reference, historical annual toll transactions were shown earlier in Table 2. A detailed summary of traffic, revenue, and **E-ZPass** by facility is presented in Table 14.

**Table 13: FY 2012 and Projected Annual Toll Transactions<sup>1</sup>, FY 2013-2022 (in millions)**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Total
2012 (Actual) <sup>2</sup>	50.8	35.3	21.3	107.4
2013	51.0	35.6	21.2	107.7
2014	51.6	35.8	21.3	108.8
2015	52.5	36.2	21.5	110.3
2016	53.4	36.6	22.1	112.1
2017	54.4	36.9	22.4	113.7
2018	55.2	37.3	22.8	115.3
2019	56.1	37.6	22.9	116.6
2020	56.9	37.9	23.1	117.9
2021	57.8	38.2	23.2	119.2
2022	58.7	38.5	23.4	120.5

<sup>1</sup> Projections do not include non-revenue vehicles or violators

<sup>2</sup> Unaudited

Note: Data will not necessarily add to totals because of rounding

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**Table 14: Detailed Traffic and Revenue Projections, FY 2013-2022 (in millions)**

**Total Revenue Paying Traffic Volumes (millions)**

Barriers/Ramps	2012 Actual	12-13 Projected Growth	2013 Projected	13-14 Projected Growth	2014 Projected	14-15 Projected Growth	2015 Projected	15-16 Projected Growth	2016 Projected	16-17 Projected Growth	2017 Projected	17-18 Projected Growth	2018 Projected	18-19 Projected Growth	2019 Projected	19-20 Projected Growth	2020 Projected	20-21 Projected Growth	2021 Projected	21-22 Projected Growth	2022 Projected
<b>CENTRAL TURNPIKE</b>																					
Hooksett Barrier	24.3	1.04%	24.6	1.43%	24.9	1.72%	25.4	1.72%	25.8	1.72%	26.2	1.62%	26.7	1.52%	27.1	1.52%	27.5	1.52%	27.9	1.52%	28.3
Hooksett Ramp	2.4	1.06%	2.4	1.44%	2.5	1.72%	2.5	1.72%	2.5	1.72%	2.6	1.62%	2.6	1.53%	2.7	1.53%	2.7	1.53%	2.7	1.53%	2.8
Bedford Barrier	16.4	-7.09%	15.2	-1.09%	15.1	1.71%	15.3	1.71%	15.6	1.71%	15.9	1.61%	16.1	1.52%	16.4	1.52%	16.6	1.52%	16.9	1.52%	17.1
Bedford Road Ramp	2.6	-8.80%	2.4	-3.69%	2.3	1.70%	2.3	1.70%	2.4	1.70%	2.4	1.60%	2.4	1.50%	2.5	1.50%	2.5	1.50%	2.5	1.50%	2.6
Exit 11 (Merrimack) Ramp	3.4	-5.79%	3.2	-3.01%	3.1	1.71%	3.1	1.71%	3.2	1.71%	3.2	1.61%	3.3	1.51%	3.3	1.51%	3.4	1.51%	3.4	1.51%	3.5
Exit 10 Merrimack Industrial Park Ramp	1.7	90.40%	3.2	18.29%	3.8	1.70%	3.9	1.70%	4.0	1.70%	4.0	1.60%	4.1	1.51%	4.2	1.51%	4.2	1.51%	4.3	1.51%	4.4
<b>Subtotal</b>	<b>50.8</b>	<b>0.46%</b>	<b>51.0</b>	<b>1.24%</b>	<b>51.6</b>	<b>1.71%</b>	<b>52.5</b>	<b>1.71%</b>	<b>53.4</b>	<b>1.71%</b>	<b>54.4</b>	<b>1.61%</b>	<b>55.2</b>	<b>1.52%</b>	<b>56.1</b>	<b>1.52%</b>	<b>56.9</b>	<b>1.52%</b>	<b>57.8</b>	<b>1.52%</b>	<b>58.7</b>
<b>BLUE STAR TURNPIKE</b>																					
Hampton Barrier	22.4	0.63%	22.5	0.81%	22.7	1.00%	22.9	1.00%	23.2	1.00%	23.4	0.90%	23.6	0.81%	23.8	0.81%	24.0	0.81%	24.2	0.81%	24.4
Hampton Ramp	13.0	0.62%	13.0	0.81%	13.1	1.00%	13.3	1.00%	13.4	1.00%	13.5	0.90%	13.7	0.81%	13.8	0.81%	13.9	0.81%	14.0	0.81%	14.1
<b>Subtotal</b>	<b>35.3</b>	<b>0.62%</b>	<b>35.6</b>	<b>0.81%</b>	<b>35.8</b>	<b>1.00%</b>	<b>36.2</b>	<b>1.00%</b>	<b>36.6</b>	<b>1.00%</b>	<b>36.9</b>	<b>0.90%</b>	<b>37.3</b>	<b>0.81%</b>	<b>37.6</b>	<b>0.81%</b>	<b>37.9</b>	<b>0.81%</b>	<b>38.2</b>	<b>0.81%</b>	<b>38.5</b>
<b>SPAULDING TURNPIKE</b>																					
Dover Barrier	13.0	-1.09%	12.9	0.01%	12.9	0.70%	13.0	2.75%	13.3	2.11%	13.6	2.60%	14.0	0.60%	14.1	0.60%	14.2	0.60%	14.2	0.60%	14.3
Rochester Barrier	8.2	0.41%	8.3	1.51%	8.4	1.70%	8.5	2.20%	8.7	0.61%	8.8	0.60%	8.8	0.60%	8.9	0.60%	8.9	0.60%	9.0	0.60%	9.0
<b>Subtotal</b>	<b>21.3</b>	<b>-0.51%</b>	<b>21.2</b>	<b>0.59%</b>	<b>21.3</b>	<b>1.10%</b>	<b>21.5</b>	<b>2.54%</b>	<b>22.1</b>	<b>1.51%</b>	<b>22.4</b>	<b>1.82%</b>	<b>22.8</b>	<b>0.60%</b>	<b>22.9</b>	<b>0.60%</b>	<b>23.1</b>	<b>0.60%</b>	<b>23.2</b>	<b>0.60%</b>	<b>23.4</b>
<b>TOTAL:</b>	<b>107.4</b>	<b>0.32%</b>	<b>107.7</b>	<b>0.97%</b>	<b>108.8</b>	<b>1.36%</b>	<b>110.3</b>	<b>1.64%</b>	<b>112.1</b>	<b>1.44%</b>	<b>113.7</b>	<b>1.42%</b>	<b>115.3</b>	<b>1.11%</b>	<b>116.6</b>	<b>1.11%</b>	<b>117.9</b>	<b>1.11%</b>	<b>119.2</b>	<b>1.11%</b>	<b>120.5</b>

**Total Toll Revenue (millions)**

Barriers/Ramps	2012 Actual	12-13 Projected Growth	2013 Projected	13-14 Projected Growth	2014 Projected	14-15 Projected Growth	2015 Projected	15-16 Projected Growth	2016 Projected	16-17 Projected Growth	2017 Projected	17-18 Projected Growth	2018 Projected	18-19 Projected Growth	2019 Projected	19-20 Projected Growth	2020 Projected	20-21 Projected Growth	2021 Projected	21-22 Projected Growth	2022 Projected
<b>CENTRAL TURNPIKE</b>																					
Hooksett Barrier	\$23.4	0.74%	\$23.6	1.18%	\$23.9	1.53%	\$24.2	1.57%	\$24.6	1.63%	\$25.0	1.59%	\$25.4	1.51%	\$25.8	1.51%	\$26.2	1.52%	\$26.6	1.52%	\$27.0
Hooksett Ramp	\$1.2	0.84%	\$1.2	1.25%	\$1.2	1.58%	\$1.3	1.61%	\$1.3	1.64%	\$1.3	1.57%	\$1.3	1.49%	\$1.3	1.47%	\$1.4	1.53%	\$1.4	1.53%	\$1.4
Bedford Barrier	\$15.2	-7.40%	\$14.1	-1.36%	\$13.9	1.50%	\$14.1	1.55%	\$14.3	1.61%	\$14.6	1.57%	\$14.8	1.49%	\$15.0	1.48%	\$15.2	1.52%	\$15.5	1.52%	\$15.7
Bedford Road Ramp	\$1.1	-9.37%	\$1.0	-4.19%	\$0.9	1.29%	\$1.0	1.38%	\$1.0	1.47%	\$1.0	1.48%	\$1.0	1.40%	\$1.0	1.63%	\$1.0	1.50%	\$1.0	1.50%	\$1.1
Exit 11 (Merrimack) Ramp	\$1.4	-6.41%	\$1.3	-3.53%	\$1.3	1.31%	\$1.3	1.41%	\$1.3	1.54%	\$1.3	1.59%	\$1.4	1.51%	\$1.4	1.55%	\$1.4	1.51%	\$1.4	1.51%	\$1.4
Exit 10 Merrimack Industrial Park Ramp	\$0.8	94.74%	\$1.6	18.18%	\$1.9	1.40%	\$1.9	1.45%	\$1.9	1.47%	\$2.0	1.40%	\$2.0	1.34%	\$2.0	1.38%	\$2.0	1.51%	\$2.1	1.51%	\$2.1
<b>Subtotal</b>	<b>\$43.2</b>	<b>-0.85%</b>	<b>\$42.8</b>	<b>0.70%</b>	<b>\$43.1</b>	<b>1.50%</b>	<b>\$43.8</b>	<b>1.55%</b>	<b>\$44.4</b>	<b>1.61%</b>	<b>\$45.2</b>	<b>1.57%</b>	<b>\$45.9</b>	<b>1.49%</b>	<b>\$46.5</b>	<b>1.50%</b>	<b>\$47.2</b>	<b>1.52%</b>	<b>\$48.0</b>	<b>1.52%</b>	<b>\$48.7</b>
<b>BLUE STAR TURNPIKE</b>																					
Hampton Barrier	\$48.8	0.60%	\$49.1	0.78%	\$49.5	0.96%	\$50.0	0.96%	\$50.5	0.95%	\$51.0	0.84%	\$51.4	0.75%	\$51.8	0.88%	\$52.2	0.81%	\$52.6	0.81%	\$53.1
Hampton Ramp	\$9.5	0.41%	\$9.5	0.63%	\$9.6	0.86%	\$9.7	0.89%	\$9.7	0.92%	\$9.8	0.85%	\$9.9	0.76%	\$10.0	0.80%	\$10.1	0.81%	\$10.2	0.81%	\$10.2
<b>Subtotal</b>	<b>\$58.3</b>	<b>0.57%</b>	<b>\$58.6</b>	<b>0.75%</b>	<b>\$59.1</b>	<b>0.95%</b>	<b>\$59.6</b>	<b>0.95%</b>	<b>\$60.2</b>	<b>0.95%</b>	<b>\$60.8</b>	<b>0.84%</b>	<b>\$61.3</b>	<b>0.75%</b>	<b>\$61.8</b>	<b>0.87%</b>	<b>\$62.3</b>	<b>0.81%</b>	<b>\$62.8</b>	<b>0.81%</b>	<b>\$63.3</b>
<b>SPAULDING TURNPIKE</b>																					
Dover Barrier	\$8.9	-1.34%	\$8.8	-0.20%	\$8.8	0.54%	\$8.8	2.62%	\$9.1	2.02%	\$9.3	2.57%	\$9.5	0.57%	\$9.6	0.60%	\$9.6	0.60%	\$9.7	0.60%	\$9.7
Rochester Barrier	\$5.6	0.06%	\$5.6	1.21%	\$5.7	1.48%	\$5.8	2.04%	\$5.9	0.51%	\$5.9	0.57%	\$6.0	0.59%	\$6.0	0.65%	\$6.0	0.60%	\$6.1	0.60%	\$6.1
<b>Subtotal</b>	<b>\$14.6</b>	<b>-0.80%</b>	<b>\$14.5</b>	<b>0.35%</b>	<b>\$14.5</b>	<b>0.91%</b>	<b>\$14.6</b>	<b>2.39%</b>	<b>\$15.0</b>	<b>1.42%</b>	<b>\$15.2</b>	<b>1.79%</b>	<b>\$15.5</b>	<b>0.58%</b>	<b>\$15.6</b>	<b>0.62%</b>	<b>\$15.7</b>	<b>0.60%</b>	<b>\$15.8</b>	<b>0.60%</b>	<b>\$15.9</b>
<b>TOTAL:</b>	<b>\$116.1</b>	<b>-0.13%</b>	<b>\$115.9</b>	<b>0.68%</b>	<b>\$116.7</b>	<b>1.15%</b>	<b>\$118.0</b>	<b>1.35%</b>	<b>\$119.6</b>	<b>1.25%</b>	<b>\$121.1</b>	<b>1.23%</b>	<b>\$122.6</b>	<b>1.01%</b>	<b>\$123.9</b>	<b>1.07%</b>	<b>\$125.2</b>	<b>1.05%</b>	<b>\$126.5</b>	<b>1.05%</b>	<b>\$127.8</b>

**E-ZPass Market Shares**

Barriers/Ramps	2012 Actual	12-13 Projected Increase	2013 Projected	13-14 Projected Increase	2014 Projected	14-15 Projected Increase	2015 Projected	15-16 Projected Increase	2016 Projected	16-17 Projected Increase	2017 Projected	17-18 Projected Increase	2018 Projected	18-19 Projected Growth	2019 Projected	19-20 Projected Growth	2020 Projected	20-21 Projected Growth	2021 Projected	21-22 Projected Growth	2022 Projected
<b>CENTRAL TURNPIKE</b>																					
Hooksett Barrier	59.8%	2.00%	61.8%	1.63%	63.4%	1.19%	64.6%	0.88%	65.5%	0.50%	66.0%	0.07%	66.0%	0.00%	66.0%	0.00%	66.0%	0.00%	66.0%	0.00%	66.0%
Hooksett Ramp	61.0%	1.83%	62.9%	1.49%	64.3%	1.08%	65.4%	0.80%	66.2%	0.46%	66.7%	0.06%	66.8%	0.01%	66.8%	0.01%	66.8%	0.01%	66.8%	0.01%	66.8%
Bedford Barrier	67.7%	1.65%	69.3%	1.35%	70.7%	0.99%	71.7%	0.73%	72.4%	0.42%	72.8%	0.05%	72.9%	0.00%	72.9%	0.00%	72.9%	0.00%	72.9%	0.00%	72.9%
Bedford Road Ramp	75.2%	1.57%	76.7%	1.26%	78.0%	0.92%	78.9%	0.68%	79.6%	0.39%	80.0%	0.05%	80.1%	0.00%	80.1%	0.00%	80.1%	0.00%	80.1%	0.00%	80.1%
Exit 11 (Merrimack) Ramp	73.4%	2.12%	75.5%	1.72%	77.2%	1.26%	78.5%	0.93%	79.4%	0.53%	79.9%	0.07%	80.0%	0.00%	80.0%	0.00%	80.0%	0.00%	80.0%	0.00%	80.0%
Exit 10 Merrimack Industrial Park Ramp	74.2%	-13.27%	60.9%	1.39%	62.3%	1.18%	63.5%	0.86%	64.3%	0.63%	65.0%	0.41%	65.4%	0.00%	65.4%	0.00%	65.4%	0.00%	65.4%	0.00%	65.4%
<b>Subtotal</b>	<b>64.6%</b>	<b>1.02%</b>	<b>65.6%</b>	<b>1.38%</b>	<b>67.0%</b>	<b>1.12%</b>	<b>68.1%</b>	<b>0.82%</b>	<b>68.9%</b>	<b>0.48%</b>	<b>69.4%</b>	<b>0.09%</b>	<b>69.5%</b>	<b>0.00%</b>	<b>69.5%</b>	<b>0.00%</b>	<b>69.5%</b>	<b>0.00%</b>	<b>69.5%</b>	<b>0.00%</b>	<b>69.5%</b>
<b>BLUE STAR TURNPIKE</b>																					
Hampton Barrier	64.9%	2.19%	67.1%	1.78%	68.9%	1.30%	70.2%	0.96%	71.2%	0.55%	71.7%	0.07%	71.8%	0.00%	71.8%	0.00%	71.8%	0.00%	71.8%	0.00%	71.8%
Hampton Ramp	66.7%	1.40%	68.1%	1.13%	69.2%	0.83%	70.0%	0.61%	70.6%	0.35%	71.0%	0.04%	71.0%	0.00%	71.0%	0.00%	71.0%	0.00%	71.0%	0.00%	71.0%
<b>Subtotal</b>	<b>65.6%</b>	<b>1.90%</b>	<b>67.5%</b>	<b>1.54%</b>	<b>69.0%</b>	<b>1.13%</b>	<b>70.1%</b>	<b>0.83%</b>	<b>71.0%</b>	<b>0.47%</b>	<b>71.4%</b>	<b>0.06%</b>	<b>71.5%</b>	<b>0.00%</b>	<b>71.5%</b>	<b>0.00%</b>	<b>71.5%</b>	<b>0.00%</b>	<b>71.5%</b>	<b>0.00%</b>	<b>71.5%</b>
<b>SPAULDING TURNPIKE</b>																					
Dover Barrier	67.0%	1.19%	68.2%	0.96%	69.2%	0.70%	69.9%	0.52%	70.4%	0.30%	70.7%	0.04%	70.7%	0.00%	70.7%	0.00%	70.7%	0.00%	70.7%	0.00%	70.7%
Rochester Barrier	65.3%	1.66%	67.0%	1.35%	68.3%	0.99%	69.3%	0.73%	70.1%	0.42%	70.5%	0.05%	70.5%	0.00%	70.5%	0.00%	70.5%	0.00%	70.5%	0.00%	70.5%
<b>Subtotal</b>	<b>66.4%</b>	<b>1.37%</b>	<b>67.7%</b>	<b>1.11%</b>	<b>68.9%</b>	<b>0.81%</b>	<b>69.7%</b>	<b>0.60%</b>	<b>70.3%</b>	<b>0.35%</b>	<b>70.6%</b>	<b>0.04%</b>	<b>70.7%</b>	<b>0.00%</b>	<b>70.7%</b>	<b>0.00%</b>	<b>70.7%</b>	<b>0.00%</b>	<b>70.7%</b>	<b>0.00%</b>	<b>70.7%</b>
<b>TOTAL:</b>	<b>65.3%</b>	<b>1.38%</b>	<b>66.6%</b>	<b>1.38%</b>	<b>68.0%</b>	<b>1.06%</b>	<b>69.1%</b>	<b>0.78%</b>	<b>69.8%</b>	<b>0.45%</b>	<b>70.3%</b>	<b>0.07%</b>	<b>70.4%</b>	<b>0.00%</b>	<b>70.4%</b>	<b>0.00%</b>	<b>70.4%</b>	<b>0.00%</b>	<b>70.4%</b>	<b>0.00%</b>	<b>70.4%</b>

\* Violation revenue and revenue from unclassified vehicles, etc.

Notes: FY 2012 figures are unaudited.  
FY 2012 and forecast years do not include non-revenue vehicles, violations or violation revenues



For purposes of revenue projection, Jacobs removed non-revenue and violation (i.e., non-toll paying) transactions from the traffic and revenue analysis. Total toll transactions are projected to increase from 107.4 million toll-paying transactions in FY 2012 to 107.7 million in FY 2013, a gain of 0.3 percent. This increase is small because of continuing slow economic growth, construction on the Spaulding Turnpike, and ramp up in the use of the free interchange at the Manchester Airport Access Road. The number of transactions is expected to then increase 1.0 percent in FY 2014, with larger growth rates ranging from 1.4 to 1.6 percent per year over the following four years as the widening of the Spaulding Turnpike is completed. For the final four years of the forecast period, it is estimated that Turnpike toll traffic will grow 1.1 percent per year. Between FY 2012 and FY 2022, the projected average annual growth rates in paid toll transactions for the Central, Blue Star and Spaulding Turnpikes are 1.5 percent, 0.9 percent and 0.9 percent respectively, with the overall Turnpike toll transaction average growth rate at 1.2 percent.

#### 9.4 TOLL REVENUE PROJECTIONS BY TURNPIKE

The actual and projected annual toll revenue on the New Hampshire Turnpike System during the period FY 2012-2022 is presented in Table 15. Detailed toll revenue projections for each toll plaza were presented previously in Table 14 (see Table 3 for toll revenues received in past years).

**Table 15: FY 2012 and Projected Annual Toll Revenue<sup>1</sup>, FY 2013-2022 (in millions)**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Total
2012 (Actual) <sup>2</sup>	\$ 43.2	\$ 58.3	\$ 14.6	\$ 116.1
2013	\$ 42.8	\$ 58.6	\$ 14.5	\$ 115.9
2014	\$ 43.1	\$ 59.1	\$ 14.5	\$ 116.7
2015	\$ 43.8	\$ 59.6	\$ 14.6	\$ 118.0
2016	\$ 44.4	\$ 60.2	\$ 15.0	\$ 119.6
2017	\$ 45.2	\$ 60.8	\$ 15.2	\$ 121.1
2018	\$ 45.9	\$ 61.3	\$ 15.5	\$ 122.6
2019	\$ 46.5	\$ 61.8	\$ 15.6	\$ 123.9
2020	\$ 47.2	\$ 62.3	\$ 15.7	\$ 125.2
2021	\$ 48.0	\$ 62.8	\$ 15.8	\$ 126.5
2022	\$ 48.7	\$ 63.3	\$ 15.9	\$ 127.8

<sup>1</sup> Does not include administrative fees or violation revenue

<sup>2</sup> Unaudited

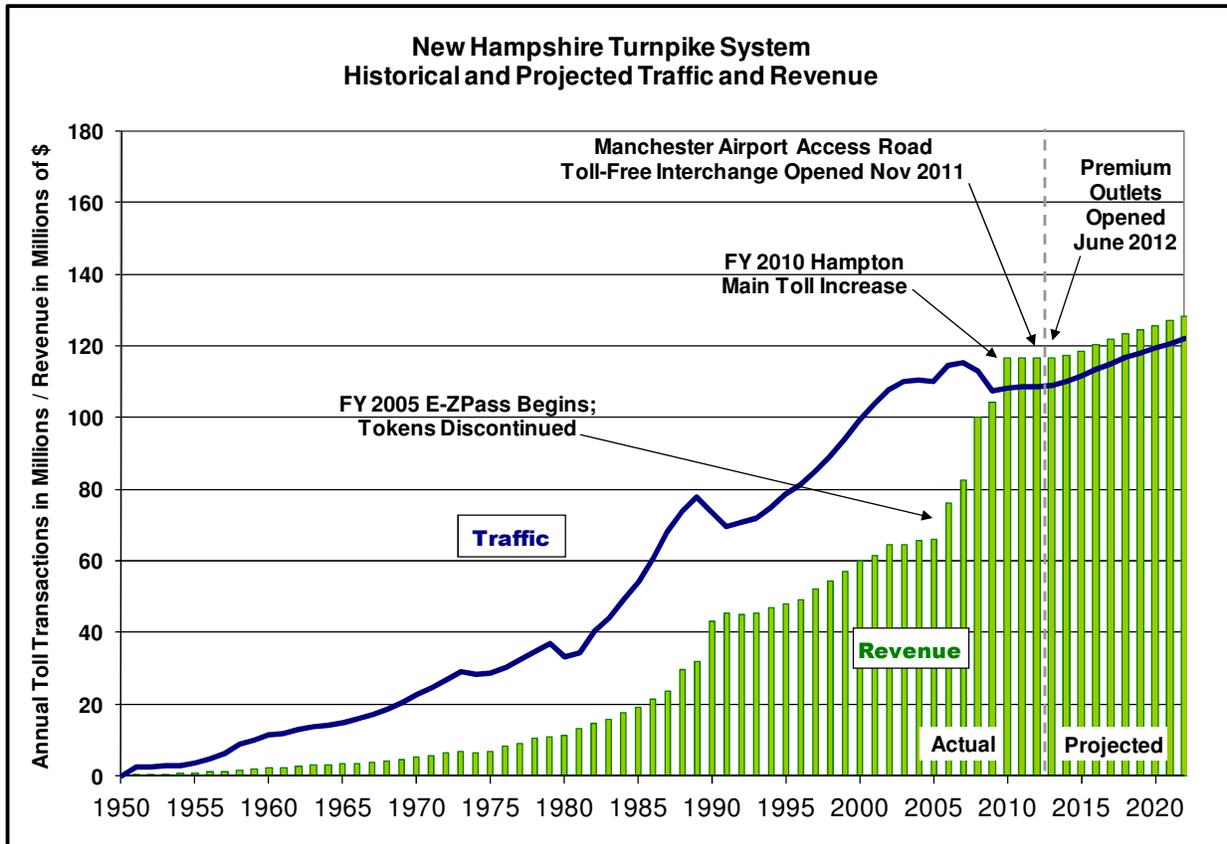
Note: Data will not necessarily add to totals because of rounding

Projected toll revenues for FY 2013 are \$115.9 million – about a 0.1 percent decrease from FY 2012. Revenue losses from construction on the Spaulding Turnpike and increased use of the free Manchester Airport Access Road interchange on the Central Turnpike as a means of avoiding a toll are expected to outweigh any revenue gains from the June 2012 opening of the Merrimack Premium Outlets. Revenue is then expected to increase 0.7 percent from FY 2013 to FY 2014, and at slightly increasing rates over the following few years as construction concludes on the Spaulding Turnpike widening project; the largest annual percent increase is expected to be in FY 2016 (1.4 percent). For the final three years of the forecast period, annual revenue growth is expected to be 1.1 percent, similar to the traffic growth rate. Toll revenues on

the Central, Blue Star and Spaulding Turnpikes are expected to grow at an average annual rate of 1.2 percent, 0.8 percent and 0.8 percent respectively between FY 2012 and FY 2022, and the overall Turnpike annual revenue growth rate is estimated to be 1.0 percent.

Historical and projected toll transaction and revenue for the entire New Hampshire Turnpike System over the period FY 1950 to 2022 are presented in Figure 40.

**Figure 40: NH Turnpike System Historical and Projected Toll Transaction and Revenue Trends, FY 1950-2022**



**9.5 E-ZPASS MARKET SHARE PROJECTIONS**

Table 16 presents the historical and projected **E-ZPass** market shares on the New Hampshire Turnpike System for the period FY 2011-2022. Detailed **E-ZPass** market shares for each toll plaza were presented previously in Table 14.

**Table 16: Historical and Projected E-ZPass Market Shares, FY 2008-2022**

Fiscal Year	Central Turnpike	Blue Star Turnpike	Spaulding Turnpike	Total
2011 <sup>1</sup>	63.1%	63.3%	64.2%	63.4%
2012 <sup>2</sup>	64.6%	65.6%	66.4%	65.3%
2013	65.6%	67.5%	67.7%	66.6%
2014	67.0%	69.0%	68.9%	68.0%
2015	68.1%	70.1%	69.7%	69.1%
2016	68.9%	71.0%	70.3%	69.8%
2017	69.4%	71.4%	70.6%	70.3%
2018-2022	69.5%	71.5%	70.7%	70.4%

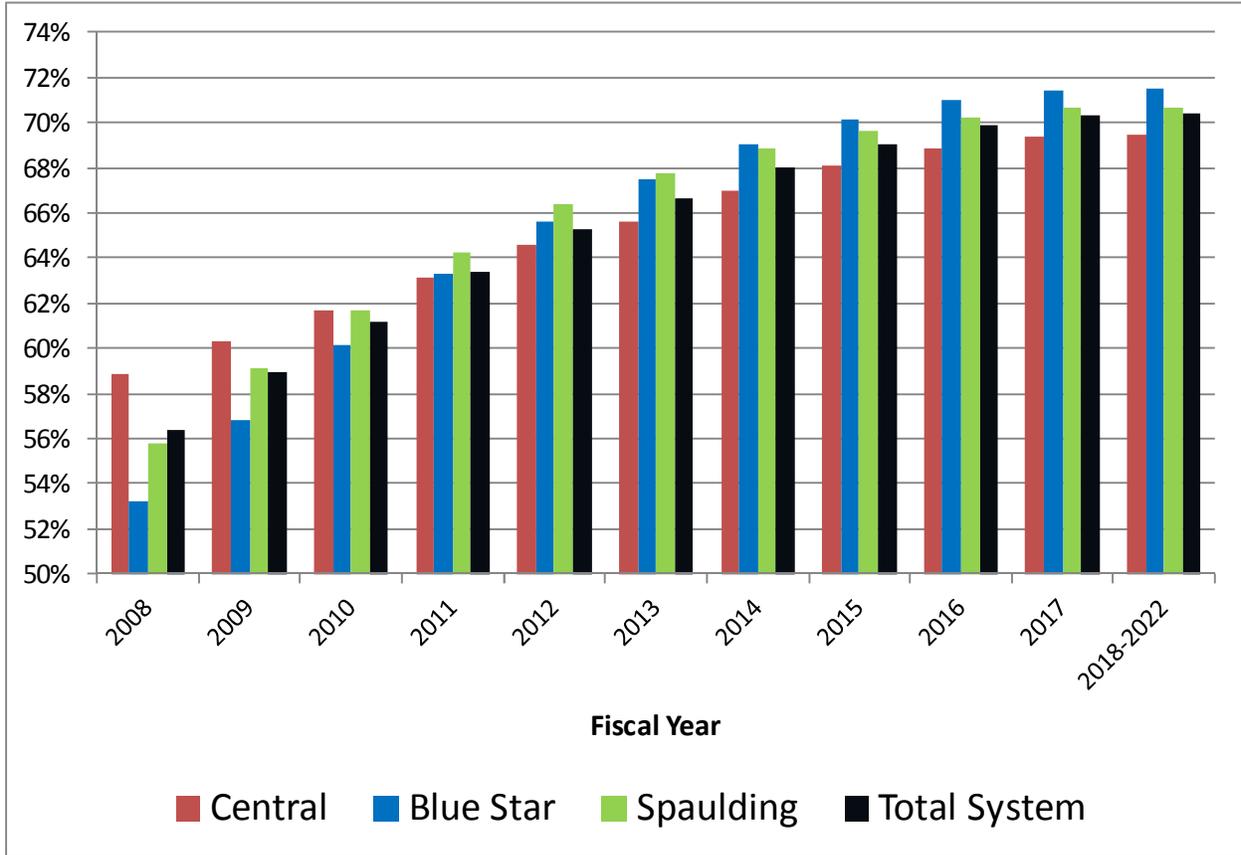
<sup>1</sup> Actual

<sup>2</sup> Actual (Unaudited)

Total New Hampshire **E-ZPass** market share increased from 63.4 percent in FY 2011 to 65.3 percent in FY 2012. Year-over-year growth in **E-ZPass** market share has slowed in recent years, and this trend is expected to continue out into the future. From FY 2011 to FY 2012, overall market share increased by 1.9 percentage points, and the market share from FY 2012 to FY 2014 is estimated to increase by 1.4 percentage points per year. Over the following years, the total **E-ZPass** market share growth rate is expected to slow down and flatten, and is assumed to reach an overall maximum share of about 70.4 percent in FY 2018. The market share will differ by plaza, as it does currently. The Blue Star Turnpike, which has fewer commuters and more long-distance travelers than the Central and Spaulding Turnpikes, is expected to have a slightly higher market share than the others because **E-ZPass** continues to grow among drivers from other states, as more and more agencies implement electronic toll collection.

Figure 41 shows the historical and projected **E-ZPass** market shares for the period FY 2008 to 2022.

**Figure 41: NH Turnpike System Historical and Projected E-ZPass Market Shares, FY 2008-2022**



## 10 FINANCIAL MODEL ANALYSIS

This section presents a financial analysis of the Turnpike System. The analysis considers Turnpike System capital expenditures, operating expenditures and debt service requirements as well as Turnpike System toll revenues and other revenues. The analysis also includes a cash flow analysis of the Turnpike System, as well as an analysis of the Turnpike System's debt service coverage ratios.

### 10.1 TOTAL TURNPIKE SYSTEM EXPENDITURES

Table 17 shows historical and projected capital, operating and debt service expenditures for the 20-year period FY 2003 to FY 2022.

**Table 17: Historical and Projected Total NH Turnpike Expenditures, FY 2003-2022 (in millions)**

Fiscal Year	Capital Expenditures	O&M Expenditures	Debt Service	Renewal & Replacement	I-95 Payments	Total Turnpike Expenditures	Unfunded Projects
2003	\$10.2	\$25.2	\$29.9	\$7.3		\$72.6	
2004	\$19.4	\$25.1	\$28.7	\$5.1		\$78.3	
2005	\$20.5	\$29.0	\$31.3	\$3.3		\$84.0	
2006	\$13.2	\$38.5	\$30.0	\$4.3		\$86.1	
2007	\$8.5	\$36.1	\$31.1	\$8.6		\$84.3	
2008	\$11.0	\$37.1	\$27.4	\$11.8		\$87.3	
2009	\$25.8	\$40.3	\$27.5	\$7.8		\$101.4	
2010	\$66.6	\$40.1	\$30.3	\$7.8	\$30.0	\$174.8	
2011	\$52.9	\$42.3	\$34.4	\$14.3	\$20.0	\$163.9	\$0.0
2012	\$47.7	\$41.8	\$33.3	\$7.3	\$26.0	\$156.0	\$0.0
<b>Total ('03-'12)</b>	<b>\$275.7</b>	<b>\$355.5</b>	<b>\$303.8</b>	<b>\$77.6</b>	<b>\$76.0</b>	<b>\$1,088.6</b>	<b>\$0.0</b>
2013	\$85.8	\$51.0	\$36.2	\$9.8	\$26.0	\$208.8	\$0.2
2014	\$48.8	\$47.4	\$39.2	\$10.0	\$5.9	\$151.3	\$3.0
2015	\$55.1	\$48.7	\$40.6	\$8.9	\$5.9	\$159.1	\$19.0
2016	\$40.4	\$49.8	\$42.1	\$9.7	\$5.9	\$147.9	\$32.5
2017	\$4.4	\$50.8	\$40.4	\$12.2	\$5.9	\$113.7	\$25.1
2018	\$2.1	\$51.9	\$36.1	\$12.3	\$5.9	\$108.3	\$12.0
2019		\$53.0	\$36.1	\$10.1	\$2.2	\$101.3	
2020		\$54.2	\$34.8	\$10.4		\$99.3	
2021		\$55.4	\$27.0	\$10.7		\$93.1	
2022		\$56.6	\$27.3	\$11.0		\$94.9	
<b>Total ('13-'22)</b>	<b>\$236.6</b>	<b>\$518.6</b>	<b>\$359.5</b>	<b>\$105.2</b>	<b>\$57.7</b>	<b>\$1,277.6</b>	<b>\$91.7</b>

*Note: Data will not necessarily add to totals because of rounding*

Historical total Turnpike System expenditures over the FY 2003-2012 period have ranged from a low of \$72.6 million in FY 2003 to a high of \$174.8 million in FY 2010. Cumulative Turnpike System expenditures for the ten-year period FY 2003-2012 totaled \$1,088.6 million with 61 percent or \$659.4 million accounting for the sum of operating expenses and debt service expenditures. Total Turnpike System expenditures are projected to vary in the ten-year FY 2013-2022 forecast period, ranging from a low of \$93.1 million in FY 2021 to a high of \$208.8 million in FY 2013. Cumulative Turnpike System expenditures over the ten-year forecast period FY 2013-2022 are projected to be \$1,277.6 million or 1.17 times what was spent over the previous ten years. Some 41 percent or \$518.6 million of this total amount is estimated to be for O&M expenditures and 28 percent or \$359.5 million for Turnpike System debt service requirements. Some 19 percent, or \$236.6 million, of total expenditures over this ten-year period are expected to be capital expenditures, while 8 percent, or \$105.2 million, is expected

for renewal and replacement.

## 10.2 TURNPIKE SYSTEM FUNDS

Table 18 presents historical and projected toll revenues, other revenues, interest income, and bond proceeds for the Turnpike System over the 20-year period FY 2003-2022.

**Table 18: Historical and Projected NH Turnpike Funds, FY 2003-2022 (in millions)**

Fiscal Year	Toll Revenue <sup>1</sup>	Transponder Revenue	Other Revenue <sup>2</sup>	Interest Income <sup>3</sup>	Total Turnpike Revenues	Net Bond Proceeds for Construction <sup>4</sup>	Total Turnpike Funds
2003	\$64.4		\$2.6		\$67.0		\$67.0
2004	\$65.8		\$1.7		\$67.5		\$67.5
2005	\$65.9		\$2.4		\$68.3		\$68.3
2006	\$76.0		\$6.4		\$82.4		\$82.4
2007	\$82.2	\$1.2	\$2.7	\$3.3	\$89.4		\$89.4
2008	\$100.4	\$0.9	\$3.2	\$2.5	\$107.0		\$107.0
2009	\$103.9	\$0.7	\$2.2	\$0.8	\$107.6		\$107.6
2010	\$116.0	\$0.7	\$1.8	\$0.8	\$119.3	\$140.9	\$260.2
2011	\$116.7	\$0.8	\$1.2	\$0.2	\$118.9		\$118.9
2012	\$116.1	\$0.7	\$1.0	\$0.2	\$118.0		\$118.0
Total ('03-'12)	\$907.4	\$5.0	\$25.2	\$7.8	\$945.4	\$140.9	\$1,086.3
2013	\$115.9	\$3.3	\$1.0	\$0.6	\$120.8	\$112.0	\$232.8
2014	\$116.7	\$0.8	\$1.0	\$0.6	\$119.1		\$119.1
2015	\$118.0	\$0.6	\$1.0	\$0.6	\$120.3	\$46.0	\$166.3
2016	\$119.6	\$0.6	\$1.1	\$0.6	\$121.9		\$121.9
2017	\$121.1	\$0.6	\$1.1	\$0.6	\$123.4		\$123.4
2018	\$122.6	\$0.6	\$1.1	\$0.6	\$124.9		\$124.9
2019	\$123.9	\$0.6	\$1.1	\$0.6	\$126.3		\$126.3
2020	\$125.2	\$0.6	\$1.1	\$1.3	\$128.2		\$128.2
2021	\$126.5	\$0.6	\$1.2	\$1.5	\$129.8		\$129.8
2022	\$127.8	\$0.6	\$1.2	\$1.8	\$131.4		\$131.4
Total ('13-'22)	\$1,217.3	\$8.9	\$10.9	\$8.9	\$1,246.1	\$158.0	\$1,404.1

<sup>1</sup> Future toll revenues does not include revenue from toll violators

<sup>2</sup> From Bureau of Turnpikes Financial Model Plan

<sup>3</sup> FY 2000 through 2006 Interest Income included in Other Revenue (includes claim reimbursement and sale of land)

<sup>4</sup> Does not include cost for issuance premiums or payments into restricted debt service accounts

Note: Data will not necessarily add to totals because of rounding

Historical annual Turnpike System revenues which include toll revenue, other revenue, and bond proceeds ranged from a low of \$67.0 million in FY 2003 to a high of \$119.3 million in FY 2010. Cumulative funds over the ten-year FY 2003-2012 period totaled \$945.4 million with toll revenues accounting for 96 percent of this amount or \$907.4 million. Over the forecast period FY 2013-2022, annual Turnpike System revenues are projected to range from a low of \$119.1 million in FY 2014 to a high of \$131.4 million in FY 2022. Total Turnpike revenues over the ten-year forecast period are \$1,246.1 million or almost 32 percent more than revenues accumulated in the previous ten years.

Toll revenues are estimated to account for almost 87 percent or \$1,217.3 million of the projected \$1,404.1 in ten-year total Turnpike System funds, while net bond proceeds for construction are expected to account for 11 percent or \$158.0 million of the projected total funds.

### 10.3 TURNPIKE COVERAGE RATIO ANALYSIS

Table 19 presents an analysis of the Bureau of Turnpikes' revenue bond debt service coverage ratios and all obligation bond coverage ratios for the forecast period FY 2013-2022.

**Table 19: NH Turnpike Debt Coverage Analysis, FY 2013-2022 (in millions)**

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>Turnpike Revenues<sup>1</sup></b>	\$120.8	\$119.1	\$120.3	\$121.9	\$123.4	\$124.9	\$126.3	\$128.2	\$129.8	\$131.4
<b>O&amp;M Expenses<sup>2</sup></b>	\$51.0	\$47.4	\$48.7	\$49.8	\$50.8	\$51.9	\$53.0	\$54.2	\$55.4	\$56.6
<b>Net Revenues (Sub-Total) (A)</b>	\$69.8	\$71.7	\$71.6	\$72.1	\$72.6	\$73.1	\$73.3	\$74.1	\$74.4	\$74.8
<b>Revenue Bond Debt Service (B)<sup>3</sup></b>	\$36.2	\$39.2	\$40.6	\$42.1	\$40.4	\$36.1	\$36.1	\$34.8	\$27.0	\$27.3
<b>Revenue Bond Debt Service Coverage Ratio (A/B)</b>	1.93	1.83	1.76	1.71	1.80	2.03	2.03	2.13	2.76	2.74
<b>General Obligation Bond Debt Service</b>	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Existing Turnpike R&amp;R Expenses<sup>4</sup></b>	\$9.8	\$10.0	\$8.9	\$9.7	\$12.2	\$12.3	\$10.1	\$10.4	\$10.7	\$11.0
<b>Payments from General Reserves for I-95 Acquisition</b>	\$5.9 <sup>5</sup>	\$5.9	\$5.9	\$5.9	\$5.9	\$5.9	\$2.2			
<b>I-95 Advanced Payment</b>	\$20.1 <sup>5</sup>									
<b>Additional R&amp;R</b>	\$4.7 <sup>5</sup>									
<b>Other Obligations (Sub-Total) (C)<sup>6</sup></b>	\$9.8	\$15.9	\$14.8	\$15.6	\$18.1	\$18.2	\$12.3	\$10.4	\$10.7	\$11.0
<b>All Obligation Coverage Ratio (A/(B+C))</b>	1.52	1.30	1.29	1.25	1.24	1.35	1.52	1.64	1.98	1.95

<sup>1</sup> Includes Toll Revenue, Other Revenue, Transponder Revenue, and Interest Income.

<sup>2</sup> Includes Administrative Expenses, Toll Operations, Maintenance, Safety & Enforcement, Toll Processing, Welcome Centers and Rest Areas, and Turnpike Funding to Highway and O&M Lapses. R&R and I-95 Payments not included.

<sup>3</sup> Assumes an issuance of 2012 Series C Bonds and a \$50 million issuance in FY2015. Future issue assumed to be structured for 30-year level debt service with an interest rate assumption of 4.00%.

<sup>4</sup> Renewal and Replacement expenditures are projected, budgeted R&R amounts from HNTB's Renewal and Replacement Program Assessment Report dated January 12, 2012 for FY 2014 through FY 2019, and were increased by 3% annually from FY 2019-2022.

<sup>5</sup> Items excluded from the all obligations coverage ratio in FY 2013. Payment from the General Reserve of \$5.9M plus advanced payment of \$20.1M for I-95 in FY 2013 will be made from sufficient general reserves held at the end of the prior fiscal year. Additional R&R of \$4.7M is a carry-forward from the previous year and is available for expenditure, and therefore is not included in the all obligations coverage ratio.

<sup>6</sup> Other obligations include general obligation debt service, existing turnpike R&R and payments from general reserves for I-95 acquisition for FY2014 and beyond.

The analysis shows that the Bureau of Turnpikes' revenue bond debt service coverage ratio is expected to range from a high of 2.76 in FY 2021 to a low of 1.71 in FY 2016. The low 1.71 revenue bond debt service coverage ratio in FY 2016 satisfies both the bond resolution's minimum requirement of 1.2 as well as the Bureau of Turnpikes' internal minimum coverage requirement of 1.3.

In comparison, the all obligation coverage ratio is projected to range from a high of 1.98 in FY 2021 to a low of 1.24 in FY 2017. The low all obligation coverage ratio of 1.24 in FY 2017 satisfies the bond resolution's minimum requirement of 1.0 and the Bureau of Turnpikes' internal minimum requirement of 1.1.

Table 20 is a projected cash flow analysis of the Turnpike System. The analysis reveals that the projected Bureau of Turnpikes cash reserves will be positive throughout the ten-year forecast period. Cash reserves as a percentage of Bureau of Turnpikes toll revenues are projected to range from a high of 131 percent in FY 2022 to a low of 11 percent in FY 2016.

**Table 20: Projected Cash Flow Analysis, FY 2013-2022 (in millions)**

	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
<b>Net Income<sup>1</sup></b>	\$23.8	\$16.6	\$16.2	\$14.4	\$14.1	\$18.8	\$24.9	\$28.9	\$36.8	\$36.5
<b>Net Bond Proceeds for Construction (minus issuance and set aside reserve costs)</b>	\$112.0	\$0.0	\$46.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
<b>Capital Expenditures</b>	-\$85.8	-\$48.8	-\$55.1	-\$40.4	-\$4.4	-\$2.1	\$0.0	\$0.0	\$0.0	\$0.0
<b>Hooksett Rest Area Acquisition</b>										
<b>Beginning Cash</b>	\$53.4	\$72.7	\$40.5	\$47.7	\$21.7	\$31.4	\$48.1	\$73.0	\$101.9	\$138.7
<b>Annual Capital Surplus/(Deficit)</b>	\$50.0	-\$32.2	\$7.2	-\$26.0	\$9.7	\$16.7	\$24.9	\$28.9	\$36.8	\$36.5
<b>I-95 Payments</b>	\$26.0									
<b>Additional R&amp;R</b>	\$4.7									
<b>Deferred Revenue Acct - Prepaid Tolls (restricted)</b>	\$8.0	\$8.0	\$8.0	\$8.0	\$8.0	\$8.0	\$8.0	\$8.0	\$8.0	\$8.0
<b>Ending Cash</b>	<b>\$64.7</b>	<b>\$32.5</b>	<b>\$39.7</b>	<b>\$13.7</b>	<b>\$23.4</b>	<b>\$40.1</b>	<b>\$65.0</b>	<b>\$93.9</b>	<b>\$130.7</b>	<b>\$167.2</b>
<b>Percent of Toll Revenues</b>	56%	28%	34%	11%	19%	33%	52%	75%	103%	131%

<sup>1</sup> Net Revenues less Revenue Bond Debt Service less Other Obligations

#### 10.4 LIMITS AND DISCLAIMERS

It is Jacobs' opinion that the traffic and toll revenue estimates provided herein represent reasonable and achievable levels of traffic and toll revenues that can be expected to accrue on the Turnpike System over the forecast period and that they have been prepared in accordance with accepted industry-wide practice. However, as should be expected with any forecast, and given the uncertainties within the current economic climate, it is important to note the following assumptions which, in our opinion, are reasonable:

- This report presents the results of Jacobs' consideration of the information available as of the date hereof and the application of our experience and professional judgment to that information. It is not a guarantee of any future events or trends.
- The traffic and gross toll revenue estimates will be subject to future economic and social conditions, demographic developments and regional transportation construction activities that cannot be predicted with certainty.
- The estimates contained in this report, while presented with numeric specificity, are based on a number of estimates and assumptions which, though considered reasonable to us, are inherently subject to economic and competitive uncertainties and contingencies, most of which are beyond the control of any tolling authority and cannot be predicted with certainty. In many instances, a broad range of alternative assumptions could be considered reasonable. Changes in the assumptions used could result in material differences in estimated outcomes.
- Jacobs' traffic and gross toll revenue estimations only represent our best judgment and we do not warrant or represent that the actual gross toll revenues will not vary from our estimates.
- We do not express any opinion on the following items: socioeconomic and demographic forecasts, proposed land use development projects and potential improvements to the regional transportation network.
- The standards of operation and maintenance on all of the system will be maintained as planned within the business rules and practices.
- The general configuration and location of the system and its interchanges will remain as discussed in this report.
- Access to and from the system will remain as discussed in this report.
- No other competing highway projects, tolled or non-tolled are assumed to be constructed or significantly improved in the Turnpike System corridors during the forecast period, except those identified within this report.
- Major highway improvements that are currently underway or fully funded will be completed as planned.

- The system will be well maintained, efficiently operated, and effectively signed to encourage maximum usage.
- No reduced growth initiatives or related controls that would significantly inhibit normal development patterns will be introduced during the estimate period.
- There will be no future serious protracted recession during the estimate period.
- There will be no protracted fuel shortage during the estimate period.
- No local, regional, or national emergency will arise that will abnormally restrict the use of motor vehicles.

In Jacobs' opinion, the assumptions underlying the projections provide a reasonable basis for the toll revenue projections. However, any financial projection is subject to uncertainties. Inevitably, some assumptions used to develop the projections will not be realized, and unanticipated events and circumstances may occur. There are likely to be differences between the projections and actual results, and those differences may be material. Because of these uncertainties, Jacobs makes no guaranty or warranty with respect to the traffic and toll revenue projections in this Study.

## STATE DEMOGRAPHIC AND ECONOMIC DATA

**General**

New Hampshire is located in the New England census region and is bordered by the states of Maine, Massachusetts and Vermont and the Province of Quebec, Canada. The State is 9,304 square miles in area and has 18 miles of general coastline on the Atlantic Ocean and 131 miles of tidal shoreline.

**Population**

New Hampshire experienced an increase in population between 2001 and 2011, mostly between 2001 and 2006. The State's population was 1,318,194 in July 2011 according to the U.S. Census Bureau. Population has increased by 4.9% since 2001 and 0.8% since 2006. The table below shows New Hampshire's resident population and the change in its population relative to New England and the nation.

<u>Year</u>	<b>Population Trends (In Thousands)</b>					
	<u>New Hampshire</u>	<u>Change During Period</u>	<u>New England</u>	<u>Change During Period</u>	<u>United States</u>	<u>Change During Period</u>
2001	1,256	1.6%	14,041	0.6%	284,969	1.3%
2002	1,269	1.0	14,122	0.6	287,625	0.9
2003	1,280	0.9	14,182	0.4	290,108	0.9
2004	1,290	0.8	14,207	0.2	292,805	0.9
2005	1,298	0.6	14,217	0.1	295,517	0.9
2006	1,308	0.8	14,246	0.2	298,380	1.0
2007	1,313	0.4	14,279	0.2	301,231	1.0
2008	1,316	0.2	14,340	0.4	304,094	1.0
2009	1,316	0.0	14,404	0.4	306,772	0.9
2010	1,317	0.1	14,454	0.3	309,330	0.8
2011	1,318	0.1	14,492	0.3	311,592	0.7
<u>Percent Change:</u>						
2001-2011		4.9%		3.2%		9.3%
2006-2011		0.8%		1.7%		4.4%

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Source: U.S. Census Bureau.

**Personal Income**

The State's per capita personal income increased 31.6% between 2001 and 2011 (as contrasted with an increase of 33.7% in the per capita personal income for the United States and a 34.4% increase for the New England region). The State's per capita personal income ranked 8th in 2011 with \$45,787 or 109.9% of the national average. The State's total personal income for 2011 was \$60.4 billion. The following table sets forth information on personal income for New Hampshire, New England and the United States since 2001.

**Comparisons of New Hampshire Personal Income  
to New England and United States, 2000-2010**

<b>Year</b>	<b>New Hampshire Total Personal Income (In Millions)</b>	<b>Per Capita Personal Income</b>			<b>Percent Change</b>			<b>New Hampshire Per Capita Personal Income Ranking<sup>(1)</sup></b>
		<b>New Hampshire</b>	<b>New England</b>	<b>United States</b>	<b>New Hampshire</b>	<b>New England</b>	<b>United States</b>	
2001	\$43,699	34,805	37,996	31,157	2.1	3.8	2.8	7
2002	44,711	35,231	38,131	31,481	1.2	0.4	1.0	6
2003	45,828	35,808	38,798	32,295	1.6	1.7	2.6	6
2004	48,661	37,718	40,837	33,909	5.3	5.3	5.0	6
2005	50,028	38,528	42,376	35,452	2.1	3.8	4.6	10
2006	53,765	41,092	45,627	37,725	6.7	7.7	6.4	10
2007	56,418	42,984	48,223	39,506	4.6	5.7	4.7	9
2008	58,162	44,199	49,726	40,947	2.8	3.1	3.6	9
2009	55,983	42,537	47,513	38,846	(3.8)	(4.5)	(5.1)	9
2010	57,542	43,698	48,840	39,937	2.7	2.8	2.8	9
2011	60,356	45,787	51,074	41,663	4.8	4.6	4.3	8

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

<sup>(1)</sup>Does not include the District of Columbia.

**Civilian Labor Force, Employment and Unemployment**

Employment in New Hampshire grew faster than in the region from 2001 to 2011. The following table sets forth the level of employment in New Hampshire, the other New England states and the United States.

**Employment in New Hampshire, New England States and the United States**

	<b>Employment (In Thousands)</b>		<b>Average Annual Growth</b>
	<b>2001</b>	<b>2011</b>	<b>2001-2011</b>
New Hampshire .....	681	698	0.25%
Connecticut .....	1,700	1,750	0.29
Maine .....	651	651	0.00
Massachusetts .....	3,275	3,202	(0.23)
Rhode Island .....	521	500	(0.41)
Vermont .....	330	339	0.27
New England.....	7,158	7,140	(0.03)
United States.....	136,933	139,869	0.21

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Division.

<sup>(1)</sup> Preliminary.

Over the past ten years, New Hampshire's unemployment rate was lower than the rate for New England and the United States, and was often the lowest in the nation. Annual unemployment data for 2011 and May 2012 show that New Hampshire's unemployment rate was below both the regional and the national level. The table below sets forth information on the civilian labor force, employment and unemployment statistics since 2001.

<b>Labor Force Trends (Not Seasonally Adjusted)</b>				<b>Unemployment Rate</b>		
<b>New Hampshire Labor Force (In Thousands)</b>						
<b>Year</b>	<b>Civilian</b>			<b>New</b>	<b>New</b>	<b>United</b>
	<b>Labor Force</b>	<b>Employed</b>	<b>Unemployed</b>	<b>Hampshire</b>	<b>England</b>	<b>States</b>
2001	705	681	24	3.4%	3.6%	4.7%
2002	712	680	32	4.5	4.8	5.8
2003	711	679	32	4.5	5.4	6.0
2004	716	688	28	3.9	4.9	5.5
2005	723	697	26	3.6	4.7	5.1
2006	735	709	26	3.5	4.5	4.6
2007	740	714	26	3.5	4.5	4.6
2008	744	715	29	3.9	5.4	5.8
2009	743	696	46	6.2	8.1	9.3
2010	739	694	45	6.1	8.5	9.6
2011	738	698	40	5.4	7.7	8.9
May 2012 <sup>(1)</sup>	737	701	36	4.9	6.7	7.9

Source: U.S. Department of Labor, Bureau of Labor Statistics, Local Area Unemployment Statistics Division.

<sup>(1)</sup> Preliminary.

### **Composition of Employment**

The service sector was the largest employment sector in New Hampshire in 2011, accounting for 44.2% of nonagricultural employment, as compared to 38.7% in 2001. This sector surpassed retail and wholesale trade as the primary economic activity of New Hampshire in 1991. This upward trend in service sector employment parallels the shift in the national economy, where services was the largest employment sector, accounting for 45.0% of employment in 2011, up from 40.2% in 2001.

The second largest employment sector in New Hampshire during 2011 was wholesale and retail trade, accounting for 18.9% of total employment as compared to 15.4% nationally. In 2001, wholesale and retail trade accounted for 19.4% of total employment in New Hampshire.

Manufacturing remains an important economic activity in New Hampshire although the percentage has dropped in recent years. Manufacturing accounted for 10.6% of nonagricultural employment in 2011, down from 15.5% in 2001. For the United States as a whole, manufacturing accounted for 8.9% of nonagricultural employment in 2011, versus 12.5% in 2001. The following table sets out the composition of nonagricultural employment in the State and the United States.

**Composition of Nonagricultural Employment in  
New Hampshire and the United States**

	<u>New Hampshire</u>		<u>United States</u>	
	<u>2001</u>	<u>2011</u>	<u>2001</u>	<u>2011</u>
Manufacturing	15.5%	10.6%	12.5%	8.9%
Durable Goods	11.7	8.2	7.9	5.5
Nondurable Goods	3.8	2.4	4.6	3.4
Nonmanufacturing	84.5	89.4	87.5	91.1
Construction & Mining	4.5	3.6	5.7	4.8
Wholesale and Retail Trade	19.4	18.9	15.9	15.4
Service Industries	38.7	44.2	40.2	45.0
Government	13.7	14.8	16.0	16.8
Finance, Insurance & Real Estate	5.7	5.5	5.9	5.4
Transportation & Public Utilities	2.5	2.4	3.8	3.7

Source: U.S. Department of Labor, Bureau of Labor Statistics.

(1) Preliminary

**Largest Employers**

The following table lists the twenty largest private employers in the State and their approximate number of employees as of January 2012.

**Largest Employers  
(Excluding Federal, State and Local Governments)**

<u>Company</u>	<u>Employees</u>	<u>Primary New Hampshire Site</u>	<u>Principal Product</u>
1. Wal-Mart Stores, Inc.	8,166	Bedford	Retail Department Stores
2. Dartmouth Hitchcock Medical Center	6,654	Lebanon	Acute Care Hospital
3. DeMoulas & Market Basket	6,000	Nashua	Supermarkets
4. Hannaford Brothers	4,817	Manchester	Supermarkets
5. Fidelity Investments	4,600	Merrimack	Financial Services
6. BAE Systems Electronic Systems	4,500	Nashua	Communications
7. Dartmouth College	4,250	Hanover	Private College
8. Liberty Mutual-Northern N.E. Division	4,200	Bedford	Financial Services
9. Shaw's Supermarkets Inc.	3,556	Stratham	Supermarkets
10. Elliot Hospital	3,375	Manchester	Hospital
11. Concord Hospital	3,256	Concord	Hospital
12. Home Depot	2,550	Manchester	Hardware Store
13. Wentworth-Douglas Hospital	2,366	Dover	Hospital
14. Southern New Hampshire Medical Center	2,200	Nashua	Healthcare Providers
15. Catholic Medical Center	2,100	Manchester	Healthcare Providers
16. Lowe's	1,932	Bedford	Hardware Store
17. Sunbridge Healthcare NH Region	1,600	Exeter	Long Term Care Providers
18. New Hampshire Motor Speedway	1,500	Loudon	Motorsports Facility
19. Public Service Company of New Hampshire	1,500	Manchester	Electric Utility
20. Exeter Hospital	1,470	Exeter	Hospital

Source: New Hampshire Business Review, Book of Lists 2012.

## State and Local Taxation

The State finances its operations through a combination of specialized taxes, user charges and revenues received from the State liquor sales and distribution system. The most important taxes are the business profits and business enterprise taxes and a meals and rooms tax. The State does not levy any personal earned income tax or general sales tax but does impose a tax on interest and dividends. The State believes its tax structure has played an important role in the State's economic growth.

New Hampshire has generally been the highest among all states in local property tax collections per \$1,000 of personal income, because local property taxes were traditionally the principal source of funding for primary and secondary education.

## Housing

According to the 2010 American Community Survey 1-year estimates, housing units in the State numbered 614,996, of which 84% were occupied. The tenure of occupied housing units in the State was 72% owner occupied and 28% renter occupied. The median purchase price of all primary homes sold in 2011 was \$207,000, a decrease of 3.7% from 2010. The median price for primary non-condominium homes sold in 2011 was \$214,000, a decrease of 4.3% from 2010.

The table below sets forth housing prices and rents in recent years.

### Housing Statistics Median Purchase Price and Median Gross Rent

	Owner-Occupied Non-Condominium Housing Unit Median Purchase Price	Percent Change	Renter-Occupied Housing Unit Median Gross Rent <sup>(1)</sup>	Percent Change
2001	\$174,500	14.4%	\$738	5.9%
2002	200,880	15.1	810	9.8
2003	229,400	14.2	854	5.4
2004	252,660	10.1	896	4.9
2005	270,000	6.9	901	0.6
2006	265,000	(1.9)	928	3.0
2007	269,900	1.8	946	1.9
2008	250,000	(7.4)	969	2.4
2009	217,000	(13.2)	969	0.0
2010	223,500	3.0	980	1.1
2011	214,000	(4.3)	984	0.4

Source: New Hampshire Housing Finance Authority.

<sup>(1)</sup> Includes utilities.

<sup>(2)</sup> January through August.

The New Hampshire Housing Finance Authority issued an updated report in July 2012 with respect to foreclosure activity in the State that included the following:

“May 2012 saw 351 foreclosure deeds recorded in New Hampshire, an increase of 3% over May of 2011, but a decline of 9% from April of this year. The cumulative total for January through May 2012 is about 3% below the same period in 2011, and 6% below the same period in 2010. If we continue to see slow improvement in overall economic conditions, as well as some improvement in the statewide and regional housing markets, and no significant national or international economic reversals, there is reason to believe the number of new foreclosures in New Hampshire will decline. Even with the above assumptions, the likely pace of improvement in foreclosure activity will be slow and the negative influence of foreclosed and distressed property on the housing market will continue through the year.”

## Building Activity

The pattern of building activity in New Hampshire in recent years, as evidenced by the issuance of residential building permits, has generally paralleled that of the New England region. There was growth in the 1992 to 2002 period in New Hampshire, New England, and the nation. The number of permits and dollar value peaked in 2004 and declined in each subsequent year through 2009, increased slightly in 2010 and declined in 2011. In 2011, building permits totaled 2,346, with a value of \$432 million. This represents a decrease of 12.1% in the number of permits, and a decrease of 6.5% in dollar value, from 2010. Set out in the following table are the number and value of building permits issued for housing units in New Hampshire, New England and the United States.

	<b>Building Permits Issued By Number of Units and Value (Value in millions)</b>					
	<u>2000</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
<b>New Hampshire</b>						
Single Family	6,097	3,772	2,333	1,662	1,890	<u>1,606</u>
Multi-Family	<u>583</u>	<u>789</u>	<u>901</u>	<u>625</u>	<u>780</u>	<u>740</u>
Total	6,680	4,561	3,234	2,287	2,670	2,346
Value	\$937	\$856	\$593	\$421	\$462	\$432
<b>New England</b>						
Single Family	38,670	26,079	15,870	13,595	14,880	12,322
Multi-Family	<u>6,665</u>	<u>11,453</u>	<u>8,584</u>	<u>5,868</u>	<u>6,084</u>	5,665
Total	45,335	37,532	24,454	19,463	20,964	17,987
Value	\$6,442	\$7,119	\$4,705	\$3,560	\$4,048	\$3,659
<b>United States</b>						
Single Family	1,198,067	979,889	575,544	441,148	447,311	418,498
Multi-Family	<u>394,200</u>	<u>418,526</u>	<u>329,805</u>	<u>141,815</u>	<u>157,299</u>	<u>205,563</u>
Total	1,592,267	1,398,415	905,359	582,963	604,610	624,061
Value	\$185,744	\$291,314	\$225,237	\$95,410	\$101,943	\$105,269

Source: U.S. Census Bureau.

## Transportation

New Hampshire has more than 4,000 miles of State and federal highways. In 1986, the State Legislature enacted a highway plan to serve as a guideline for highway development in the State. A major component of the 1986 highway plan legislation as amended to date provides for continued development of the State's Turnpike System. The State issued in December, 2009, \$150 million of its Turnpike System revenue bonds to finance additional capital improvements to the Turnpike System.

There are twenty-four public commercial airports in the State, two of which have scheduled air service (Manchester and Lebanon), eight private commercial airports and nine private non-commercial airports.

Manchester-Boston Regional Airport, the State's largest commercial passenger and air cargo airport, undertook a 158,000 square foot new terminal construction project in 1992. Bonds guaranteed by the State were issued in June 1992 (and subsequently refunded and paid on January 1, 2002 with the proceeds of non-guaranteed airport revenue bonds of the City); the new terminal opened on January 1, 1994. Since that time, the airport has grown from 427,657 enplanements in fiscal year 1994 to 1,393,035 enplanements in fiscal year 2011. Due to a continued soft global economy, jet fuel price uncertainty and a dramatically changing aviation industry, the Airport experienced a 4.7% decrease in enplanements in fiscal year 2011 as compared with fiscal year 2010 enplanements. Manchester – Boston Regional Airport has undertaken a number of additional expansion, improvement and

renovation projects, which were financed by the City of Manchester through the issuance of airport revenue bonds in October 1998, April 2000, June 2002, and July 2005; and a refunding of bonds in July 2008, December 2009 and June 2012. These projects are expected to enhance the airport’s capacity for increased passenger and freight traffic in the future. The 1998, 2000, 2002, 2005, 2008, 2009 and 2012 bonds are not guaranteed by the State.

Rail freight service is provided by twelve railroads. The Portsmouth Harbor is an important commercial shipping center that can accommodate deep-draft vessels. The State Port Authority Marine Terminal is located on Noble’s Island in Portsmouth Harbor.

The New Hampshire Rail Transit Authority was created pursuant to Chapter 360 of the Laws of 2007 for the purpose of establishing regular commuter rail or other passenger rail service between points within and adjacent to the State. If passed into law, House Bill 218 of the 2011 legislative session would effectively dissolve the current Rail Transit Authority and would establish a new governmental body to study various rail issues. The bill passed both houses during the legislative session and was vetoed by the Governor on June 15, 2011. Because the veto has not been voted on, the current Rail Transit Authority has not changed.

**Education**

New Hampshire provides a mix of public and private educational opportunities. The education function of the State is carried out through the State Board of Education, the Department of Education and the University System of New Hampshire. The State Board and the Department of Education provide curriculum guidance and administrative support to 176 public school districts ranging in grades from kindergarten through grade twelve. In addition to public education, there are numerous private preparatory schools in the State, including Phillips Exeter Academy in Exeter and St. Paul’s School in Concord.

At the university level, the State offers undergraduate and graduate programs in liberal arts and various sciences through the University System of New Hampshire, which includes the University of New Hampshire, Keene State College and Plymouth State University. The University System also operates Granite State College, which offers continuing education to the non-traditional student. In addition to the state-supported university system, eighteen private higher educational institutions are located in New Hampshire, including Dartmouth College in Hanover. The State also supports a network of community colleges comprised of the New Hampshire Technical Institute in Concord and six other colleges located throughout the State. The Institute and colleges offer a two-year associates degree and a variety of certificates in approximately 100 different industrial, business and health programs. Since 1983, over 50% of New Hampshire high school graduates have continued their education beyond the high school level.

As the following table indicates, as of 2010, the educational level of New Hampshire residents over the age of 25 was higher than that of the nation as a whole.

<u>Level of Education</u>	<u>2000</u>		<u>2010</u>	
	<u>New Hampshire</u>	<u>United States</u>	<u>New Hampshire</u>	<u>United States</u>
9-11 years	N/A	84.5%	97.3%	93.9%
12 years	88.1%	78.5	91.5	85.6
1-3 years post-secondary	N/A	47.5	61.7	57.1
4 or more years post-secondary	30.1	21.9	32.8	28.2

Source: 2000 U.S. Census of Population, Census Bureau.

**TURNPIKE SYSTEM AUDITED FINANCIAL STATEMENTS  
FISCAL YEAR 2011**

(Included by Reference and Filed with the  
Municipal Securities Rulemaking Board through its  
Electronic Municipal Market Access system)

**FORM OF CONTINUING DISCLOSURE CERTIFICATE**

This Continuing Disclosure Certificate (the “Disclosure Certificate”) is executed and delivered by the State of New Hampshire (the “State”) in connection with the issuance of its \$110,180,000 Turnpike System Revenue Bonds, 2012 Series C, dated their date of delivery (the “Bonds”). The Bonds are being issued pursuant to the General Bond Resolution of the State authorizing the issuance of State of New Hampshire Turnpike System Revenue Bonds, adopted November 9, 1987, as amended and supplemented to date (the “Resolution”). The State covenants and agrees as follows:

**SECTION 1. Purpose of the Disclosure Certificate.** This Disclosure Certificate is being executed and delivered by the State for the benefit of the Owners of the Bonds and in order to assist the Participating Underwriters in complying with the Rule.

**SECTION 2. Definitions.** In addition to the definitions set forth in the Resolution which apply to any capitalized term used in this Disclosure Certificate, the following capitalized terms shall have the following meanings:

“Annual Report” shall mean any Annual Report provided by the State pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

“Final Official Statement” means the official statement of the State dated August 22, 2012, prepared in connection with the Bonds.

“Listed Events” shall mean any of the events listed in Section 5(a) of this Disclosure Certificate.

“MSRB” means the Municipal Securities Rulemaking Board established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934, or any successor thereto or to the functions of the MSRB contemplated by this Disclosure Certificate. Until otherwise designated by the MSRB or the Securities and Exchange Commission, filings with the MSRB are to be made through the Electronic Municipal Market Access (EMMA) website of the MSRB, currently located at <http://emma.msrb.org>. “Owners of the Bonds” shall mean the registered owners, including beneficial owners, of the Bonds.

“Owners of the Bonds” shall mean the registered owners, including beneficial owners, of the Bonds.

“Participating Underwriter” shall mean any of the original underwriters of the Bonds required to comply with the Rule in connection with offering of the Bonds.

“Rule” shall mean Rule 15c2-12 adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

**SECTION 3. Provision of Annual Reports.**

(a) The State shall, not later than 240 days after the end of each fiscal year, provide to the MSRB an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Certificate. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 4 of this Disclosure Certificate; provided that the audited financial statements of the State may be submitted when available separately from the balance of the Annual Report.

(b) If the State is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the State shall send a notice to the MSRB in substantially the form attached as Exhibit A.

**SECTION 4. Content of Annual Reports.** The State’s Annual Report shall contain or incorporate by reference the following:

(a) to the extent not included in the financial statements described in (b) below, the financial information and operating data for the preceding fiscal year of the type included in the information appearing in the Final Official Statement under the headings *The Turnpike System – General Description* with respect to the first paragraph under such heading on page 20, - *Maintenance of the Turnpike System* with respect to the table captioned *Renewal and Replacement Expenditures* on page 24, - *Toll Rates* with respect to the table captioned *Turnpike System Toll Rate Schedule* on page 35, - *Turnpike System – Historical Revenues and Expenditures* with respect to the table captioned *Statement of Revenues, Expenses and Changes in Net Assets* on page 36, - *Management Discussion of Historical Revenues and Expenditures* (only with respect to the preceding fiscal year) on page 37, *Turnpike System Indebtedness* with respect to the table captioned *Turnpike System Debt Service* on page 44, and *Capital Improvement Program* with respect to the tables captioned *Project Descriptions* on pages 47 through 49 and *Capital Improvement Program Expenditures* on page 50; provided, however, that references to the Final Official Statement for the Bonds as a means of identifying such financial information and operating data shall not prevent the State from reorganizing such material in subsequent official statements or annual information reports, and

(b) the most recently available audited financial statements of the State pertaining to the Turnpike System, prepared in accordance with generally accepted accounting principles.

If audited financial statements of the State pertaining to the Turnpike System for the preceding fiscal year are not available when the Annual Report is submitted, the Annual Report will include unaudited financial statements for the preceding fiscal year.

Any or all of the items listed above may be incorporated by reference from other documents, including official statements of debt issues with respect to which the State is an “obligated person” (as defined by the Rule), which (i) are available to the public on the MSRB internet website, or (ii) have been filed with the Securities and Exchange Commission. The State shall clearly identify each such other document so incorporated by reference.

The State reserves the right (i) to provide financial statements which are not audited if no longer required by law, (ii) to modify from time to time the format of the presentation of such information or date, and (iii) to modify the accounting principles it follows to the extent required by law, by changes in generally accepted accounting principles, or by changes in mandated State statutory principles as in effect from time to time; provided that the State agrees that the exercise of any such right will be done in a manner consistent with the Rule.

#### SECTION 5. Reporting of Significant Events.

(a) The State shall give notice, in accordance with subsection 5(b) below, of the occurrence of any of the following events with respect to the Bonds:

1. principal and interest payment delinquencies;
2. non-payment related defaults, if material;
3. unscheduled draws on the debt service reserves reflecting financial difficulties;
4. unscheduled draws on the credit enhancements reflecting financial difficulties;
5. substitution of the credit or liquidity providers or their failure to perform;
6. adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determination of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
7. modifications to rights of Bondholders, if material;
8. (i) bonds calls, if material, and (ii) tender offers;
9. defeasances;

10. release, substitution or sale of property securing repayment of the Bonds, if material;
11. rating changes;
12. bankruptcy, insolvency, receivership or similar event of the State\* ;
13. the consummation of a merger, consolidation, or acquisition involving the State or the sale of all or substantially all of the assets of the State, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; and
14. appointment of a successor or additional trustee or the change of name of a trustee, if material.

(b) Upon the occurrence of a Listed Event described in subsections (a)(2), (7), (8)(i), (10), (13) or (14), the State shall as soon as possible determine if such event is material under applicable federal securities laws.

(c) Upon the occurrence of a Listed Event described in subsections (a)(1), (3), (4), (5), (6), (8)(ii), (9), (11) or (12), and in the event the State determines that the occurrence of a Listed Event described in subsections (a)(2), (7), (8)(i), (10), (13) or (14) is material under applicable federal securities laws, the State shall, in a timely manner not in excess of ten (10) business days after the occurrence of the event, file a notice of such occurrence with the MSRB.

**SECTION 6. Transmission of Information and Notices.** Unless otherwise required by law, all notices, documents and information provided to the MSRB shall be provided in electronic format as prescribed by the MSRB and shall be accompanied by identifying information as prescribed by the MSRB.

**SECTION 7. Amendment; Waiver.** Notwithstanding any other provision of this Disclosure Certificate, the State may amend this Disclosure Certificate and any provision of this Disclosure Certificate may be waived if such amendment or waiver is permitted by the Rule, as evidenced by an opinion of counsel expert in federal securities law (which may also include bond counsel to the State), to the effect that such amendment or waiver would not cause the Disclosure Certificate to violate the Rule. The first Annual Report filed after enactment of any amendment to or waiver of this Disclosure Certificate shall explain, in narrative form, the reasons for the amendment or waiver and the impact of the change in the type of information being provided in the Annual Report.

If the amendment provides for a change in the accounting principles to be followed in preparing financial statements, the Annual Report for the year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The comparison shall include a qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information in order to provide information to investors to enable them to evaluate the ability of the State to meet its obligations. To the extent reasonably feasible, the comparison shall also be quantitative. A notice of the change in the accounting principles shall be sent to the MSRB.

**SECTION 8. Additional Information.** Nothing in this Disclosure Certificate shall be deemed to prevent the State from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the State chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the State shall have no obligation under this

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\* As noted in the Rule, this event is considered to occur when any of the following occur: (i) the appointment of a receiver, fiscal agent or similar officer for the State in a proceeding under the U.S. Bankruptcy Code or in any proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the State, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or (ii) the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the State.

Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 9. Default. The State acknowledges that its undertakings set forth in this Disclosure Certificate are intended to be for the benefit of, and enforceable by, the beneficial owners from time to time of the Bonds. In the event the State shall fail to perform its duties hereunder, the State shall have the option to cure such failure within a reasonable time (but not exceeding 30 days with respect to the undertakings set forth in Section 3(a) of this Disclosure Certificate or five business days with respect to the undertakings set forth in Sections 3(b) and 5 of this Disclosure Certificate) from the time the State receives written notice of such failure from any beneficial owner of the Bonds. The present address of the State is State of New Hampshire, 25 Capitol Street, Room 121, Concord, New Hampshire 03301, attention: State Treasurer.

In the event the State does not cure such failure in the time specified above, the Trustee may (and, at the request of beneficial owners representing at least 25% in aggregate principal amount of Outstanding Bonds, and upon receipt of indemnification satisfactory to the Trustee, shall), take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the State to comply with its obligations under this Disclosure Certificate. Without regard to the foregoing, any beneficial owner may take such actions as may be necessary and appropriate, including seeking specific performance by court order, to cause the State to comply with its obligations under this Disclosure Certificate. A default under this Disclosure Certificate shall not be deemed an Event of Default under the Resolution, and the sole remedy under this Disclosure Certificate in the event of any failure of the State to comply with this Disclosure Certificate shall be an action to compel performance. The State expressly acknowledges and the beneficial owners are hereby deemed to expressly agree that no monetary damages shall arise or be payable hereunder nor shall any failure to comply with this Disclosure Certificate constitute an event of default with respect to the Bonds.

SECTION 10. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the Owners of the Bonds from time to time, and shall create no rights in any other person or entity.

Date: \_\_\_\_\_, 2012

STATE OF NEW HAMPSHIRE

By: \_\_\_\_\_  
State Treasurer

\_\_\_\_\_  
Governor

\_\_\_\_\_  
Commissioner of Department of  
Transportation

(Exhibit A: Form of Notice of Failure to File Annual Report)  
(Exhibit B: Filing Information Relating to the Municipal Securities Rulemaking Board)



PROPOSED FORM OF OPINION

EDWARDS WILDMAN PALMER LLP  
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edwardswildman.com

[Date of Delivery]

The Honorable Catherine A. Provencher  
State Treasurer  
State House Annex  
Concord, New Hampshire 03301

\$110,180,000  
State of New Hampshire  
Turnpike System Revenue Bonds  
2012 Series C Bonds  
Dated Date of Delivery

We have acted as Bond Counsel to the State of New Hampshire (the "State") in connection with the issuance by the State of the above-referenced Bonds (the "Bonds"). In such capacity, we have examined the law and such certified proceedings and other papers as we have deemed necessary to render this opinion.

The Bonds are issued pursuant to Chapter 237-A of the New Hampshire Revised Statutes Annotated (the "Act") and a General Bond Resolution of the State adopted by the Governor and Council on November 9, 1987, as heretofore supplemented and amended (the "Resolution").

As to questions of fact material to our opinion we have relied upon representations and covenants of the State contained in the Resolution and in the certified proceedings and other certifications of public officials furnished to us, without undertaking to verify the same by independent investigation.

Based on our examination, we are of the opinion, under existing law, as follows:

1. The State has the legal right and authority to adopt the Resolution and to issue the Bonds.
2. The Resolution has been duly adopted by the State and is in full force and effect and constitutes a valid and binding obligation of the State enforceable in accordance with its terms.
3. Pursuant to the Act, the Resolution provides for the benefit of the owners from time to time of the Bonds a valid and binding pledge of and lien on the Revenues (as defined in the Resolution) and moneys and securities on deposit from time to time in all accounts and subaccounts established by or pursuant to the Resolution, other than the Rebate Account, on a parity with other bonds to be issued under the Resolution, after payment of Operating Expenses (as so defined).
4. The Bonds have been duly authorized, executed and delivered by the State, have been duly authenticated and delivered under the Resolution and constitute valid and binding special obligations of the State, enforceable in accordance with their terms.
5. Interest on the Bonds is exempt from the New Hampshire personal income tax on interest and dividends. We express no opinion regarding any other New Hampshire tax consequences arising

with respect to the Bonds or any tax consequences arising with respect to the Bonds under the laws of any state other than New Hampshire.

6. Interest on the Bonds is excluded from the gross income of the owners of the Bonds for federal income tax purposes. In addition, interest on the Bonds is not a specific preference item for purposes of the federal individual or corporate alternative minimum taxes, although such interest is included in adjusted current earnings when calculating corporate alternative minimum taxable income. In rendering the opinions set forth in this paragraph, we have assumed compliance by the State with all requirements of the Internal Revenue Code of 1986 that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, and continue to be, excluded from gross income for federal income tax purposes. The State has covenanted to comply with all such requirements. Failure by the State to comply with certain of such requirements may cause interest on the Bonds to become included in gross income for federal income tax purposes retroactive to the date of issuance of the Bonds. We express no opinion regarding any other federal tax consequences arising with respect to the Bonds.

This opinion is expressed as of the date hereof, and we neither assume nor undertake any obligation to update, revise, supplement or restate this opinion to reflect any action taken or omitted, or any facts or circumstances or changes in law or in the interpretation thereof, that may hereafter arise or occur, or for any other reason.

The rights of the holders of the Bonds and the enforceability of the Bonds and the Resolution are subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted to the extent constitutionally applicable and their enforcement may also be subject to the exercise of judicial discretion in appropriate cases.

EDWARDS WILDMAN PALMER LLP

## GLOSSARY OF TERMS

The following is a list of summary definitions of certain capitalized terms used in this Official Statement.

**“Act”** means Chapter 237-A of the New Hampshire Revised Statutes Annotated, as amended.

**“Additional Bonds”** means Bonds other than the Turnpike System Revenue Bonds, 1987 Series issued under the Bond Resolution.

**“Annual Budget”** means the annual operating budget adopted in accordance with the Bond Resolution.

**“Authorized Officer”** means the Commissioner or the Assistant Commissioner of the Department of Transportation of the State or their successors or delegates.

**“Bondholders”** means the registered owner of the Bonds from time to time as shown in the books kept by the bond registrar.

**“Bond Resolution”** means the general bond resolution adopted by the Governor and Executive Council of the State on November 9, 1987, as amended and supplemented by Supplemental Resolutions dated November 9, 1987, March 21, 1990, March 27, 1991, August 12, 1992, February 9, 1994, February 3, 1999, August 31, 2001, June 4, 2003, June 25, 2003, November 2, 2005, October 21, 2009, June 22, 2011, February 8, 2012 and June 20, 2012 and as further amended and supplemented from time to time by Supplemental Resolutions.

**“Bonds”** means the Turnpike System Revenue Bonds issued from time to time under the Bond Resolution and any Bond or Bonds issued in exchange for or replacement of a previously issued Bond.

**“Capital Improvement Program”** means the multi-year program authorized by the New Hampshire Legislature in 1986, as subsequently amended and supplemented.

**“Completion Date”** means the date on which a Project is first ready for normal continuous operation as determined by an Authorized Officer. If a Project consists of more than one portion, the Completion Date of the Project is the latest Completion Date of any portion of the Project.

**“Construction Account”** means the Turnpike System Revenue Bond Construction Account established by the Bond Resolution.

**“Debt Service”** means with respect to each Fiscal Year or other period the aggregate of the amounts to be set aside (or estimated to be required to be set aside) in the Debt Service Account pursuant to the Bond Resolution in the Fiscal Year or other period for the payment of the principal and sinking fund installments of and interest on Bonds, excluding debt service paid or to be paid from Bond proceeds or from any subsidy from the United States of America for the purpose.

**“Debt Service Account”** means the Turnpike System Revenue Bond Debt Service Account established by the Bond Resolution.

**“Debt Service Reserve Account”** means the Turnpike System Revenue Bond Debt Service Reserve Account established by the Bond Resolution.

**“Debt Service Reserve Account Requirement”** means, as of any date of calculation, an amount equal to the maximum annual Debt Service during the then current or any future Fiscal Year on Outstanding Bonds; provided that in computing such requirement any Option Bonds Outstanding during such Fiscal Year shall be assumed to mature on their stated dates of maturity.

**“Defeasance Obligations”** means (i) any direct and general obligations of, or any obligations unconditionally guaranteed by, the United States of America, (ii) any obligations of any state or political subdivision

of a state (collectively, “Municipal Bonds”) that are fully secured as to principal and interest by an irrevocable pledge of moneys or direct and general obligations of, or obligations unconditionally guaranteed by, the United States of America, which moneys or obligations are segregated in trust and pledged for the benefit of the owners of the Municipal Bonds, and (iii) certificates of ownership of the principal of or interest on direct and general obligations of, or obligations unconditionally guaranteed by, the United States of America, which obligations are held in trust by a commercial bank which is a member of the Federal Reserve System.

“**Default**” means a Default as defined in the Bond Resolution.

“**Event of Default**” means an Event of Default as defined in the Bond Resolution.

“**Fiscal Year**” means the fiscal year of the State with respect to the Turnpike System as established from time to time. The Fiscal Year is now the twelve-month period ending June 30.

“**General Reserve Account**” means the Turnpike System General Reserve Account established by the Bond Resolution.

“**Independent Engineer**” means the engineer or engineering firm or firms retained by the State pursuant to the Bond Resolution.

“**Insurance Reserve Account**” means the Turnpike System Insurance Reserve Account established under the Bond Resolution.

“**Insurance Reserve Requirement**” means, with respect to any Fiscal Year, the amount required by the Bond Resolution to be on deposit in the Insurance Reserve Account.

“**Maximum Interest Rate**” shall mean, with respect to any particular Series of Variable Rate Bonds, a numerical rate of interest that shall be the maximum rate of interest that such Variable Rate Bonds may at any particular time bear, as determined under the Supplemental Resolution authorizing such Variable Rate Bonds.

“**Net Revenue Requirement**” means with respect to each Fiscal Year or other period an amount equal to the greater of: (a) one hundred twenty percent (120%) of Debt Service; or (b) one hundred percent (100%) of Debt Service plus the total amount of principal of and interest on all general obligation or other bonds, notes or other evidences of indebtedness (excluding principal of bond anticipation notes to the extent they are paid or to be paid from proceeds of bonds or other obligations maturing after the end of the Fiscal Year or other period) payable from Revenues during the Fiscal Year or other period and the additional amount, if any, required to be paid from the General Reserve Account to satisfy the Renewal and Replacement Requirement for the Fiscal Year or other period.

“**Net Revenues**” means the Revenues (excluding (a) proceeds of Bonds and notes issued in anticipation of Bonds or of Revenues and (b) the proceeds of the sale or other disposition of all or any part of the Turnpike System, proceeds of insurance and condemnation awards received with respect to the Turnpike System (other than proceeds of use and occupancy insurance or any other insurance against loss of Revenues) and other items of an extraordinary and non-recurrent nature) after deducting Operating Expenses.

“**Operating Expenses**” means the ordinary costs and expenses of the State for the operation, maintenance and repair of the Turnpike System, including working capital as provided in the Bond Resolution. Operating Expenses do not include the principal of and interest on bonds, notes or other evidences of indebtedness issued by the State for the purposes of the Turnpike System. Operating Expenses also do not include Renewal and Replacement Costs and depreciation.

“**Option Bonds**” means Bonds which by their terms may be tendered by and at the option of the Bondholder for payment by the State prior to the stated maturity thereof, or the maturities of which may be extended by and at the option of the Bondholder.

“**Original Issue Discount Bonds**” means bonds originally reoffered to the public at a price (excluding accrued interest) of less than 98% of their principal amount.

**“Outstanding”**, when used to modify Bonds, refers to Bonds issued under the Bond Resolution, excluding: (a) Bonds which have been exchanged or replaced, or delivered to the Trustee for credit against a principal payment or a sinking fund installment; (b) Bonds which have been paid; (c) Bonds which have been purchased by the Trustee from moneys held under the Bond Resolution; (d) Bonds which have become due and for the payment of which moneys have been duly provided; and (e) Bonds with respect to which the obligations of the State under the Bond Resolution have been discharged or otherwise defeased pursuant to the Bond Resolution.

**“Project”** means any construction, improvement, extension, addition, alteration, reconstruction, extraordinary repair, dismantling, equipping or reequipping of or to the Turnpike System, or any one or more of the foregoing, which is designated as a Project by Supplemental Resolution.

**“Project Costs”** means all costs of carrying out a Project and, without limiting the generality of the foregoing, may include (a) preliminary expenses, (b) the cost of acquiring property, franchise, easements, rights-of-way and other property rights necessary or convenient for the Project, (c) engineering architectural and legal expenses, (d) expenses for estimates of cost and revenues, (e) expenses for plans, specifications, traffic estimates, studies and surveys, (f) other expenses incident or necessary to determining the feasibility or practicability of the Project, (g) administrative expenses, (h) construction costs, (i) interest prior to the Completion Date of any Project, (j) the establishment of or contribution to such reserves as may be required by the Bond Resolution, and (k) such other expenses as may be incurred in the financing of the Project or in carrying it out and placing it in operation.

**“Rebate Account”** means the Turnpike System Revenue Bond Rebate Account established by the Bond Resolution.

**“Renewal and Replacement Costs”** means costs associated with major reconstruction, rehabilitation, renewals, replacements and extraordinary repairs necessary to the sound operation of the Turnpike System or to prevent the loss of Revenues, but not costs associated with new construction, additions or extensions.

**“Renewal and Replacement Requirement”** means, with respect to each Fiscal Year, an amount to be set forth in the Annual Budget for Renewal and Replacement Costs for that Fiscal Year.

**“Revenue Account”** means the Turnpike System Revenue Account established by the Bond Resolution.

**“Revenues”** means all tolls, rates, fees, charges, receipts or other income derived or to be derived by the State from the ownership or operation of the Turnpike System, and all rights to receive the same. Without limiting the generality of the foregoing, Revenues include rentals, proceeds of insurance or condemnation or other disposition of Turnpike System assets (except as provided below), proceeds of use and occupancy insurance or any other insurance against loss of Revenues, proceeds of bonds issued under the Act for the Turnpike System, proceeds of notes issued in anticipation of operating Revenues (unless set aside to pay notes of the same character), grants, loans and other contributions from any governmental unit (except as provided below) and earnings from the investment of Revenues. Unless otherwise provided by Supplemental Resolution, Revenues do not include the proceeds of other borrowings by the State or the proceeds of grants for limited purposes or of the disposition of property financed by such grants.

**“Series”** or **“Series of Bonds”** or **“Bonds of a Series”** means a series of Bonds authorized by the Bond Resolution.

**“Special Redemption Account”** means the Turnpike System Revenue Bond Special Redemption Account established by the Bond Resolution.

**“State”** means the State of New Hampshire.

**“Supplemental Resolution”** means a resolution adopted by the Governor and Executive Council under the Bond Resolution.

**“Treasurer”** means the Treasurer of the State.

**“Trustee”** means the Trustee appointed pursuant to the Bond Resolution and any successor Trustee.

**“Turnpike System”** means the complete turnpike system of the State as defined in Chapters 237 and 237-A of the New Hampshire Revised Statutes Annotated, as amended, together with any improvement or addition constructed or acquired after the adoption of the Bond Resolution.

**“Variable Rate Bonds”** means Bonds issued with a variable, adjustable, convertible or other similar rate that is not fixed in percentage for the entire term of thereof at the date of issue of the Bonds.

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