

*In the opinion of Co-Bond Counsel to the New York State Thruway Authority, under existing statutes and court decisions, and assuming compliance with the tax covenants described herein, (i) interest on the Series K Bonds is excluded from gross income for Federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and (ii) interest on the Series K Bonds is not treated as a preference item in calculating the alternative minimum tax imposed on individuals and corporations under the Code; such interest, however, is included in the adjusted current earnings of certain corporations for purposes of calculating the alternative minimum tax imposed on such corporations. In addition, in the respective opinions of Co-Bond Counsel to the Authority, under existing statutes, interest on the Series K Bonds is exempt from personal income taxes imposed by the State of New York or any political subdivision thereof (including The City of New York and the City of Yonkers). See "TAX MATTERS" herein.*



**\$743,865,000**  
**NEW YORK STATE THRUWAY AUTHORITY**  
**General Revenue Refunding Bonds**  
**Series K**

**Dated: Date of Delivery**

**Due: January 1, as shown on the inside cover hereof**

Interest is payable each January 1 and July 1 commencing July 1, 2015. The New York State Thruway Authority General Revenue Refunding Bonds, Series K (the "Series K Bonds") are issuable only as fully registered bonds without coupons, in the principal amount of \$5,000 or any integral multiple thereof. The Series K Bonds will be issued initially under a book-entry only system and will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), which will act as securities depository for the Series K Bonds. See **Appendix D** — "Book-Entry Only System" herein. Principal of and premium, if any, and interest on the Series K Bonds will be payable to Bondholders through The Bank of New York Mellon, New York, New York, as Trustee.

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**The Series K Bonds are subject to redemption prior to maturity as described herein.**

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The Series K Bonds of the New York State Thruway Authority (the "Authority") will be issued pursuant to the Authority's General Revenue Bond Resolution adopted on August 3, 1992, as supplemented (such General Revenue Bond Resolution as from time to time amended or supplemented being herein called the "Bond Resolution"), including as supplemented by the Sixteenth Supplemental Revenue Bond Resolution Authorizing General Revenue Bonds, Series K, adopted by the Authority on October 20, 2014 (the "Series Resolution"), and are secured as to the payment of principal, premium, if any, and interest thereon by a pledge of the Revenues and certain funds and accounts established under the Bond Resolution, subject to the application thereof for the purposes and on the terms and conditions provided in the Bond Resolution. **The Series K Bonds are not a debt of the State of New York (the "State") nor shall the State be liable thereon.**

The scheduled payment of principal of and interest on the Series K Bonds maturing on January 1 in the years 2028 (5.0% rate, 2.880% yield, CUSIP No. 650009H30), 2031 (4.0% rate, 3.260% yield, CUSIP No. 650009H63) and 2031 (5.0% rate, 3.070% yield, CUSIP No. 650009H71) (the "Insured Bonds"), when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured Bonds by ASSURED GUARANTY MUNICIPAL CORP. For more information relating to the Insured Bonds, see inside cover.

The Series K Bonds are being issued to (i) provide funds to refund certain of the Authority's Outstanding Bonds and (ii) pay the Costs of Issuance of the Series K Bonds.

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**MATURITY SCHEDULE — See Inside Cover**

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The cover and inside cover pages contain certain information for general reference only. They are not intended to be a summary of the security or terms of this issue. Investors are advised to read the entire Official Statement to obtain information essential to the making of an informed decision.

The Series K Bonds are offered, when, as and if issued by the Authority and delivered to the Underwriters, and are subject to the approval of legality by Hawkins Delafield & Wood LLP, and Hardwick Law Firm, LLC, as Co-Bond Counsel to the Authority. Certain legal matters are subject to the approval of William J. Estes, Esq., General Counsel to the Authority, and of Nixon Peabody LLP, Counsel to the Underwriters. Public Resources Advisory Group is acting as Financial Advisor to the Authority. It is expected that the Series K Bonds will be available for delivery to The Depository Trust Company, New York, New York, on or about December 17, 2014.

**Goldman, Sachs & Co.**  
**Citigroup**

**CastleOak Securities, L.P. Janney Montgomery Scott**

**Ramirez & Co., Inc.**  
**Wells Fargo Securities**

**Loop Capital Markets TD Securities**

**\$743,865,000**  
**New York State Thruway Authority**  
**General Revenue Refunding Bonds**  
**Series K**

**Maturities, Principal Amounts, Interest Rates, Prices or Yields and CUSIP Numbers**

<b>Due January 1</b>	<b>Principal Amount</b>	<b>Interest Rate</b>	<b>Price or Yield</b>	<b>CUSIP** Number (Base # 650009)</b>
2019	\$ 4,825,000	3.00%	1.17%	E82
2020	5,130,000	4.00	1.45	E90
2020	20,340,000	5.00	1.45	G64
2021	4,060,000	4.00	1.73	F24
2021	22,700,000	5.00	1.73	G72
2022	5,335,000	4.00	2.02	F32
2022	22,705,000	5.00	2.02	G80
2023	755,000	4.00	2.25	F40
2023	28,640,000	5.00	2.25	G98
2024	3,520,000	4.00	2.41	F57
2024	27,340,000	5.00	2.41	H22
2025	19,260,000	5.00	2.58	F65
2026	20,215,000	5.00	2.77*	F73
2027	21,230,000	5.00	2.87*	F81
2028	2,605,000†	5.00	2.88*	H30
2028	90,360,000	5.00	2.98*	F99
2029	5,055,000	3.25	100	H48
2029	92,525,000	5.00	3.07*	G23
2030	102,355,000	5.00	3.12*	G31
2031	2,465,000†	4.00	3.26*	H63
2031	20,000,000†	5.00	3.07*	H71
2031	97,015,000	5.00	3.17*	G49
2032	20,100,000	3.50	99.75	H55
2032	105,330,000	5.00	3.20*	G56

† Insured by Assured Guaranty Municipal Corp. See “BOND INSURANCE ON CERTAIN MATURITIES.”

\* Priced at the stated yield to the January 1, 2025 optional redemption date at a redemption price of 100%.

\*\* CUSIP numbers have been assigned by Standard & Poor’s CUSIP Service Bureau, a division of the McGraw-Hill Companies, Inc. and are included solely for the convenience of the Series K Bonds Bondholders. The Authority is not responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Series K Bonds or as indicated above. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Series K Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series K Bonds.

IN CONNECTION WITH THE OFFERING OF THE SERIES K BONDS, THE UNDERWRITERS MAY OVERALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF SUCH BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH STABILIZATION, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

No dealer, broker, salesperson or other person has been authorized to give any information or to make any representations, other than those contained in this Official Statement (the term “Official Statement” when used herein shall for all purposes include reference to the Appendices hereto), and, if given or made, such other information or representations must not be relied upon as having been authorized. 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 Series K Bonds by any person in any jurisdiction in which it is unlawful for the person to make such offer, solicitation or sale.

The information set forth herein has been provided by the Authority and other sources which are believed to be reliable by the Authority, but is not guaranteed as to its accuracy or completeness.

Assured Guaranty Municipal Corp. (“AGM”) makes no representation regarding the Series K Bonds or the advisability of investing in the Series K Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading “BOND INSURANCE ON CERTAIN MATURITIES” and in **Appendix G** – “Specimen Municipal Bond Insurance Policy.”

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

The information herein is 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 the affairs of the Authority since the date hereof. This Official Statement is submitted in connection with the sale of the securities referred to herein and may not be reproduced or used, in whole or in part, for any other purpose.

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#### **CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING STATEMENTS IN THIS OFFICIAL STATEMENT**

This Official Statement and particularly the information contained under the captions “SUMMARY STATEMENT,” “SOURCES OF PAYMENT AND SECURITY FOR THE BONDS,” “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT,” “INVESTMENT CONSIDERATIONS,” and “**Appendix A** — Supplemental Letter and Report of Traffic Engineer” contain statements relating to future results and economic performance that are “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. When used in this Official Statement, the words “anticipate,” “believe,” “may,” “will,” “should,” “seek,” “expect,” “assume,” “estimate,” “projection,” “plan,” “budget,” “forecast,” “intend,” and “goal,” and similar expressions identify forward-looking statements. The words or phrases “to date,” “now,” “currently,” and the like are intended to mean as of the date of this Official Statement. Examples of forward-looking statements contained in this Official Statement are statements that concern the Authority’s or the New NY Bridge Project’s future revenues, costs, additional revenue needs, traffic projections and liquidity. The forward-looking statements contained herein are based on the Authority’s expectations and are necessarily dependent upon assumptions, estimates and data that it believes are reasonable as of the date made but that may be incorrect, incomplete or imprecise or not reflective of actual results. The

Authority does not undertake to update or revise any of the forward-looking statements contained herein, even if it becomes clear that they will not be realized.

**Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in such forward-looking statements. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between forecasts and actual results, and those differences may be material. For a discussion of certain of such risks and possible variations in results, see the information under “INVESTMENT CONSIDERATIONS.” The Authority does not plan to issue any updates or revisions to those forward-looking statements if or when its expectations, or events, conditions or circumstances on which such statements are based occur.**

**THE SERIES K BONDS HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION. THE REGISTRATION, QUALIFICATION, OR EXEMPTION OF THE SERIES K BONDS IN ACCORDANCE WITH THE APPLICABLE SECURITIES LAW PROVISIONS OF THE JURISDICTIONS IN WHICH THESE SECURITIES HAVE BEEN REGISTERED, QUALIFIED, OR EXEMPTED SHOULD NOT BE REGARDED AS A RECOMMENDATION THEREOF. NEITHER THESE JURISDICTIONS NOR ANY OF THEIR AGENCIES HAVE GUARANTEED OR PASSED UPON THE SAFETY OF THE SERIES K BONDS AS AN INVESTMENT, UPON THE PROBABILITY OF ANY EARNINGS THEREON OR UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT.**

The order and placement of information in this Official Statement, including appendices, are not an indication of relevance, materiality or relative importance, and this Official Statement, including the appendices, must be read in its entirety. The captions and headings in this Official Statement are for convenience purposes only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provision or section of this Official Statement.

This Official Statement contains summaries of and references to documents that the Authority believes to be accurate; however, reference is made to the actual documents for complete information. All such summaries and references are qualified in their entirety by such reference.

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## SUMMARY STATEMENT

*This summary statement is qualified in its entirety by reference to the information appearing elsewhere in this Official Statement. Terms used in this summary statement and not defined herein shall have the meanings set forth in the body of this Official Statement.*

### **The Authority**

The New York State Thruway Authority (the “Authority”), a body corporate and politic constituting a public corporation, created in 1950 by the New York State Thruway Authority Act, as amended, Title 9 of Article 2 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State of New York (the “Act”), is empowered, among other things, to construct, operate and maintain as a toll facility, and to improve and reconstruct the New York State Thruway (the “Thruway”), subject to certain statutory limitations on the Authority’s right to impose tolls on certain parts of the Thruway, including the Cross-Westchester Expressway. The Act also authorizes the Authority to issue, from time to time, negotiable bonds and notes for any corporate purpose secured by tolls, revenues, rates, fees, charges, rents and other earned income of the Authority. See “THE AUTHORITY”.

The Thruway is a 570-mile superhighway system crossing the State and is one of the largest toll superhighway systems in the United States. In addition to being the principal artery of travel and commerce within New York connecting the State’s principal cities, the Thruway is a vital link to long distance interstate travel. In addition, the Thruway provides the major route of access for visitors to the State’s tourist destinations including Niagara Falls, the State Canal system, the Finger Lakes, the Adirondacks, the Catskills and New York City. The Tappan Zee Bridge is a major component of the Thruway spanning the Hudson River north of New York City. It is being replaced by a new twin-span structure (the “New NY Bridge Project”) currently under construction. See “AUTHORITY GOVERNANCE, FACILITIES AND OPERATIONS — Thruway Facilities and Operations” and **Appendix A** — “Supplemental Letter and Report of Traffic Engineer”.

### **Purpose of Issue**

The Series K Bonds are being issued to (i) provide funds to refund certain of the Authority’s Outstanding Bonds and (ii) pay the Costs of Issuance of the Series K Bonds. See “PLAN OF REFUNDING”.

No portion of the proceeds of the Series K Bonds will be applied to finance the New NY Bridge Project.

### **Security**

The Series K Bonds are direct and general obligations of the Authority. Bonds issued under the Bond Resolution, including the Series K Bonds, are secured as to the payment of principal, premium, if any, and interest thereon by a pledge of the Revenues and certain funds and accounts established under the Bond Resolution, subject to the application thereof for the purposes and on the terms and conditions provided in the Bond Resolution. **The Series K Bonds are not a debt of the State nor shall the State be liable thereon.** The Authority has no taxing power. The Series K Bonds are secured by the Senior Debt Service Reserve Fund in an amount equal to the maximum amount of Aggregate Debt Service for any 12-month period on all Outstanding Bonds secured by the Senior Debt Service Reserve Fund, a substantial portion of which is currently funded by Reserve Credit Facilities as permitted by the Bond Resolution. The Bond Resolution also provides that Operating Expenses of Facilities will be funded from Revenues prior to the provision for accrued Debt Service on the Bonds. See “SOURCES OF PAYMENT AND SECURITY FOR THE BONDS” and “AGGREGATE ANNUAL SENIOR LIEN DEBT SERVICE REQUIREMENTS”.

### **Toll Covenant**

Pursuant to the Bond Resolution, the Authority has covenanted at all times to fix, charge and collect such tolls, fees and charges for the use of the Facilities as are required in order that, in each fiscal year, Net Revenues shall at least equal the Net Revenue Requirement for such year. “Net Revenue Requirement”

means, with respect to any period of time, an amount equal to the greater of (i) the sum of amounts required to make payments with respect to Aggregate Debt Service, deposits to the Senior Debt Service Reserve Fund, Reserve Maintenance Payments (minimum, \$30 million a year), and the amounts required to be deposited in the Junior Indebtedness Fund pursuant to the Supplemental Resolution or other resolution or agreement authorizing outstanding Junior Indebtedness or (ii) 1.20 times the sum of the Aggregate Debt Service for such period. See “SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Tolls, Fees and Charges” and **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Tolls, Fees and Charges”.

### **Additional Indebtedness**

Under the Bond Resolution, the Authority may issue Additional Bonds, Refunding Bonds, Junior Indebtedness and Subordinated Indebtedness payable from Revenues. Additional Bonds may be issued, subject to certain limitations, to pay for Project Costs of the Original Project, any Additional Projects and any Other Authority Projects. Refunding Bonds may be issued, subject to certain limitations, to refund Outstanding Bonds, any Junior Indebtedness and any Subordinated Indebtedness. Such limitations include, but are not limited to, satisfaction of an earnings or coverage test or not-to-exceed Aggregate Debt Service test. See “SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Additional Bonds, Refunding Bonds and Other Indebtedness” and “— Reserve Maintenance Fund”.

On December 18, 2013, the Authority issued \$1,600,000,000 of General Revenue Junior Indebtedness Obligations, Series 2013A (the “Series 2013A Junior Indebtedness Obligations”) pursuant to the Authority’s Resolution Authorizing General Revenue Junior Indebtedness Obligations and First Supplemental Junior Indebtedness Resolution Authorizing General Revenue Junior Indebtedness Obligations, Series 2013A, both adopted on November 7, 2013 (collectively, the “Junior Indebtedness Resolution”). In addition, in order to secure the Authority’s obligations under a loan agreement (the “TIFIA Loan Agreement”) with the United States Department of Transportation, acting through the Federal Highway Administration (“USDOT”), whereby USDOT is loaning up to \$1,600,000,000 (the “TIFIA Loan”) to the Authority, the Authority on December 19, 2013 issued its General Revenue Junior Indebtedness Obligations, Series 2013B (the “Series 2013B Junior Indebtedness Obligations”). While not pledged therefor, the Authority expects to pay the principal due at maturity on May 1, 2019 of the Series 2013A Junior Indebtedness Obligations by drawing funds under the TIFIA Loan. The Series 2013A Junior Indebtedness Obligations and the Series 2013B Junior Indebtedness Obligations are the only Junior Indebtedness Obligations outstanding. The Authority expects to issue multiple series of Junior Indebtedness Obligations to finance the costs of the New NY Bridge Project. See the category of “Proposed Debt Issuances by Year” in the chart entitled “Projected Results” under “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT”. The Authority has covenanted under the TIFIA Loan Agreement that the proceeds of Junior Indebtedness Obligations will only be used to finance construction and equipping of the New NY Bridge Project through the substantial completion of that project, and that no Bonds issued pursuant to the Bond Resolution will be applied to pay costs of construction and equipping of the New NY Bridge Project. See “INVESTMENT CONSIDERATIONS” for additional discussion relating to the New NY Bridge Project and the TIFIA Loan and see “THE AUTHORITY – Outstanding Indebtedness” for a reference to outstanding Subordinate Indebtedness.

### **Budget and Multi-Year Capital Program**

On December 16, 2013, the Authority Board approved the 2014 Budget (the “2014 Budget”) and Multi-Year Capital Program totaling \$4.7 billion, including \$3.1 billion in costs for the New NY Bridge Project. The implementation of a new asset management system and project selection protocols have allowed the Authority to pursue a more efficient and balanced approach to the Multi-Year Capital Program project mix, focusing more on high priority and high impact investments to maintain the useful life of Thruway and Canal infrastructure. The Multi-Year Capital Program completes major, job-sustaining reconstruction projects currently underway and includes new projects that address reconstruction and rehabilitation of roadway, bridges, facilities and support systems of the Thruway; congestion relief, mobility enhancements and capital funds for Canal projects; and provision for replacement of equipment and other non-bridge and highway projects of the Authority. See “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT



— Multi-Year Capital Program” and “— Funding of the Multi-Year Capital Program” for more information on the Multi-Year Capital Program and the New NY Bridge Project.

In December 2014, the Authority Board is expected to adopt a revised 2014 Budget (the “2014 Revised Budget”) reflecting expected results for 2014 and a proposed budget for 2015 (the “2015 Proposed Budget”) that will maintain high levels of safety and customer service and preserve good highway, bridge, and waterway conditions. See “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT — 2014 Revised Budget and 2015 Proposed Budget”.

### Projected Results

The Authority retained the Traffic Engineer to prepare a study (the “Traffic Engineer’s Report”), and an update of their study, dated November 5, 2014 (“Supplemental Letter”) of the Authority’s Thruway operations and to project the financial results of the Authority’s operations in the years 2014-2019. The forecast of traffic and revenues detailed in the Traffic Engineer’s Report and the Supplemental Letter are based on the Authority’s current toll schedule. The Traffic Engineer’s Report and the Supplemental Letter provide estimates of future revenues required for the Authority to successfully complete the New NY Bridge Project while meeting its system-wide operating, debt service, and capital needs. Future incremental funding needs for the years 2015 through 2019 were established by the Authority at amounts necessary to maintain levels of safety and service, good infrastructure conditions, support Thruway and Canal operations, and maintain the Authority’s established debt service coverage policy targets. In the Supplemental Letter, the Traffic Engineer confirmed its forecast and reiterated its conclusions as presented in the Traffic Engineer’s Report.

The projections summarized in the following table, entitled “Projected Results” show the actual results for 2013 and the Traffic Engineer’s findings for the years 2014 through 2018. The results of this analysis are included in the Traffic Engineer’s Report, as updated in the Supplemental Letter, both of which are included in **Appendix A**. The Traffic Engineer’s Report and Supplemental Letter should be read in their entirety. See “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT — Projected Results.”

	Projected Results (in millions)					
	Actual <u>2013</u>	2014 Revised <u>Budget</u>	2015 Proposed <u>Budget</u>	Estimated <u>2016</u>	Estimated <u>2017</u>	Estimated <u>2018</u>
Total Revenue Target <sup>(1)</sup>	\$680.7	\$689.2	\$728.9	\$849.7	\$964.1	\$1,031.6
Operating Expenses and Reserve	<u>283.1</u>	<u>290.5</u>	<u>291.0</u>	<u>299.9</u>	<u>308.9</u>	<u>318.1</u>
Net Revenue (A)	397.6	398.7	437.9	549.8	655.2	713.6
Net Senior Debt Service (B)	<u>239.8</u>	<u>254.9</u>	<u>245.4</u>	<u>263.2</u>	<u>288.4</u>	<u>302.1</u>
Net Revenue after Senior Debt Service	157.8	143.8	192.5	286.6	366.8	411.4
Net Junior Debt Service (C)	0.0	0.0	36.8	80.1	120.7	143.4
Senior Debt Service Coverage Ratio (A/B) <sup>(2)</sup>	1.66	1.56	1.78	2.09	2.27	2.36
Senior & Junior Debt Service Coverage Ratio (A/(B+C)) <sup>(2)</sup>	N/A	N/A	1.55	1.60	1.60	1.60

Source: Jacobs Civil Consultants, Inc. Traffic Engineer’s Report dated December 4, 2013, and Supplemental Letter dated November 5, 2014.

<sup>(1)</sup> Includes estimates of additional toll revenues that will be necessary to maintain fiscal balance in the years 2015 through 2018.

<sup>(2)</sup> Board-adopted Fiscal Management Guidelines require a minimum 1.5x Senior Bond coverage ratio. The Bond Resolution requires a 1.2x minimum Senior Debt Service coverage ratio and the Junior Indebtedness Resolution requires a 1.2x minimum Senior and Junior Debt Service coverage ratio.

## **Bond Insurance**

Concurrently with the issuance of the Series K Bonds, Assured Guaranty Municipal Corp. (“AGM”) will issue its Municipal Bond Insurance Policy (the “Policy”) for the Series K Bonds maturing on January 1 in the years 2028 (5.0% rate, 2.880% yield, CUSIP No. 650009H30), 2031 (4.0% rate, 3.260% yield, CUSIP No. 650009H63) and 2031 (5.0% rate, 3.070% yield, CUSIP No. 650009H71) (the “Insured Bonds”). For more information relating to the Insured Bonds, see inside cover. The Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the Policy included as **Appendix G** to this Official Statement.

## **Ratings**

Moody’s Investors Service (“Moody’s”) and Standard & Poor’s Ratings Services (“S&P”) have rated the Series K Bonds “A2” and “A”, respectively. The Authority expects the Insured Bonds to be rated “A2” and “AA” by Moody’s and S&P, respectively. See “RATINGS.”

## OFFICIAL STATEMENT

# **\$743,865,000** **New York State Thruway Authority** **General Revenue Refunding Bonds** **Series K**

Albany, New York  
December 4, 2014

### INTRODUCTION

The purpose of this Official Statement, including the cover and inside cover pages, the summary statement and appendices, is to set forth information with respect to the General Revenue Refunding Bonds, Series K (the “Series K Bonds”), of the New York State Thruway Authority (the “Authority”). The Series K Bonds are authorized by the New York State Thruway Authority Act, as amended, Title 9 of Article 2 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State of New York (the “Act”). The Series K Bonds are authorized to be issued under and pursuant to the Authority’s General Revenue Bond Resolution, adopted on August 3, 1992, as amended on January 5, 2007, as supplemented (such General Revenue Bond Resolution as from time to time amended or supplemented being herein called the “Bond Resolution”), including as supplemented by the Sixteenth Supplemental Revenue Bond Resolution Authorizing General Revenue Refunding Bonds, Series K (the “Series Resolution”), adopted by the Authority on October 20, 2014.

### THE AUTHORITY

The Authority, a body corporate and politic constituting a public corporation, created in 1950 by the Act, is empowered to finance, construct, operate and maintain as a toll facility, and to improve and reconstruct, the Governor Thomas E. Dewey Thruway. In addition, pursuant to Chapter 766 of the Laws of New York of 1992 and other authorizations, the Authority, among other things, (i) has jurisdiction of and operational and financing authority over the New York State Canal system, (ii) will finance and undertake specified economic development transportation projects in the State and (iii) may undertake certain financings on behalf of the State for transportation purposes.

#### History

In 1942, the State’s leaders recognized that the State’s highway system would not be adequate for post-war needs and ordered the planning of a superhighway system through the major travel corridors of the State. In 1944, the State Legislature authorized the State Bureau of Public Works (the predecessor of the New York State Department of Transportation) to proceed with construction of the Thruway. Governor Thomas E. Dewey broke ground for the Thruway in 1946. In May 1948, the first section, four miles between Canandaigua and Victor near Rochester, was opened. By 1950, approximately \$25 million of State funds had been spent on the Thruway. A special committee of State officials from whom Governor Dewey sought advice urged that it become a toll highway operated by an independent public authority.

In 1950, the Legislature created the Authority to build, operate and maintain the highway. It was financed primarily through the issuance of \$500,000,000 of State Guaranteed Bonds and \$472,000,000 of Prior General Revenue Bonds, all of which have been paid in full and are no longer outstanding. The revenue to retire these bonds was generated primarily from tolls. In June 1954, the first toll section, a 115-mile stretch from Lowell (west of Utica) to Rochester, was opened. The 426-mile mainline was completed in 1956 and in 1964 it was given Governor Dewey’s name in recognition of his role in its development.

In 1992 and 1993, legislation was adopted which, among other things, created and transferred jurisdiction of the State Canal system to a subsidiary corporation of the Authority and authorized the Authority to assist in or finance the development of certain projects.

## **Powers**

The Authority is authorized under the Act to establish and collect such tolls and charges as may be convenient or necessary to produce at all times sufficient revenues to meet its expenses of maintenance and operation, to pay, as the same shall become due, the principal of and interest on the Bonds and Junior Indebtedness Obligations and to fulfill the terms of any agreement made with the holders of Bonds and Junior Indebtedness Obligations until such Bonds and Junior Indebtedness Obligations and the interest thereon are fully met and discharged. Under the Bond Resolution and the Junior Indebtedness Resolution, tolls shall remain in effect until all of the Bonds and Junior Indebtedness Obligations, as applicable, have been retired.

Under the Act, the powers of the Authority include, among others, the power to maintain, reconstruct and operate the Thruway so long as its corporate existence shall continue; and, in addition, to construct and maintain facilities for the public not inconsistent with the appropriate use of the Thruway, to contract for such construction, and to lease the right to construct and use such facilities on such terms and for such considerations as it determines.

Title to the real property utilized by the Authority is vested in the State, but the Authority has the right, so long as its corporate existence shall continue, to possess, use and dispose of all real property and rights therein. The Authority has the power to acquire, hold and dispose of personal property for its corporate purposes. The Authority has no taxing power.

## **Outstanding Indebtedness**

The Authority has been authorized under the Act to issue its bonds and notes to fund a portion of the capital needs of the Authority. As of December 4, 2014, the Authority has outstanding under the Bond Resolution \$3,483,025,000 aggregate principal amount of Bonds. After the issuance of the Series K Bonds and the defeasance of the Refunded Bonds (as hereinafter defined), the Authority will have \$3,389,515,000 aggregate principal amount of Bonds outstanding under the Bond Resolution.

On December 18, 2013, the Authority issued \$1,600,000,000 of General Revenue Junior Indebtedness Obligations, Series 2013A (the "Series 2013A Junior Indebtedness Obligations") pursuant to the Authority's Resolution Authorizing General Revenue Junior Indebtedness Obligations and First Supplemental Junior Indebtedness Resolution Authorizing General Revenue Junior Indebtedness Obligations, Series 2013A, both adopted on November 7, 2013 (collectively, the "Junior Indebtedness Resolution"). In addition, in order to secure the Authority's obligations under a loan agreement (the "TIFIA Loan Agreement") with the United States Department of Transportation, acting through the Federal Highway Administrator ("USDOT"), whereby USDOT is loaning up to \$1,600,000,000 (the "TIFIA Loan") to the Authority, on December 19, 2013 the Authority issued its General Revenue Junior Indebtedness Obligations, Series 2013B (the "Series 2013B Junior Indebtedness Obligations"). While not pledged therefor, the Authority expects to pay the principal due at maturity on May 1, 2019 of the Series 2013A Junior Indebtedness Obligations by drawing funds under the TIFIA Loan. The Series 2013A Junior Indebtedness Obligations and the Series 2013B Junior Indebtedness Obligations are the only Junior Indebtedness Obligations outstanding. The Authority has covenanted under the TIFIA Loan Agreement that the proceeds of Junior Indebtedness Obligations will only be used to finance construction and equipping of the New NY Bridge Project through the substantial completion of that project, and that no Bonds issued pursuant to the Bond Resolution will be applied to pay costs of construction and equipping of the New NY Bridge Project.

The Authority's official statement dated December 12, 2013 relating to the issuance of the Series 2013A Junior Indebtedness Obligations, including the summary of the Junior Indebtedness Resolution and the

TIFIA Loan Agreement, has been filed with the Electronic Municipal Market Access System (“EMMA”) of the Municipal Securities Rulemaking Board (“MSRB”), and the information under the captions “THE JUNIOR INDEBTEDNESS OBLIGATIONS”, “TIFIA LOAN PROVISIONS”, and **Appendix C** – “Summary of Certain Provisions of the Junior Indebtedness Resolution and the Senior Resolution” are included by specific cross-reference in this Official Statement.

In 2012, the Authority entered into a loan agreement (the “Loan Agreement”) with Citibank, N.A. for a revolving loan in an aggregate amount not to exceed \$60 million. The loan matures in 2017 and may be pre-paid at any time by the Authority without penalty. As of December 4, 2014, the Authority has borrowed \$24 million via the revolving loan to reconstruct portions of the Canal System damaged or destroyed by Tropical Storms Irene and Lee. The Authority’s obligation to repay the revolving loan is secured by a note constituting Subordinate Indebtedness under the Bond Resolution through a pledge of revenues available in the General Reserve Fund, as well as federal (FEMA) grant funds. *This obligation is subordinate to all Bonds and all Junior Indebtedness Obligations and is payable solely from the Authority’s General Reserve Fund.*

**Members and Officers**

The Act provides that the Authority consists of a Board of seven members appointed by the Governor of the State, with the advice and consent of the State Senate. Board members serve for terms of nine years each. Vacancies on the Authority Board occurring other than by expiration of term are filled for the remainder of the unexpired term in the manner previously stated. Pursuant to the New York State Public Officers Law, members of the Authority Board whose terms have expired continue to serve until a successor is appointed and qualified. The members of the Authority Board receive no salary but are reimbursed for their necessary expenses incurred in connection with their duties. The Chair serves in that capacity for the full term of the appointment as a member of the Authority Board. Pursuant to law and the Authority By-Laws, Donna J. Luh, as Vice Chair, became Acting Chair effective November 30, 2014, upon the resignation of Howard P. Milstein as the Chair of the Authority Board. Ms. Luh assumes and performs all powers and duties of the Chair until the appointment and confirmation of a new Chair as described above. The members of the Authority Board may appoint other officers. The present members of the Board and the expiration dates of their terms of office are as follows:

<u>Name</u>	<u>Expiration of Term</u>
E. Virgil Conway .....	January 1, 2017
José Holguín-Veras.....	December 12, 2018
Donna J. Luh.....	June 22, 2017
J. Donald Rice, Jr.....	June 13, 2018
Brandon R. Sall.....	January 1, 2023
Richard N. Simberg .....	September 14, 2017

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The present officers of the Authority are as follows:

<u>Name</u>	<u>Office</u>
Vacant.....	Chairman
Donna J. Luh.....	Vice Chair
Thomas J. Madison, Jr. ....	Executive Director
John M. Bryan .....	Treasurer
William F. McDonough.....	Assistant Treasurer
William J. Estes .....	Secretary
Jonathan E. Gunther.....	Assistant Secretary
Keith Fragomeni.....	Assistant Secretary
Jerry B. Yomoah.....	Assistant Secretary

Thomas J. Madison, Jr. is the Executive Director of the New York State Thruway Authority and Canal Corporation. John M. Bryan serves as Chief Operating and Financial Officer of the Authority. William J. Estes, Esq. serves as the General Counsel and Secretary to the Authority. See “AUTHORITY GOVERNANCE, FACILITIES AND OPERATIONS” for additional detail on the Board membership and senior staff at the Authority.

**PLAN OF REFUNDING**

The Series K Bonds are being issued to (i) provide funds to refund certain of the Authority’s Outstanding Bonds and (ii) pay the Costs of Issuance of the Series K Bonds. See the table below under “SOURCES AND USES OF FUNDS”.

The net proceeds of the Series K Bonds being used to refund certain of the Authority’s Outstanding Bonds, issued under the Bond Resolution and identified in **Appendix F** (the “Refunded Bonds”), which will be redeemed on the dates and at the Redemption Prices indicated in **Appendix F**, will be invested under an escrow agreement and used to acquire direct obligations of, or obligations guaranteed by, the United States of America (the “Government Obligations”), the principal of and interest on which, when due, will provide, together with any moneys or other investments which may be deposited by the Authority with The Bank of New York Mellon, as Escrow Agent and as the Trustee under the Bond Resolution, moneys sufficient to pay the principal or redemption price of the Refunded Bonds and the interest to become due on such Refunded Bonds on and prior to their respective maturity or redemption dates. Upon making such deposit with the Trustee and the issuance of certain irrevocable instructions to the Trustee pursuant to the Bond Resolution, the Refunded Bonds will, under the terms of the Bond Resolution, be deemed to have been paid and will no longer be Outstanding and will cease to be entitled to any lien, benefit or security under the Bond Resolution.

**SOURCES AND USES OF FUNDS**

The proceeds received from the sale of the Series K Bonds are expected to be applied in the following approximate amounts:

**Sources of Funds**

Principal Amount of Series K Bonds	\$743,865,000
Net Original Issue Premium	121,085,643
Other Available Monies	<u>17,220,904</u>
Total Sources of Funds	<u>\$882,171,547</u>

**Uses of Funds**

Deposit with Trustee for Refunded Bonds	\$872,069,613
Costs of Issuance (including Bond Insurance Premium and New York State Bond Issuance Charge)	6,812,910
Underwriters’ Discount	<u>3,289,024</u>
Total Uses of Funds	<u>\$882,171,547</u>

**AGGREGATE ANNUAL SENIOR LIEN  
DEBT SERVICE REQUIREMENTS**

The following schedule sets forth, for each 12-month period of the years shown, the amounts required to be paid by the Authority for the Debt Service for the Bonds. The following schedule does not include debt service on the Junior Indebtedness Obligations.

Calendar Year <sup>(1)</sup>	GENERAL REVENUE BONDS						
	A	-	B	+	C	=	D
	Debt Service on Outstanding Bonds	-	Less Debt Service on Refunded Bonds <sup>(3)</sup>	Principal	Interest	Total	Total General Revenue Bond Debt Service
2014	\$174,335,416		\$ 3,444,181	-	-	-	\$170,891,235
2015	261,411,489		67,035,169	-	\$37,913,354	\$37,913,354	232,289,674
2016	261,703,094		66,068,869	-	36,494,138	36,494,138	232,128,363
2017	261,702,544		61,825,219	-	36,494,138	36,494,138	236,371,463
2018	261,702,444		61,820,019	\$ 4,825,000	36,494,138	41,319,138	241,201,563
2019	261,707,675		61,824,150	25,470,000	36,349,388	61,819,388	261,702,913
2020	261,701,444		61,888,919	26,760,000	35,127,188	61,887,188	261,699,713
2021	261,703,694		61,874,369	28,040,000	33,829,788	61,869,788	261,699,113
2022	261,700,494		61,879,519	29,395,000	32,481,138	61,876,138	261,697,113
2023	261,701,394		61,883,869	30,860,000	31,018,938	61,878,938	261,696,463
2024	261,700,694		48,774,819	19,260,000	29,511,138	48,771,138	261,697,013
2025	261,702,213		48,765,038	20,215,000	28,548,138	48,763,138	261,698,313
2026	261,704,963		48,770,788	21,230,000	27,537,388	48,767,388	261,701,563
2027	261,704,525		119,444,163	92,965,000	26,475,888	119,440,888	261,701,250
2028	261,698,400		119,410,788	97,580,000	21,827,638	119,407,638	261,695,250
2029	261,703,163		119,392,550	102,355,000	17,037,100	119,392,100	261,702,713
2030	263,318,813		131,401,500	119,480,000	11,919,350	131,399,350	263,316,663
2031	263,317,744		131,402,250	125,430,000	5,970,000	131,400,000	263,315,494
2032	131,918,744		-	-	-	-	131,918,744
2033	131,921,813		-	-	-	-	131,921,813
2034	131,922,006		-	-	-	-	131,922,006
2035	131,911,288		-	-	-	-	131,911,288
2036	131,919,094		-	-	-	-	131,919,094
2037	95,696,931		-	-	-	-	95,696,931
2038	95,697,806		-	-	-	-	95,697,806
2039	95,694,519		-	-	-	-	95,694,519
2040	95,699,050		-	-	-	-	95,699,050
2041	95,696,944		-	-	-	-	95,696,944
2042	23,074,994		-	-	-	-	23,074,994
2043	23,075,044		-	-	-	-	23,075,044
Total <sup>(2)</sup>	<u>\$5,810,446,430</u>		<u>\$1,336,906,174</u>	<u>\$743,865,000</u>	<u>\$485,028,841</u>	<u>\$1,228,893,841</u>	<u>\$5,702,434,096</u>

(1) Includes principal and interest due January 1 of the following calendar year.

(2) Totals may not add due to rounding.

(3) Debt service in 2014 excludes \$17,220,904 in Senior Debt Service Fund monies contributed to this refunding transaction.

## DESCRIPTION OF THE SERIES K BONDS

### General

The Series K Bonds will be dated their date of delivery, will bear interest at the rates per annum and will mature, subject to optional and mandatory redemption as described below, on the dates and in the principal amounts set forth on the inside cover page of this Official Statement. Interest on the Series K Bonds will be payable semiannually on January 1 and July 1 of each year, commencing on July 1, 2015.

### Book-Entry Only System

The Series K 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, New York, New York (“DTC”). The Series K Bonds will be held in book-entry only form. Principal of and premium, if any, and interest on the Series K Bonds will be payable through The Bank of New York Mellon, as paying agent (the “Paying Agent”). The Bank of New York Mellon is also serving as trustee (the “Trustee”) under the Bond Resolution. Purchases from DTC of beneficial interests in the Series K Bonds will be made in book-entry only form (without certificates) in the principal amount of \$5,000 or any integral multiple of \$5,000 in excess thereof. For so long as Cede & Co., as nominee of DTC, is the registered owner of the Series K Bonds, payments of the principal of, premium, if any, and interest on the Series K Bonds will be made directly to DTC. Disbursement of such payment to the DTC Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of the DTC Participants and the Indirect Participants, each such term as hereinafter defined. SO LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE SERIES K BONDS, AS NOMINEE FOR DTC, REFERENCES HEREIN TO BONDHOLDERS OR OWNERS OF THE SERIES K BONDS (OTHER THAN UNDER THE CAPTION “TAX MATTERS” HEREIN) SHALL MEAN CEDE & CO. AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES K BONDS.

See **Appendix D** — “Book-Entry Only System”.

### Redemption Provisions

The Series K Bonds are subject to optional redemption as described below. In addition, the State may, upon furnishing sufficient funds therefor, require the Authority to redeem the Bonds as provided in the Act. See **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Redemption of Bonds”.

**Optional Redemption.** The Series K Bonds maturing on or before January 1, 2025 are not subject to optional redemption prior to maturity. The Series K Bonds maturing on or after January 1, 2026 are subject to redemption prior to maturity at any time on or after January 1, 2025, at the option of the Authority, as a whole or in part in the principal amounts and from the maturities selected by the Authority, at par, plus accrued interest to the redemption date.

**Selection of Bonds to be Redeemed.** In the case of redemption of less than all of the Series K Bonds, the Authority will select the maturities of the Series K Bonds to be redeemed. If less than all of the Series K Bonds of a maturity are to be redeemed, the Trustee shall select the Outstanding Bonds of such maturity to be redeemed, using such method of selection as it shall consider proper in its discretion.

**Notice of Redemption.** The Trustee is to give notice of the redemption of the Series K Bonds in the name of the Authority. Such notice shall be given by first-class mail, postage prepaid, not less than thirty (30) days nor more than forty-five (45) days prior to the redemption date to the registered owners of any Series K Bonds which are to be redeemed, at their last known addresses appearing on the registration books of the Authority. The failure of any owner of a Series K Bond to be redeemed to receive notice of redemption thereof will not affect the validity of the proceedings for the redemption of such Series K Bonds.



The notice of an optional redemption required by the Bond Resolution to be given shall not be given with respect to Bonds to be redeemed pursuant to the Bond Resolution (other than any notice referring to Bonds to be refunded) unless prior to the date such notice is to be given, the Authority shall have paid or caused to be paid to the Trustee (i) an amount of money which, in addition to other money available therefor held by the Trustee, is sufficient to redeem such Bonds on the Redemption Date at the Redemption Price thereof, and (ii) accrued interest to the Redemption Date on all of the Bonds to be so redeemed.

If on the redemption date moneys for the redemption of the Series K Bonds to be redeemed, together with interest thereon to the redemption date, are held by the Trustee so as to be available for payment of the Redemption Price, and if notice of redemption shall have been given, then interest on the Series K Bonds to be redeemed will cease to accrue from and after the Redemption Date and such Series K Bonds will no longer be considered to be Outstanding under the Bond Resolution.

## **SOURCES OF PAYMENT AND SECURITY FOR THE BONDS**

### **Authorized Projects**

In order to finance the projects included within the Authority's responsibilities as broadened by 1992 legislation, the Authority adopted the Bond Resolution which established two project categories: "Facilities" and "Other Authority Projects," as defined below. Only projects which qualify in one of those two categories may be funded from proceeds of Bonds. Any Authority project may be funded from surplus Revenues released from time to time from the General Reserve Fund.

The Bond Resolution uses the two categories to determine which revenues are pledged to the Bonds, the priority of application of Revenues, and the amount of Additional Bonds that may be issued, all as discussed below.

The first category, "Facilities," includes all of the Thruway as it existed in 1992 when the Bond Resolution was adopted (the "Original Project"), together with "Additional Projects" acquired or constructed thereafter, such as additional interchanges, extensions, toll roads, tunnels or bridges and other transportation or transportation-related projects. To qualify as an "Additional Project," a project must meet certain financial requirements and be under the Authority's jurisdiction, and the Authority must have the exclusive power to set tolls, rates, fees and charges on it. The issuance of Bonds for Facilities is limited by the Additional Bonds test. See "— Additional Bonds, Refunding Bonds and Other Indebtedness — *Additional Bonds for Facilities*".

The second category, "Other Authority Projects," includes the State Canal system, as well as six specifically designated projects: the Inner Harbor project and the Intermodal Transportation Center in Syracuse, the Horizons Waterfront project in Buffalo, the Thruway Exit 26 Bridge, Tappan Zee Ferry Service and Stewart International Airport Access projects. Pursuant to a Supplemental Resolution, the Authority may designate a transportation or transportation-related facility or property as an Other Authority Project, if it is within the jurisdiction and control of the Authority. The issuance of Bonds for Other Authority Projects is limited by the Additional Bonds test, and a provision which restricts total debt service in any year on all debt issued for Other Authority Projects to a level equal to no more than 20% of certain historical Net Revenues. See "— Facilities" and "— Additional Bonds, Refunding Bonds and Other Indebtedness — *Additional Bonds for Other Authority Projects*".

### **Revenues**

Under the Bond Resolution, the Authority has pledged "Revenues" to the payment of Bonds, including the Series K Bonds. "Revenues" mean (i) all tolls, revenues, fees, charges, rent and other income and receipts derived from the operation, jurisdiction and control of the Facilities (*i.e.*, the Original Project and Additional Projects), (ii) the proceeds of any use and occupancy insurance relating to the Facilities and of any other insurance which insures against loss of Revenues and (iii) investment income received on any moneys or

securities held under the Bond Resolution other than investment income on amounts held in the Rebate Fund or Junior Indebtedness Fund and certain other investment income which is not transferred to the Revenue Fund pursuant to the Bond Resolution. Revenues do not include the (i) proceeds of any gifts, grants or other income to the Authority from the government of the United States or the State, any public instrumentality of the State or any other individual or entity to the extent the Authority is precluded by law, the grant or other operative contract or instrument from applying such amounts to Operating Expenses and Debt Service, or (ii) revenues of Other Authority Projects, including revenues derived from the State Canal system. Provision for operating expenses or capital needs associated with Other Authority Projects or activities to be financed from amounts released from time to time from the General Reserve Fund may not be made under the Bond Resolution unless provision has first been made for, among other things, Operating Expenses of Facilities, accrual of debt service on the Bonds (including the Series K Bonds), and required Reserve Maintenance Fund deposits for Facilities. See “— General Revenue Bond Resolution Flow of Funds”.

### **Pledge under the Bond Resolution**

The Bonds are direct and general obligations of the Authority. Under the Bond Resolution, the payment of principal and redemption price of, interest on, and Sinking Fund Installments for the Bonds is secured by a pledge of the following: (i) the Revenues, (ii) the proceeds of the sale of the Bonds, and (iii) all Funds and accounts established under the Bond Resolution referred to below under “General Revenue Bond Resolution Flow of Funds” and in **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Funds and Revenues”, including the investments thereof, except for the Rebate Fund and the Junior Indebtedness Fund and, with respect to certain series of Additional Bonds and Refunding Bonds, the Senior Debt Service Reserve Fund. See “Senior Debt Service Reserve Fund” below. The pledge created by the Bond Resolution is subject to the provisions of the Bond Resolution permitting the application of the Revenues, the proceeds of the sale of the Bonds and the funds and accounts established under the Bond Resolution for the purposes and upon the terms and conditions set forth in the Bond Resolution. The Bond Resolution also provides that monthly Operating Expenses of Facilities will be funded from Revenues prior to the provision for accrued Debt Service on Bonds. The Bond Resolution also provides that the pledge and lien created by the Bond Resolution shall be superior in all respects to any pledge or lien now or hereafter created for Junior Indebtedness or Subordinated Indebtedness.

**The Act provides that notes and bonds of the Authority shall not be a debt of the State nor shall the State be liable thereon, nor shall such notes or bonds be payable out of any funds other than those of the Authority. The Bond Resolution specifically provides that the Bonds shall not be a debt of the State nor shall the State be liable thereon.**

### **General Revenue Bond Resolution Flow of Funds**

Pursuant to the Bond Resolution, the Authority is required to pay into the Revenue Fund all Revenues as received. On or before the last Business Day of each month, the Authority is required to pay into the Operating Fund, out of the moneys in the Revenue Fund, all amounts required for reasonable and necessary Operating Expenses and reserves for Operating Expenses and working capital with respect to Facilities. Operating Expenses for Other Authority Projects are not payable out of the Operating Fund but may be paid out of the Other Authority Projects Operating Fund. On or before the last Business Day of each month, the Authority is required to deposit amounts remaining in the Revenue Fund after such deposits to the Operating Fund as of the last day of the preceding month as follows:

(1) To the Trustee for deposit in the Senior Debt Service Fund, the amount required so that the balance in the Senior Debt Service Fund shall be at least equal to the Accrued Debt Service for all Bonds Outstanding as of the last day of the then current calendar month, after taking into account any other amounts available for payment of Debt Service, including any amounts representing investment earnings retained in the Senior Debt Service Fund or transferred from the Senior Debt Service Reserve Fund;

(2) To the Trustee for deposit in the Senior Debt Service Reserve Fund, if and to the extent required so that the balance in said Fund shall equal the Senior Debt Service Reserve Requirement for all Bonds secured by such Fund and Outstanding on said date;

(3) To the Reserve Maintenance Fund, an amount such that (a) on or before the first day of the seventh month of the Authority's fiscal year there shall have been deposited an amount equal to or greater than one-half of the amount, and (b) on or before the last day of the Authority's fiscal year there shall have been deposited an amount equal to or greater than the full amount, provided in the Authority Budget for the applicable fiscal year for Reserve Maintenance Payments, plus accrued deficits, if any, with respect to the prior required allocations to such Fund;

(4) To the Junior Indebtedness Fund, the amount required so that the balance in said Fund shall equal the amounts required to be deposited therein by any instrument authorizing the issuance of Junior Indebtedness outstanding on said date;

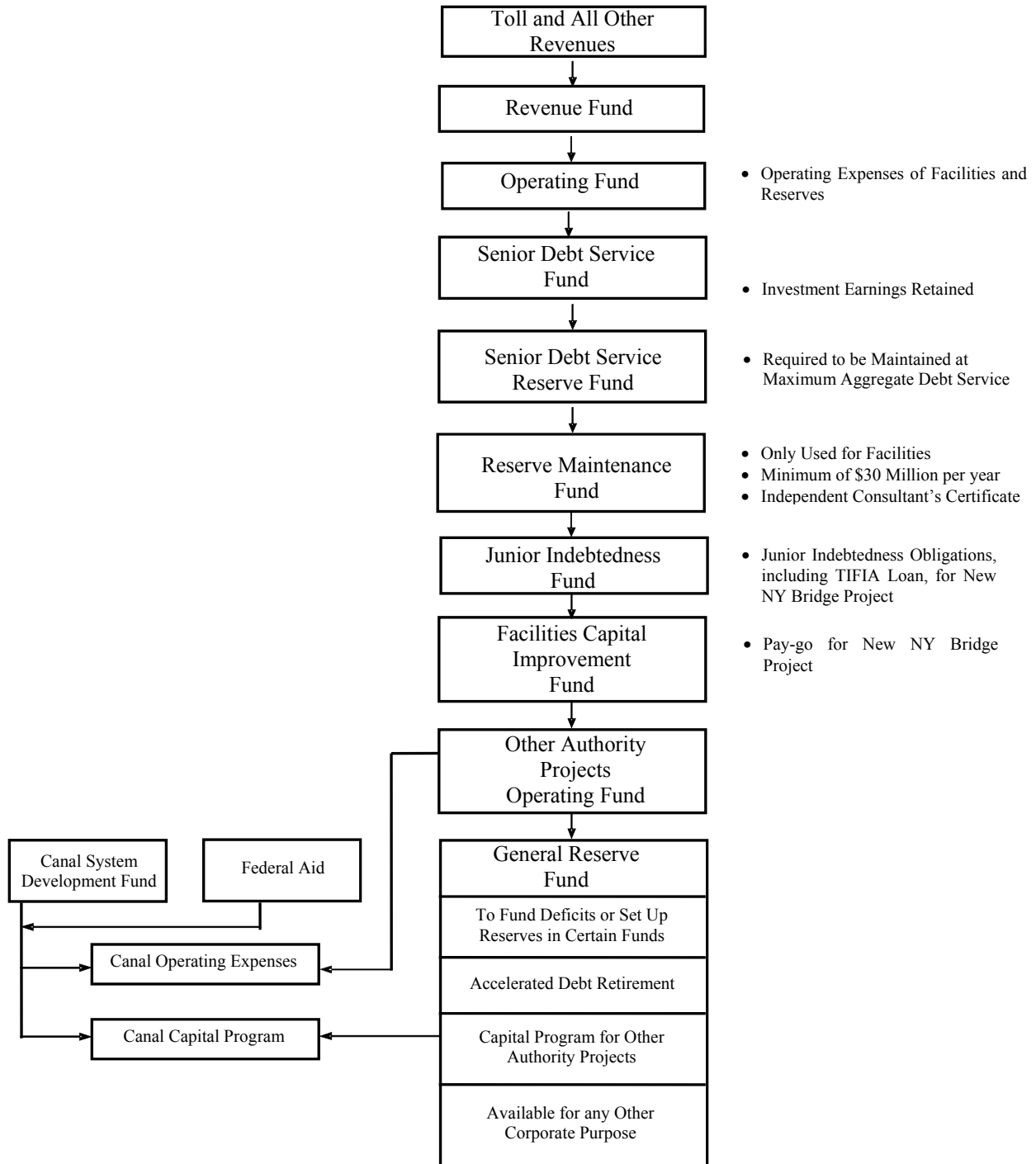
(5) To the Facilities Capital Improvement Fund, the amount determined to be necessary or appropriate by the Authority Board to fund Project Costs of Facilities or to set up reserves to fund such costs;

(6) To the Other Authority Projects Operating Fund, the amount determined to be necessary or appropriate by the Authority Board to fund operating expenses relating to Other Authority Projects or to set up reserves to fund such expenses; and

(7) To the General Reserve Fund, any remaining balance of such moneys.

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## General Revenue Bond Resolution Flow of Funds



## **Senior Debt Service Reserve Fund**

The Senior Debt Service Reserve Fund Requirement is equal to the maximum amount of Aggregate Debt Service for any 12-month period on all Outstanding Bonds secured by the Senior Debt Service Reserve Fund (calculated with respect to Variable Interest Rate Bonds at the Estimated Average Interest Rate until conversion to a fixed rate of interest and subject to certain limitations). On the date of issuance of the Series K Bonds, the amount in the Senior Debt Service Reserve Fund shall be equal to the Senior Debt Service Reserve Fund Requirement. To the extent that amounts in the Senior Debt Service Fund and unencumbered moneys in the General Reserve Fund, the Other Authority Projects Operating Fund, the Facilities Capital Improvement Fund and the Reserve Maintenance Fund are insufficient to pay debt service, when due, on the Bonds, deficiencies will be made up from amounts in the Senior Debt Service Reserve Fund; provided that no payments will be made from moneys in the Senior Debt Service Reserve Fund with respect to Bonds not secured by the Senior Debt Service Reserve Fund. The Bond Resolution provides that the Authority may determine pursuant to any Supplemental Resolution authorizing a series of Bonds that such series of Bonds will not be secured by the Senior Debt Service Reserve Fund. The Series K Bonds are secured by the Senior Debt Service Reserve Fund. The Bond Resolution also provides that a Reserve Credit Facility may be deposited or substituted for deposit in the Senior Debt Service Reserve Fund to satisfy all or any portion of the Senior Debt Service Reserve Fund Requirement. See **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Senior Debt Service Reserve Fund”.

As permitted by the Bond Resolution, the Authority currently has on deposit in the Senior Debt Service Reserve Fund, together with cash and investments to meet the Senior Debt Service Reserve Fund Requirement, Reserve Credit Facilities in the form of a Debt Service Reserve Surety Bond originally issued by MBIA Insurance Corporation (“MBIA”) in the maximum amount of \$69,895,025 (the “MBIA Reserve Fund Surety”) and a Municipal Bond Debt Service Reserve Fund Policy originally issued by Financial Guaranty Insurance Company (“FGIC”) in the maximum amount of \$13,118,280.99 (the “Financial Guaranty Reserve Fund Policy” and collectively with the MBIA Reserve Fund Surety, the “Reserve Fund Policies”). The MBIA Reserve Fund Surety expires on January 1, 2027 and the Financial Guaranty Reserve Fund Policy expires on January 1, 2024, subject, in each case to early termination. The Reserve Fund Policies permit the Trustee, in the event that scheduled debt service is due on Bonds, including the Series K Bonds, and moneys to the credit of the Senior Debt Service Fund are insufficient, to draw pro rata amounts up to the maximum amounts of such Policies after all the cash (such as will be deposited in connection with the issuance of the Series K Bonds) and investments of that cash to the credit of the Senior Debt Service Reserve Fund have first been withdrawn. The Bond Resolution and the Reserve Fund Policies permit the substitution at any time and from time to time of other Reserve Credit Facilities meeting certain requirements for cash to the credit of the Senior Debt Service Reserve Fund. The Authority understands that MBIA ceded the MBIA Reserve Fund Surety to its subsidiary, MBIA Insurance Corp. of Illinois (“MBIA Illinois”), and that MBIA Illinois has been renamed National Public Finance Guarantee Corporation (“National”). The Authority further understands that pursuant to a reinsurance agreement between FGIC and National, National has reinsured certain obligations of FGIC, including the Financial Guaranty Reserve Fund Policy. As of the date hereof, National is rated “A3” and “AA-” by Moody’s Investors Service and Standard & Poor’s Ratings Services, respectively. See “SOURCES AND USES OF FUNDS” and **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Senior Debt Service Reserve Fund”.

## **Additional Bonds, Refunding Bonds and Other Indebtedness**

The Bond Resolution permits the issuance of Bonds, Junior Indebtedness and Subordinated Indebtedness. The Bond Resolution defines the “Bonds” to be bonds or other indebtedness of the Authority payable from amounts in the Senior Debt Service Fund, including but not limited to, any additional payment obligations in connection with a Qualified Swap, a Qualified Reverse Swap, a Parity Reimbursement Obligation or a capital lease undertaken in connection with the issuance of certificates of participation. “Junior Indebtedness” is any evidence of indebtedness of the Authority payable out of the Junior Indebtedness Fund. “Subordinated Indebtedness” is any evidence of indebtedness of the Authority payable out of amounts

available in the General Reserve Fund. The Authority has issued Junior Indebtedness Obligations under the Junior Indebtedness Resolution. See “— *Junior Indebtedness Obligations*”. The Authority has also issued a note constituting Subordinate Indebtedness under a revolving loan to Citibank, N.A. See “THE AUTHORITY — Outstanding Indebtedness” above. In addition, the Authority has not and has no current plans to enter into any payment obligations in connection with a Qualified Swap, a Qualified Reverse Swap, a Parity Reimbursement Obligation or a capital lease undertaken in connection with the issuance of certificates of participation under the Bond Resolution.

Bonds consist of the currently Outstanding Bonds and any Additional Bonds and Refunding Bonds that may be issued hereafter. Subject to the limitations described below (i) Additional Bonds may be issued to pay for Project Costs of the Original Project, any Additional Projects and any Other Authority Projects and (ii) Refunding Bonds may be issued to refund any Outstanding Bonds, any Junior Indebtedness or any Subordinated Indebtedness. For a more complete description of the provisions of the Bond Resolution governing the issuance of Additional Bonds and Refunding Bonds than the discussion that follows, see **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Additional Bonds” and “— Refunding Bonds”.

***Additional Bonds for Facilities.*** In the case of Additional Bonds issued to provide for the Project Cost of one or more Facilities, other than as described under “Additional Bonds to Prevent a Loss of Revenues from Facilities” below, the following requirements, among others, must be met:

(1) The Net Revenues (subject to certain adjustments including toll increases, as provided by the Bond Resolution) for any period of 12 consecutive calendar months out of the 18 calendar months next preceding the date of issuance of the proposed Additional Bonds are at least equal to the Net Revenue Requirement. “Net Revenue Requirement” means, with respect to any period of time, an amount equal to the greater of (i) the sum of the amounts required to make payments with respect to Aggregate Debt Service, deposits to the Senior Debt Service Reserve Fund, Reserve Maintenance Payments, and the amounts required to be deposited in the Junior Indebtedness Fund pursuant to the instrument authorizing the issuance of such Junior Indebtedness and (ii) 1.2 times the sum of the Aggregate Debt Service (which under certain circumstances may be reduced by an amount equal to anticipated investment income on the Senior Debt Service Fund and on the Senior Debt Service Reserve Fund) for such period\*;

(2) For the then current fiscal year and each fiscal year in the Test Period (being the next five Authority fiscal years or the period extending from the next Authority fiscal year through the second Authority fiscal year following the estimated date of completion of any Facility not then completed, whichever period is greater), the Net Revenues (subject to certain adjustments including toll increases, as provided by the Bond Resolution) must, based on estimates by an Independent Consultant, be at least equal to the estimated Net Revenue Requirement (assuming the Maximum Interest Rate on any Variable Interest Rate Bonds); and

(3) The Net Revenues in the last fiscal year of the Test Period must be estimated by an Independent Consultant to be at least equal to Maximum Annual Debt Service on all Bonds Outstanding immediately after the issuance of the proposed Additional Bonds.

***Additional Bonds to Prevent a Loss of Revenues from Facilities.*** The Authority may issue Additional Bonds without satisfying any earnings or coverage test for the purpose of providing for Project Costs of improvement, reconstruction or rehabilitation of one or more Facilities for the purpose of preventing a loss of Net Revenues derived from such Facilities where such loss would otherwise result from an emergency or some unusual or extraordinary occurrence.

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\* During any period during which the TIFIA Loan is outstanding, the Authority has covenanted pursuant to the TIFIA Loan Agreement, that in order to issue Additional Bonds under the Bond Resolution (not Refunding Bonds), the Authority must demonstrate the Junior Indebtedness Net Revenue Requirement is also satisfied, namely, that for such period of time, Net Revenues equal or exceed 1.20 times the sum of Aggregate Debt Service and amounts required to be deposited in the Junior Indebtedness Debt Service Payment Account.

***Additional Bonds for Other Authority Projects.*** Additional Bonds may be issued to finance Other Authority Project Costs only if, in addition to satisfying the conditions described under the subheading “Additional Bonds for Facilities” above, the Maximum Annual Debt Service on all Outstanding Bonds (including the proposed Additional Bonds) the proceeds of which are used to finance or refinance Project Costs for Other Authority Projects (excluding Other Authority Projects that have since been designated as Additional Projects in accordance with the Bond Resolution) is less than 20% of the amount of Net Revenues for 12 consecutive months out of the most recent 18 months.

***Refunding Bonds to Refund Bonds.*** Bonds may be issued for the purpose of refunding Bonds if, in addition to meeting certain other requirements, (i) Aggregate Debt Service (assuming with respect to any Variable Interest Rate Bonds a Maximum Interest Rate), including the Refunding Bonds then proposed to be issued but not including the Bonds to be refunded, for the then current and any future fiscal year is no greater than the Aggregate Debt Service on the Bonds as calculated immediately prior to the refunding (including the refunded Bonds but not including the Refunding Bonds) or (ii) the requirements set forth above under the subheading “Additional Bonds for Facilities” are met.

***Refunding Bonds to Refund Junior Indebtedness or Subordinated Indebtedness.*** Refunding Bonds may be issued for the purpose of refunding Junior Indebtedness or Subordinated Indebtedness that was issued to finance or refinance Project Costs of Facilities or Other Authority Projects if the requirements set forth above under the subheading “Additional Bonds for Facilities” are met and, in addition, if the Junior Indebtedness or Subordinated Indebtedness to be refunded was issued to finance Project Costs for any Other Authority Project that has not been designated as an Additional Project, Refunding Bonds may be issued only if the requirements set forth under the subheading “Additional Bonds for Other Authority Projects” above are met.

***Junior Indebtedness Obligations.*** Under the Junior Indebtedness Resolution, the Authority may issue Additional Junior Indebtedness Obligations and Junior Indebtedness Refunding Obligations payable from Revenues. Subject to the limitations set forth in the Junior Indebtedness Resolution, Additional Junior Indebtedness Obligations may be issued to (i) pay for Project Costs of the Original Project, any Additional Projects and any Other Authority Projects, (ii) refund or refinance any Senior Bonds (including any bond anticipation notes related thereto), Junior Indebtedness Obligations or Subordinated Indebtedness of the Authority, (iii) make a deposit to a subaccount of the Junior Indebtedness Debt Service Reserve Account, if required, (iv) pay Costs of Issuance relating to the issuance or incurrence of Junior Indebtedness Obligations and (v) pay or provide for the payment of Project Costs of improvement, reconstruction or rehabilitation of the New NY Bridge for the purpose of preventing a loss of Net Revenues derived from the New NY Bridge Project, provided that such loss of Net Revenues would be the result of an emergency declared by the State, the federal government or a federal authority or agency and that proceeds of Additional Junior Indebtedness Obligations would not be used for such purpose to the extent that insurance proceeds relating to such occurrence were then available. *Notwithstanding the foregoing, prior to the completion of the construction and equipping of the New NY Bridge Project, (A) Junior Indebtedness Obligations may be issued to pay for Project Costs solely related to the New NY Bridge Project, and (B) Junior Indebtedness Refunding Obligations may be issued to refund Outstanding Junior Indebtedness Obligations. After the completion of the New NY Bridge Project, and subject to certain limitations, (A) Additional Junior Indebtedness Obligations may be issued, to pay for Project Costs of the Original Project, any Additional Junior Indebtedness Projects and any Other Authority Projects, and (B) Junior Indebtedness Refunding Obligations may be issued to refund Outstanding Senior Bonds, Junior Indebtedness Obligations and Subordinated Indebtedness.*

***Other Indebtedness.*** The Bond Resolution permits the issuance of Junior Indebtedness and Subordinated Indebtedness under another resolution. **See Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Junior Indebtedness Fund” and “— General Reserve Fund”. The Authority may covenant with the holders of Junior Indebtedness Obligations or Subordinated Indebtedness to add to the conditions and restrictions under which Additional Bonds may be issued. *The holders of Junior Indebtedness Obligations or Subordinated Indebtedness may not accelerate the principal owed upon a default unless all*

*Outstanding Bonds shall have been declared immediately due and payable in accordance with the Bond Resolution. The proceeds of Junior Indebtedness Obligations may be used to provide for Facilities or Other Authority Projects. However, the Authority has covenanted in the Junior Indebtedness Resolution that prior to the completion of the construction and equipping of the New NY Bridge Project it will only issue or incur Junior Indebtedness Obligations to finance or refinance capital costs of the New NY Bridge Project.*

Subordinated Indebtedness may be used to finance any lawful corporate purpose of the Authority. In April 2012, the Authority incurred Subordinated Indebtedness under a Loan Agreement with Citibank, N.A. to finance emergency capital project repairs on the Canal system. See “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEERS REPORT — Canal Financing” herein.

## **Facilities**

The Facilities consist of the Original Project and any Additional Projects. Additional Projects consist of New Interchanges, New Extensions and Other Authority Projects that have been designated as Additional Projects by the Authority in accordance with the requirements set forth in the Bond Resolution.

**Original Project.** The Original Project consists of all Thruway sections and connections constituting roads or bridges, authorized by the Act as in effect on, and open to traffic on, the date of adoption of the Bond Resolution on August 3, 1992, together with any Facility Capital Improvements related thereto which include other related structures and facilities.

**Additional Projects.** Any project may become an Additional Project if so designated by the Authority and if (i) such project has been operated (whether or not by the Authority) so as to produce revenues in excess of operating expenses for a twelve-month period prior to the date such project is designated as an Additional Project by the Authority, (ii) the Authority certifies that the Net Revenues (including the revenues and operating expenses of the proposed Additional Project) at least equaled the Net Revenue Requirement for such twelve-month period, (iii) an Independent Consultant estimates that Net Revenues for all Facilities (including the proposed Additional Project) less the estimated Reserve Maintenance Payments for each of the fiscal years in the Test Period equal or exceed the estimated Net Revenues for all Facilities (excluding the proposed Additional Project) less the estimated Reserve Maintenance Payments for each of the fiscal years in the Test Period, and (iv) counsel opines that the Authority has the legal right and authority to undertake such project and to establish charges in connection therewith which do not require certain additional governmental approvals. See **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Additional Projects”. Operating Expenses with respect to Facilities, including Additional Projects, are payable from the Operating Fund prior to Debt Service on the Bonds, including the Series K Bonds. The Authority has not designated any project as an Additional Project under the Bond Resolution.

**Other Authority Projects.** Under the Bond Resolution, the Canal system constitutes an Other Authority Project. Other Authority Projects also include facilities and other property which the Authority is now or hereafter authorized to acquire, construct, maintain, operate, finance, improve, reconstruct, rehabilitate or otherwise undertake for transportation or transportation-related purposes. In order for a facility or any other property to qualify as an Other Authority Project, it must be within the jurisdiction and control of the Authority and be designated as an Other Authority Project by the Authority. Other than projects for which the Authority has already reached its maximum funding obligation, the Authority has not designated any other project as an Other Authority Project under the Bond Resolution.

## **Reserve Maintenance Fund**

Pursuant to the Bond Resolution, the Authority is required to deposit in each fiscal year into the Reserve Maintenance Fund an amount which shall be no less than the greater of \$30,000,000 or the amount specified in an Independent Consultant’s Certificate for such fiscal year (the “Minimum Amount”). The amount deposited into the Reserve Maintenance Fund may not exceed any amount from time to time



established by the Authority pursuant to a Supplemental Resolution (the “Maximum Amount”) provided that the Maximum Amount may not be less than the Minimum Amount.

Subject to the provisions of the Bond Resolution, money held in the Reserve Maintenance Fund can be disbursed for the purpose of paying (i) costs relating to the Facilities of (a) maintenance or repairs not recurring annually, and renewals and replacements; (b) repairs or replacements resulting from an emergency or caused by some unusual or extraordinary occurrence, to the extent that the moneys in other available Funds, together with insurance proceeds, if any, available therefor are insufficient to meet such emergency; (c) items of equipment; and (d) engineering expenses incurred in connection with the above permitted uses; and (ii) similar costs relating to certain highway and railroad grade crossings. The Authority may from time to time transfer any money from the Reserve Maintenance Fund to the Revenue Fund when such amount is no longer needed for the purposes of the Reserve Maintenance Fund. In addition, to the extent that amounts in the Senior Debt Service Fund and unencumbered moneys in the General Reserve Fund, the Other Authority Projects Operating Fund and the Facilities Capital Improvement Fund are insufficient to pay debt service, when due, on the Bonds, deficiencies will be made up from amounts in the Reserve Maintenance Fund.

### **Tolls, Fees and Charges**

***Toll Covenant.*** Pursuant to the Bond Resolution, the Authority has covenanted at all times to fix, charge and collect such tolls, fees and charges for the use of the Facilities as are required in order that, in each fiscal year, Net Revenues shall at least equal the Net Revenue Requirement for such year. “Net Revenue Requirement” means, with respect to any period of time, an amount equal to the greater of (i) the sum of amounts required to make payments with respect to Aggregate Debt Service, deposits to the Senior Debt Service Reserve Fund, Reserve Maintenance Payments (minimum, \$30 million a year), and the amounts required to be deposited in the Junior Indebtedness Fund pursuant to the Supplemental Resolution or other resolution or agreement authorizing outstanding Junior Indebtedness or (ii) 1.20 times the sum of the Aggregate Debt Service for such period.\*

If the Authority determines that Net Revenues may be inadequate, it is required to cause a study to be made by an Independent Consultant that will recommend a schedule of tolls, fees and charges which will provide sufficient Net Revenues in the following year to comply with the revenue covenant described above and which will provide additional Net Revenues to eliminate any deficiency in funds and accounts held under the Bond Resolution at the earliest practicable time, and the Authority will place in effect as soon as practicable either (i) the recommended schedule of tolls, fees and charges, or (ii) a different schedule of tolls, fees and charges developed by the Authority which will provide sufficient Net Revenues in the following fiscal year to comply with the revenue covenant described above and which will provide additional Net Revenues in such following fiscal year to eliminate any deficiency at the earliest practicable time, which conclusion is concurred in by an Independent Consultant. See **Appendix C** — “Summary of Certain Provisions of the Bond Resolution — Tolls, Fees and Charges”.

***Ability To Set Tolls.*** The Authority’s power under the Act to fix, collect and alter toll rates is not subject to the approval of any governmental entity. Tolls on the Tappan Zee Bridge and the Grand Island Bridges, which were constructed pursuant to the General Bridge Act of 1946, as amended, may be subject to the standard imposed by Section 135 of the Surface Transportation and Uniform Relocation Assistance Act of 1987, Pub. L. 100-17 to the effect that such tolls be “just and reasonable”. The Authority believes that the tolls on all of its vehicular toll facilities are just and reasonable.

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\* During any period during which the Junior Indebtedness Obligations are outstanding, the Authority has covenanted pursuant to the Junior Indebtedness Resolution, to maintain tolls in such amounts in order that Net Revenues will at least equal both the Net Revenue Requirement under the Bond Resolution and the Junior Indebtedness Net Revenue Requirement under the Junior Indebtedness Resolution, namely that Net Revenues at any time required shall equal or exceed 1.20 times the sum of Aggregate Debt Service and the amount required to be deposited in the Junior Indebtedness Debt Service Payment Account.

## **Agreement of the State**

Under the Act, the State has agreed with the holders of the bonds and notes of the Authority, including the Bonds, that it will not limit or alter the rights vested by the Act in the Authority to establish and collect such fees, rentals and charges as may be convenient or necessary to produce sufficient revenue to meet the expense of maintenance and operation and to fulfill the terms of any agreements made with such holders of bonds, or in any way impair the rights and remedies of such bondholders and noteholders. In addition, the State has agreed with the holders of bonds and notes of the Authority secured by a pledge of tolls from any bridge constructed by the Authority across the Hudson River south of Bear Mountain bridge or from any part of the Original Project which includes such bridge, that no bridge or tunnel constituting a connection for vehicular traffic over, under or across the Hudson River between the present location of the Bear Mountain bridge and the boundary line between New York and New Jersey at the west side of the Hudson River will be constructed or maintained so long as the obligations of such bonds and notes for principal and interest shall not have been paid or otherwise discharged.

## **BOND INSURANCE ON CERTAIN MATURITIES**

### **Bond Insurance Policy**

Concurrently with the issuance of the Series K Bonds, Assured Guaranty Municipal Corp. (“AGM”) will issue its Municipal Bond Insurance Policy (the “Policy”) for the Series K Bonds maturing on January 1 in the years 2028 (5.0% rate, 2.880% yield, CUSIP No. 650009H30), 2031 (4.0% rate, 3.260% yield, CUSIP No. 650009H63) and 2031 (5.0% rate, 3.070% yield, CUSIP No. 650009H71) (the “Insured Bonds”). For more information relating to the Insured Bonds, see inside cover. The Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the Policy included as **Appendix G** to this Official Statement.

The Policy is not covered by any insurance security or guaranty fund established under New York, California, Connecticut or Florida insurance law.

### **Assured Guaranty Municipal Corp.**

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. (“AGL”), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol “AGO”. AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and global public finance, infrastructure and structured finance markets. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM’s financial strength is rated “AA” (stable outlook) by Standard and Poor’s Ratings Services, a Standard & Poor’s Financial Services LLC business (“S&P”), “AA+” (stable outlook) by Kroll Bond Rating Agency, Inc. (“KBRA”) and “A2” (stable outlook) by Moody’s Investors Service, Inc. (“Moody’s”). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM’s long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance

with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

#### *Current Financial Strength Ratings*

On November 13, 2014, KBRA assigned an insurance financial strength rating of “AA+” (stable outlook) to AGM. AGM can give no assurance as to any further ratings action that KBRA may take.

On July 2, 2014, S&P issued a credit rating report in which it affirmed AGM’s financial strength rating of “AA” (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On July 2, 2014, Moody’s issued a rating action report stating that it had affirmed AGM’s insurance financial strength rating of “A2” (stable outlook). AGM can give no assurance as to any further ratings action that Moody’s may take.

For more information regarding AGM’s financial strength ratings and the risks relating thereto, see AGL’s Annual Report on Form 10-K for the fiscal year ended December 31, 2013.

#### *Capitalization of AGM*

At September 30, 2014, AGM’s policyholders’ surplus and contingency reserve were approximately \$3,683 million and its net unearned premium reserve was approximately \$1,810 million. Such amounts represent the combined surplus, contingency reserve and net unearned premium reserve of AGM, AGM’s wholly owned subsidiary Assured Guaranty (Europe) Ltd. and 60.7% of AGM’s indirect subsidiary Municipal Assurance Corp.; each amount of surplus, contingency reserve and net unearned premium reserve for each company was determined in accordance with statutory accounting principles.

#### *Incorporation of Certain Documents by Reference*

Portions of the following documents filed by AGL with the Securities and Exchange Commission (the “SEC”) that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof:

- (i) the Annual Report on Form 10-K for the fiscal year ended December 31, 2013 (filed by AGL with the SEC on February 28, 2014);
- (ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2014 (filed by AGL with the SEC on May 9, 2014);
- (iii) the Quarterly Report on Form 10-Q for the quarterly period ended June 30, 2014 (filed by AGL with the SEC on August 8, 2014); and
- (iv) the Quarterly Report on Form 10-Q for the quarterly period ended September 30, 2014 (filed by AGL with the SEC on November 7, 2014).

All consolidated financial statements of AGM and all other information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof “furnished” under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Series K Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC’s website at <http://www.sec.gov>, at AGL’s website at

<http://www.assuredguaranty.com>, or will be provided upon request to Assured Guaranty Municipal Corp.: 31 West 52nd Street, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE ON CERTAIN MATURITIES – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

#### *Miscellaneous Matters*

AGM or one of its affiliates may purchase a portion of the Insured Bonds or any uninsured bonds offered under this Official Statement and such purchases may constitute a significant proportion of the bonds offered. AGM or such affiliate may hold such Insured Bonds or uninsured bonds for investment or may sell or otherwise dispose of such Insured Bonds or uninsured bonds at any time or from time to time.

AGM makes no representation regarding the Series K Bonds or the advisability of investing in the Series K Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "BOND INSURANCE ON CERTAIN MATURITIES".

## **AUTHORITY GOVERNANCE, FACILITIES AND OPERATIONS**

### **Thruway Facilities and Operations**

The Thruway is one of the largest tolled highway systems in the United States and is a critical component in the national interstate network. The original Thruway roadway system was constructed between 1949 and 1960 and is one of the oldest components of the national Interstate Highway System. In 1991, State legislation made the Authority additionally responsible for the operation and maintenance of 11 miles of I-287 Cross-Westchester Expressway. (The New York State Department of Transportation (NYSDOT) remains responsible for capital improvements to this roadway.) The Thruway System is now over 570 miles in total length and includes 134 interchanges.

The Thruway serves travelers with a variety of needs and purposes, including commuters, business travelers, recreational travelers, and commercial vehicle traffic and provides the major route of access for visitors to the State's tourist destinations including Niagara Falls, the State Canal system, the Finger Lakes, the Adirondacks, the Catskills and New York City. The Thruway has provided a dependable roadway system for these travelers, sustaining and encouraging economic growth, fostering job creation and generating tax revenues to the State and its local governments. Underscoring its importance to the State, region and nation, in 2013 Thruway customers traveled approximately 7.8 billion vehicle-miles on the highway, averaging over 21.3 million vehicle-miles per day. Due to the extent of its maintenance activities, good infrastructure conditions and the dedication of a specialized troop of the New York State Police to patrol the Thruway System, it has remained one of the safest roadway networks in the nation.

The Thruway System is comprised of 2,834 lane miles of roadway. In addition, the Authority has maintenance responsibility for 809 bridges and also owns 27 travel plazas located at intervals along the Thruway System, operated by three food service and two fuel concessionaires that are open 24-hours a day, 7 days a week. Routine maintenance activities are performed by Authority staff from 21 maintenance locations

grouped into four divisions. Also, the Authority's tolling system is extensive, including over 282 toll booths and 90 dedicated E-ZPass-only lanes, and it manages sophisticated incident response, ITS and traveler information systems to enhance mobility, safety and service.

The Thruway connects the principal cities of the State from New York City to Albany, and on to Utica, Syracuse and Rochester through to Buffalo and the Pennsylvania State line. Because the Thruway corridor serves 37 of the State's 62 counties and the majority of the State's population, it is the principal artery of travel and commerce within the State. It also is an important interstate connector, joining with the Massachusetts Turnpike (I-90), Connecticut Turnpike (I-95), New Jersey's Garden State Parkway, as well as several other Interstate routes such as I-287 from New Jersey; I-90 in Pennsylvania; I-290 around the north side of Buffalo; I-390 and I-490 serving Rochester; I-81, I-481 and I-690 at Syracuse; I-790 in Utica; I-87 (the Northway), I-88, I-90, I-787, and I-890 at Albany; and I-84 at Newburgh. As a result, the Thruway is a vital link to long distance interstate travel and a high proportion of its patrons are from out-of-state.

The Thruway is comprised of two types of toll systems – a controlled (ticket) system and a barrier system. The controlled system (approximately 481 miles) makes up the largest portion of the Thruway, running from Woodbury (in the southeast corner of the State) north along I-87 to Albany, then west on I-90 to Buffalo and south of Lake Erie to the Pennsylvania border. In addition to this main stretch of the controlled system, there is a small tolled branch south and east of Albany, known as the Berkshire Spur.

On the controlled system, tolls are charged based on the actual distance traveled by the customer. Meanwhile, barrier toll plazas have a fixed toll rate for each vehicle class and payment type (e.g., Cash, E-ZPass, as well as Commuter and other E-ZPass Discounts). The two barrier systems (four located in the NYC metropolitan region and one in the Buffalo region) are comprised of the Tappan Zee Bridge, Yonkers Barrier, New Rochelle Barrier, Spring Valley Barrier, Harriman Barrier and the Grand Island Bridges. Under the existing policy, toll rates across the system are based on vehicle classifications, related to the number of axles per vehicle and the height of the vehicle over the first two axles. Approximately 248.4 million toll transactions occurred on the Thruway in 2013, generating over \$648.9 million in toll revenues.

For a further description of the Thruway's facilities, traffic patterns on the Thruway system, and an analysis of the Thruway's financial history and projections for the future, see **Appendix A** — "Supplemental Letter and Report of Traffic Engineer".

### **Canal Facilities and Operations**

Legislation enacted in 1992 (the "1992 Legislation") (i) created and transferred jurisdiction of the State Canal system to the New York State Canal Corporation, a subsidiary corporation of the Authority (the "Canal Corporation"), and (ii) authorized and directed the Authority to assist in the financing of the Inner Harbor project and the Intermodal Transportation Center, both in Syracuse, the Horizons Waterfront project in Buffalo, the Stewart International Airport Access Project in Orange County and the Thruway Exit 26 Bridge Project in Schenectady County.

The 1992 Legislation transferred jurisdiction of the State Canal system (except bridges over the canals) from the DOT to the Canal Corporation, transferred all powers and duties of the Commissioner of Transportation over this property to the Canal Corporation and authorized the Authority to issue up to \$60 million in bonds for the construction, reconstruction or improvement of the Canal system. (This original bond authorization has been fully exhausted. However, in June 2011, the State Legislature increased the bond authorization by \$100 million and authorized an additional \$10 million for bonding Canal capital improvements deemed an emergency project.) This transfer followed the ratification in 1991 of a constitutional amendment which allowed the imposition of user fees and the sale or lease of lands along the Canal system. A modest toll schedule was introduced beginning with the 1994 navigation season.

The 1992 Legislation, as amended, also created the Canal Recreationway Commission (the “Commission”) with 14 voting members, including the Chairman of the Authority and the Commissioners of Transportation, Parks, Recreation and Historic Preservation and Environmental Conservation plus 10 other individuals selected from sporting, environmental and tourism fields that are geographically representative of the Canal’s various sections. The Commission has primary responsibility for guiding the development and implementation of a statewide canal recreationway plan for the Canal system. The Authority supports the cost of the operation and maintenance of the Canal system from the Other Authority Projects Operating Fund and certain capital costs from the General Reserve Fund.

Today, the State’s 524-mile Canal system is a world class recreation-way and tourist destination that cultivates historic preservation and spurs economic development in upstate New York. The Canal System links the Hudson River with Lake Champlain, Lake Ontario, the Finger Lakes, the Niagara River and Lake Erie, passes through 25 counties and is in close proximity to more than 200 villages, hamlets and towns.

The current Canal system, constructed between 1905 and 1918, provides extensive inter-modal linkages within and beyond the State’s borders. The Canal system includes four major canals, canalized natural waterways, five lakes, feeder reservoirs and numerous shipping terminals. It also consists of 57 locks, 18 moveable bridges, 22 reservoirs, 374 buildings, 112 dams and many other structures critical to the maintenance and operations of the waterways and its feeder systems. The Canal Corporation also maintains more than 150 miles of the 290 completed miles of Canalway trails. The multi-use, recreational trail network runs along the current and historic alignment of New York’s Canals.

The Canal Corporation has the same members as the persons holding the offices of members of the Authority. Under the 1992 Legislation, the Canal Corporation has power to operate, toll, maintain, improve, finance (but not issue bonds) and promote the Canal system. All revenues of the Canal system are to be credited to the New York State Canal System Development Fund (created by the 1992 Legislation and held by the State) where they are available to the Canal Corporation, subject to appropriation, only for purposes of the Canal system.

## **Board Members**

The Act grants to the Authority Board the broad powers of the Authority, as summarized herein under the caption “THE AUTHORITY”. The Authority Board continues in existence so long as the Authority has any indebtedness or other obligations outstanding. Pursuant to the New York State Public Officers Law, members of the Authority whose terms have expired continue to serve until a successor is appointed and qualified.

Donna J. Luh was confirmed as a member of the Authority Board in June 2008 and was appointed Vice Chair of the Authority on June 16, 2010. Ms. Luh currently owns and operates Luh Consulting Services. Ms. Luh is a graduate of Canisius College, earning a Master of Science in Education Administration.\*

E. Virgil Conway was initially confirmed as a member of the Authority Board in December 2006. Mr. Conway has been a financial consultant and corporate director for more than 50 years. Mr. Conway had served most recently as Chairman and Chief Executive Officer for the New York State Metropolitan Transportation Authority (MTA). Mr. Conway is a graduate of Colgate University and received his *Legum Baccalaures* from Yale University School of Law.

José Holguín-Veras, Ph.D., P.E., was confirmed as a member of the Authority Board in May 2010. Dr. Holguín-Veras is the William Howard Hart Professor in the Department of Civil and Environmental Engineering at Rensselaer Polytechnic Institute (“RPI”) and also is the Director of RPI’s Center for

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\* As noted above under “THE AUTHORITY – Members and Officers”, Ms. Luh assumed the powers and duties of the Chair upon the November 30, 2014 resignation of Howard P. Milstein.

Infrastructure, Transportation, and the Environment. Dr. Holguín-Veras received a Bachelor of Science degree in Civil Engineering from Universidad Autonoma de Santo Domingo; Master of Science degree in Transportation from Universidad Central de Venezuela; and a doctoral degree in transportation from the University of Texas at Austin.

J. Donald Rice, Jr., was confirmed as a member of the Authority Board in May 2010. Mr. Rice is founder and Chief Executive Officer of Rice Financial Products Company, a New York City-based full service municipal investment banking firm. Mr. Rice received a M.B.A. with distinction from Harvard Business School and a bachelor's degree in engineering with honors from Kettering University.

Brandon R. Sall was confirmed for a second term as a member of the Authority Board in June 2014. Mr. Sall is currently a partner in the law firm of Sall & Geist concentrating in real estate law, trusts and estates. Mr. Sall is a graduate of the University of Miami and earned his Juris Doctor at Benjamin N. Cardozo School of Law.

Richard N. Simberg was confirmed as a member of the Authority Board in June 2009. Mr. Simberg previously served in several positions with the New York State Department of Transportation between 1958 and 1991, including Assistant Commissioner for Engineering and Chief Engineer, and Regional Director of Transportation for the Central New York and Mohawk Valley Regions. Since then he has been active in engineering education, engineering ethics and has consulted with the City of Alexandria regarding the Woodrow Wilson Bridge. Mr. Simberg earned a Bachelor of Civil Engineering degree from Clarkson University and received a Master of Civil Engineering degree from Rensselaer Polytechnic Institute.

## **Senior Staff**

The day-to-day management of the Authority and the Canal Corporation is primarily the responsibility of the following senior staff members:

*Executive Director.* Thomas J. Madison, Jr. is the Executive Director of the New York State Thruway Authority and Canal Corporation and the Project Executive for the New NY Bridge Project. Upon the recommendation of Governor Andrew M. Cuomo, Mr. Madison was appointed to serve in this position by the Boards of the Thruway Authority and the Canal Corporation on September 15, 2011 and was confirmed by the New York State Senate on January 9, 2012. Previously, Mr. Madison had been Vice President and Director of Transportation Policy for STV, Inc. Prior to his position with STV, Mr. Madison served as Federal Highway Administrator for the United States Department of Transportation. He also served as President of Spectra Subsurface Imaging Group, LLC and as Vice President for Infrastructure Services of Spectra Environmental Group, Inc. Before joining Spectra, Mr. Madison served as Commissioner of the New York State Department of Transportation and held several other high level positions in both New York State and local government. Mr. Madison earned a B.A. in Political Science from the State University of New York at Geneseo.

*Chief Operating Officer, Chief Financial Officer and Treasurer.* John M. Bryan was appointed to serve as the Chief Financial Officer and Treasurer of the New York State Thruway Authority and Canal Corporation in December 2004. He was appointed Chief Operating Officer in 2013. Mr. Bryan also served as the Authority's Interim Chief Information Officer from October 2010 to April 2012. Prior to joining the Authority and the Canal Corporation, Mr. Bryan had 15 years of service for the State of New York, including Senior Vice President and Chief Administrative/Information Officer of the Empire State Development Corporation and various positions at the NYS Senate Finance and NYS Assembly Ways and Means Committees. Mr. Bryan received Bachelor's and Master's degrees in Economics from the Maxwell School of Citizenship and Public Affairs at Syracuse University.

*Chief Engineer.* Michael A. Shamma, P.E., joined the New York State Thruway Authority and Canal Corporation in May 2012 and was appointed Chief Engineer in October 2012. Mr. Shamma brings more than 24 years of transportation-related public service and private sector experience to the organization. Prior to

joining the Thruway Authority and Canal Corporation, he most recently served in numerous positions at the New York State Department of Transportation including Regional Director (Region 2), Director of the Engineering Division, as well as several other progressively responsible Engineering positions. Mr. Shamma received his Bachelors Degree in Civil Engineering with a minor in Political Science and a Masters Degree in Transportation Engineering from Rensselaer Polytechnic Institute. He is a licensed Professional Engineer registered in the State of New York.

*New NY Bridge Project Director.* Peter Sanderson was appointed to serve as New NY Bridge Project Director in February 2013. Mr. Sanderson has more than 40 years of engineering and construction experience on major, multi-million dollar projects. Areas of expertise include signature span bridges, project construction management and delivery on cable stayed structures. His global experience combined with his social and civil engineering skills were vital to the structural and public success of the high-profile I-35W (St. Anthony Falls) replacement design-build project in Minneapolis. Mr. Sanderson received the distinction of “Top 25 Newsmaker” from the Engineering News Record for his achievements. During his career, he has served as president for three major bridge contractors tasked with the construction of major bridges totaling over \$6.7 billion in construction value. Mr. Sanderson received a Bachelor of Science Degree in Engineering from the University of Western Australia.

*General Counsel and Secretary.* William J. Estes, Esq. was appointed to serve as General Counsel to the New York State Thruway Authority and Canal Corporation in July 2009 and as Secretary in January 2014. Previously, Mr. Estes served as an Assistant Counsel to two Governors, with a portfolio encompassing all State public authorities and agencies involved in transportation, public finance, economic development and housing. He has also served as a Senior Counsel at the United States Securities and Exchange Commission and he was designated a Special Assistant United States Attorney for the United States Attorney’s Office in the Eastern District of New York. Prior to that, he worked as an Assistant Attorney General in the Investment Protection Bureau with the New York State Attorney General’s Office. Mr. Estes received his Bachelor of Arts Degree in English from Northwestern University and his Juris Doctor from the Emory University School of Law. He is admitted to practice law in the States of New York, New Jersey and Connecticut.

*Director of Administrative Services.* John F. Barr was appointed Director of Administrative Services on November 16, 2006. Prior to joining the Authority, Mr. Barr served as the Executive Deputy Commissioner of the New York State Department of Civil Service. Mr. Barr received a Bachelor of Arts degree in History from Hartwick College. Mr. Barr earned his Juris Doctor at Thomas M. Cooley Law School.

*Director of Maintenance and Operations.* Theodore T. Nadratowski, P.E. has served as the Acting Director of Maintenance and Operations since May 2013. Mr. Nadratowski joined the Thruway Authority in April 1989 and has over 30 years of transportation experience in a variety of disciplines including Highway, Bridge and Facilities Maintenance, Highway Design, Structural Design, Construction Management and Traffic Safety. Prior to his current position, Mr. Nadratowski served as Chief Engineer and Project Director for the New NY Bridge Project. Mr. Nadratowski received both a Bachelor of Science Degree in Civil and Environmental Engineering and a Master of Engineering Degree in Civil and Environmental Engineering from Clarkson College. He is a licensed Professional Engineer registered in the State of New York.

*Director of Audit and Management Services.* Harry A. Lennon was appointed Director for the Department of Audit and Management Services in May 2012. Prior to this appointment, Mr. Lennon served as Senior Confidential Investigator Auditor for the Department of Audit and Management Services. During this time, Mr. Lennon also served as Infrastructure Security Officer. Prior to joining the Authority, Mr. Lennon served as a Confidential Investigator for the New York State Ethics Commission. At the beginning of his career, Mr. Lennon served as a Police Officer for the Supreme Court of the United States. Mr. Lennon earned his Bachelor of Science degree at the University of Scranton.

*Director of Information Technology.* Susan B. Young has served as Director of Information Technology since April 2012. Immediately prior to this appointment she served as Assistant Director of



Information Technology Services. Ms. Young has over 30 years of experience at the Authority and has held a number of positions in technology and management including Director of Systems Management and Manager of Business Systems. Ms. Young received a Bachelor of Science degree from St. Bonaventure University.

*Director of the Canal Corporation.* Brian U. Stratton has served as Director of the New York State Canal Corporation since April 2011. In this capacity, he is responsible for overseeing the operation and development of New York's 524-mile Canal system, including the historic Erie Canal. Prior to joining the Canal Corporation, Mr. Stratton served as Mayor of the City of Schenectady for seven years. Mr. Stratton received his Bachelor of Arts degree from the State University of New York at Oswego.

## **Organization**

To administer its responsibilities for the Thruway and Other Authority Projects, the Authority is organized into nine operating departments and employs approximately 2,260 permanent employees, exclusive of approximately 457 permanent employees dedicated to the Canal system.

The departments are Engineering, Maintenance and Operations, Administrative Services, Finance and Accounts, Legal, Media Relations & Communications, Audit and Management Services, Information Technology and the Canal Corporation.

The Department of Engineering includes Asset and Innovation Management, Capital Program and Contracts Management, Program Delivery, and Transportation Planning and Environmental Services. The Department oversees the development and implementation of the Authority's and Corporation's long range capital programs. It has the professional capacity to design and inspect some capital projects in-house and accordingly does not have to rely solely on outside consultants.

The Department of Maintenance and Operations manages and maintains the highway, bridge and facilities infrastructure and equipment in a cost-effective manner in order to offer Thruway users high levels of safety and service. It is responsible for all toll collection activities, traffic management and travelers' services including concessions. The Department helps develop the Multi-Year Capital Program designed to preserve the condition, serviceability and safety of the roadway, bridges and facilities. The Department also continues to explore and implement innovative designs and technologies to enhance the safety and efficiency of the Thruway system. Direct field management of the maintenance and operations functions is handled through the four division offices (New York, Albany, Syracuse and Buffalo) under the auspices of the four Division Directors who report to the Director of Maintenance and Operations.

The Department of Maintenance and Operations also acts as liaison with New York State Police Troop T, whose 320 members patrol the Thruway. Beginning in 2013, as part of a State-supported initiative to reduce the Authority's Operating Expenses, the State formally assumed financial responsibility for State Police Troop T enforcement on the Thruway System.

## **RESULTS OF OPERATIONS**

### **Financial Results of Operations**

Set forth below are certain revenue and expense items (\$ in millions) and certain other financial information derived from the Authority's audited financial statements for each of the Authority's fiscal years 2011 through 2013. The revenues and operating expenses below are presented in accordance with the Bond Resolution and the Junior Indebtedness Resolution and were derived by adjusting information contained in the Authority's audited financial statements, which are prepared in conformity with generally accepted accounting principles. This information is qualified by, and should be read in conjunction with, the audited financial statements for the Authority's fiscal year ended December 31, 2013 included in **Appendix B** to this Official Statement. See also "MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS" below. Totals may not add due to rounding.

**ACTUAL RESULTS OF OPERATIONS**  
For the Calendar Years 2011-2013  
(in \$ millions)

	<u>2011</u>	<u>2012</u>	<u>2013</u>
Revenue:			
Toll Revenue	\$634.1	\$637.7	\$648.9
Concession Revenue	12.5	13.1	13.3
Other Revenue	<u>18.9</u>	<u>18.4</u>	<u>18.5</u>
Total Pledged Revenues	665.5	669.2	680.7
Operating Expenses:			
Facilities Operating <sup>(1)</sup>	365.4	357.0	279.6
Public Liability Claims & Environmental Reserve <sup>(2)</sup>	<u>4.6</u>	<u>2.0</u>	<u>3.5</u>
Total Operating Expenses	370.0	359.0	283.1
Net Revenue [A]	295.5	310.2	397.6
Senior Bonds Debt Service [B]	<u>167.4</u>	<u>198.5</u>	<u>239.8</u>
Net Revenue After Debt Service	128.1	111.7	157.8
Retained for Operating Reserves <sup>(3)</sup>	(4.3)	(5.3)	(10.7)
Reserve Maintenance Fund Provisions	<u>10.0</u>	<u>36.2</u>	<u>79.8</u>
Remaining Net Revenue	113.8	70.2	88.7
Other Authority Projects – Operating (Canals) <sup>(1)</sup>	51.3	51.9	47.7
Facilities Capital Improvement Fund <sup>(4)</sup>	-	8.0	25.0
General Reserve Fund Provision <sup>(5)</sup>	<u>62.6</u>	<u>10.1</u>	<u>16.1</u>
Remaining Balance	(0.1)	0.2	(0.1)
Adjustment to Cash Basis <sup>(6)</sup>	<u>0.1</u>	<u>(0.2)</u>	<u>0.1</u>
Balance After Cash Basis Adjustment	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Pro Forma Senior Bonds Debt Service Coverage [=A÷B]	1.77x	1.56x	1.66x

<sup>(1)</sup> Operating expenses do not include the liability of \$42.1 million in 2011, \$43.3 million in 2012, and \$38.8 million in 2013 for Thruway, or \$9.3 million in 2011, \$9.5 million in 2012 and \$8.6 million in 2013 for Canals, relative to the implementation of Government Accounting Standard Board Statement 45 (GASB 45), which establishes reporting standards for post-employment health care benefits and represents the unfunded expenses for the years as noted.

<sup>(2)</sup> Includes \$3.6 million for Environmental Remediation Reserve in 2011, \$2.0 million in 2012, and \$1.0 million in 2013.

<sup>(3)</sup> In 2011, \$9.0 million of revenues was retained for use in 2012, \$14.3 million was retained in 2012 for 2013, and in 2013, \$3.6 million was retained for 2014.

<sup>(4)</sup> The Facilities Capital Improvement Fund has been designated for capturing project costs relating to the New NY Bridge Project (Tappan Zee Bridge Replacement).

<sup>(5)</sup> Funds transferred to cover Canal capital program expenditures and Series 2009A and 2011A BANs interest costs, as well as interest and commitment fees from a line of credit secured in 2012 to finance emergency repair work on the Canals due to damage to the Canal system from Tropical Storms Irene and Lee.

<sup>(6)</sup> Reflects differences in cash and accrual basis and timing differences relating to permit sales, investments and Debt Service.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS

### Discussion of Results of Operations: 2011 through 2013

A number of factors impacted the Authority's operating results from 2011 through 2013. During this period, traffic and revenues along the Thruway System were tempered by the slow and protracted nature of the national economic recovery. In addition, during this period traffic was adversely impacted by increases in fuel prices and Tropical Storms Sandy, Irene, Lee and other major weather events. To maintain fiscal balance during this period, the Authority pursued a number of significant cost containment initiatives, including reduced energy consumption and costs, joint procurements with other State entities to enhance buying power and reduce costs, reduced staffing and a transition to a more flexible workforce, extending the useful life of equipment and facilities, and many other initiatives. In 2013, the State assumed financial responsibility for \$85 million of costs relative to State Police Troop T and other operating expenses.

2011. Total Pledged Revenues were \$665.5 million or \$7.0 million below the prior year mainly due to the impact that high and volatile fuel prices and Tropical Storms Irene and Lee had on traffic and toll collections. Toll revenue decreased \$7.1 million or 1.1% compared to 2010. Total operating expenses increased \$5.8 million or 1.6% in 2011 as a result of higher health insurance and pension costs that were partially offset by personal service savings related to the 2010 Early Retirement Incentive Program and savings from ongoing cost containment efforts.

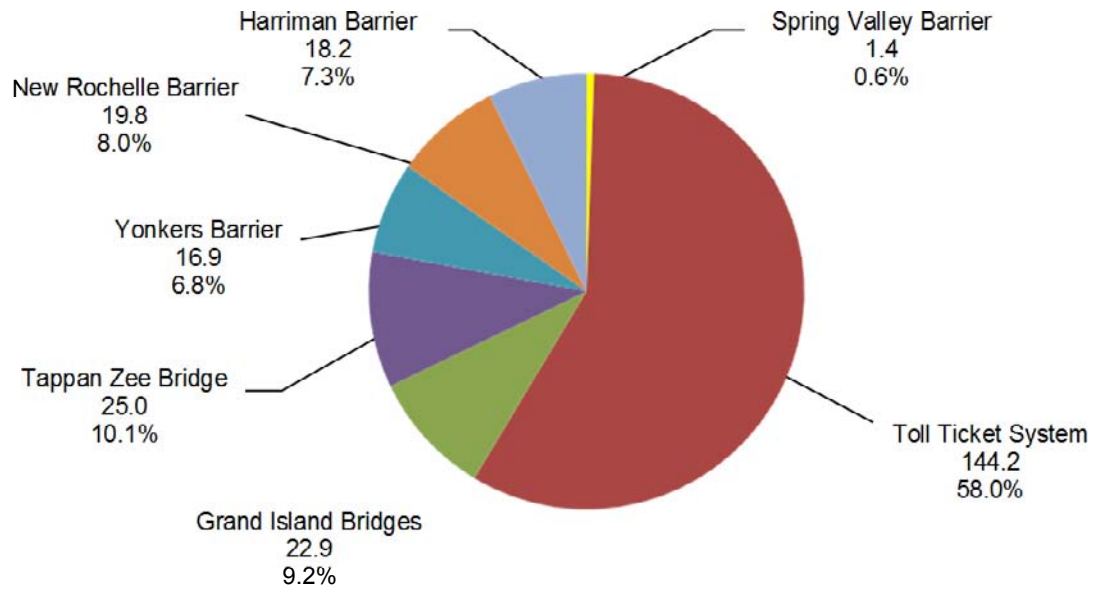
2012. Total Pledged Revenues were \$669.2 million or \$3.7 million above the prior year due to increased traffic and toll collections resulting from milder winter weather conditions. This increase was partially offset by reduced traffic and toll collections resulting from Tropical Storm Sandy. Total operating expenses decreased by \$11.0 million primarily due to milder weather (which reduced snow and ice control costs), the implementation of a number of significant streamlining initiatives, and reductions in operating contracts and environmental remediation costs.

2013. Total Pledged Revenues were \$680.7 million or \$11.5 million above the prior year due to improved weather and economic conditions. Total operating expenses decreased by \$75.9 million primarily due to an agreement with the State of New York for the transfer of NYS Police Troop T expenses as well as taking responsibility for \$24 million of certain annual operating costs.

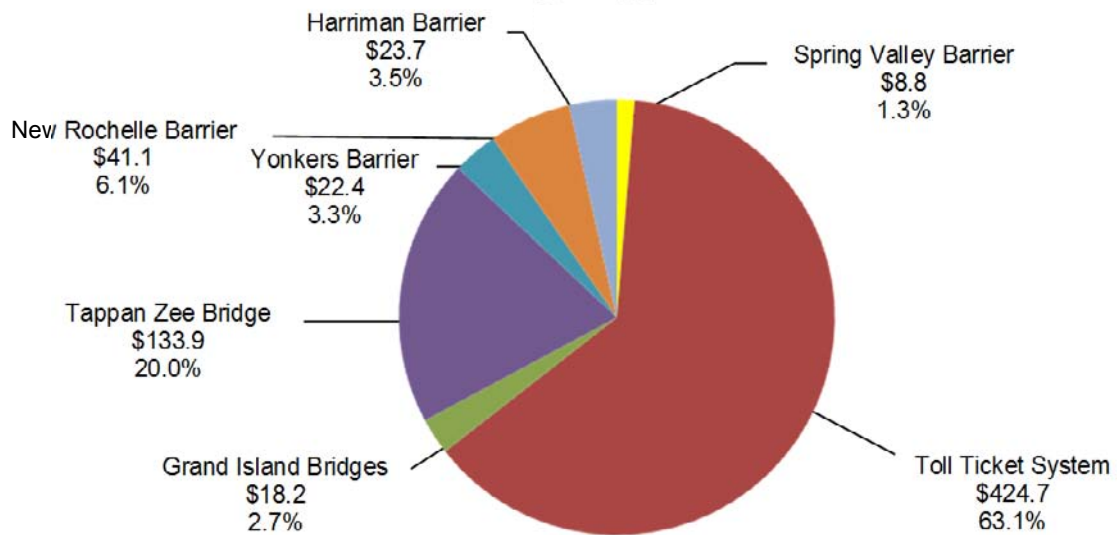
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2013 Traffic and Revenue

**Traffic Transactions – 248.4 Million  
(in millions)**



**Toll Revenue - \$672.8 Million  
(in millions)**



(1) Reflects actual results of traffic operations at 2013 year-end. “Traffic” refers to number of toll transactions at all locations where tolls are collected.

(2) Based on the Authority’s 2013 audited financial statements approved at the April 3, 2014 Board Meeting.

(3) Toll Revenue does not reflect volume discounts totaling \$23.8 million taken under the Authority’s commercial charge account program.

See **Appendix A** — “Supplemental Letter and Report of Traffic Engineer” for a more detailed discussion of traffic, revenue and expenses for the years 2014 through 2019.

## **BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT**

### **2014 Revised Budget and 2015 Proposed Budget**

*2014 Revised Budget.* The Authority’s Board adopted the 2014 Budget (the “2014 Budget”) at its December 16, 2013 meeting. During 2013 and 2014, the Authority continued to implement long-term strategies to work more efficiently and economically, including new plans to reorganize field divisions to cut costs and flatten management, improving coordination and communication between program areas, implementing modernized and enhanced performance metrics, and prioritizing the focus of resources on core mission areas of the Thruway and the Canal. The Authority continues to pursue additional measures to reduce operating costs.

In November 2014, the Authority presented its revised 2014 Budget (the “2014 Revised Budget”). The 2014 Revised Budget reflects a continuation of operating efficiencies that is expected to more than offset higher snow and ice control costs related to unusually heavy winter storms in early 2014. The 2014 Revised Budget also reflects better than expected traffic growth, new improvements in equipment used for automatic vehicle classification of E-ZPass patrons, and improved economic conditions that led to stronger toll revenue forecasts by the Traffic Consultant. In December 2014, the Board is expected to adopt the 2014 Revised Budget and the 2015 Proposed Budget that will ensure high levels of safety and customer service will be maintained and good highway, bridge, and waterway conditions will be preserved.

Recent storm activity in western areas of New York State resulted in temporary closures of certain portions of the Thruway. The Authority plans for winter weather related events in the ordinary course of business. The impact of this weather, if any, on the current operating budget cannot be determined at this time, but the Authority believes that this recent weather will not materially impact its current revised budget and forecasts.

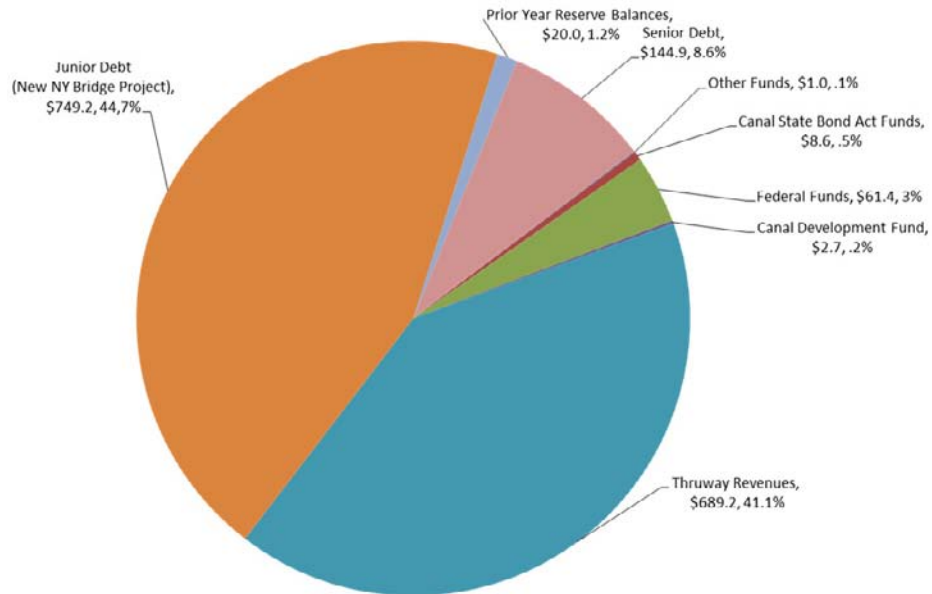
*2015 Proposed Budget.* The proposed 2015 Budget (the “2015 Proposed Budget”) will be submitted to the Authority Board for approval at its next meeting in December. Additional revenues will be required to meet the 2015 Proposed Budget revenue target. The Authority has continued to limit operating expenses, with no increase planned for 2015. The 2015 Proposed Budget is balanced and includes plans to deploy new technologies to enhance safety and further reduce operating costs, including a new computer aided dispatch system to respond to emergencies and new GPS technology in equipment and fleet vehicles to better manage fuel, salt and labor costs. The 2015 Proposed Budget anticipates the letting of 40 new capital projects to help maintain good bridge and highway conditions, and that the fixed-price, date certain New NY Bridge Project will remain on-budget and on-schedule.

References in this Official Statement to the 2014 Revised Budget and the 2015 Proposed Budget reflect the documents expected to be submitted to the Authority Board for its approval in December 2015. No assurances can be given that there will not be revisions to the 2014 Revised Budget or the 2015 Proposed Budget prior to their submission to the Authority Board for approval or that the Authority Board will not make revisions. Though the Authority does not currently expect that there will be material revisions to either the 2014 Revised Budget or the 2015 Proposed Budget prior to approval by the Authority Board, no assurances can be given that any potential revisions will not be material.

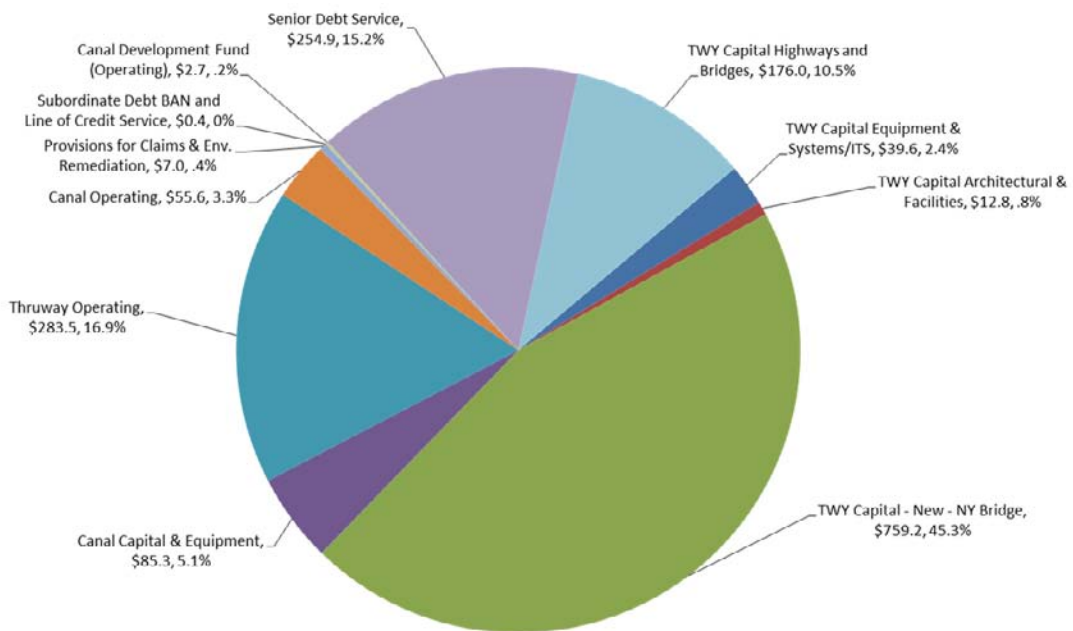
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The 2014 Revised Budget totals \$1.7 billion, an increase of \$227 million or 16% from the actual 2013 results, primarily due to the initiation of construction of the New NY Bridge. Sources and Uses of the 2014 Revised Budget are highlighted in the following charts:

2014 Sources of Funds \$1,676.9 Million  
(in millions)



2014 Uses of Funds \$1,676.9 Million  
(in millions)



The following chart shows the differences in sources and uses of funds between the 2014 Revised Budget and the 2015 Proposed Budget. Additional detail regarding the 2015 Proposed Budget can be found at [www.thruway.ny.gov](http://www.thruway.ny.gov). No statement on the foregoing website or any other website is included by specific cross-reference herein.

**2014 Revised Budget vs. 2015 Proposed Budget  
(in millions)**

	<b>2014 Revised Budget</b>	<b>2015 Proposed Budget<sup>(1)</sup></b>	<b>Change from Revised</b>
<b>SOURCES:</b>			
Thruway Revenues	\$ 689.2	\$ 728.9	\$ 39.7
Prior Year Reserve Balances	20.0	32.0	12.0
Senior Debt Proceeds	144.9	294.8	150.0
Junior Debt Proceeds	749.2	922.0	172.8
Federal Funds	61.4	41.2	(20.2)
Other Funds	1.0	1.9	1.0
NYS Bond Act Proceeds	8.6	5.7	(2.9)
Canal Development Fund	2.7	2.9	0.3
<b>Total Sources</b>	<b>\$ 1,676.9</b>	<b>\$ 2,029.5</b>	<b>\$ 352.6</b>
<b>USES:</b>			
<b>Operating Expenses:</b>			
Thruway Operating expenses	\$ 283.5	\$ 289.2	\$ 5.7
Canal Operating expenses	55.6	54.9	(0.6)
Sub Total	339.1	344.2	5.1
Provisions for Claims & Env. Remediation	7.0	1.8	(5.3)
Canal Development Fund	2.7	2.9	0.3
Total	348.8	348.9	0.1
<b>Debt Service:</b>			
Subordinate Debt	0.4	0.5	0.2
Senior Debt Service	254.9	245.4	(9.5)
Junior Debt Service	-	36.8	36.8
Total	255.3	282.8	27.5
<b>Capital Program:</b>			
Thruway Capital - Highways and Bridges	176.0	290.5	114.5
Thruway Capital - New NY Bridge	759.2	966.8	207.6
Thruway Capital - Architectural & Facilities	12.8	32.3	19.5
Thruway Capital - Equipment & Systems/ITS	39.6	57.1	17.5
Canal Capital & Equipment	85.3	51.2	(34.1)
Total	1,072.8	1,397.8	325.0
<b>Total Uses</b>	<b>\$ 1,676.9</b>	<b>\$ 2,029.5</b>	<b>\$ 352.6</b>

<sup>(1)</sup> The 2015 Proposed Budget is expected to be approved by the Authority Board in December 2014.

**Multi-Year Capital Program**

Annually, the Authority adopts a one-year contracts program based on the prioritization of projects scheduled in its Multi-Year Capital Program. This annual contracts program is approved by the Board and represents the Authority's official capital construction program for the year. Project selection considers the following priority factors: safety, bridge and highway condition rating, capacity needs, and facility needs.

As the Thruway is at the end of its sixth decade of operation, the necessity for reconstruction and rehabilitation of the aging Thruway infrastructure requires an increasing level of investment. At the same time, travelers on the roadway during peak travel periods are experiencing delays resulting from increasing traffic volumes. Authority staff, utilizing enhanced and modernized asset management systems, historical records of past remedial work, and their knowledge of the current condition of facilities, developed the Multi-Year Capital Program, which is a rolling 4-year program that is updated annually.

The Multi-Year Capital Program is designed to address several key objectives that are critical to Thruway customers and is intended to maximize the benefit to the Thruway. These objectives are system reliability, increased customer service, improved safety and mobility and environmental stewardship. The Multi-Year Capital Program also will take advantage of technology improvements and innovations in the field of transportation management. As evidenced through the Multi-Year Capital Program, the Authority is committed to providing customers with the mobility and service they expect, and to preserving the main transportation artery that supports the State's economy.

The Multi-Year Capital Program will complete major, job-sustaining reconstruction projects that are currently underway and includes new projects for reconstruction and rehabilitation of roadway, bridges, facilities, equipment and support systems of the Thruway and Canal systems. The current Multi-Year Capital Program provides for work on 136 bridges, the resurfacing/rehabilitation/reconstruction of approximately 337 center line miles (1,385 lane miles) of highway and the reduction of congestion in key corridors. The Authority estimates that the investments made in this program will preserve overall highway and bridge conditions in the "good" category, allowing for the continued reliability of the Thruway system.

Since the transfer of the Canal system to the Authority in the 1990s, the Authority has made significant maintenance and capital investments into the waterway's infrastructure. Given the age of the Canal system, revitalization of infrastructure is necessary to meet the demands of recreational boaters, tour and rental boats and a resurgent commercial shipping sector. While the Authority undertakes an ambitious annual maintenance program, capital investments need to be made to ensure that critical Canal structures and equipment remain in good condition. The Multi-Year Capital Program provides new investments to meet essential equipment needs and reconstruct and rehabilitate a number of critical facilities damaged by Tropical Storms Irene and Lee and other major storm events that have impacted the Canal system.

***Total Capital Program Expenditures.*** The following table presents actual and projected expenditures that support the Authority's capital programs. The table also includes the Authority's projections for capital expenditures on the New NY Bridge Project, which began in 2013. With these projected capital investments, the Authority will be able to continue to provide good service to patrons, meet the growing demands of increased use with up-to-date technology and other necessary improvements, and assure that the system is not adversely affected by deteriorating bridge and pavement conditions.



**ACTUAL AND PROJECTED CAPITAL PROGRAM EXPENDITURES**  
**2005-2018**  
(in millions)

<u>Year</u>	<u>Thruway Highway and Bridge Capital Expenditures</u>	<u>Equipment Replacement and Other Facility Capital Needs</u>	<u>Canal Capital Program</u>	<u>Subtotal Capital Program Expenditures</u>	<u>New NY Bridge Project</u>	<u>Total Capital Program Expenditures<sup>(1)</sup></u>
2005	\$ 97.1	\$ 27.3	\$ 21.0	\$ 145.4		\$ 145.4
2006	179.3	50.9	14.4	244.6		244.6
2007	267.3	59.0	44.2	370.5		370.5
2008	288.7	36.2	30.3	355.2		355.2
2009	259.6	35.4	26.1	321.1		321.1
2010	311.0	39.9	26.8	377.7		377.7
2011	367.6	49.5	27.4	444.5		444.5
2012	322.4	22.9	45.7	390.9		390.9
2013	183.7	30.7	37.5	251.9	\$ 613.4 <sup>(3)</sup>	865.3
2014 <sup>(2)</sup>	176.0	52.4	85.3	313.7	759.2	1,072.9
2015 <sup>(2)</sup>	290.5	89.4	51.2	431.1	966.8	1,397.9
2016 <sup>(2)</sup>	328.0	113.0	49.9	490.9	719.4	1,210.3
2017 <sup>(2)</sup>	352.6	90.6	62.3	505.5	637.5	1,143.0
2018 <sup>(2)</sup>	329.0	62.3	46.3	437.6	274.2	711.8
<b>Total<sup>(1)</sup></b>	<b>\$3,752.8</b>	<b>\$759.5</b>	<b>\$568.4</b>	<b>\$5,080.6</b>	<b>\$3,970.5<sup>(4)</sup></b>	<b>\$9,051.1</b>

<sup>(1)</sup> Totals may not add due to rounding.

<sup>(2)</sup> Projected capital expenditures.

<sup>(3)</sup> Includes \$8.3 million of pre-design environmental costs.

<sup>(4)</sup> Does not include prior years' expenses that had been paid from the construction fund and are included in the column entitled "Thruway Highway and Bridge Capital Expenditures". An additional \$0.5 million is expected to be needed in 2019 to complete the New NY Bridge Project.

**Funding of the Multi-Year Capital Program**

The current Multi-Year Capital Program for 2015 – 2018 totals \$1.9 billion excluding the New NY Bridge Project. The Multi-Year Capital Program is expected to be funded with a combination of Net Revenues, Senior Bond proceeds and Federal, State and other funds.

The Authority's Capital Program Management Group (the Authority's Chief Engineer, Chief Financial Officer and Director and Maintenance and Operations) and the Authority Board continually monitor projected system needs and balance them with available resources. The Authority is also enhancing and modernizing its asset management system to ensure the efficient and effective delivery of the Multi-Year Capital Program, resulting in smart project selections and enhancing its ability to respond to price variability and other changes that would impact funding, project cost and delivery. It is important to note that the Authority's Board has the power, without approval by the Legislature or the Governor, to increase toll rates to maintain a high level of operating safety and services on the Thruway system, to maintain and rehabilitate the Thruway system, to pay debt service, to meet toll covenants and to maintain the balance of revenues and expenses.

In June 2011, the State legislature enacted legislation that increased the authorized amount of bonds or notes that the Authority may issue for capital projects for the Canal system by \$100 million, as well as an additional \$10 million authorization for bonding for any canal capital improvements deemed an emergency project.

In addition, on April 23, 2012, the Authority entered into a Loan Agreement with Citibank, N.A., (the "Bank") under which the Bank is providing a revolving line of credit, evidenced by a note (the "Bank Note"), in an aggregate amount not to exceed \$60 million. The Bank Note matures on April 23, 2017 and may be pre-paid at any time by the Authority without penalty. The proceeds of the Bank Note as needed are to be applied to finance capital projects for the State Canal system arising from tropical storm and hurricane damage caused in August and

September 2011. The Authority's reimbursement obligations under the Bank Note are secured in part by a pledge of revenues available in the General Reserve Fund, which pledge constitutes Subordinated Indebtedness under the Bond Resolution. In addition, grant monies expected to be received from the Federal Emergency Management Agency ("FEMA") for these emergency repairs are also pledged to repay the Bank Note, and such FEMA funds are expected to provide a substantial portion of the proceeds to repay the Bank Note. As of December 4, 2014, the Authority has borrowed \$24 million under the Loan Agreement.

### **The New NY Bridge Project**

The Tappan Zee Bridge is a major state and regional crossing of the Hudson River, and has historically been a significant source of toll revenues for the Thruway System since it opened to traffic in 1955. In 2013, the Tappan Zee Bridge generated \$133.9 million of toll revenue and carried approximately 50 million vehicles. Over the years, the Tappan Zee Bridge has been the subject of numerous replacement studies due to growing congestion and aging of its structural components. Opened in 1955, the Tappan Zee Bridge was built to last only 50 years. It is a vital Hudson River crossing in the dense core of the Northeast with no nearby alternative crossings and is servicing traffic that is 40% more than it was designed to handle. In addition, the current bridge has no shoulders for emergency services or disabled vehicles, no mass transit capability and seismic and other structural deficiencies exist (below current standards). After many years of study and debate, a final project scope was developed in 2011 that would deliver a realistic, affordable and expedited bridge replacement project.

In 2011, the New NY Bridge Project was advanced to replace the Tappan Zee Bridge. The project includes the construction of twin bridge spans that will correct existing structural deficiencies that require ongoing extraordinary maintenance, address longstanding safety concerns, and provide sufficient capacity to serve current usage safely and allow for future economic growth. Because of its national and regional importance, the New NY Bridge Project was named one of fourteen infrastructure projects that President Obama selected for expedited federal environmental review.

The New NY Bridge Project is designed to provide:

- At least a 100-year design life before major maintenance is required, greatly improving operational efficiencies and lowering life-cycle costs;
- Four travel lanes in each direction to match the highway approaches on either side of the Hudson River;
- Dedicated bus lanes during commuter rush hours;
- A structural envelope with the strength and capacity to allow for potential future transit modes, including commuter rail, light rail and/or bus rapid transit service;
- Conformance with current seismic, safety, security and geometric requirements;
- Adequate shoulders to properly manage traffic incidents and emergencies;
- All Electronic Tolling and reconfigured toll plazas to reduce barrier-related congestion;
- Enhanced environmental features that will lessen long term impacts on the Hudson River; and
- Accommodation for bike/pedestrian use.

To advance the New NY Bridge Project on an accelerated pace, the Authority pursued a parallel environmental review and procurement process that is serving as a national model for the delivery of mega-transportation projects. On December 9, 2011, Governor Andrew M. Cuomo signed the "Infrastructure Investment Act of 2011" permitting the use of design-build contracts for certain government procurements, paving the way for a design-build procurement for the New NY Bridge Project. The Federal Highway Administration, the lead federal agency in the environmental review process, signed the final Environmental Impact Statement for the New NY

Bridge Project on July 25, 2012. The Joint Record of Decision and State Environmental Quality Review Act Findings Statement were both signed by the Federal Highway Administration on September 25, 2012, completing the National Environmental Policy Act (“NEPA”) approval process in approximately eleven months.

The Authority initiated a design-build procurement process and in December 2012, the review process of the three submitted proposals was completed and the Authority Board authorized the award of a \$3.142 billion design-build contract (“Design-Build Contract”) to Tappan Zee Constructors, LLC (“TZC LLC” or “Design-Build Contractor”). TZC LLC received notice to proceed on the New NY Bridge Project in January 2013. TZC LLC is a special purpose joint venture of Fluor Enterprises, Inc., American Bridge Company, Granite Construction Northeast, Inc. and Traylor Brothers Inc.

The fixed-price, date-certain, Design-Build Contract with the Authority transfers significant risk for the design and construction of the New NY Bridge Project to TZC LLC. The key risks associated with the New NY Bridge Project involve geotechnical conditions due to the large number of pilings in the riverbed. The Design-Build Contract effectively transfers the risks of changed geotechnical conditions to TZC LLC. Other major risks, such as commodity price escalation, design interfaces, and labor relations also have been contractually transferred to TZC LLC or are addressed through the Project Labor Agreement. Risks associated with completion delay and traffic or toll collection interruption are borne by TZC LLC and are subject to an extensive liquidated damages regime. TZC LLC is responsible for substantial completion of the project by mid-2018.

TZC LLC’s performance is secured by a construction security package that includes a joint and several guarantee of TZC LLC’s performance from its members, including a parent guarantee from Fluor Corp. which has credit ratings of “A-”, “A3” and “A-” from Standard & Poor’s Rating Services, Moody’s Investors Service and Fitch Ratings, respectively, with a stable outlook. The construction security package also includes surety bonds for payment and performance of approximately \$1.5 billion each, contractual liquidated damages for delays in completing major project milestones and for lane closures, and a maximum liability cap of 50% of the contract price.

Design has been substantially completed and construction activities are well underway. On October 16, 2013, formal construction began with installation of the first permanent piles that will comprise the foundation of the New NY Bridge Project. The project schedule estimates that the new north (westbound) span will open in late 2016, at which point all traffic will be moved off of the existing Tappan Zee Bridge and onto the new north span. The new north span will be designed to accommodate all existing Tappan Zee Bridge traffic, with no decrease in capacity because the new north span will have larger deck capacity than the existing Tappan Zee Bridge, which assures full traffic-carrying capacity throughout construction. During construction of the new south (eastbound) span, which is scheduled to open at the project’s completion in mid-2018, the existing Tappan Zee Bridge will be deconstructed. During the entire time the twin bridge spans are constructed, tolls will continue to be collected across the Thruway System (including the existing Tappan Zee Bridge or the north span of the New NY Bridge Project).

The Authority entered into a TIFIA Loan Agreement on December 19, 2013 with the United States Department of Transportation (acting by and through the Federal Highway Administrator) authorizing a loan for an amount up to \$1.6 billion (the “TIFIA Loan”). The TIFIA Loan is secured by the Series 2013B Junior Indebtedness Obligation and bears an interest rate of 3.89% per annum. The Series 2013B Junior Indebtedness Obligation securing the TIFIA Loan is on parity with all other Junior Indebtedness Obligations issued or incurred and outstanding, or to be issued or incurred by the Authority under the Junior Indebtedness Resolution. The Authority anticipates drawing on the TIFIA Loan in March, 2019. The Authority has reserved the right to pay, but is not obligated to pay, all or a portion of the principal of the Series 2013A Junior Indebtedness Obligations when due from the proceeds of the TIFIA Loan.

Under the Design-Build Contract, the key risks retained by the Authority involve exposure for any pre-existing contamination not previously disclosed to the contractor, errors in geotechnical data at specific locations, and changes in law or regulation, such as those related to Homeland Security considerations or changes in the

Authority's specifications and unforeseen costs associated with delay. The completion of dredging has largely mitigated risks associated with contamination and the validity of earlier test boring data has been confirmed. For changes in law, unforeseen costs associated with delay or other factors, and any potential owner-directed changes, the Authority's cost estimate includes over \$552 million of contingency and allowances – over 20% of the underlying \$3.142 billion Design-Build Contract price. As noted above, full toll collection will be maintained throughout the construction process and even if completion is delayed.

The Authority expects to issue additional series of Junior Indebtedness Obligations to finance a substantial portion of the costs of the New NY Bridge Project. See the category of "Proposed Debt Issuances by Year – Junior Indebtedness" in the chart under "Projected Results" below for the current planned issuances of Junior Indebtedness Obligations to finance the New NY Bridge Project.

The Authority's Executive Director, Thomas J. Madison, Jr., serves as Project Executive and Peter Sanderson serves as Project Director for the New NY Bridge Project. Additional information regarding the New NY Bridge Project can be found at [www.newnybridge.com](http://www.newnybridge.com). No statement on the foregoing website or any other website is included by specific cross-reference herein.

### **Bridge Inspection Program and Condition Ratings**

There are 873 bridges on the Thruway, excluding bridges on the Cross-Westchester Expressway for which the Authority has not assumed any inspection responsibility. The Authority has inspection responsibility for 810 of these bridges, including 410 mainline and ramp bridges and 400 overhead bridges carrying interchange traffic as well those carrying State and local roads, pedestrian or railroad traffic. The New York State Department of Transportation ("DOT") is responsible for inspecting the remaining 63 overhead bridges located on the Thruway and all of the bridges located on the Cross-Westchester Expressway.

The Authority's inspection program exceeds current Federal and State standards. The inspection process strives for strict adherence to both the qualification and training of inspectors, and inspection methodologies as prescribed by DOT. All bridges are inspected biennially as required by the State's Uniform Code of Bridge Inspection (the "Bridge Code"). The Authority contracts with outside consultants to conduct this inspection for most of its bridges. In addition to the Bridge Code requirement, the Authority performs an annual inspection of suspension components of pin and hanger assemblies of bridges, inspection of bridges over waterways after each major flood event, and inspection of bridges after any seismic activity in the area. During each general biennial or interim inspection, certain superstructure elements which could cause the failure of a bridge receive particularly close inspection. Bridges over waterways which are identified for underwater diving inspection are also inspected regularly at a frequency recommended in the last diving inspection report as per guidelines issued by DOT.

The Authority has maintenance responsibility for 809 bridges, while DOT and other entities have maintenance responsibility for the remaining 64 bridges. The Authority's bridge maintenance engineers review each bridge inspection report to determine maintenance and rehabilitation needs. A maintenance and rehabilitation program is implemented through in-house crews or through a contracts program depending upon the extent of work required to be performed at any bridge.

A comparison of the Authority’s Bridge Condition Ratings for the years 2013 and 2014 are shown as follows.

**BRIDGE RATINGS**

CONDITION	NO. OF BRIDGES	
	<u>Dec. 2013</u>	<u>Nov. 2014</u>
<b>GENERAL RECOMMENDATION 5-7</b>		
Bridges in generally good condition with only minor to moderate repairs required.	663	666
<b>GENERAL RECOMMENDATION 4</b>		
Bridges in good to fair condition requiring reconditioning of some structural elements.	141	135
<b>GENERAL RECOMMENDATION 2-3</b>		
Bridges in poor condition requiring major repairs or replacement.	5	8

The change in the Authority’s bridge condition ratings between December 2013 and November 2014 is generally due to aging of the bridge structures. As of November 4, 2014, there were eight bridges with a general recommendation of 3. Seven of the eight bridges in such condition will be rehabilitated, replaced or removed in the current or ensuing Multi-Year Capital Plan. They are being maintained in a safe and serviceable condition until that time. The eighth bridge has had substantial repairs since its last inspection, which will improve the general recommendation in the next inspection cycle, removing it from this category.

**Operational Streamlining**

The Authority is continuing to improve the efficiency and effectiveness of its operations through an ongoing operational streamlining program. This program has played an important role in maintaining fiscal balance, involving structural reforms and other measures that will generate reductions in Authority operating expenses. As it has in previous years, the streamlining program is expected to significantly reduce operating expenses going forward. The Authority expects to hold operating costs at relatively the same level in 2014 and 2015, after a significant reduction in 2013 from 2012. The streamlining program consists of workforce reductions and a transition to a more part-time and temporary workforce, realigning employee benefits to comport with the State’s benefit plans, departmental consolidations and staff reorganizations, reductions in vehicle and equipment fleets, reductions in energy usage and costs, reductions in overtime and the number of cash toll lanes that are staffed during off-peak hours, bulk purchasing of goods and shared services with other entities to reduce pricing, and many other initiatives.

**Federal Funding**

Pursuant to the provisions of an agreement dated July 19, 1982, entered into among the Authority, the United States Department of Transportation and the State and in accordance with the provisions of Title 23, United States Code, as amended (“Title 23”), the Authority historically has received Federal funds in connection with the funding of various resurfacing, restoration and rehabilitation projects on certain designated interstate portions of the Thruway. While the amount of Federal aid received by the Authority in recent years has been *de minimis*, the Authority has received agreements to provide \$100 million in new Federal aid in 2012 through 2016, to be used to fund Thruway and Canal capital projects and to reimburse eligible Canal operating costs.

## Report of Independent Traffic Engineer

The Authority retained Jacobs Civil Consultants, Inc., as Traffic Engineer, to prepare a study (the “Traffic Engineer’s Report”) that reviewed the operations and physical condition of the Thruway System. The Traffic Engineer’s Report, dated December 4, 2013, projected the financial results of the Authority’s operations for 2013-2019. The forecast of traffic and revenues detailed in the Traffic Engineer’s Report were based on the Authority’s current toll schedule. The Traffic Engineer’s Report also identified future revenues required for the Authority to successfully complete the New NY Bridge Project while fulfilling its system-wide operating, debt service, and capital needs. Future funding needs through 2019 were established by the Authority at amounts necessary to maintain levels of safety and service, good infrastructure conditions, support Thruway and Canal operations, and maintain the Authority established debt service coverage policy targets.

The Traffic Engineer’s Report concluded that these additional revenues will allow the Authority to:

- Fund necessary operations, maintenance and capital expenses;
- Preserve good overall infrastructure conditions;
- Maintain targeted levels of debt service coverage;
- Meet the covenants of the Bond Resolution and the Junior Indebtedness Resolution;
- Satisfy the terms of the TIFIA Loan; and
- Meet the requirements of the Authority’s Fiscal Management Guidelines.

The Traffic Engineer’s Report contained the following additional conclusions:

- The Authority has the independent, statutory ability to adjust its toll rates and provide significant amounts of additional revenue;
- The Authority’s toll rates are relatively low and compare well to other toll systems, allowing for future rate setting flexibility with minimal long-term diversion impact;
- The Authority’s operational streamlining efforts have limited growth in operational expenses and can be anticipated to provide recurring, long-term savings;
- Infrastructure conditions and the capacity of the Thruway System should not affect the projected growth of traffic and toll revenues throughout the forecast period;
- The Authority’s facilities have been maintained in high standards over the years, resulting in overall good infrastructure conditions;
- The Authority’s planned extensive and regular maintenance programs, new asset management systems and long-term capital planning process provides confidence that overall operational and structural integrity of its facilities will be maintained; and
- Target levels of future maintenance and capital expenditures beyond the current Multi-Year Capital Program will support the integrity and reliability of the Thruway System.

In a supplemental letter, dated November 5, 2014 (the “Supplemental Letter”) provided to the Authority, the Traffic Engineer provided updated traffic and revenue forecasts and reaffirmed their conclusions made in the

Traffic Engineer’s Report. The Supplemental Letter also reaffirms that future additional revenue will be needed for the Authority to be able to fill projected shortfalls in each of the years 2015 through 2019.

The conclusions presented above are subject to the limitations and assumptions detailed in the Traffic Engineer’s Report. The Supplemental Letter and Traffic Engineer’s Report are contained in **Appendix A**, which should be read in their entirety.

**Projected Results**

The Traffic Engineer’s Report identifies future revenues required for the Authority to successfully complete the New NY Bridge Project while fulfilling its system-wide operating, debt service, and capital needs. Future funding needs through 2019 were established by the Authority at amounts necessary to maintain levels of safety and service, good infrastructure conditions, support Thruway and Canal operations, and maintain the Authority’s established debt service coverage policy targets. The projections summarized in the following table, entitled “Projected Results”, show the Traffic Engineer’s findings for the years 2013 through 2018. See “Report of Independent Traffic Engineer” above, and **Appendix A** — “Supplemental Letter and Report of Traffic Engineer”.

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	<b>Projected Results (in millions)</b>				
	<b>2014 Revised Budget</b>	<b>2015 Proposed Budget</b>	<b>Estimated 2016</b>	<b>Estimated 2017</b>	<b>Estimated 2018</b>
Toll Revenue Target <sup>(1)</sup>	\$658.1	\$694.4	\$817.1	\$931.1	\$991.8
Other Revenues	31.1	34.5	32.6	33.0	39.8
Total Revenue Target	689.2	728.9	849.7	964.1	1,031.6
Thruway Operating Expenses	283.5	289.2	297.9	306.9	316.1
Reserve for Claims and Indemnities and Environmental Remediation	<u>7.0</u>	<u>1.8</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>
Net Revenue (A)	398.7	437.9	549.8	655.2	713.6
Current Senior Debt Service Outstanding	255.4	261.4	261.7	261.7	261.7
Proposed Senior Bonds	0.0	(15.5)	2.1	27.4	41.1
Less Interest Earnings on Senior Debt Service					
Reserve Funds	<u>(0.5)</u>	<u>(0.5)</u>	<u>(0.6)</u>	<u>(0.6)</u>	<u>(0.7)</u>
Net Senior Debt Service (B)	254.9	245.4	263.2	288.4	302.1
Net Revenue after Senior Debt Service	143.8	192.5	286.6	366.8	411.4
Reserve Maintenance Deposit	54.3	30.0	30.0	30.0	30.0
Total Junior Debt Service	0.0	37.0	80.4	121.1	143.9
Less Interest Earnings on Junior Debt Service					
Reserve Funds	<u>0.0</u>	<u>(0.1)</u>	<u>(0.3)</u>	<u>(0.4)</u>	<u>(0.5)</u>
Net Junior Debt Service (C)	0.0	36.8	80.1	120.7	143.4
Facilities Capital Improvement Deposit	10.0	44.8	98.5	123.8	147.3
Canal Corporation (Net of Federal Aid)	50.6	54.9	56.6	58.3	60.0
General Reserve Fund Provision - Canal Capital	28.5	25.3	20.9	33.8	30.7
General Reserve Fund - Subordinate Debt	<u>0.4</u>	<u>0.5</u>	<u>0.5</u>	<u>0.2</u>	<u>0.0</u>
Balance	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
Senior Debt Service Coverage Ratio (A/B) <sup>(2)</sup>	1.56	1.78	2.09	2.27	2.36
Senior & Junior Debt Service Coverage Ratio (A/(B+C)) <sup>(2)</sup>	N/A	1.55	1.60	1.60	1.60
Proposed Debt Issuances by Year:					
Senior General Revenue Bonds	N/A	273.0	361.8	286.8	0.00
Junior Indebtedness	N/A	1,016.4	227.6	691.8	288.8

Source: Jacobs Civil Consultants, Inc. Traffic Engineer's Report dated December 4, 2013 and Supplemental Letter dated November 5, 2014

<sup>(1)</sup> Includes estimates of additional toll revenues that will be necessary to maintain fiscal balance in the years 2015 through 2018.

<sup>(2)</sup> Board-adopted Fiscal Management Guidelines require a minimum 1.5x Senior Bond coverage ratio. The Bond Resolution requires a 1.2x minimum Senior Debt Service coverage ratio and the Junior Indebtedness Resolution requires a 1.2x minimum Senior and Junior Debt Service coverage ratio.



Future availability of Net Revenues will affect the amount of debt issued under both the Bond Resolution and the Junior Indebtedness Resolution to fund Authority capital expenditures and, therefore, the level of future debt service coverages. However, the Authority has covenanted to maintain tolls in order that Net Revenues will at least equal both the Net Revenue Requirement under the Bond Resolution and the Junior Indebtedness Net Revenue Requirement under the Junior Indebtedness Resolution for each year. See “SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Tolls, Fees and Charges”.

In addition, the Authority continually monitors its projected needs and financial plan. It also continually reviews projections of Revenues and expenses and has the power, without approval by the Legislature or the Governor, to increase toll rates to maintain a high level of operating safety and services on the Thruway system, to maintain and rehabilitate the Thruway system, to pay debt service, to meet toll covenants and to maintain the balance of revenues and expenses.

## **ADDITIONAL AUTHORITY INFORMATION**

### **Employee Relations**

Authority and Canal Corporation employees are represented pursuant to New York State’s Public Employees’ Fair Employment Act (Taylor Law) by three unions, International Brotherhood of Teamsters (the “Teamsters”), Civil Service Employees Association (“CSEA”) and the Public Employees Federation (“PEF”). The Teamsters represent the Authority’s maintenance, toll collection and clerical employees while the CSEA represents both Authority professional, supervisory and technical employees and Canal Corporation operational, maintenance and clerical employees in separate locals. PEF represents professional, technical and supervisory Canal Corporation employees. In 2010, the Authority offered a Retirement Incentive Program to employees who met eligibility requirements. Approximately 10% of the Authority’s workforce elected to retire under this program. The Authority is responsible for a surcharge that was estimated to be \$14.08 million which was provided for in 2010. In 2012, the Authority implemented a reduction in force that resulted in the layoff of approximately 8% of the Thruway and Canal workforce. The Authority currently is in negotiation with all bargaining units, each of which has a labor contract with a term which ended on June 30, 2012.

### **Retirement Plans and Other Post Employment Benefits**

The pension plan for Authority and Canal Corporation employees is part of the New York State and Local Employees’ Retirement System (“ERS”). The ERS is a cost-sharing multiple-employer retirement system that provides retirement benefits as well as death and disability benefits. Plan benefits are provided under the provisions of the New York State Retirement and Social Security Law and are guaranteed under the State Constitution. The Authority’s election to participate in the State plans is irrevocable. ERS Tiers I through IV are noncontributory except for employees with less than 10 years of service who contribute 3% of their salary. All Tier V employees contribute 3% of their salary. All Tier VI employees contributed 3% of their salary in State Fiscal Year 2012-2013; however, beginning April 1, 2013, all Tier VI employees contribute between 3% and 6% of their salary, based upon the amount of their annual salary. Under State law, the Comptroller certifies annually the rates, expressed as proportions of payroll of members, which are used in computing the contributions required to be made by employers. The rates billed by the Comptroller for ERS during the year ended December 31, 2013 ranged from 11.4% to 28.8% and during the year ended December 31, 2012 ranged from 10.1 to 25.4%. The New York State Police and Fire Retirement System (“PFRS”) is paid as part of a fringe benefit rate billed to the Authority for the State Police which as of January 1, 2013 is no longer the fiscal responsibility of the Authority. The PFRS benefit rates billed were 13.14% for April through December 2012, and 12.03% for April 2011 through March 2012.

The approximate required Authority contributions for each of the years 2011 through 2013 were as follows (in thousands):

	<u>ERS</u>	<u>PFRS</u>
2013	\$34,916	\$ 0*
2012	33,006	4,028
2011	37,698	3,912

\*State Police pension costs are no longer paid by the Authority.

The Authority's contributions in each of the foregoing years were equal to 100% of the contributions required for the period.

The Authority reports its Other Post-Employment Benefits ("OPEB") in compliance with GASB Statement No. 45 - "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions." GASB Statement No. 45 requires governmental entities, including the Authority, to recognize in its financial statements the financial impact of OPEB, principally employer funded health care and death benefits which the Authority provides for retired employees. Substantially all Authority employees may become eligible for these benefits if they reach normal retirement age while working for the Authority.

The following table summarizes the Authority's evaluation of OPEB costs and obligations at December 31, 2013 and 2012 (in thousands):

	<u>2013</u>			<u>2012</u>
	<u>Thruway Authority</u>	<u>Canal Corporation</u>	<u>Total</u>	<u>Total</u>
Present Value of Future Benefit Payments	\$1,230,128	\$239,645	\$1,469,773	\$1,401,446
Unfunded Accrued Liability	897,075	165,268	1,062,343	1,071,069
Annual Required Contribution (30 Year Amortization)	63,750	12,966	76,716	80,718
Annual OPEB Cost	62,630	12,724	75,354	78,495
Valuation Payroll	123,161	22,055	145,216	160,733
Annual OPEB Expense (as % of payroll)	50.9%	57.7%	51.9%	48.8%
Expected Benefit Payment	23,809	4,086	27,895	25,723

See Note 8 – Retirement Benefits and Note 9 – Other Postemployment Benefits in the Authority's financial statements in **Appendix B** to this Official Statement for a further discussion of the Authority's retirement and OPEB programs.

## Investments

The Bond Resolution enumerates various investments for Authority funds as authorized by law. See **Appendix C** — "Summary of Certain Provisions of the Bond Resolution — Definitions — Investment Obligations" and "— Investments of Funds". The Act limits investments to those obligations in which the Comptroller of the State may invest public funds pursuant to Section 98-a of the State Finance Law, as amended from time to time. Title 7, Section 2925 of the Public Authorities Law requires that the Authority Board annually review and approve its investment policies and practices and provides for an annual independent audit of all investments. **Appendix B** includes a copy of the Authority's financial statements and a list of its investments as of December 31, 2013 and 2012. The Authority's investment policies emphasize preservation of principal and the Authority believes its practices are fiscally responsible.

## **Insurance**

Pursuant to the Bond Resolution, the Authority purchases various insurance policies to provide against loss of or damage to the Facilities and loss of revenue, to the extent necessary and reasonably obtainable, to protect the interests of the Authority and the Bondholders. The insurance program is comprised of a combination of policies from major insurance companies, self-insurance and contractual transfer of liability, including naming the Authority as an additional insured and indemnification.

Property damage to bridges is insured through two policies with major insurance companies equal to the maximum probable loss from a single occurrence. The Thruway's largest bridge, the Tappan Zee Bridge, is separately covered by two commercial insurance policies providing loss of revenue and damage coverage in the amount of \$550 million and terrorism coverage in the amount of \$100 million. Loss of revenues is insured through a use and occupancy policy that covers any interruption in excess of fifteen days with a maximum recovery period of 30 months.

The Authority purchases insurance for workers' compensation benefits and various liability exposures. In addition, the Authority is self insured for property damage to its division headquarters buildings, maintenance facilities and toll plazas and third party liability, including automobile liability. There are two funded reserves for these exposures, a \$2.5 million insurance fund and a reserve for public liability claims which, as of December 31, 2013, totaled \$9.9 million.

Insurance for the Authority's service area facilities is provided by the concessionaires. Also, the liability related to construction projects, tandem trailer operations, authorized garage operations and similar type risks is transferred through contractual indemnification and compliance with Authority insurance requirements.

## **Other Bond Programs**

Pursuant to its statutory mandate the Authority has from time to time issued bonds to provide funds to finance primarily non-Authority transportation projects in the State. Those bonds and the programs discussed below have no lien on the Revenues, assets or properties of the Authority which secure the Senior Bonds and the Junior Indebtedness Obligations. Those bond programs include the Local Highway and Bridge Service Contract Bonds, the General Highway and Bridge Trust Fund Bonds, State Personal Income Tax Revenue Bonds (Transportation), as well as the newly enacted State Sales Tax Revenue Bond program, all issued or expected to be issued in multiple series for State and local highway purposes. These bond programs require varying debt service payments which are payable solely from payments received by the Authority under contractual agreements with the State. In each of these bond programs, the obligation of the State to make such payments is subject to, and dependent upon, annual State legislative appropriations. The State may from time to time authorize the Authority by statute to undertake additional financing activities.

## **INVESTMENT CONSIDERATIONS**

The Series K Bonds are revenue obligations of the Authority which are secured and payable solely from the Net Revenues available therefor under the Bond Resolution and derived principally from vehicular tolls paid by Thruway patrons. The following is a discussion of certain investment considerations that should be considered in evaluating an investment in the Series K Bonds. This discussion does not purport to be either comprehensive or definitive. The order in which such considerations and risks are presented is not intended to reflect either the likelihood that a particular event will occur or the relative significance of such an event. Moreover, there may well be other considerations and risks associated with an investment in the Series K Bonds in addition to those set forth herein. Investors are advised to read the entire Official Statement, including the appendices hereto to obtain information essential to the making of an informed investment decision.

## **Traffic Engineer's Report**

As the Traffic Engineer for the Authority, Jacobs Civil Consultants, Inc. was requested by the Authority to prepare the Traffic Engineer's Report presenting its analyses and findings relative to recent trends in traffic and revenue on the Thruway System and to supplement such Report in connection with the issuance of the Series K Bonds. See "**Appendix A** — Supplemental Letter and Report of Traffic Engineer" attached to this Official Statement. *The revenue forecasts contained in the Traffic Engineer's Report and the Supplemental Letter are based upon certain assumptions and limits set forth or incorporated therein which should be reviewed by potential investors to assure an understanding of some of the risks inherent in such estimates and projections. Moreover, the Traffic Engineer's Report and the Supplemental Letter do not recommend specific toll levels that should be adopted by the Authority to meet its programmatic needs, including the full implementation of the New NY Bridge Project, but projects such needs for the period through 2019 and concludes that the Thruway System can sustain toll adjustments necessary to finance such needs.* The Traffic Engineer's Report and the Supplemental Letter are not a guarantee of any future events or trends and the forecasts therein are subject to future economic and social conditions and demographic developments that cannot be predicted with certainty. Further, the estimates, projections and assumptions in the Traffic Engineer's Report and the Supplemental Letter are inherently subject to significant economic and competitive uncertainties and contingencies, many of which are beyond the control of the Authority. Failure to achieve or realize any of the assumptions listed in the Traffic Engineer's Report or the Supplemental Letter may have a materially adverse effect upon the Net Revenues actually realized by the Authority.

The information provided with respect to toll revenues collected by the Authority is based on historical data. The amount of future toll revenues to be collected by the Authority depends upon a number of factors, some of which are not in the control of the Authority. Some of these factors include a decline in traffic on the Thruway System due to general economic conditions, diversion of traffic to alternative non-toll routes, increased fuel costs, limited supply of fuel, availability of alternate forms of travel and shipping, and government regulations, such as Clean Air Act requirements, increased mileage standards or higher fuel taxes, which could significantly restrict motor vehicle use, as well as international events affecting fuel supply and costs. Although the Authority has covenanted in the Bond Resolution to fix, charge and collect tolls for the use of the Thruway System in amounts so that, in each calendar year, the Net Revenues shall at least equal the Net Revenue Requirement for such year, there can be no assurance that the traffic on the Thruway System will continue to be sufficient for the Authority to generate the necessary revenues to meet its obligations under the Bond Resolution.

## **Risks Relating to the New NY Bridge Project**

### *General*

As discussed in greater detail under "BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER'S REPORT — The New NY Bridge Project", the Authority successfully procured and awarded the Design-Build Contract for the design and construction of the New NY Bridge Project to TZC LLC in January 2013. The Authority issued a Notice to Proceed to TZC LLC on January 18, 2013. Currently, design of the New NY Bridge Project is substantially complete, and pre-construction and actual construction activities are in progress.

The contractor's guaranteed fixed price design-build, best value price is \$3.142 billion. The total budgeted project design, construction and oversight cost is approximately \$4 billion, which is about \$1.4 billion lower than the initial estimates of the project's cost. The preliminary plan of finance for the project assumes the New NY Bridge Project will be financed primarily with toll revenue bonds constituting Junior Indebtedness Obligations, including the Series 2013B Junior Indebtedness Obligations (which were issued to secure the TIFIA Loan in a maximum principal amount equal to the lesser of \$1.6 billion or 33% of federally eligible project costs, currently estimated to be \$1.6 billion), as well as pay-as-you-go funding. The proceeds of the TIFIA Loan, when drawn, are expected to pay principal of the Series 2013A Junior Indebtedness Obligations. The level and timing of toll adjustments, debt structure, and balance between debt and pay-as-you-go funding will be dependent upon final project cost, other grant and loan opportunities, and credit market conditions.

### *Construction Delay and Phasing of Operations*

Financing and revenue risks related to construction delays are mitigated by the fact that full toll collection will be maintained on the existing Tappan Zee Bridge, and then on the northern span of the New NY Bridge Project, during construction. A further cash contingency for schedule risk also has been incorporated into the project budget.

The New NY Bridge Project is comprised of twin spans. Construction sequencing of the New NY Bridge Project anticipates opening the northern span and then closing and removing the existing Tappan Zee Bridge to allow construction of the second, southern span of the New NY Bridge Project. The northern span has sufficient deck width to carry the full volume of traffic now flowing on the existing Tappan Zee Bridge. The northern span is being constructed with this additional width in order to accommodate a future shared use path, breakdown lanes and a bus-only lane, all of which will be instituted once the southern span is open to traffic.

The most critical point for delay from the perspective of the Authority's ability to maintain full toll revenue collections during construction occurs when traffic is shifted from the existing bridge to the northern span of the new bridge because the connection points occur at the same landing. This risk has been mitigated by a planned shift to all electronic tolling, temporary relocation of the toll collection point to the Rockland County side of the bridge, and a comprehensive contractual schedule of liquidated damages to compensate the Authority for potential lost revenues. Liquidated damages are also incurred if construction activities disrupt the ability of the Authority to collect tolls. Contractor performance and payment of liquidated damages are secured by parent company guarantees from the members of TZC LLC, as well as a \$1.5 billion performance bond, one of the largest surety bonds ever provided for a single project in the United States.

### *Toll-Backed Components of the New NY Bridge Project and Multi-Year Capital Program Financial Plans*

The New NY Bridge Project financial plan relies upon the issuance of substantial amounts of Junior Indebtedness Obligations by the Authority, including the Series 2013B Junior Indebtedness Obligations securing the Authority's obligations under the TIFIA Loan. Reliance on such funding will require the Authority to raise revenue under the requirements of the Bond Resolution and the Junior Indebtedness Resolution. Moreover, funding capital improvements to the remainder of the Thruway System to sustain a state of good repair are primarily dependent upon pay-as-you-go funding and additional Senior Bond proceeds. Such revenue actions which the Authority determines to be necessary to fund such capital program obligations are contingent on future Board action, environmental reviews and traffic demand. The Authority has consistently fulfilled its responsibilities to maintain a state of good repair and its safety record exceeds the norms of the national interstate highway system. The Authority expects to maintain access to the capital markets to finance the non-TIFIA portion of the New NY Bridge Project capital costs and other system-wide capital needs through adherence to Board-adopted fiscal policies that assure continuation of the Authority's stable credit ratings, as well as strict controls over future operating costs and a disciplined approach to capital project selection.

### *Risks Relating to the Design-Build Contract*

The New NY Bridge Project has been procured using a Design-Build Contract that transfers many risks normally retained by the Authority to the design-build joint venture, including such items as design defects, changed geotechnical conditions, project management and coordination, and commodity price escalation, among others. As noted above, the Design-Build Contract was awarded to a consortium, TZC LLC, whose members have extensive experience in large infrastructure developments and are providing significant levels of financial security to the Authority. Design-build contracts are viewed as providing greater cost certainty than traditional contracting methods. However, it is possible that despite these modifications to traditional contracting processes, additional costs beyond the initial contract price may be incurred by the Authority relating to such risks as pre-existing contamination beyond what has been identified in prior studies or change orders related to evolving homeland security considerations. To mitigate these risks, the Authority has budgeted contingencies and allowances for such possibilities of approximately 20% of the Design-Build Contract price. It is highly unlikely that the Authority's

actual exposure for additional costs would exceed these budgeted amounts, but in that event additional Junior Indebtedness Obligations for completion could be required. See “BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER’S REPORT — The New NY Bridge Project” above for more detail on the Design-Build Contract and TZC LLC.

*Risks Related to Natural and Catastrophic Events Could Delay or Damage the New NY Bridge Project and Otherwise Reduce Revenue Generation from the New NY Bridge Project*

A natural disaster (earthquake, landslide), severe weather (tornados, floods, hurricanes, extreme wind and storm), or any other event (terrorism, explosion, ship strike) that damages the New NY Bridge Project during construction or after operation of one or both spans has commenced could reduce toll revenues projected to be generated by the New NY Bridge Project or significantly increase the expense of maintaining or restoring the New NY Bridge Project. These risks are generally covered by Authority insurance policies for property damage and business interruption, the Design-Build Contractor’s builder’s risk insurance, and, in the extreme, assistance from the Federal Emergency Management Agency (“FEMA”). The Authority is experienced in filing claims under the FEMA process and has recovered costs incurred due to hurricane damage to the Canal system. If any of the foregoing events occur, to the extent not fully covered by insurance or federal disaster assistance, the Authority’s ability to repay the Junior Indebtedness Obligations and the TIFIA Loan could be adversely affected.

*Required Conditions for Disbursement of TIFIA Loan*

Disbursement of the TIFIA Loan is subject to the following conditions precedent:

- Evidence that the disbursement requested does not exceed the lesser of \$1.6 billion or 33% of federally eligible project costs and that total federal assistance to the New NY Bridge does not exceed 80% of eligible project costs; and
- Evidence that the balance of Junior Indebtedness Obligations required to complete the New NY Bridge Project have been issued, except in the case where the New NY Bridge Project is delayed past the maturity date of the Series 2013A Junior Indebtedness Obligations; and
- A Traffic and Revenue Report showing that the Authority is able to generate revenues sufficient to meet the Junior Indebtedness Net Revenue Requirement in each year of the term of the TIFIA Loan; and
- A certified revised financial model for the New NY Bridge Project acceptable to the TIFIA Lender on or prior to the initial Drawdown Date demonstrating that the projected Revenues shall be sufficient to meet the Loan Amortization Schedule and satisfy the Rate Coverage Test in the TIFIA Loan; provided that for the current fiscal year and each of next two fiscal years the initial financial model may only utilize actual tolls schedules then in effect or anticipated to be in effect and for which all approvals have been received; and
- Evidence that within the prior 3 months of such disbursement, the Series 2013B Junior Indebtedness Obligations received an investment grade rating from at least two nationally recognized rating agencies and such ratings shall have been received no greater than 30 days prior to the date of the disbursement; and
- Certification from the Authority that no covenant default under the Bond Resolution or the Junior Indebtedness Resolution has been breached.

The Authority anticipates repaying the Series 2013A Junior Indebtedness Obligations approximately one year after substantial completion of the New NY Bridge Project through a single draw on the TIFIA Loan that would be subject to the above conditions precedent. The Authority has agreed to these requirements and the

financial plan included as part of the TIFIA Loan incorporates assumptions that exceed, or are consistent with the expectations of the TIFIA Lender in this regard. Further, if substantial completion is delayed beyond the maturity date of the Series 2013A Junior Indebtedness Obligations, the TIFIA Loan may still be drawn as toll collection will continue unabated during the entire construction process and toll rates will be adjusted as necessary to conform to the Authority's fiscal policies and the requirements of the TIFIA Loan. The Authority has limited its risk exposure for interest rate fluctuations at the time the Series 2013A Junior Indebtedness Obligations are refinanced because the TIFIA Loan rate of one basis point above the rate for United States Treasury Obligations was fixed for the life of the loan at the time the TIFIA Loan was closed.

If additional disbursements under the TIFIA Loan are made, the following conditions precedent would apply:

- Evidence that (A) prior thereto or simultaneously therewith, a disbursement of Junior Indebtedness Obligations proceeds has occurred such that as of any such TIFIA Loan disbursement, the outstanding TIFIA Loan balance (including such disbursement) shall not exceed the lesser of \$1.6 billion or 33 percent (33%) of the total amount of federally eligible project costs for the New NY Bridge Project and (B) the total federal assistance provided to the New NY Bridge Project shall not exceed eighty percent (80%) of eligible project costs as required pursuant to federal law;
- At the TIFIA Lender's request, an update to the Traffic and Revenue Report would be undertaken showing that the Authority is able to continue to generate revenues sufficient to meet the Junior Indebtedness Net Revenue Requirement in each year of the term of the TIFIA Loan;
- A certified revised financial model will be delivered to the TIFIA Lender on or prior to the initial drawdown date demonstrating that the projected Revenues shall be sufficient to meet the Loan Amortization Schedule and satisfy the Rate Coverage Test; provided that for the current fiscal year and each of next two fiscal years the financial model may only utilize actual tolls schedules then in effect or anticipated to be in effect and for which all approvals have been received;
- At the TIFIA Lender's request, evidence that within the prior 12 months of any additional disbursement, the Series 2013B Junior Indebtedness Obligations received an investment grade rating from at least one nationally recognized rating agencies; and
- Certification from the Authority that no covenant default under the Bond Resolution or the Junior Indebtedness Resolution has been breached.

*Market Access Required if TIFIA Loan Proceeds are not Disbursed*

While the risk of a failure to disburse all, or a portion of the TIFIA Loan proceeds is remote, in the event of such failure, the Authority will issue Junior Indebtedness Obligations to repay the remaining balance of the Series 2013A Junior Indebtedness Obligations that are due. It is anticipated that the Authority will have sufficient time prior to the maturity of the Series 2013A Junior Indebtedness Obligations to undertake the actions related to toll rate setting, financial plan revisions and marketing to assure access to the debt markets and effect a refinancing of the outstanding principal and interest due.

**Ratings of the Bonds Could be Lowered or Withdrawn**

Two credit rating agencies have assigned credit ratings to the Bonds, including the Series K Bonds. The ratings of the Bonds are not a recommendation to purchase, hold or sell the Bonds, and the ratings do not comment on the market price or suitability of the Bonds for a particular investor. The ratings of the Bonds may not remain for any given period of time and may be lowered or withdrawn depending on, among other things, each rating agency's assessment of the Authority's financial strength and the financial plan relating to the New NY Bridge Project and its progress and implementation.

## **Certain Matters Relating to Enforceability of Obligations**

The remedies available to the owners of the Series K Bonds upon the occurrence of an Event of Default under the Bond Resolution are, in many respects, dependent upon regulatory and judicial actions that are often subject to discretion or delay. Under existing law and judicial decisions, including specifically the United States Bankruptcy Code, the remedies specified in the Bond Resolution may not be readily available or may be limited. However, the Authority is not authorized under existing State law to file for bankruptcy under the United States Bankruptcy Code. Enforcement of such remedies (i) may be subject to general principles of equity which may permit the exercise of judicial discretion, (ii) are subject to the exercise in the future by the State and its agencies and political subdivisions of the police power inherent in the sovereignty of the State, (iii) may be subject, in part, to the provisions of the United States Bankruptcy Act and other applicable bankruptcy, insolvency, reorganization, moratorium or similar laws relating to or affecting the enforcement of creditors' rights generally, now or hereafter in effect, and (iv) are subject to the exercise by the United States of the powers delegated to it by the Constitution of the United States of America. The various legal opinions to be delivered concurrently with the delivery of the Series K Bonds will be qualified to the extent that the enforceability of certain legal rights related to the Series K Bonds is subject to limitations imposed by bankruptcy, reorganization, insolvency or other similar laws affecting the rights of creditors generally and by equitable remedies and proceedings generally.

## **Legislative Action**

Legislation is introduced from time to time in the State Legislature which, if adopted, may affect the Authority and/or the Thruway System. The Authority cannot predict whether or not these bills will be enacted into law or how such legislation may affect the Authority and its ability to pay debt service on the Series K Bonds.

## **LITIGATION**

There is no litigation pending or, to the knowledge of the Authority, threatened in any court, questioning the creation, organization or existence of the Authority, the title to office of the members or officers of the Authority, the validity of any provision of the Series K Bonds or the Bond Resolution, or any proceedings of the Authority taken with respect to the issuance or sale thereof, or seeking to restrain or enjoin the issuance, sale, execution or delivery of the Series K Bonds.

On November 14, 2013, a claim was filed in the United States District Court for the Southern District of New York styled *American Trucking Association, Inc. et al. v. New York State Thruway Authority, et al.*, which alleges that the Authority's commercial truck toll rates violate federal law and among other provisions of the United States Constitution, the Commerce Clause. The plaintiffs allege the Authority's commercial trucking toll rates are artificially inflated since they are used to support the New York State Canal System and therefore, commercial truckers allegedly do not pay a fair approximation of their use of the Thruway. The claim seeks class action status for all individuals and motor carriers traveling in interstate commerce who have paid tolls on the Thruway since November 14, 2010. The plaintiffs seek an injunction barring the Authority from continuing to collect allegedly unconstitutionally excessive truck tolls as well as damages, disgorgement, recoupment, restitution, costs and attorney's fees. In the defendants' view, the Authority has a statutory obligation to support the New York State Canal System based upon an act of the Legislature passed in 1992. On August 6, 2014, the Judge granted the Authority's Motion to Dismiss the claim. On November 13, 2014, the plaintiffs filed an opening brief to the United States Court of Appeals for the Second Circuit appealing the District Court's dismissal of the claim. The Authority intends to vigorously oppose the appeal.

On June 17, 2014 a claim was filed in the United States District Court for the Southern District of New York styled *New York State Thruway Employees Local 72, et al. v. New York State Thruway Authority, et al.* ("the Local 72 Claim"), which alleges that the reduction in force instituted at the Authority in 2013 violated the First, Fifth and Fourteenth Amendments to the United States Constitution and Article I, § 17 of the New York State Constitution. The claim seeks class action status on behalf of employees represented by Local 72 who were affected by the reduction in force. The plaintiffs seek reinstatement to their former positions, economic, emotional



and punitive damages and attorneys' fees and costs. This action was transferred to the Northern District of New York. The Court consolidated the Local 72 Claim with two other claims styled *Donohue, et al. v. Madison et al.* (1:13-CV-918) and *Donohue, et al. v. Madison* (1:13-CV-920) for the purposes of discovery and dispositive motions. These other claims were filed in the United States District Court for the Northern District of New York and made allegations and demands similar to those in the Local 72 Claim and named many of the same defendants. In the Authority's view, the reduction in force was necessary and was implemented without violation of the law. The Authority intends to vigorously defend these actions.

The Authority is a party to various legal proceedings including negligence suits, many of which arise in the normal course of the Authority's operations, a majority of which will, in the opinion of the Authority, be disposed of within the amounts which the Authority has reserved or has available therefor, or, as applicable, within the amounts of insurance coverage provided therefor and without any material adverse effect on the financial position of the Authority. The Authority maintains a claims reserve sufficient to cover anticipated liability and it is periodically replenished.

## **TAX MATTERS**

### **Opinion of Co-Bond Counsel**

In the opinion of Hawkins Delafield & Wood LLP and Hardwick Law Firm LLC, Co-Bond Counsel to the Authority, under existing statutes and court decisions and assuming continuing compliance with certain tax covenants described herein, (i) interest on the Series K Bonds is excluded from gross income for Federal income tax purposes pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and (ii) interest on the Series K Bonds is not treated as a preference item in calculating the alternative minimum tax imposed on individuals and corporations under the Code; such interest, however, is included in the adjusted current earnings of certain corporations for purposes of calculating the alternative minimum tax imposed on such corporations. In rendering their respective opinions, Co-Bond Counsel have relied on certain representations, certifications of fact, and statements of reasonable expectations made by the Authority in connection with the Series K Bonds, and Co-Bond Counsel have assumed compliance by the Authority with certain ongoing covenants to comply with applicable requirements of the Code to assure the exclusion of interest on the Series K Bonds from gross income under Section 103 of the Code.

In addition, in the respective opinions of Co-Bond Counsel, under existing statutes, interest on the Series K Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof (including The City of New York and the City of Yonkers).

Co-Bond Counsel express no opinion regarding any other Federal or state tax consequences with respect to the Series K Bonds. Co-Bond Counsel render their respective opinions under existing statutes and court decisions as of the issue date, and assume no obligation to update, revise or supplement their opinions after the issue date to reflect any future action, fact or circumstance, or change in law or interpretation, or otherwise. Co-Bond Counsel express no opinion on the effect of any action hereafter taken or not taken in reliance upon an opinion of other counsel on the exclusion from gross income for Federal income tax purposes of interest on the Series K Bonds, or under state and local tax law.

### **Certain Ongoing Federal Tax Requirements and Covenants**

The Code establishes certain ongoing requirements that must be met subsequent to the issuance and delivery of the Series K Bonds in order that interest on the Series K Bonds be and remain excluded from gross income under Section 103 of the Code. These requirements include, but are not limited to, requirements relating to use and expenditure of gross proceeds of the Series K Bonds, yield and other restrictions on investments of gross proceeds, and the arbitrage rebate requirement that certain excess earnings on gross proceeds be rebated to the Federal government. Noncompliance with such requirements may cause interest on the Series K Bonds to become included in gross income for Federal income tax purposes retroactive to their issue date, irrespective of the date on

which such noncompliance occurs or is discovered. The Authority has covenanted to comply with certain applicable requirements of the Code to assure the exclusion of interest on the Series K Bonds from gross income under Section 103 of the Code.

### **Certain Collateral Federal Tax Consequences**

The following is a brief discussion of certain collateral Federal income tax matters with respect to the Series K Bonds. It does not purport to address all aspects of Federal taxation that may be relevant to a particular owner of a Series K Bond. Prospective investors, particularly those who may be subject to special rules, are advised to consult their own tax advisors regarding the Federal tax consequences of owning and disposing of the Series K Bonds.

Prospective owners of the Series K Bonds should be aware that the ownership of such obligations may result in collateral Federal income tax consequences to various categories of persons, such as corporations (including S corporations and foreign corporations), financial institutions, property and casualty and life insurance companies, individual recipients of Social Security and railroad retirement benefits, individuals otherwise eligible for the earned income tax credit, and taxpayers deemed to have incurred or continued indebtedness to purchase or carry obligations the interest on which is excluded from gross income for Federal income tax purposes. Interest on the Series K Bonds may be taken into account in determining the tax liability of foreign corporations subject to the branch profits tax imposed by Section 884 of the Code.

### **Original Issue Discount**

“Original issue discount” (“OID”) is the excess of the sum of all amounts payable at the stated maturity of a Series K Bond (excluding certain “qualified stated interest” that is unconditionally payable at least annually at prescribed rates) over the issue price of that maturity. In general, the “issue price” of a maturity means the first price at which a substantial amount of the Series K Bonds of that maturity was sold (excluding sales to bond houses, brokers, or similar persons acting in the capacity as underwriters, placement agents, or wholesalers). In general, the issue price for each maturity of Series K Bonds is expected to be the initial public offering price set forth on the inside cover page of this Official Statement. Co-Bond Counsel further are of the opinion that, for any Series K Bonds having OID (a “Discount Bond”), OID that has accrued and is properly allocable to the owners of the Discount Bonds under Section 1288 of the Code is excludable from gross income for Federal income tax purposes to the same extent as other interest on the Series K Bonds.

In general, under Section 1288 of the Code, OID on a Discount Bond accrues under a constant yield method, based on periodic compounding of interest over prescribed accrual periods using a compounding rate determined by reference to the yield on that Discount Bond. An owner’s adjusted basis in a Discount Bond is increased by accrued OID for purposes of determining gain or loss on sale, exchange, or other disposition of such Discount Bond. Accrued OID may be taken into account as an increase in the amount of tax-exempt income received or deemed to have been received for purposes of determining various other tax consequences of owning a Discount Bond even though there will not be a corresponding cash payment.

Owners of Discount Bonds should consult their own tax advisors with respect to the treatment of original issue discount for Federal income tax purposes, including various special rules relating thereto, and the state and local tax consequences of acquiring, holding, and disposing of Discount Bonds.

### **Bond Premium**

In general, if an owner acquires a Series K Bond upon original issuance for a purchase price (excluding accrued interest) or otherwise at a tax basis that reflects a premium over the sum of all amounts payable on the Series K Bond after the acquisition date (excluding certain “qualified stated interest” that is unconditionally payable at least annually at prescribed rates), that premium constitutes “bond premium” on that Series K Bond (a “Premium Bond”). In general, under Section 171 of the Code, an owner of a Premium Bond must amortize the bond premium

over the remaining term of the Premium Bond, based on the owner's yield over the remaining term of the Premium Bond, determined based on constant yield principles (in certain cases involving a Premium Bond callable prior to its stated maturity date, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on such bond). An owner of a Premium Bond must amortize the bond premium by offsetting the qualified stated interest allocable to each interest accrual period under the owner's regular method of accounting against the bond premium allocable to that period. In the case of a tax-exempt Premium Bond, if the bond premium allocable to an accrual period exceeds the qualified stated interest allocable to that accrual period, the excess is a nondeductible loss. Under certain circumstances, the owner of a Premium Bond may realize a taxable gain upon disposition of the Premium Bond even though it is sold or redeemed for an amount less than or equal to the owner's original acquisition cost. Owners of any Premium Bonds should consult their own tax advisors regarding the treatment of bond premium for Federal income tax purposes, including various special rules relating thereto, and state and local tax consequences, in connection with the acquisition, ownership, amortization of bond premium on, sale, exchange, or other disposition of Premium Bonds.

### **Information Reporting and Backup Withholding**

Information reporting requirements apply to interest on tax-exempt obligations, including the Series K Bonds. In general, such requirements are satisfied if the interest recipient completes, and provides the payor with, a Form W-9, "Request for Taxpayer Identification Number and Certification," or if the recipient is one of a limited class of exempt recipients, including corporations. A recipient not otherwise exempt from information reporting who fails to satisfy the information reporting requirements will be subject to "backup withholding," which means that the payor is required to deduct and withhold a tax from the interest payment, calculated in the manner set forth in the Code. For the foregoing purpose, a "payor" generally refers to the person or entity from whom a recipient receives its payments of interest or who collects such payments on behalf of the recipient.

If an owner purchasing a Series K Bond through a brokerage account has executed a Form W-9 in connection with the establishment of such account, as generally can be expected, no backup withholding should occur. In any event, backup withholding does not affect the excludability of the interest on the Series K Bonds from gross income for Federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the owner's Federal income tax once the required information is furnished to the Internal Revenue Service.

### **Miscellaneous**

Tax legislation, administrative actions taken by tax authorities, or court decisions, whether at the Federal or state level, may adversely affect the tax-exempt status of interest on the Bonds under Federal or state law or otherwise prevent beneficial owners of the Bonds from realizing the full current benefit of the tax status of such interest. In addition, such legislation or actions (whether currently proposed, proposed in the future, or enacted) and such decisions could affect the market price or marketability of the Bonds. For example, the Fiscal Year 2015 Budget proposed on March 4, 2014, by the Obama Administration recommends a 28% limitation on "all itemized deductions, as well as other tax benefits" including "tax-exempt interest." The net effect of such a proposal, if enacted into law, would be that an owner of a tax-exempt bond with a marginal tax rate in excess of 28% would pay some amount of Federal income tax with respect to the interest on such tax-exempt bond. Similarly, on February 26, 2014, Dave Camp, Chairman of the United States House Ways and Means Committee, released a discussion draft of a proposed bill which would significantly overhaul the Code, including the repeal of many deductions; changes to the marginal tax rates; elimination of tax-exempt treatment of interest for certain bonds issued after 2014; and a provision similar to the 28% limitation on tax-benefit items described above (at 25%) which, as to certain high income taxpayers, effectively would impose a 10% surcharge on their "modified adjusted gross income," defined to include tax-exempt interest received or accrued on all bonds, regardless of issue date.

Prospective purchasers of the Bonds should consult their own tax advisors regarding the foregoing matters.

See **Appendix E** for the proposed form of opinion of Co-Bond Counsel.

## RATINGS

Moody's Investors Service ("Moody's") and Standard & Poor's Ratings Services, a Division of The McGraw Hill Companies ("S&P") have rated the Series K Bonds "A2" and "A", respectively. The Authority expects the Insured Bonds to be rated "A2" and "AA" by Moody's and S&P, respectively, based upon the issuance of the Policy for the Insured Bonds by Assured Guaranty Municipal Corp. at the time of delivery of the Insured Bonds.

Ratings reflect only the respective views of such organizations, and any desired explanation of the significance of such ratings should be obtained from the rating agencies furnishing the same. The Authority furnished to such rating agencies certain materials and information in addition to that provided here. There is no assurance that such ratings will prevail for any given period of time or that they will not be revised downward or withdrawn entirely by any or all of such rating agencies if, in the judgment of any or all of them, circumstances so warrant. Any such downward revision or withdrawal of such rating or ratings may have an adverse effect on the market price of the Series K Bonds. A securities rating is not a recommendation to buy, sell or hold securities and may be subject to revision or withdrawal at any time.

## UNDERWRITING

The Underwriters have jointly and severally agreed, subject to certain conditions, to purchase from the Authority the Series K Bonds at an aggregate purchase price of \$861,661,618.32, reflecting a net original issue premium of \$121,085,642.80 and an Underwriters' discount of \$3,289,024.48 and to reoffer such Series K Bonds at the public offering prices or yields set forth on the inside cover page hereof. Such Series K Bonds may be offered and sold to certain dealers (including dealers depositing such Series K Bonds into investment trusts) at prices lower and yields higher than such public offering prices and yields and prices and yields may be changed, from time to time, by the Underwriters. The Underwriters' obligations are subject to certain conditions precedent, and they will be obligated to purchase all such Series K Bonds if any Series K Bonds are purchased. The Underwriters have designated Goldman, Sachs & Co., as Representative of the Underwriters of the Series K Bonds.

Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association. Wells Fargo Bank, National Association ("WFBNA"), one of the Underwriters of the Series K Bonds, has entered into an agreement (the "Distribution Agreement") with its affiliate, Wells Fargo Advisors, LLC ("WFA"), for the distribution of certain municipal securities offerings, including the Series K Bonds. Pursuant to the Distribution Agreement, WFBNA will share a portion of its underwriting or remarketing agent compensation, as applicable, with respect to the Series K Bonds with WFA. WFBNA also utilizes the distribution capabilities of its affiliates, Wells Fargo Securities, LLC ("WFSLLC") and Wells Fargo Institutional Securities, LLC ("WFIS"), for the distribution of municipal securities offerings, including the Series K Bonds. In connection with utilizing the distribution capabilities of WFSLLC, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, WFIS, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the Underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the Authority and to persons and entities with relationships with the Authority, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or

relate to assets, securities and/or instruments of the Authority (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Authority. The Underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

### **VERIFICATION OF MATHEMATICAL COMPUTATIONS**

American Municipal Tax-Exempt Compliance Corporation will deliver to the Authority on or before the settlement date of the Series K Bonds, its report indicating that it has verified the mathematical accuracy of schedules provided by the Authority and its representatives. Included in the scope of its engagement will be a verification of the mathematical accuracy of (a) the mathematical computations of the adequacy of the maturing principal of and interest on the Government Obligations, to pay, when due, the maturing principal of, interest on and call premium requirements of the Refunded Bonds and (b) the computations underlying the opinion of Bond Counsel that the Series K Bonds are not “arbitrage bonds” under the Code and the regulations promulgated thereunder.

The verification performed by American Municipal Tax-Exempt Compliance Corporation will be solely based upon data, information and documents provided to American Municipal Tax-Exempt Compliance Corporation by the Authority and its representatives. The American Municipal Tax-Exempt Compliance Corporation report of its verification will state that American Municipal Tax-Exempt Compliance Corporation has no obligation to update the report because of events occurring, or data or information coming to their attention, subsequent to the date of the report.

### **LEGALITY OF INVESTMENT**

Pursuant to the Act, the Bonds are made securities in which all public officers and bodies of the State and all municipalities and municipal subdivisions, all insurance companies and associations and other persons carrying on an insurance business, all banks, bankers, trust companies, savings banks and saving associations, including savings and loan associations, building and loan associations, investment companies and other persons carrying on a banking business, all administrators, guardians, executors, trustees and other fiduciaries and all other persons whatsoever who are now or may hereafter be authorized to invest in bonds or other obligations of the State, may properly and legally invest funds including capital in their control or belonging to them. The Bonds are also made securities which may be deposited with and may be received by all public officers and bodies of the State and all municipalities and municipal subdivisions for any purpose for which the deposit of bonds or other obligations of the State is now or may hereafter be authorized.

### **LEGAL MATTERS**

All legal matters incident to the authorization and issuance of the Series K Bonds are subject to the approval of Hawkins Delafield & Wood LLP, New York, New York, and Hardwick Law Firm LLC, New York, New York, Co-Bond Counsel to the Authority. Certain legal matters are subject to the approval of William J. Estes, Esq., General Counsel to the Authority, and of Nixon Peabody LLP, New York, New York, Counsel to the Underwriters.

### **CONSULTANT’S AND ACCOUNTANT’S REPORTS**

The Supplemental Letter and Traffic Engineer’s Report are included herein as **Appendix A** of this Official Statement in reliance upon the authority of Jacobs Civil Consultants, Inc. as experts. The Traffic Engineer has advised the Authority that they have reviewed the summaries contained in this Official Statement of the information, estimates and projections contained in the Supplemental Letter and the Traffic Engineer’s Report and that, in their opinion, the statements made herein are correct and fairly present in summary form the information

contained in such Supplemental Letter and the Traffic Engineer's Report, and that all material assumptions or qualifications with respect to such statements are reflected therein.

The financial statements of the Authority for the fiscal years ended December 31, 2013 and 2012, included in **Appendix B** of this Official Statement have been audited by Toski & Co., CPA's, P.C., independent auditors, as stated in their report appearing in **Appendix B**.

### **FINANCIAL ADVISOR**

The Authority has retained Public Resources Advisory Group to serve as Financial Advisor (the "Financial Advisor") in connection with the issuance of the General Revenue Refunding Bonds, Series K. Although the Financial Advisor has reviewed the Official Statement, the Financial Advisor has not undertaken to make an independent verification or to assume responsibility for the accuracy, completeness, or fairness of information in the Official Statement. Public Resources Advisory Group is an independent financial advisory firm not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

### **CONTINUING DISCLOSURE UNDER SEC RULE 15c2-12**

In order to assist the purchasers of the Series K Bonds in complying with Rule 15c2-12 promulgated by the Securities and Exchange Commission ("SEC"), the Authority and the Trustee will enter into a written agreement (the "Agreement") for the benefit of the holders of the Series K Bonds to provide continuing disclosure. The Authority will undertake for the benefit of the holders of the Series K Bonds to provide to the Municipal Securities Rulemaking Board ("MSRB"), on an annual basis on or before 120 days after the end of each fiscal year, commencing with the fiscal year ending December 31, 2014, certain financial information and operating data concerning the Authority and the sources of revenue for Bonds issued under the Bond Resolution referred to herein as "Annual Information" and described in more detail below. The Authority will also undertake to provide no later than 120 days after the end of each of its fiscal years, commencing with the fiscal year ending December 31, 2014, the Authority's annual financial statements for such year, prepared in accordance with GAAP and audited by an independent firm of certified public accountants in accordance with generally accepted auditing standards, to the MSRB; provided, however, that if audited financial statements are not then available, unaudited financial statements shall be so provided and such audited financial statements shall be provided to the MSRB if and when available. In addition, the Authority will undertake, for the benefit of the holders of the Series K Bonds, to provide to the MSRB, in a timely manner not in excess of ten (10) Business Days, the notices of certain events described below. The Authority may from time to time designate an agent to act on its behalf in providing or filing notices, documents and information as required under the Agreement, and revoke or modify any such designation.

The Annual Information shall consist of the financial information and operating data of the type included in this Official Statement under the headings "RESULTS OF OPERATIONS — Financial Results of Operations", "MANAGEMENT'S DISCUSSION AND ANALYSIS OF RESULTS OF OPERATIONS — Traffic and Revenue", and "BUDGET AND CAPITAL PROGRAM; TRAFFIC ENGINEER'S REPORT — 2014 Revised Budget and 2015 Proposed Budget," and "— Funding of the Multi-Year Capital Program" which shall include information relating to the following: (i) current toll rates for all classes of vehicles; (ii) statements of Revenues, Operating Expenses and Net Revenues for the most recent fiscal year; (iii) statements of traffic and operating revenues for the most recent fiscal year; (iv) summary of the most recent inspection by the Authority, its Independent Consultant, or other professional engineer or engineers retained for the purpose of such inspection; (v) status of the Authority's capital planning process; and (vi) statement of the Authority's debt service coverage for the most recent fiscal year.

The notices described above include notices of any of the following events with respect to the Series K Bonds: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations

of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices of determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds; (7) modifications to the rights of security holders, if material; (8) bond calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the securities, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership or similar event of the Authority; (13) the consummation of a merger, consolidation, or acquisition involving the Authority or the sale of all or substantially all of the assets of the Authority, 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. In addition, the Authority will undertake, for the benefit of the holders of the Series K Bonds, to provide to the MSRB, in a timely manner, notice of any failure by the Authority to provide the Annual Information and annual financial statements by the date required in the Authority's undertakings described above.

On five occasions the Authority did not file a notice on EMMA as required under the applicable continuing disclosure agreements of changes in S&P's and Moody's ratings of bond insurers that had insured certain maturities of the Authority's General Revenue Bonds, Series G and certain maturities of the Authority's General Revenue Bonds, Series H. The Authority was not notified of any such bond insurer rating changes. On January 14, 2014, the Authority filed notices on EMMA noting the bond insurer rating changes, and stating that the Authority had not previously filed notices of such bond insurer rating changes. The Authority has reviewed its existing procedures to ensure that future filings of continuing disclosure information will be in compliance with existing continuing disclosure undertakings, including transmitting such filings to EMMA. Aside from the foregoing, the Authority is in compliance with all existing continuing disclosure agreements.

The sole and exclusive remedy for breach or default under the Agreement to provide continuing disclosure described above is an action to compel specific performance of the undertakings of the Authority, and no person, including the holder of the Series K Bonds, may recover monetary damages thereunder under any circumstances. Any Series K Bondholder, including any beneficial owner, may enforce the Agreement for the equal and proportionate benefit of all holders similarly situated to the extent provided in the Agreement. A breach or default under the Agreement shall not constitute an Event of Default under the Bond Resolution. In addition, if all or any part of Rule 15c2-12 ceases to be in effect for any reason, then the information required to be provided under the Agreement, insofar as the provision of Rule 15c2-12 no longer in effect required the provision of such information, shall no longer be required to be provided.

The foregoing undertakings are intended to set forth a general description of the type of financial information and operating data that will be provided; the descriptions are not intended to state more than general categories of financial information and operating data; and where an undertaking calls for information that no longer can be generated or is no longer relevant because the operations to which it related have been materially changed or discontinued, a statement to that effect will be provided. As a result, the parties to the Agreement do not anticipate that it often will be necessary to amend the informational undertakings. The Agreement, however, may be amended or modified under certain circumstances set forth therein. Copies of the Agreement when executed by the parties thereto upon issuance of the Series K Bonds will be on file at the office of the Authority.

#### **MISCELLANEOUS**

The references herein to the Act and the Bond Resolution are brief outlines of certain provisions thereof. Such outlines do not purport to be complete and reference is made to the Act and the Bond Resolution for full and complete statements of such provisions. Copies of the Act and the Bond Resolution are on file at the offices of the Authority, and the Trustee.

The agreements of the Authority with the holders of the Series K Bonds are fully set forth in the Bond Resolution. Neither any advertisement of the Series K Bonds nor this Official Statement is to be construed as a contract with purchasers of the Series K Bonds.

Any statements in this Official Statement involving matters of opinion, forecasts or estimates, whether or not expressly stated, are intended merely as expressions of opinion, forecasts or estimates and not as representations of fact.

The delivery of this Official Statement by its Chief Financial Officer and Treasurer has been duly authorized by the Authority.

NEW YORK STATE THRUWAY AUTHORITY

By: /s/ John M. Bryan  
Chief Financial Officer and Treasurer



**APPENDIX A**

**SUPPLEMENTAL LETTER AND REPORT OF TRAFFIC ENGINEER**

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November 5, 2014

Mr. John M. Bryan  
Chief Financial Officer  
New York State Thruway Authority  
200 Southern Boulevard  
P.O. Box 189  
Albany, New York 12201-0189

**Reference: Supplemental to Jacobs' December 4, 2013 Traffic and Revenue Report**

Dear Mr. Bryan:

At your request, we have reviewed our projections of traffic and toll revenue and the infrastructure conditions of the Thruway that we provided you for your issuance of Series J General Revenue Bonds ("Traffic and Revenue Report Including a Review of the Physical Condition of the Thruway System" – December 4, 2013).

Jacobs recently concluded a series of interviews with the Authority's Chief Engineer and Division Engineers. Based on the information gathered from this updated review, we confirm that the physical conditions of the Thruway's highway, bridge and other infrastructure have not materially changed from those specified in the December 2013 report.

As noted in the attached memorandum, baseline traffic and toll revenue have slightly outperformed the projections contained in the December 2013 report. In addition, additional revenues will be needed for the Authority to successfully complete the New NY Bridge project and fulfill its future system-wide operating, debt service, and capital needs. As noted in the attached flow of funds table, additional revenues to meet these needs will allow the Authority to maintain a balanced budget and debt service coverage levels appropriate for its current "A" credit rating throughout the forecast period.

This letter reaffirms the conclusions made in the December 4, 2013 Traffic Engineer's Report. We believe the Authority has the ability to continue to provide good service to its customers and will fulfill its critical role in supporting the State's economy. Thank you for the opportunity to provide this letter and please feel free to contact me should you have any questions or comments.

Sincerely,



Richard J. Gobeille, P.E.

National Toll / Finance Manager



Table 1: Thruway Flow of Funds (millions of dollars), and Debt Service Coverage

	Actual	Projected					
	2013	2014	2015	2016	2017	2018	2019
Revenues							
Base Toll Revenues (Budget Forecasts)	\$ 648.9	\$ 658.1	\$ 663.9	\$ 668.8	\$ 678.9	\$ 687.1	\$ 695.3
Other Revenues	31.8	31.1	34.5	32.6	33.0	39.8	40.1
Additional Revenue Needs	0.0	0.0	30.5	148.3	252.2	304.7	413.5
Total Revenue Needs	680.7	689.2	728.9	849.7	964.1	1031.6	1148.8
Less:							
Operating Expenses	279.6	283.5	289.2	297.9	306.9	316.1	325.5
Operating Reserves	<u>3.5</u>	<u>7.0</u>	<u>1.8</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>
Total Thruway Operating	283.1	290.5	291.0	299.9	308.9	318.1	327.5
Net Revenues	397.6	398.7	437.9	549.8	655.2	713.6	821.3
Less: Senior Debt Service	239.8	254.9	245.4	263.2	288.4	302.1	333.6
Net Revenues After Debt Service	157.8	143.8	192.5	286.6	366.8	411.4	487.7
Less: Retained for Oper. Reserves	10.8	0.0	0.0	0.0	0.0	0.0	0.0
Net Revenues Available	168.6	143.8	192.5	286.6	366.8	411.4	487.7
Less:							
Reserve Maint. Fund Provisions	79.8	54.3	30.0	30.0	30.0	30.0	30.0
Facility Capital Improvement Fund	25.0	10.0	44.8	98.5	123.8	147.3	191.3
Junior Indebtedness Fund	0.0	0.0	36.8	80.1	120.7	143.4	172.5
Other Authority Projects - Canal Oper.	47.7	50.6	54.9	56.6	58.3	60.0	61.8
General Res. Fund - Canal Capital	15.8	28.5	25.3	20.9	33.8	30.7	31.9
General Res. Fund - Subordinate Debt	0.3	0.4	0.5	0.5	0.2	0.0	0.0
Adjustments for Cash Basis	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net Balance	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
SR. Debt Service Coverage Ratio	1.66	1.56	1.78	2.09	2.27	2.36	2.46
JR. Debt Service Coverage Ratio	1.66	1.56	1.55	1.60	1.60	1.60	1.62
Pay As You Go % (w/o NNYB Project)	44.9%	53.8%	31.6%	30.5%	33.9%	41.2%	59.5%



### **Limits and Disclaimers**

In Jacobs' opinion, the assumptions underlying the study provide a reasonable basis for the analysis. 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 projections in this Letter.

This document, and the opinions, analysis, evaluations, or recommendations contained herein are for the sole use and benefit of the contracting parties. There are no intended third party beneficiaries, and Jacobs Civil Consultants Inc., (and its affiliates) shall have no liability whatsoever to any third parties for any defect, deficiency, error, omission in any statement contained in or in any way related to this document or the services provided.

Neither this document nor any information contained therein or otherwise supplied by Jacobs Civil Consultants Inc. in connection with the study and the services provided to our client shall be used in connection with any financing solicitation, proxy, and proxy statement, proxy soliciting materials, prospectus, Securities Registration Statement or similar document without the express written consent of Jacobs Civil Consultants Inc.

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*Date* November 4, 2014

*To* John Bryan, Dorraine Steele; NYSTA

*From* Richard Gobeille, Suzanne Seegmuller, and Nate Dickerson

*Subject* NYSTA Budget Forecast

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The purpose of this memorandum is to provide our latest traffic and toll revenue forecast for the Thruway. We included a discussion of recent economic trends to provide a better understanding of the process that went into the development of the current forecast. It is important to note that the forecasts contained herein represent our baseline view of projected traffic and toll revenue trends without consideration of any changes to toll rates or collection methods other than a transition to all electronic tolling (AET) at the Tappan Zee Bridge in late 2015.

## **Economic Backdrop and Outlook for the Future**

In the preparation of Thruway toll revenue forecasts, we considered a number of important national and regional economic trends that influence traffic and motorist behavior. Historically, passenger vehicle traffic has generally correlated to Gross Domestic Product (GDP) while truck traffic growth has shown some correlation to the Industrial Production Index (IPI). Factors such as unemployment and gas prices have also had some effect on vehicle-miles traveled (VMT) by passenger vehicles.

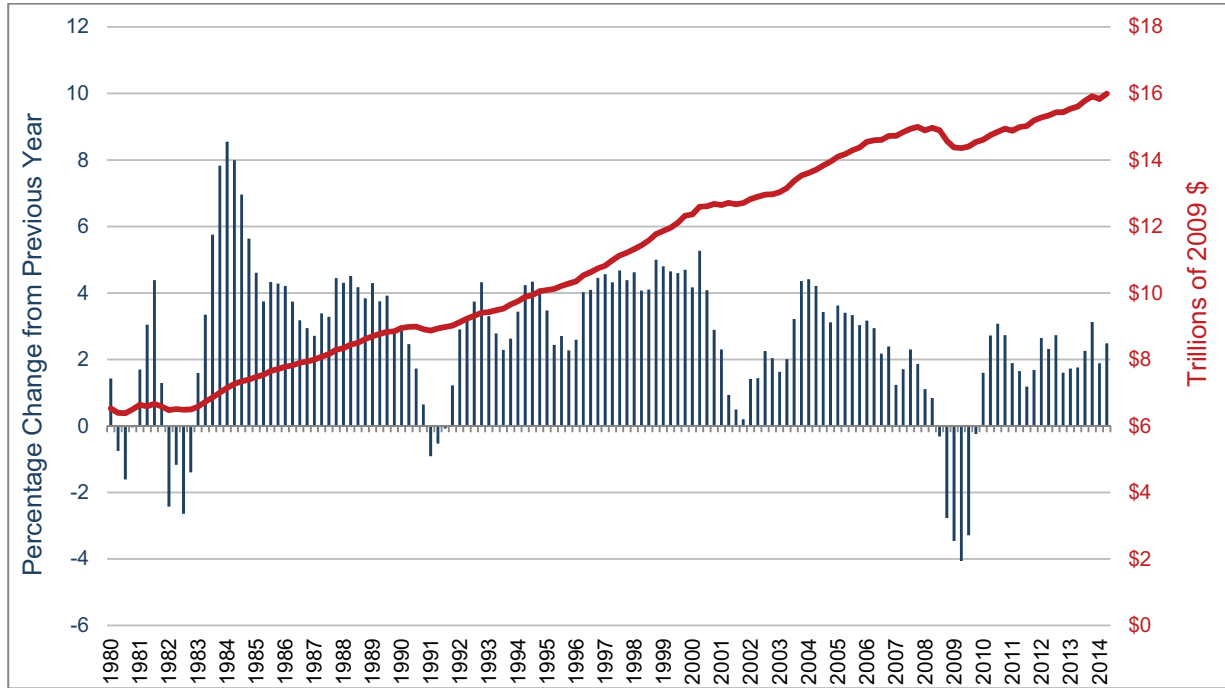
### ***Gross Domestic Product***

From 2000 to 2013, real GDP in the United States increased at an average annual rate of 1.7 percent. This period included the 2001 recession and the recession that began in late 2007 and ended in June 2009. The 2007 to 2009 recession, which some economists termed the “Great Recession”, was far more severe than originally predicted and significantly deeper and longer than previous recessions. In 2008, real GDP decreased by 0.3 percent. In 2009 the recession reached its apex, with real GDP decreasing by 2.8 percent. As the U.S. economy began to recover from 2010 to 2013, real GDP increased by 2.5 percent, 1.8 percent, 2.8 percent, and 1.9 percent each year, respectively, as shown in Figure 1. As of the second quarter of 2014, real GDP reached almost \$16 trillion.

Recessions are technically defined as two consecutive calendar quarters of negative growth. According to the National Bureau of Economic Research, the 2007 to 2009 recession lasted 18 months, making it the longest economic downturn since the Great Depression and likely deeper than the large recessions of the early 1970’s and 1980’s. Typically, economic downturns that occurred after the Great Depression were triggered by a contraction in monetary supply (typified by higher interest rates) or an external shock (e.g., sudden rise in oil prices, political turmoil, etc.) resulting in decreased consumer confidence, economic

growth, and employment. Once expansionary conditions are in place, these historical post-recessionary periods have typically been characterized by rapid, strong and sustained increases in GDP and employment. Note that gray shaded areas on the below figures represent U.S. recessions as determined by the National Bureau of Economic Research.

Figure 1: Real Gross Domestic Product



Source: U.S. Census Bureau, Bureau of Economic Analysis, National Bureau of Economic Research

Financial and economic analysts expect the U.S. economy to grow in the near-term future. The most recent consensus forecast, derived from projections from more than 50 financial institutions and professional forecasting firms, is that real GDP will grow by 2.1 percent in 2014 and 3.0 percent in 2015.<sup>1</sup>

**Industrial Production**

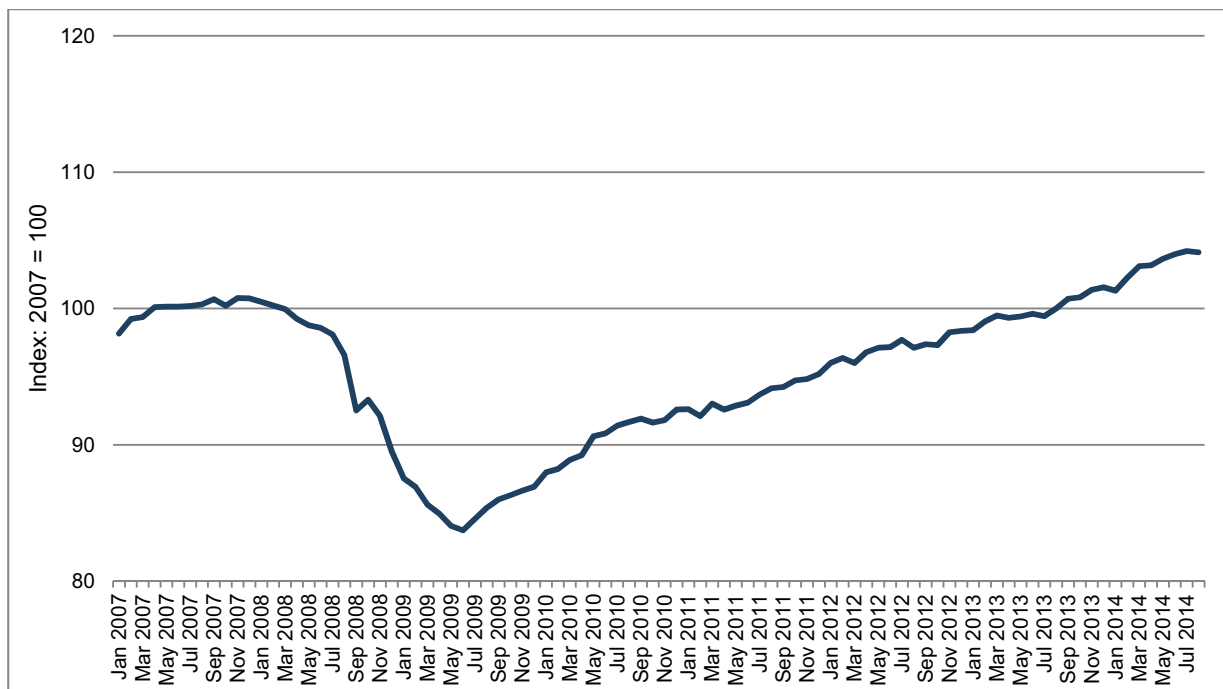
The Industrial Production Index (IPI) is a measure of real output published by the Board of Governors of the Federal Reserve System. The index is measured as a percentage of real output of a given base year, in this case 2007. Changes in U.S. industrial production have historically moved in tandem with GDP, albeit with steeper decreases during recessions and larger increases during recovery periods. Similar to other economic indicators, the IPI decreased sharply during the most recent recession but has since rebounded.

<sup>1</sup> “Blue Chip Economic Indicators: Top Analysts’ Forecasts of the U.S. Economic Outlook for the Year Ahead”, Wolters and Kluwer Law & Business, September 10, 2014.

As shown in Figure 2, the IPI hit its most recent trough in June 2009, the last month of the 2007 to 2009 recession. Since that time, it has been on an upward trajectory, increasing by 24.3 percent from June 2009 to August 2014. The consensus forecast among analysts is that the index will continue to increase in 2014 and 2015.<sup>2</sup>

We expect that the future growth in the shipment of goods across the nation’s highways will be tempered, resulting in a more modest rate of growth in commercial traffic on the Thruway’s facilities than had been experienced in the past. This trend is also seen on other toll facilities in the Northeast and is built into to our traffic and revenue estimates for the Thruway.

**Figure 2: Industrial Production Index**



Source: Board of Governors of the Federal Reserve System, National Bureau of Economic Research

Based on forecasts developed by financial institutions and industry analysts, the IPI is forecasted to increase by 4.0 percent in 2014 and 3.6 percent in 2015. Since the beginning of 2014, IPI growth forecasts have fluctuated between 3.3 and 3.7 percent, indicating that analysts are generally positive about the direction of the U.S. economy.

**Employment**

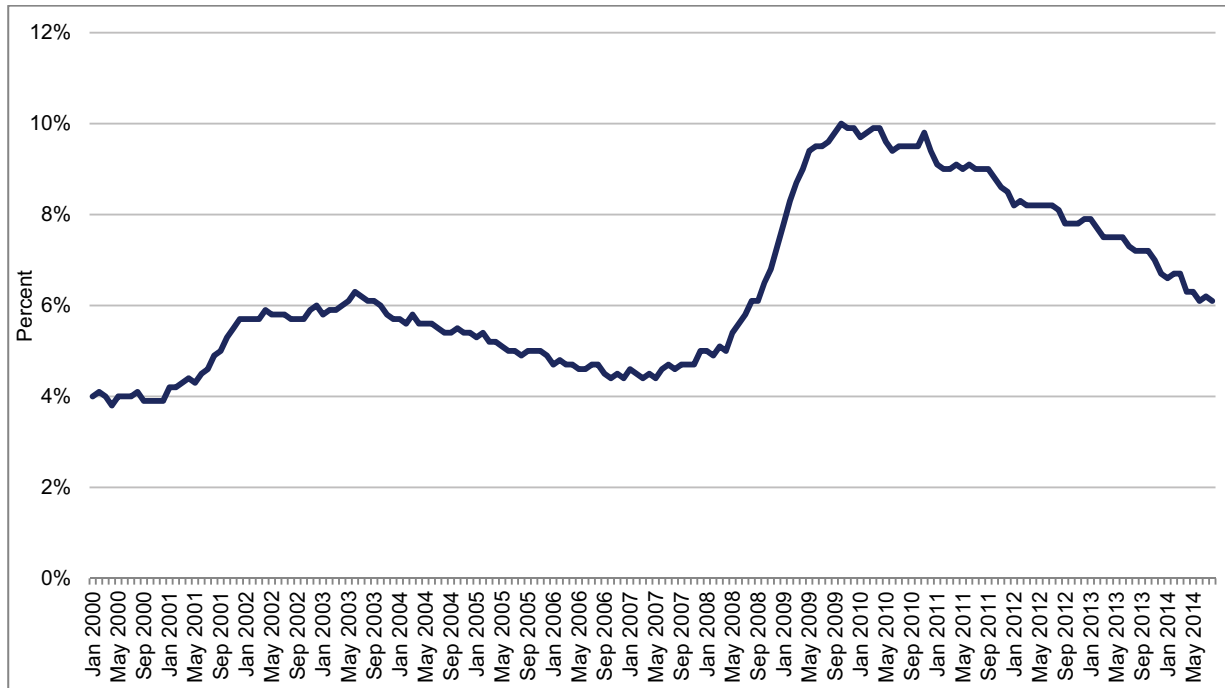
At the beginning of 2008, the national unemployment rate was 5.0 percent. By October 2009 during the depth of the recent recession, unemployment peaked at approximately 10.0 percent. In addition, during

<sup>2</sup> “Blue Chip Economic Indicators: Top Analysts’ Forecasts of the U.S. Economic Outlook for the Year Ahead”, Wolters and Kluwer Law & Business, September 10, 2014.



2008 and 2009, total employment decreased by 2.6 percent and 3.8 percent, respectively. Total employment has started to recover with a 0.8 percent increase in 2010, a 1.6 percent increase in 2011, a 1.7 percent increase in 2012, and a 1.7 percent increase in 2013. As of August 2014, as shown in Figure 3, the national unemployment rate was 6.1 percent.

**Figure 3: Civilian Unemployment Rate, Seasonally Adjusted**



Source: U.S. Department of Labor, Bureau of Labor Statistics, National Bureau of Economic Research

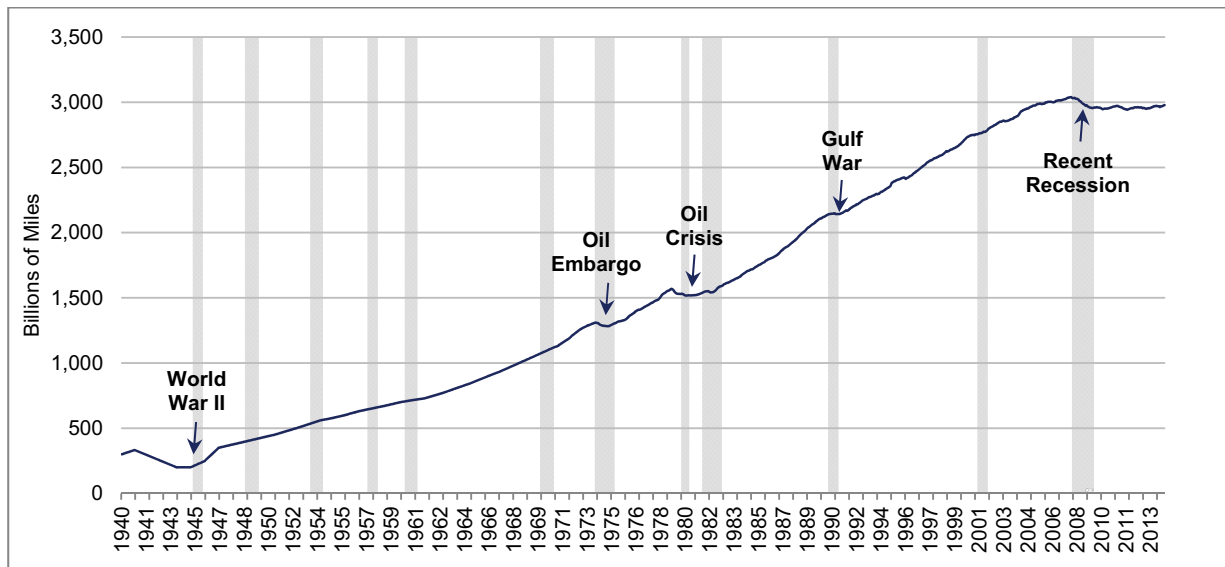
Long-term forecasts of employment tend to differ, depending on varying assumptions of the impact of long-term structural trends that have been mentioned herein, such as advances in information technology, outsourcing, and an aging population. The U.S. Congressional Budget Office (CBO) has forecasted that employment would return to pre-recession 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, and a relatively slow recovery will continue to have a negative impact on traffic growth potential on Thruway facilities.

**National Trends in Vehicle Miles Traveled (VMT)**

The United States has experienced a historic flattening and 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 gasoline taxes or tolls - for funding transportation operation, maintenance and capital expenses. Jacobs reviewed and compiled available reports and data to investigate the possible factors contributing to this phenomenon.

Figure 4 depicts the 12-month moving total of national travel mileage on all U.S. highways, from 1940 through July 2014. As seen in this figure, there were temporary reductions in VMT during World War II, oil crises and previous economic recessions. Despite these temporary “dips”, the VMT continued to grow rapidly over the years. The figure 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, 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 the December 2007 peak. While VMT declined throughout 2008, it remained flat in 2009 until the summer months, when there was a slight increase over the previous year, 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 or changes in weather, but generally VMT has been flat.

**Figure 4: Vehicle Miles Traveled**



Source: U.S. Department of Transportation, Federal Highway Administration, National Bureau of Economic Research

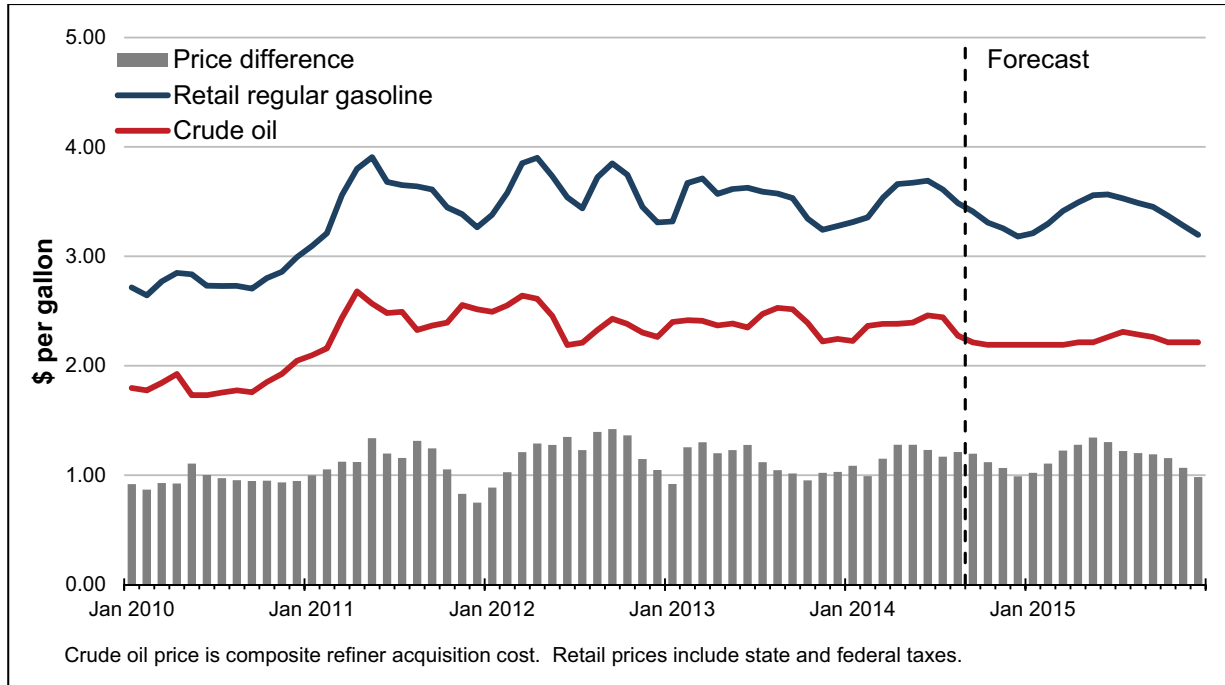
**Fuel Cost Impacts on Travel**

A number of factors may have caused the recent drop in VMT, however, volatile gas prices are often cited as one of the primary factors that have a significant impact on travel trends on Thruway facilities. Figure 5 presents historical and projected gasoline and crude prices from the U.S. Energy Information Administration (EIA). Data from the most recent EIA report indicate that prices in August 2014 reached \$3.49 per gallon. As shown in the graph, prices for gasoline and crude oil are expected to remain between \$3.00 and \$4.00 in the near-term future.

This relatively static forecast of future oil and gas prices may be reassuring; however, this graph does not show the level of uncertainty in these projections. Figure 6 presents the EIA’s projections for West Texas Intermediate Crude Oil Price. The base projection is similar to that illustrated in Figure 5, but it is the

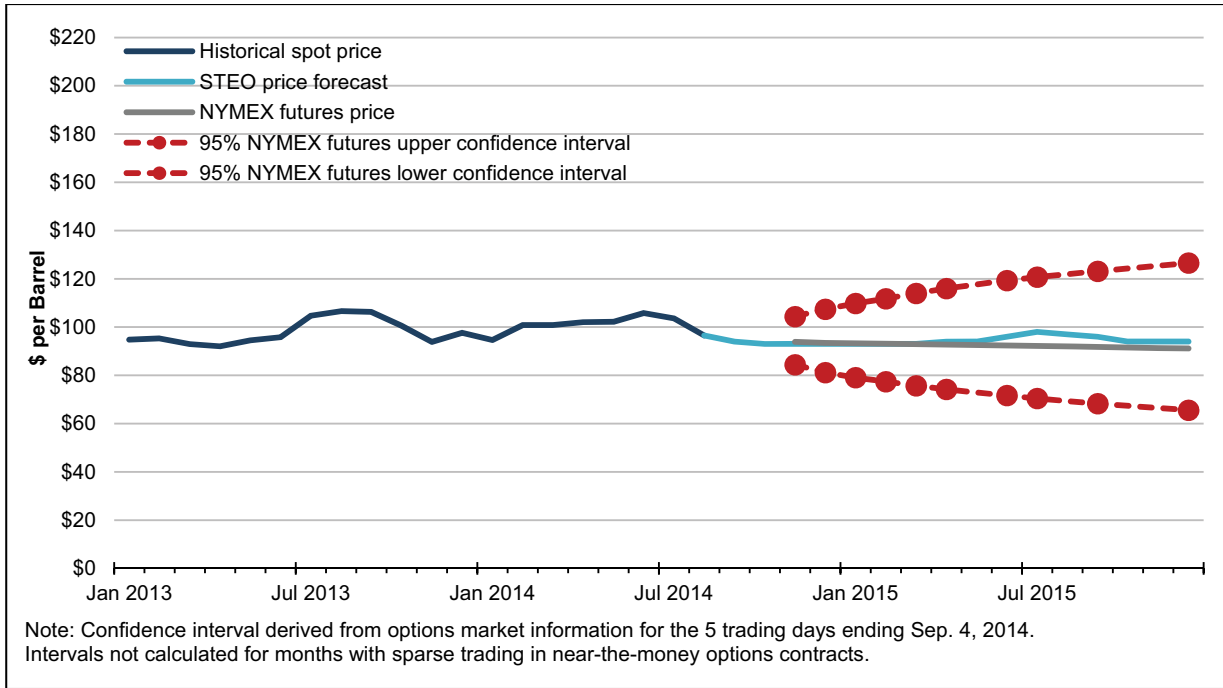
possible range of this price that represents a downside risk to the U.S. economy and VMT. Based on options markets the 95 percent confidence interval for WTI is between 34 percent more to 30 percent less than current forecasts for December 2015. Recognizing the impact fuel prices have on motorist behavior, with a wide range of possible future prices of oil and gasoline, accurately projecting traffic volumes has become an increasingly difficult task.

Figure 5: Historical and Projected U.S. Gasoline and Crude Oil Prices



Source: U.S. Department of Energy, U.S Energy Information Administration, Short-Term Energy Outlook, September 2014

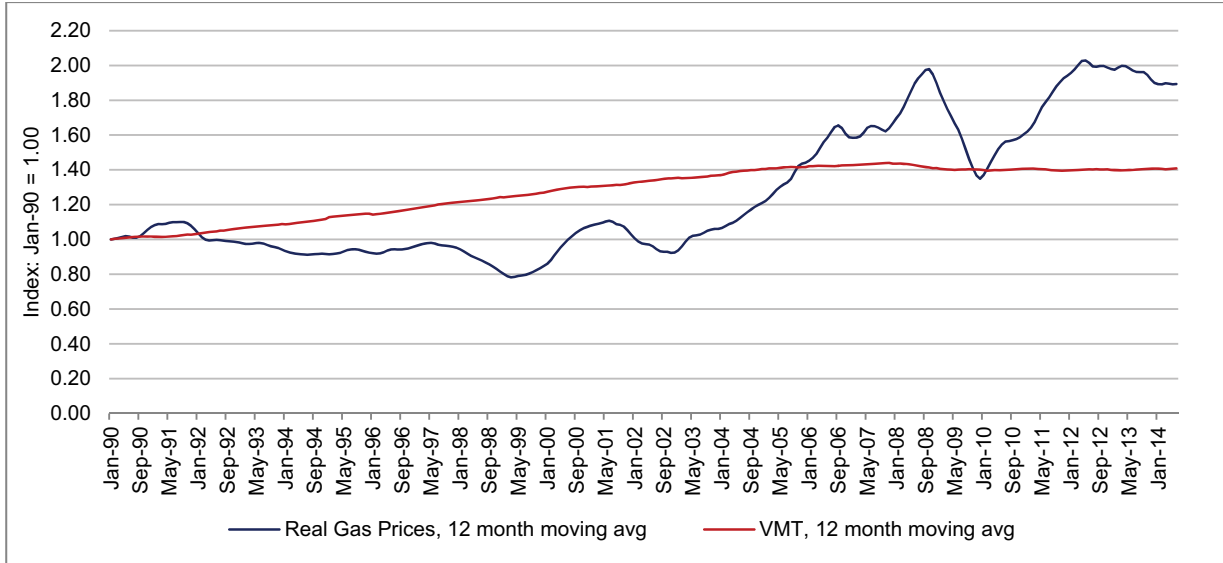
Figure 6: Historical and Projected Crude Oil Prices with Confidence Ranges



Source: U.S. Department of Energy, Energy Information Administration, Short-Term Energy Outlook, September 2014

To understand the potential impact of future gas prices on traffic we can look at historical reactions. Figure 7 presents historical VMT across the United States as compared to real retail 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 at the end of 2007, there was still a flattening, then decline, in vehicle miles traveled 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 then increased throughout the rest of 2009 and through the spring of 2011 with no noticeable change to VMT. In the last few years, gas prices have been less volatile and have declined slightly, however, no increase in VMT has been observed. This data shows that it is difficult to pinpoint the elasticity of travel as it relates to gas prices; however, very large gas price increases do generally result in a small reduction in driving.

Figure 7: National VMT vs. Real Gas Prices



Source: U.S. Department of Energy, Energy Information Administration and U.S. Department of Transportation, Federal Highway Administration

### Current Baseline Traffic and Toll Revenue Forecasts

Table 1 and Table 2 present actual traffic and toll revenue from 2010 through 2013 and forecasts for 2014 through 2019 based on the economic information and expectations summarized in this memorandum. Actual data through August 2014 was used in preparing these estimates. It is important to note that estimated revenue growth is expected to be higher than projected traffic growth because trucks, which pay more per mile than passenger vehicles, have been and are expected to continue growing at a faster rate. There is an exception to this trend in 2015 and 2016 when AET begins on the Tappan Zee Bridge and there is a lag in collecting video toll revenue.

As shown in Table 2, there has been little annual growth in passenger car traffic since 2010, the year after the official end of the recession. Over this same time frame, truck traffic growth has been strong. The forecast for future years is consistent with prior forecasts in that we anticipate a longer period of moderate growth as the economy improves.

**Table 1: Baseline Toll Revenue Forecasts, in millions of dollars**

Year	Passenger Cars			Commercial Vehicles				Total	Growth
	Control	TZB	Other Barriers	Control	TZB	Other Barriers	Vol. Disc.		
2010 <sup>1</sup>	\$226.6	\$104.7	\$81.8	\$194.9	\$24.6	\$31.4	\$(22.8)	\$641.2	-
2011 <sup>1</sup>	\$220.2	\$102.4	\$81.3	\$196.3	\$24.1	\$32.4	\$(22.7)	\$634.1	-1.1%
2012 <sup>1</sup>	\$220.7	\$103.4	\$81.2	\$196.9	\$26.2	\$32.1	\$(22.8)	\$637.7	0.6%
2013 <sup>1</sup>	\$225.6	\$105.1	\$81.3	\$199.1	\$28.8	\$32.8	\$(23.8)	\$648.9	1.8%
2014	\$227.5	\$105.7	\$81.7	\$203.9	\$31.6	\$32.7	\$(24.8)	\$658.1	1.4%
2015 <sup>2</sup>	\$230.7	\$104.3	\$82.4	\$207.9	\$31.0	\$33.3	\$(25.7)	\$663.9	0.9%
2016	\$232.9	\$105.0	\$83.1	\$210.9	\$29.3	\$33.9	\$(26.3)	\$668.8	0.7%
2017	\$235.3	\$108.1	\$83.8	\$213.9	\$30.2	\$34.5	\$(26.9)	\$678.9	1.5%
2018	\$237.7	\$109.9	\$84.5	\$216.6	\$30.7	\$35.2	\$(27.4)	\$687.1	1.2%
2019	\$240.2	\$111.6	\$85.3	\$219.2	\$31.2	\$35.8	\$(27.9)	\$695.3	1.2%

<sup>1</sup> Actual 2010-2013

<sup>2</sup> All-Electronic Tolling (AET) assumed to begin 11/1/15

Note: Numbers may not add due to rounding.

**Table 2: Baseline Traffic Forecasts, in millions of vehicles**

Year	Passenger Cars			Commercial Vehicles			Total	Growth
	Control	TZB	Other Barriers	Control	TZB	Other Barriers		
2010 <sup>1</sup>	129.0	23.1	70.7	15.7	1.4	7.7	247.6	-
2011 <sup>1</sup>	126.6	22.6	70.9	15.8	1.4	7.9	245.2	-1.0%
2012 <sup>1</sup>	127.3	22.9	71.1	15.9	1.5	7.9	246.5	0.5%
2013 <sup>1</sup>	128.2	23.3	71.1	16.0	1.7	8.1	248.4	0.7%
2014	129.4	23.4	71.4	16.4	1.9	8.2	250.6	0.9%
2015 <sup>2</sup>	131.2	23.8	72.2	16.7	1.9	8.4	254.2	1.4%
2016	132.5	24.0	72.9	16.9	1.9	8.5	256.8	1.0%
2017	133.9	24.4	73.5	17.2	2.0	8.7	259.6	1.1%
2018	135.2	24.8	74.2	17.4	2.0	8.8	262.4	1.1%
2019	136.5	25.2	74.9	17.6	2.0	9.0	265.2	1.1%

<sup>1</sup> Actual 2010-2013

<sup>2</sup> All-Electronic Tolling (AET) assumed to begin 11/1/15

Note: Numbers may not add due to rounding. Non-revenue traffic not included.

Details on how the current forecast compares to the previous budget forecast are presented in Table 3 and Table 4 for toll revenue and traffic, respectively.

After completion of our forecasts for the Thruway’s 2014 Budget in September 2013, unexpected growth in traffic and revenue occurred that resulted in toll revenues exceeding our 2013 estimates by \$7.8 million. In 2014, multiple snowstorms, including several which closed parts of the Thruway system to certain trucks or all vehicles, tempered traffic growth earlier in the year. However, traffic growth in the spring and summer of 2014 has also been greater than expected, prompting us to increase our overall traffic growth estimates for 2014. In addition, recent improvements in equipment used for automatic vehicle classification of E-ZPass traffic have had a positive impact on commercial revenues.

Overall, we estimate modest traffic growth in 2015 due to improved economic conditions as well as a less severe winter travel season than experienced in 2014. This improved traffic outlook will translate into growth in toll revenues, but tempered somewhat due to the inception of AET at the Tappan Zee Bridge which will cause a delay in the collection on some revenues at that location. Beyond, 2015, we expect underlying traffic growth to remain modest due to estimated economic conditions and travel trends.

**Table 3: Toll Revenue Forecast Comparison (millions)**

Year	2015 Budget Forecast				2014 Budget Forecast				Difference Between Current & Previous Forecast
	Car Rev	Truck Rev	Total Rev	Ann'l % Growth	Car Rev	Truck Rev	Total Rev	Ann'l % Growth	
2012	\$405.3	\$232.4	\$637.7		\$405.3	\$232.4	\$637.7		\$0.0
2013	\$412.0	\$236.9	\$648.9	1.8%	\$406.1	\$235.0	\$641.1	0.5%	\$7.8
2014	\$414.8	\$243.3	\$658.1	1.4%	\$410.0	\$237.6	\$647.5	1.0%	\$10.6
2015	\$417.4	\$246.5	\$663.9	0.9%	\$416.0	\$240.9	\$657.0	1.5%	\$6.9
2016	\$421.1	\$247.8	\$668.8	0.7%	\$422.3	\$244.3	\$666.6	1.5%	\$2.2
2017	\$427.2	\$251.7	\$678.9	1.5%	\$428.7	\$247.7	\$676.4	1.5%	\$2.5
2018	\$432.1	\$255.1	\$687.1	1.2%	\$434.8	\$251.1	\$685.8	1.4%	\$1.3
2019	\$437.0	\$258.3	\$695.3	1.2%	\$440.5	\$254.2	\$694.7	1.3%	\$0.6

**Table 4: Traffic Forecast Comparison (millions of trips)**

Year	2015 Budget Forecast				2014 Budget Forecast				Difference Between Current & Previous Forecast
	Car Traffic	Truck Traffic	Total Traffic	Ann'l % Growth	Car Traffic	Truck Traffic	Total Traffic	Ann'l % Growth	
2012	221.3	25.3	246.5		221.3	25.3	246.5		0.0
2013	222.6	25.8	248.4	0.7%	221.5	25.7	247.1	0.2%	1.2
2014	224.2	26.4	250.6	0.9%	223.3	26.0	249.3	0.9%	1.3
2015	227.2	26.9	254.2	1.4%	226.4	26.5	252.9	1.4%	1.3
2016	229.4	27.4	256.8	1.0%	229.7	26.9	256.6	1.4%	0.3
2017	231.8	27.8	259.6	1.1%	233.0	27.3	260.3	1.4%	-0.7
2018	234.2	28.2	262.4	1.1%	236.1	27.7	263.8	1.4%	-1.4
2019	236.6	28.6	265.2	1.1%	239.1	28.0	267.2	1.3%	-2.0

It is important to note that additional revenues may be needed for the Authority to be able to successfully complete the New NY Bridge project and fulfill its system-wide operating, debt service, and capital needs through the forecast period. Future funding needs will be established by the Authority at amounts necessary to continue high levels of safety and service, maintain good infrastructure conditions, support Thruway and Canal operations, and maintain debt service coverage levels appropriate for its current “A” credit rating. Any additional revenues needed and the impact of any rate changes will be studied independently from these forecasts.



# JACOBS™



*Submitted to:*  
**New York State  
Thruway Authority**

## **Traffic and Revenue Report Including a Review of the Physical Condition of the Thruway System**

**December 4, 2013**

*Submitted by:*

*Jacobs Civil Consultants Inc.*  
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New York, NY 10121

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## **I. Introduction and Executive Summary**

The New York State Thruway Authority (“Authority”) has requested that Jacobs Civil Consultants, Inc. provide an investment grade traffic and revenue study for its proposed sale of Series 2013A Junior Indebtedness Obligations Revenue Bonds.

The updated forecast of traffic and revenues summarized herein are based on the Authority’s current toll schedule. The study identifies future revenues required for the Authority to successfully complete the New NY Bridge project while fulfilling its system-wide operating, debt service, and capital needs. Future funding needs through 2019 were established by the Authority at amounts necessary to maintain levels of safety and service, good infrastructure conditions, support Thruway and Canal operations, and maintain established debt service coverage policy targets appropriate for “A” level credit ratings.

While no specific toll adjustments have currently been proposed by the Authority, as they will likely have no additional revenue need until 2015, we have been asked to review their draft long-term plan and estimate the effects that future toll rate adjustments may have on traffic and shifts of traffic. Jacobs looked at historical reactions of traffic to toll increases to develop a modeling process that estimates traffic diversion off a facility or shifts between payment types due to future increases in tolls, and the resulting toll revenues. As noted in this report, our analysis shows that toll rate adjustments that are necessary for the Authority to meet its future revenue needs, including funding the New NY Bridge project, will result in small changes to traffic patterns. Additionally, we feel that the Authority can adjust toll rates to provide adequate resources for it to satisfy covenants established in its General Revenue Bond Resolution and Junior Indebtedness General Revenue Resolution, the terms and conditions of the expected TIFIA loan, and the requirements of the Authority’s Fiscal Management Guidelines.

Note that the Authority is considering the possibility of converting one or more of its plazas to all-electronic toll collection (“AETC”), and the forecasts contained within this study do not consider the impact to revenues and costs for a switch to AETC. It is Jacobs’ opinion that through the modification of toll rates and fees, this conversion can be completed with no reduction to Net Revenues as defined in the General Bond Resolution.

On the basis of studies and analyses we have made, we would like to make the following additional observations:

- The Authority has the independent, statutory ability to adjust its toll rates and provide significant amounts of additional revenue;
- The Authority’s toll rates are relatively low and compare well to other toll systems, allowing for future rate setting flexibility with minimal long-term diversion impact;
- The Authority’s operational streamlining efforts have limited growth in operational expenses and can be anticipated to provide recurring, long-term savings;
- Infrastructure conditions and the capacity of the Thruway System should not affect the projected growth of traffic and toll revenues throughout the forecast period;

- The Authority’s facilities have been maintained in high standards over the years, resulting in overall good infrastructure conditions;
- The Authority’s planned extensive and regular maintenance programs, new asset management systems and long-term capital planning process provides confidence that overall operational and structural integrity of its facilities will be maintained; and
- Target levels of future maintenance and capital expenditures beyond the current 2012-2015 Multi-Year Capital Program will support the integrity and reliability of the Thruway System.

## **II. The New York State Thruway & Canal System**

### **A. The Thruway System**

#### **1. Background**

Since its opening more than 56 years ago, the Thruway has served as an essential and central artery of the State’s transportation system, providing a vital link between its major cities from the Atlantic Ocean to Canada and the Great Lakes. Over the years, the Authority has taken actions that have allowed for safe and efficient travel for millions of passenger and commercial customers.

The Thruway serves travelers with a variety of essential needs and purposes, including commuters, business travelers, recreational travelers, and commercial vehicle traffic. The Thruway has provided a dependable roadway system for these travelers, sustaining and encouraging economic growth, fostering job creation and generating tax revenues to the State and its local governments. Underscoring its importance to the state, region and nation, in 2012 Thruway customers traveled approximately 8.1 billion vehicle-miles on the highway, averaging 22.2 million vehicle-miles per day.

At 570 miles in length, the New York State Thruway is one of the largest tolled highway systems in the United States and is a critical component in the national interstate network. There are few alternatives to the Thruway as it connects the principal cities of the State from New York City to Albany, and on to Utica, Syracuse and Rochester through to Buffalo and the Pennsylvania State Line. The Thruway corridor serves 37 of the State’s 62 counties and the majority of the State’s population. Approximately 246.5 million toll transactions occurred on the Thruway in 2012, generating about \$637.7 million in toll revenues.

The Thruway is an important interstate connector, joining with the Massachusetts Turnpike (I-90), Connecticut Turnpike (I-95), New Jersey’s Garden State Parkway, as well as several other Interstate routes such as I-287 from New Jersey; I-90 in Pennsylvania; I-290 around the north side of Buffalo; I-390 and I-490 serving Rochester; I-81, I-481 and I-690 at Syracuse; I-790 in Utica; I-87 (the Northway), I-88, I-90, I-787, and I-890 at Albany; and I-84 at Newburgh. It also makes direct connections with numerous major State highways.

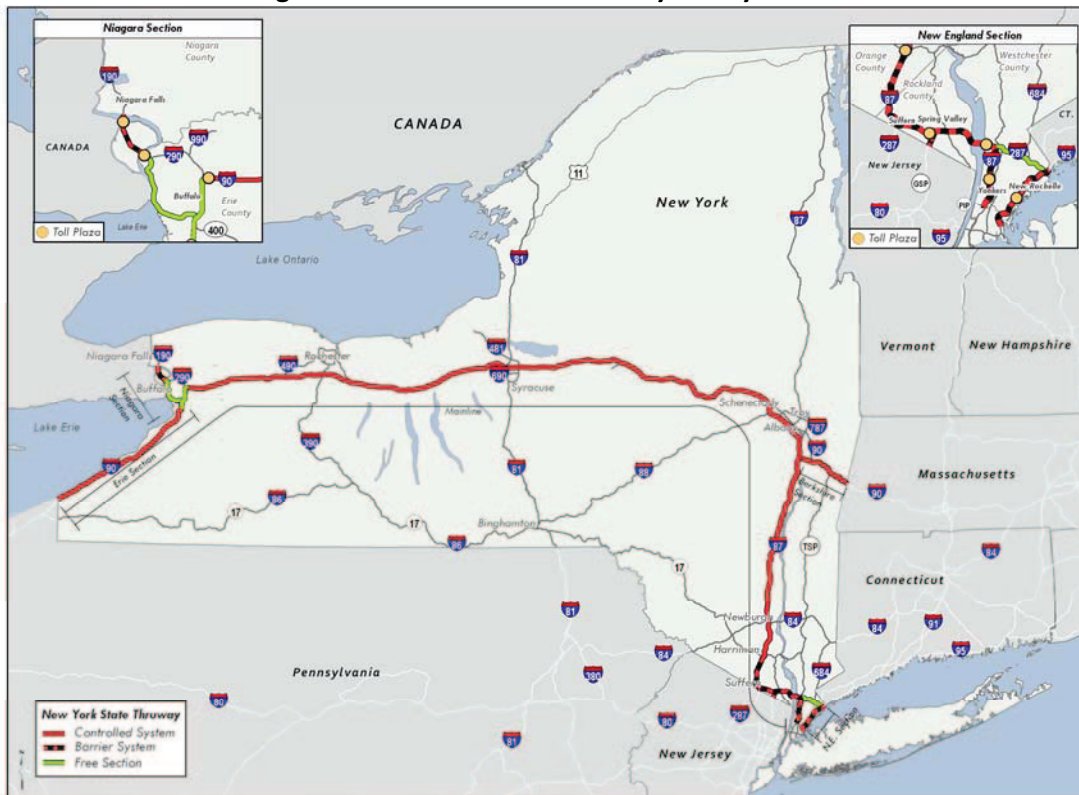
The Thruway is comprised of two types of toll systems – a controlled (ticket) system and a barrier system. The controlled system (approximately 481 miles) makes up the largest portion of the Thruway, running from Woodbury (in the southeast corner of the State) north along I-87 to Albany, then west on I-90 to Buffalo and south of Lake Erie to the Pennsylvania border. In addition to this main stretch of the controlled

system, there is a small branch south and east of Albany providing a connection to the Massachusetts border and the I-90 Massachusetts Turnpike.

On the controlled system, tolls are charged based on the actual distance traveled by the customer. Meanwhile, barrier toll plazas have a fixed toll rate for each vehicle class and payment type (e.g., Cash, *E-ZPass*, as well as Commuter and other *E-ZPass* Discounts). The barrier systems (one located in the southeast corner of the State and the other located in the northwest corner of the State) are comprised of the Tappan Zee Bridge, Yonkers Barrier, New Rochelle Barrier, Spring Valley Barrier, Harriman Barrier and the Grand Island Bridges. Under the existing policy, toll rates across the system are based on the vehicle classification, related to the number of axles per vehicle and the height of the vehicle over the first two axles.

It is important to note that there are portions of the roadways under the Thruway jurisdiction that are currently toll-free. These include a nine-mile section in the Buffalo area between the controlled sections; I-190 between Buffalo and Grand Island; I-90 between Albany (Interchange 24) and I-88 (Interchange 25A); and the Cross Westchester Expressway (I-287). In addition, there are stretches of roadway on the sections with fixed-toll barriers where short trips can be made without passing through a toll barrier.

**Figure 1: New York State Thruway Toll Systems**



## 2. Roadways

The original 2,800 lane mile Thruway roadway system was constructed between 1949 and 1960 and is one of the oldest components of the national Interstate Highway System. In addition to the original mandate of

the Authority to operate and maintain the original components of the Thruway, the Authority was given responsibility over several other transportation facilities in the early 1990's:

- In 1991, the Cross-Westchester Expressway (I-287), which starts at I-87 near Tarrytown and travels east for 11 miles to the Thruway's New England Section (I-95) in Rye became the Authority's responsibility for maintenance and operational expenditures only. Capital improvements remained the responsibility of the New York State Department of Transportation ("NYSDOT"); and
- In 1991, via an agreement with NYSDOT, the Authority began to operate and maintain I-84 - a 71-mile section of roadway that connects the Pennsylvania State Line to the Connecticut State Line. After November 2007, the agreement was amended and the Authority was henceforth fully reimbursed by NYSDOT for all operating and maintenance costs. The operation and maintenance responsibility of I-84 was permanently transferred back to NYSDOT as of October 11, 2010.

Including these changes, the Thruway System is now over 570 total miles in length and 134 interchanges. The various sections of the roadway currently maintained by the Authority are listed in Table 1.

**Table 1: The Thruway System**

Section	Controlled Section	Barrier Section	Length (miles)
The Mainline (New York City – Buffalo)	X	X	426
Erie Section (Buffalo – Pennsylvania Line)	X		70
Niagara Section I-90 (Buffalo – Niagara Falls)		X	21
Berkshire Section (Selkirk – Massachusetts Line)	X		24
New England Section (I-95) (Bronx – Connecticut Line)		X	15
Garden State Parkway Connection (Spring Valley – New Jersey)			3
Cross-Westchester Expressway (I-287) (Mainline I-87 in Tarrytown – I-95 in Rye)			11
<b>Total</b>			570

Thruway pavements are typically nine inches of reinforced Portland cement concrete placed on 12 inches of granular sub-base. Shoulders are made up of treated granular material with asphaltic wearing surface. A large portion of the roadway's base dates back to its original construction, highlighting the need for heavy maintenance, reconstruction and rehabilitation activities to retain the riding surface in a state of good repair.

The Authority has an established process under which it selects highway projects for its capital program. Potential highway capital projects are identified by engineering and program field staff and are vetted through the Authority's asset management system and a centralized final selection process. Projects are prioritized based on safety, riding surface condition, and the impact to asset useful life and capacity. This

process has historically allowed the Authority to maintain good overall surface and riding conditions of its highway pavement.

### **3. Bridges**

The Authority has maintenance responsibility for 809 bridges that carry local roads and state highways over the Thruway System. The structural characteristics of these bridges vary: about 15 percent are concrete structures, either pre-stressed girder, arch, rigid frame or box culverts. The remaining 85 percent of the bridges are steel structures with asphalt overlaid, reinforced concrete decks. As with the roadway, an overwhelming majority of the structures date back to the original opening of the Thruway System in the 1950's and require continual and significant repair, rehabilitation and reconstruction investments to prevent deteriorating conditions.

By far, the largest bridge on the Thruway System is the Tappan Zee Bridge over the Hudson River, located approximately 20 miles north of New York City. The Tappan Zee Bridge was opened to traffic in 1956 and is a three-mile long multi-span steel truss, deck truss and girder type structure. Due to its size and importance, a permanent Authority maintenance team is assigned to the Tappan Zee Bridge. The Tappan Zee Bridge routinely experiences peak hour traffic volumes that are 40 percent higher than normal operational volumes and to increase the Bridge's one-way traffic capacity, a movable barrier provides for the reversal of one of the seven traffic lanes to help accommodate directional peak traffic volumes. The Tappan Zee Bridge is now being replaced under the Authority's New NY Bridge project (see <http://www.newnybridge.com> for project details).

Besides the Tappan Zee Bridge, the Thruway consists of seven other major bridge structures. These include the Castleton-on-Hudson Bridge across the Hudson River on the Berkshire Section; the four Grand Island Bridges spanning branches of the Niagara River north of Buffalo; the mile long Niagara Viaduct, and the Byram River Bridge on the New England Section.

As with its highways, the Authority pursues a similar established process under which it selects bridge projects for rehabilitation or replacement. Potential bridge capital projects are identified by Authority field engineering staff and are vetted through the Authority's asset management system. This process has allowed the Authority to target bridge projects towards those that are critical to maintain safety and good structural conditions.

### **4. Service Areas and Buildings**

There are 393 buildings of various types owned by the Authority along the Thruway, which are summarized in Table 2. These buildings include large maintenance and administrative facilities as well as smaller structures, such as storage sheds, utility buildings, and other minor facilities. The buildings include four administrative headquarters and 55 centralized maintenance buildings; 148 maintenance section buildings; 64 travel plaza buildings, 67 toll facilities, 12 police barracks and 43 miscellaneous use buildings.



**Table 2: Thruway Authority Buildings**

<b>Thruway Authority Buildings</b>	
<b>Description</b>	<b>Number</b>
Administrative Headquarters	4
Centralized Maintenance	55
Maintenance Section	148
Service Areas	64
Toll Facilities	67
Police Barracks	12
Miscellaneous Use	43
<b>Total</b>	<b>393</b>

The Authority's Administrative Headquarters is located just off Interchange 23 at 200 Southern Boulevard in Albany, overlooking the Thruway mainline and the Albany Division maintenance complex. This building was constructed in 1972.

The Thruway's maintenance responsibility is divided into four divisions, with each division having its own headquarters facility. These Division headquarters are located in Suffern, Albany, Syracuse, and Buffalo. The Division headquarters serve several functions that include housing the administrative staff for the maintenance program, as well as providing offices for State police and toll collection, traffic and customer service personnel.

Toll booth facilities and related buildings are an important part of the Authority's physical plant. The Thruway system contains over 250 toll lanes. The toll booths have all of the characteristics of individual buildings, with each having its own heating and lighting systems, windows and doors.

Service areas providing fuel, restaurants and other amenities for the 27 travel plazas owned by the Authority are operated through concessionaire agreements. The buildings, parking areas, and waste water treatment plants are maintained by Thruway staff. These travel plazas are located at intervals along the Thruway System, and are operated by three food service concessionaires: HMS Host Family Restaurants, Inc. (12 plazas), McDonald's Corporation (11 plazas) and Delaware North Companies Travel Hospitality Services, Inc. (4 plazas); and two fuel service operators: Lehigh Gas Corporation (12 plazas) and Sunoco, Inc. (R&M) (15 plazas). The Authority collected \$13.1 million in concession payments from these vendors in 2012.

All food and fuel centers are open 24 hours daily, seven days a week and offer parking, fuel, public restrooms (including family assist restrooms equipped for persons with disabilities), ATMs, and free Wireless Internet Service. There is also a brand name food vendor at each travel plaza open to the public 24 hours a day, seven days a week. Further, many travel plazas have seasonal farm markets, gift shops, fax machines, sell *E-ZPass* On-the-Go (retail *E-ZPass* transponders) and staff a number of Tourist Information Centers.

The Authority and its concessionaires continue to make various improvements at the travel plazas, including updating food concepts and the overall appearance of the interiors and exteriors of the buildings, gas station renovations, adding trucker's lounges and increased tractor trailer parking.

## **5. Safety, Incident Response and Traveler Information Systems**

The Thruway Statewide Operations Center ("TSOC"), housed at the Authority's Administrative Headquarters in Albany, is the central location for the coordination of all traffic incident response, emergency management, and dissemination of traveler information along the entire Thruway. The TSOC operates 24 hours a day, 7 days a week, 365 days a year. The Authority exchanges traffic and Intelligent Transportation Systems ("ITS") data with NYSDOT through the Regional Traffic Operation Centers, providing the public with a view of traffic operations across New York State so they may make more informed travel choices.

To increase the functionality of the TSOC, the Authority recently implemented an Advanced Traffic Management System to integrate and control all current and future ITS devices and systems. Such devices include 73 Permanent Variable Message Signs, 154 Closed Circuit Television cameras, 13 Highway Advisory Radio stations, 119 real-time vehicle detector sites, and 26 Portable Variable Message Signs. The Authority also offers an email alert service (TRANSalert) to its customers to inform them of major unscheduled incidents that may affect their travel plans and the Thruway website ([www.thruway.ny.gov](http://www.thruway.ny.gov)) offers a centralized location to access a multitude of traveler information.

Finally, a troop of New York State Police (Troop T) is entirely dedicated to policing on the Thruway System. The principal mission concern for Troop T is to increase safety on the roadway and reduce fatal and personal injury auto accidents. They address the issue through enforcement and education. Through the years, Troop T has participated in traffic enforcement initiatives directed at drivers who engage in behavior known to cause fatalities or exacerbate the fatality rate: speed, failure to use seatbelts and drunk and/or drugged driving. However, the greatest proven method to reduce fatalities is the day-to-day visible enforcement of traffic laws by the patrol troopers on the highway.

In 2012, good overall highway conditions, traveler access to online and radio information services, good incidence and weather response and the efforts of Troop T contributed to a very low fatality rate. The fatality rate on the Thruway is among the lowest in the nation at 0.2 fatalities per 100 million miles traveled. This compares to an index of 1.16 for the national average and 0.8 for all of New York State.

## **6. Annual Routine Maintenance Activities**

Over the years, the Authority has developed comprehensive plans for the maintenance of its facilities. Formal pavement and bridge management systems have been developed to address maintenance issues and provide input into the development of long-term infrastructure management programs. Routine maintenance activities are performed by Authority staff from 21 maintenance locations grouped into four divisions.

Additional specified routine maintenance activities are provided by the four division highway and bridge maintenance headquarters and by the Tappan Zee Bridge maintenance team. Responsibilities include snow and ice removal, pavement and bridge repair and maintenance, guiderail and safety work, responding to incidents and accident damage, and right-of-way maintenance. Additional specialized maintenance activities are provided by the four centralized division maintenance crews and the Tappan Zee Bridge crews. Maintenance activities also include innovative preventative maintenance operations to preserve the highway system and minimize added capital improvement costs.

Environmental stewardship has become an important factor in ongoing maintenance decisions. Some examples of what is included in these types of enhancements by the Authority are the use of solar-powered ITS elements, the planting of living snow fencing, the use of beet juice as an additive to road salt to promote adhesion and snow melting, the purchase of flex fuel vehicles, and the construction of five wind turbines along the Thruway section south of Lake Erie between Buffalo and the Pennsylvania border for the generation of electric power to provide heat and light for Thruway facilities, which is anticipated to be completed before the end of 2014.

In addition to the original mandate of the Authority to operate and maintain the controlled ticket bridge and barrier systems along the Thruway, the Authority was given responsibility over the Cross-Westchester Expressway (I-287) in 1991. This highway starts at I-87 near Tarrytown and travels east for 11 miles to the Thruway's New England Section (I-95) in Rye. In 1991, it became the Authority's responsibility for maintenance and operational expenditures only. Capital improvements remained the responsibility of NYSDOT.

## **7. Physical Condition of the Thruway's Infrastructure**

This section summarizes our physical Inspection of Thruway facilities, as required by Section 619 of the General Revenue Bond Resolution. Over a seven day period in late September 2013, Jacobs performed a "drive-through" physical inspection of the entire Thruway system. While an inspection of this type is not intended to identify specific localized problems, it does provide an overview of the Thruway's physical condition. The effectiveness of the Thruway's maintenance and capital programs was evident during this inspection.

With some exceptions, the condition of the pavement and bridges was observed to be satisfactory or better. In locations where assets were less than satisfactory, construction or repair efforts were either underway or scheduled for the near term. As noted above, the Thruway has developed comprehensive asset management programs for pavement, bridges, and other assets. All assets are cycled through these programs as they age. This system includes a data repository known as IIS (Infrastructure Inventory and Inspection System), which maintains photographs, inspection, and condition records for pavement, bridges, culverts, rock slopes, and other areas. Thruway personnel can access this system to obtain information and plan for maintenance and capital construction.

Jacobs conducted interviews with the leadership of each of the Thruway's four Division Engineers: New York Division, Albany Division, Syracuse Division, and Buffalo Division. Each interview explored the following topics:

- Current limits of the Division;

- For major facilities, condition and issues concerning pavement, bridges, facilities and service areas, and other assets;
- Maintenance issues, practices, resources, and potential needs;
- Capital Improvements, including status of existing projects, planned or potential new projects, quality of support from the consultant community, and potential needs; and
- Organization / Asset Management, including any potential risks to the Division, any suggested changes or improvements in organization, and any other topics that the Division Engineers believe should be addressed

The following sections contain the results of the drive-through inspection and interviews for each Division.

#### *a) New York Division*

The New York Division runs from the New York City line to New Paltz, MP0 to MP76. In addition to I-87, it includes I-95 to the Connecticut Line (the New England Section), the Cross-Westchester Expressway (I-287, for which the Thruway is responsible only for maintenance), and a three-mile connection from Spring Valley to the New Jersey Line (Garden State Parkway.) Major bridges in the New York Division include the Tappan Zee Bridge and the Byram River Bridge in the New England Section. Toll facilities include the Tappan Zee Bridge Barrier, Yonkers Barrier, New Rochelle Barrier, Spring Valley Barrier, and Harriman Barrier. The bridges, barriers, and pavement in this Division were generally observed to be in satisfactory condition or better, with the exception of pavement in the vicinity of Newburgh, which is about to undergo reconstruction. As a result of recent interchange reconstruction projects, several of the bridges on I-287 are new.

*Maintenance.* The New York Division has more than 300 maintenance personnel for its roadway, bridges, and facilities, including a group dedicated solely to the existing Tappan Zee Bridge. The Division's maintenance program is ongoing, and it follows guidelines and directives from the Authority's headquarters in Albany. These specify, for example, maintenance procedures for roadway and bridges; roof inspections and system testing requirements for facilities; and maintenance and overhaul schedules for snow plows. The Division's maintenance fleet varies widely in age and undergoes a regular program of repair and replacement. Hurricane Irene brought heavy rains to the Thruway between mileposts 29 and 38, and numerous maintenance and capital projects were implemented to repair damage and build resiliency into the Thruway system.

*Capital Program.* The 2012 - 2015 capital program includes major repaving, repair, or new construction projects. Notable repaving and bridge repair projects include the New England Thruway from Pelham Parkway to Port Chester (MPNE0 – NE14.1, \$16.5M); I-287/Route 17S (Exit 15 – 15A, \$14.9M); south of Nyack to north of Garden State Parkway Connector (MP16 – MP24, \$10.4M); and pavement resurfacing from the Woodbury Toll Barrier to Newburgh (MP46 – MP60.1, \$10.4M).

*The New NY Bridge.* The new \$4.0B bridge will be constructed just north of the existing Tappan Zee Bridge; when completed, it will replace the Tappan Zee Bridge. The New NY Bridge is included on the national list

of infrastructure projects for priority federal funding. It is a defining project for the Thruway and a focal point of attention for the New York Division. The project is being delivered under a design-build contract by a consortium of major engineering and construction firms. Initial construction has begun.

Construction activity was evident during the drive-through. Numerous barges are present along the alignment of the new bridge, where contractors are engaged in driving test piles and armoring the dredge areas. Access areas are also under construction.

### ***b) Albany Division***

The Albany Division runs from MP 76 in New Paltz to MP 197.9 in Canajoharie. It also includes the 24-mile Berkshire Section (I-90), which connects the Thruway mainline to the Massachusetts Turnpike through rugged terrain, including several steep rock cuts. The Berkshire Section includes the largest bridge in the Albany Division: the Castleton-on-Hudson Bridge, a 1500-ft cantilever truss bridge spanning the Hudson River. The pavement and bridges in the Albany Division were generally observed to be in satisfactory condition or better.

*Maintenance.* The Albany Division has more than 200 personnel devoted to maintenance. The Division's equipment fleet, which includes plows, trucks, grade-alls, excavators, and other equipment, is a mixture of old and new equipment. Trucks dating from 2004 and 2005 are considered "old" due to the winter environment and punishing nature of their work. The Division plans and prioritizes preventive maintenance activities, renting or borrowing equipment as necessary to circumvent equipment reliability issues. In light of recent storms, the Thruway has also established a stronger relationship with the National Weather Service to plan for snow removal and other maintenance/operations issues.

Because the Erie Canal is adjacent to the Thruway for much of its length within the Albany Division, the two are somewhat interdependent from a standpoint of flooding, maintenance, and operations issues. The Canal infrastructure is being improved and hardened to resist storm damage, and the Division is tasked with providing construction oversight and helping to maintain Canal equipment and facilities.

*Capital Program.* The major capital project in the Albany Division is the Albany Corridor project, which includes total reconstruction of the Thruway from Exit 23 to 24, and the widening of this section to three lanes in either direction. Construction of this \$100M project is nearing completion. Other major capital projects for the 2012 – 2015 program include painting and steel repair on the Castleton Bridge (\$17.5M) and rehabilitation of the Thruway Bridge over the Wallkill River (MP81.72, \$12M). Upcoming pavement projects in the program include resurfacing at Exits 24 through 26, and resurfacing and safety upgrades from Exit B-1 to the Canaan Toll Barrier on the Berkshire Section.

### ***c) Syracuse Division***

The Syracuse Division runs from MP 197.9 in Canajoharie to MP 350 (Rochester – Victor – I-490). The Syracuse Division is notable for its many travel plazas, as this section of the Thruway runs through primarily rural areas. The pavement and bridges in the Syracuse Division were generally observed to be in

satisfactory condition or better. The bridges at Exit 43 were undergoing maintenance at the time of the drive-through inspection.

*Maintenance.* The Syracuse Division has approximately 200 personnel devoted to maintenance. With eleven travel plazas and eight wastewater treatment plants, the Syracuse Division is heavily engaged in maintaining its facilities. Inventories are kept for facility maintenance and repair. Inventories are also kept for the Division's many bridges and culverts, all of which require regular maintenance.

Of particular interest in the Syracuse Division are potential plans to decommission abandoned railroad bridges (MP 244.85, 292.06, 292.49, 198.34). Maintaining these bridges requires considerable resources, particularly for longer structures (those on skewed alignments). By decommissioning them, the Thruway can reallocate its maintenance resources and save money. These bridges are used primarily as hiking trails, and decommissioning them will require re-routing the trails to the next crossing, as well as an evaluation of community and environmental impacts.

*Capital Program.* Currently, the Division is in the midst of a capital program for roof repair: four facility projects are currently in design, and four more will be entering design. The Syracuse Division also includes 189 bridges, and the 2012 – 2015 capital program is keeping pace with their condition (satisfactory or better). Notable capital projects include the Interchange 36 bridge replacement and ramp realignment project (MP282.93, \$9M) scheduled to be let in 2014, and the Verona to Canastota pavement resurfacing and safety upgrades (MP252.2 to MP262, \$12M.) The second half of this paving project (MP240 to MP252.2, \$15.6M) is expected to be let in 2015.

#### *d) Buffalo Division*

The Buffalo Division runs from MP 350 (Rochester – Victor – I-490) to the Pennsylvania State Line (MP 496) and from MP 426.17 (Exit 53, I-190) to Niagara Falls (the Niagara Section). The Erie Section (MP426.17 to the Pennsylvania State Line) is rural and known for its many vineyards. This section also runs through land belonging to the Seneca Nation. The Niagara Section includes a mile-long viaduct (the viaduct deck was replaced in the mid-1990s) and four major bridges to Grand Island (two north bridges and two south). The Buffalo Division includes more bridges than any other section of the Thruway.

The pavement and bridges in the Buffalo Division were generally observed to be in satisfactory condition or better. The substructures of the Grand Island Bridges appeared to be in good condition, and discussion with the Division indicated that these substructures were recently rehabilitated. The focus of current and near term work is deck rehabilitation/replacement, cleaning, and painting. The North Grand Island Bridge Southbound is scheduled to begin deck replacement in 2013 at a cost of \$70M; the South Grand Island Bridge Southbound is undergoing deck rehabilitation and miscellaneous repairs. Over the past 20 years, approximately \$100M has been invested in maintaining and improving these bridges.

*Maintenance.* The Buffalo Division has approximately 350 personnel dedicated to maintenance: 200 for bridges and highway, 100 for facilities, and 50 for ITS and other assets. The Division's maintenance fleet includes 59 plow trucks, among other vehicles, which require a greater percentage of preventative maintenance as they age. As noted, the Thruway has a seasonal preventative maintenance program which

prescribes preventative maintenance and annual maintenance plans. Currently, the Buffalo Division expends approximately 150 hours of preventative maintenance annually for each vehicle.

*Capital Program.* The Division's 2012 – 2015 capital program includes numerous pavement resurfacing and bridge rehabilitation and replacement projects. These include replacement of the Cleveland Drive Bridge over the Thruway (MP420.70), \$10M; four bridge rehabilitations over Silver Creek (MP458.5, MP458.81) and Walnut Creek (MP459.9 and MP459.91), \$12.9M; and pavement resurfacing from LeRoy (Exit 47, MP378.2) to west of Batavia (MP393.7), \$20M.

Other projects include the Cattaraugus Creek Bridge, which is in need of rehabilitation and pavement work; and bridge replacements, rehabilitations, and pavement resurfacing from MP427.9 (Exit 54) to the Lackawanna Barrier at MP430.6. The latter projects are planned to be let in 2015, with an approximate construction cost of \$20M.

In addition to pavement and bridge projects, the Buffalo Division has been evaluating traffic and toll issues in key areas. The Buffalo Corridor (I-190 to Transit Road) comprises the free section of the Thruway through Buffalo. This section, which accommodates 140,000 vehicles per day, faces recurring congestion and incident delays. A study of the corridor suggests a range of potential remedies, and the Division will focus on short-term operational improvements that can be accommodated by the capital program.

Beyond 2015, the Buffalo Division anticipates rehabilitation of the Buffalo Viaduct (half deck replacement and half deck repairs), painting of the Grand Island Bridges, and eventual replacement of some of the mainline Thruway bridges.

#### *e) Opinion*

The review of the Authority's maintenance and capital activities indicates a comprehensive program based on detailed inspections, evaluations, asset management, and a structured priority setting. As a result, the Authority's capital facilities have been maintained to high standards over the years, resulting in generally good physical conditions. In our opinion, the development and implementation of the Authority's 2012 – 2015 Capital Program, together with the ongoing heavy and regular maintenance programs, should assure that the operational and structural integrity of these facilities will be maintained during the term of the Junior Indebtedness Obligations Revenue Bonds, Series 2013A. We are also of the opinion that sufficient toll revenues can be generated to fund these programs.

## **B. New York State Canal System**

In 1992, the New York State Canal Corporation was formed as a subsidiary of the Authority, and the Authority assumed control of the maintenance, operation and capital improvement of the 524-mile New York State Canal System. Financially, the Canal System is considered to be an "Other Authority Project" and funds allocated to the Canal can only be provided through funds which are junior to Thruway operations, debt service, and Thruway System capital responsibilities (per the Authority's General Revenue Bond Resolution).

For two centuries, the New York State Canal System has played a very important role in the history and development of the State and the nation. The ability to efficiently move people and goods across the State

proved instrumental in the westward expansion of the nation, and the development of major cities in upstate New York including Buffalo, Rochester, Syracuse and Albany, as well as hundreds of smaller cities, towns and villages. The construction of the Erie Canal and the subsequent Canal System was primarily responsible for the dominance of New York City as the country's premier shipping port for many years.

Today, New York State's 524-mile Canal System is a recreation-way and tourist destination whose mission includes the cultivation of historic preservation and economic development. The Canal System links the Hudson River with Lake Champlain, Lake Ontario, the Finger Lakes, the Niagara River and Lake Erie, passes through 25 counties and is in close proximity to more than 200 villages, hamlets and towns. It has been estimated that the canal waterway network supports nearly \$400 million in economic activity throughout the Canal corridor. For much of its length, it closely parallels the Thruway System.

The current Canal System, which began construction in 1905, provides extensive inter-modal linkages within and beyond the State's borders and includes four major canals, canalized natural waterways, five lakes, feeder reservoirs and numerous shipping terminals. It consists of 57 locks, 20 lift bridges, 22 reservoirs, 203 buildings, 114 dams and over 1,500 other structures critical to the maintenance and operations of the waterways and its feeder systems (water control devices, fixed bridges over the Canal System, terminals, terminal walls, aqueducts, culverts, roads and reservoirs). Due to the age of the infrastructure, substantial maintenance activities are required to ensure system reliability.

In addition to maintaining these facilities, the Authority also maintains more than 260 miles of multi-use, recreational trails across upstate New York that are adjacent to the waterways of the Canal System or follow remnants of the historic original canals that date back to the early 1800s. According to a recent study, an estimated 2.4 million people use the trail network each year for bicycling, walking, jogging and other activities, providing an economic impact of more than \$41 million per year. More information on the Canal System and Trail Network can be found at <http://www.canals.ny.gov/>.



**Figure 2: New York State Canal System**



### **III. Historical Review of the Authority's Finances**

This section provides an overview of the Authority's actual operating and revenue trends from 2005 through 2012.

#### **A. Operating and Maintenance Expenses**

The Authority's operating expenses include non-capitalized costs for the maintenance of highway, building and canal facilities; equipment purchases; snow and ice removal; Thruway toll collection; policing; administrative costs and fringe benefits; Thruway traffic operations; and provisions for funding environmental and other liability reserves. Table 3 summarizes the Authority's operating and maintenance (O&M) expenses for the period 2005 through 2012, including expenses for I-287, I-84 and the Canal System for the period in which these facilities have been the responsibility of the Authority.

From 2005 through 2012, the Authority was able to limit the level of growth in Thruway and Canal operating costs primarily through staffing reductions and a stronger workforce management program. During this period, the Authority eliminated 318 positions, representing a workforce reduction of approximately 10 percent. In addition, the Authority reduced or eliminated expenditures for equipment and projects, cancelled scheduled salary increases and other employee benefits, relied more heavily upon part-time and seasonal workforces, reduced toll lane staffing hours, enhanced energy efficiency measures, reduced overtime and discretionary expenses and a number of other actions. Combined with new actions planned to further modernize the management and streamline operations, these initiatives will generate recurring savings and aid the Authority in maintaining fiscal balance in the future.

It is important to note that in 2013 New York State permanently relieved the Authority of \$85 million for certain fiscal responsibilities, including about \$56M to fund the operations of New York State Police (Troop T) that polices the Thruway System. These cost reductions are expected to continue to significantly contribute to a reduction in overall operating expenses into the future.

**Table 3: Actual Operating and Maintenance Expenses, 2005 – 2012, Thruway System (millions)**

Year	Thruway Operations	Reserves <sup>(1)</sup>	I-84 <sup>(2)(3)</sup>	Canal System <sup>(2)</sup>	Total Operating Expenses
2005	\$303.8	\$3.5	\$12.5	\$38.2	\$358.0
2006	310.7	13.0	11.5	42.8	378.0
2007 <sup>(3)</sup>	332.2	6.8	10.3	45.9	395.2
2008 <sup>(3)</sup>	334.8	2.5	-	45.2	382.5
2009	339.4	7.3	-	48.7	395.4
2010 <sup>(4)</sup>	358.2	6.0	-	46.0	410.2
2011	365.4	4.6	-	51.3	421.3
2012	357.0	2.0	-	54.1	413.1

<sup>(1)</sup> Includes provisions for legal claims and indemnities and reserves for environmental remediation.

<sup>(2)</sup> Canal and I-84 operating expenses are paid out of the Other Authority Projects Operating Fund and are net of Federal Enhancement fund reimbursements.

<sup>(3)</sup> From November 2007 through October 2010, expenditures for I-84 were fully reimbursable by the New York State Department of Transportation. Since October 11, 2010, the Authority has no legal operational or funding responsibility for I-84.

<sup>(4)</sup> In 2010, operating expenses include \$13.3 million for the special early retirement surcharge (\$11.4 million for the Thruway and \$1.9 million for the Canal) and \$5.6 million in Federal Enhancement funds was received for Canal operations.

## B. Capital Expenditures

Given the age of the Thruway and Canal Systems and the high percentage of their infrastructure that dates back to original construction, significant capital investments have been necessary to complement maintenance activities for the system to remain reliable and in a state of good repair. While the Authority's recently completed 2005-2011 Capital Program was primarily focused on maintaining infrastructure conditions, it did include some heavy reconstruction and capacity improvement activities.

The 2005-2011 Capital Program was intended to address several key objectives that were critical to Thruway and Canal customers. Those goals were reliability, increased customer service, improved safety and mobility and environmental stewardship. The program included projects that addressed the need for reconstruction and rehabilitation of roadway, bridges, facilities and support systems of the Thruway; congestion relief and mobility enhancements; equipment replacement needs; critical canal capital projects; and higher/highway speed *E-ZPass* lanes.

However, beginning in 2007, the fiscal distress resulting from declining traffic and high fuel prices and construction commodity prices required the Authority to re-examine the capital and equipment needs of the Thruway and Canal systems. As a result of this re-evaluation, a significant number of project scopes were reduced, projects were eliminated and others were delayed. These actions reduced the level of

planned infrastructure and equipment investments in the 2005-2011 Capital Program by \$300 million, reducing capital expenses from \$2.6 billion to about \$2.3 billion during this period. Despite these actions, as noted in Figure 16 and Figure 17 later in this report, the Authority was able to maintain good overall highway and bridge conditions during this period.

As shown separately below, 2012 was the first year of the current 2012-2015 Capital Program. Total capital expenditures and funding sources for 2005-2012 are shown in Table 4 and Table 5.

**Table 4: Actual Capital Expenditures, Thruway Authority (millions)**

Year	Highway and Bridge	Facilities, Travel Plazas and Equipment	Canal System and Other Authority Projects <sup>(1)</sup>	Total Capital Expenditures
<b>2005</b>	\$97.1	\$27.3	\$21.0	\$145.4
<b>2006</b>	179.3	50.9	14.4	244.6
<b>2007</b>	267.3	59.0	44.2	370.5
<b>2008</b>	288.7	36.2	30.3	355.2
<b>2009</b>	259.6	35.4	26.1	321.1
<b>2010</b>	311.0	39.9	26.8	377.7
<b>2011</b>	367.6	49.5	27.4	444.5
<b>2012</b>	322.4	22.9	45.7	390.9
<b>Total 2005-2012</b>	<b>\$2,093.0</b>	<b>\$321.1</b>	<b>\$235.9</b>	<b>\$2,649.9</b>

Note: Numbers may not add due to rounding.

<sup>(1)</sup> As noted above, these costs are payable only after Thruway operating and maintenance and debt service costs.

**Table 5: Funding Sources, Thruway Authority (millions)**

Year	Funding Sources					
	Federal Aid	Other	Bond / Note Proceeds	Subtotal Exclusive of Thruway Revenues on Pay-As-You-Go Basis	Revenues Required from Tolls, etc.	Pay-As-You-Go %
2005	\$43.1	\$0.8	\$60.4	\$104.3	\$41.1	58.5%
2006	22.7	7.4	154.8	184.9	59.7	36.7%
2007	30.9	1.2	198.3	230.4	140.1	46.5%
2008	17.6	1.3	299.5	318.4	36.8	15.7%
2009	10.0	2.7	258.4	271.1	50.1	19.6%
2010	8.7	4.9	305.8	319.4	58.3	19.0%
2011	0.0	6.4	366.0	372.4	72.1	17.6%
2012	11.2	54.2	268.7	334.1	56.8	31.3%
<b>Total</b>	<b>\$144.2</b>	<b>\$78.9</b>	<b>\$1,911.9</b>	<b>\$2,135.0</b>	<b>\$515.0</b>	<b>27.8%</b>

Note: Numbers may not add due to rounding.

It is important to note from Table 5 that Federal aid allocated by the NYSDOT to the Authority declined significantly from 2005 through 2011. This decline is predominately the result of the expiration of an agreement with NYSDOT in 2005, which had previously authorized the allocation of Federal Interstate Maintenance Aid (I-M) and Transportation Enhancement Program (TEP) assistance to the Authority that supported its capital and operational needs. As noted, declining Federal aid and low revenue growth led to a reduction in the level of Pay-as-you-go financing for the 2005-2011 Capital Program. In 2012, there was an increase of other funding sources for the Capital Program including Canal storm-related repairs to be reimbursed by FEMA and to account for DOT and MTA’s share of the environmental costs of the New NY Bridge.

### C. Debt Service Expenses

As a result of a larger capital level of investment and the reduced Pay-as-you-go financing from 2005 to 2011, the Authority utilized additional bond/note proceeds to finance commitments made in the Multi-Year Capital Program. As noted in Table 6, the greater reliance on bonds and the issuance of short-term notes to finance programmed capital improvements resulted in annual debt service payments increasing from \$108.4 million in 2005 to \$200.5 million in 2012.

**Table 6: Debt Service, Thruway System (millions)**

Year	Service on Outstanding Debt
2005	\$108.4
2006	128.5
2007	135.8
2008	163.5
2009	176.9
2010	191.2
2011	181.8
2012	200.5
<b>2005-2012 Total</b>	<b>\$1,286.6</b>

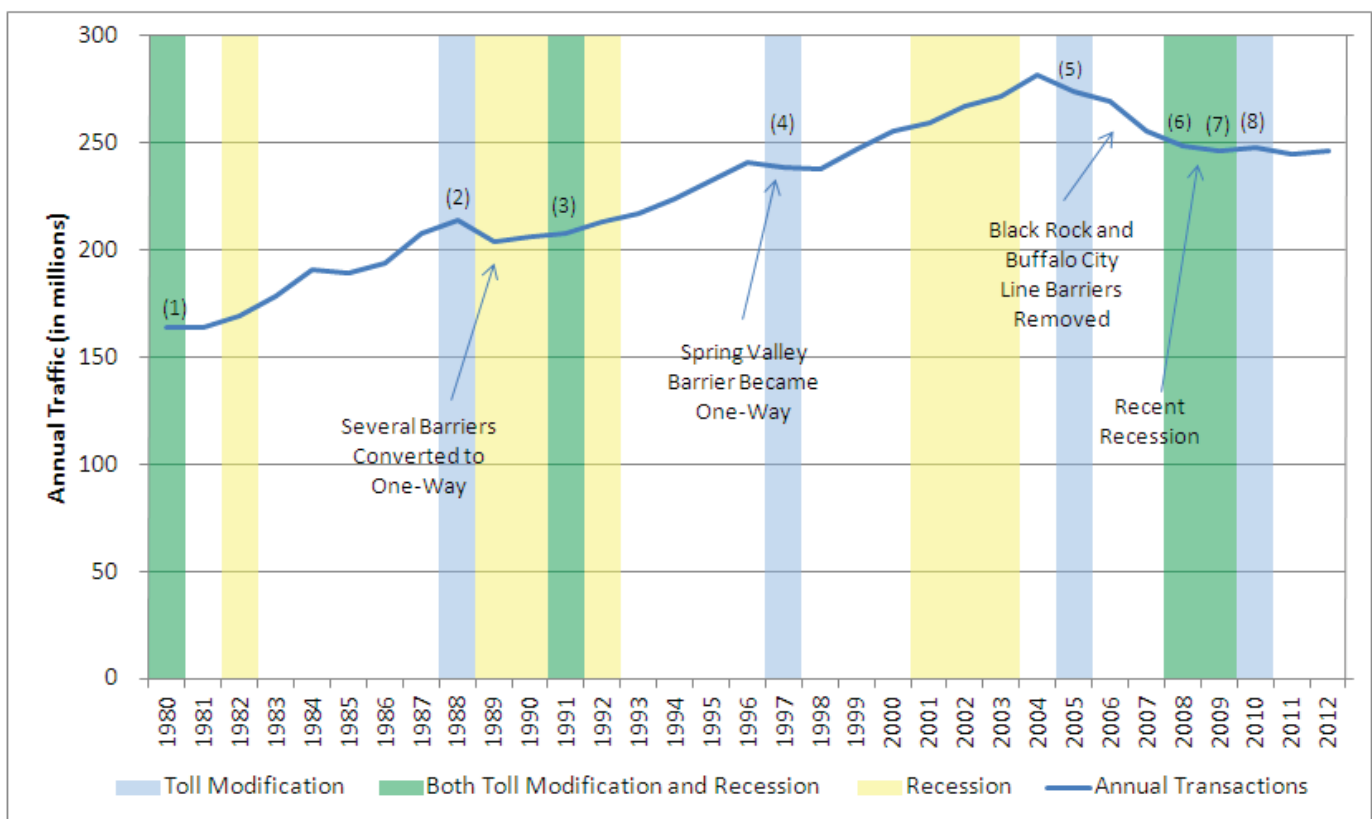
*Note: Numbers may not add due to rounding.*

## D. Traffic and Revenues

### 1. Historical Traffic

Figure 3 shows historical total traffic on the Thruway since 1980. It is important to note that the volumes shown are not adjusted for various toll collection changes on the Thruway. For example, the 2005 toll modification resulted in the elimination of several commercial vehicle classes that were based on a single vehicle receiving two toll transactions, resulting in an apparent decrease in commercial traffic counts. This was a one-time occurrence that did not represent a decrease in actual number vehicle trips made on the Thruway. Similarly, in October 2006, tolls were removed from the Buffalo City Line and Black Rock toll barriers which reduced total annual trips on the Thruway by approximately 17 million annually.

**Figure 3: Historical Thruway Traffic Volumes**



- (1) 1980 - Average Toll Increase of 25% Passenger Cars, 30% Commercial
- (2) 1988 - Average Toll Increase of 32% Passenger Cars, 38% Commercial
- (3) 1991 - Spring Valley Toll Adjustment, Passenger Cars Only
- (4) 1997 - Tappan Zee Corridor Relief (Congestion Pricing)
- (5) 2005 - System Reclassification, Average Toll Increase of 25% Passenger Cars, 35% Commercial
- (6) 2008 - Average Toll Increase of 10% for All Vehicles, Plus Reduction of E-ZPass Discount in July
- (7) 2009 - Average Toll Increase of 5% for All Vehicles
- (8) 2010 - Average Toll Increase of 5% for All Vehicles (not apparent in all toll schedules, due to rounding)

Table 7 summarizes passenger and commercial traffic trends from 2005 through 2012.

**Table 7: The Thruway System's Actual Tolled Traffic (millions of trips), 2005 – 2012**

Year	Passenger			Commercial			Total	Growth
	Control System	TZB	Other Barriers	Control System	TZB	Other Barriers		
2005 <sup>(1)</sup>	125.8	23.7	92.0	19.9	1.6	10.9	274.0	-
2006 <sup>(2)</sup>	127.8	23.6	89.1	17.7	1.5	9.8	269.4	-1.7%
2007	127.7	23.7	76.9	17.7	1.5	8.6	256.0	-5.0%
2008 <sup>(1)</sup>	125.5	22.9	73.5	16.9	1.4	8.3	248.5	-2.9%
2009 <sup>(1)</sup>	128.2	22.7	71.5	15.4	1.3	7.5	246.7	-0.7%
2010 <sup>(1)</sup>	129.0	23.1	70.7	15.7	1.4	7.7	247.6	0.4%
2011	126.6	22.6	70.9	15.8	1.4	7.9	245.2	-1.0%
2012	127.3	22.9	71.1	15.9	1.5	7.9	246.5	0.5%

*Notes: Totals may not add due to rounding. Non-revenue traffic not included.*

*(1) Toll Adjustments were implemented in 2005, 2008, 2009, and 2010.*

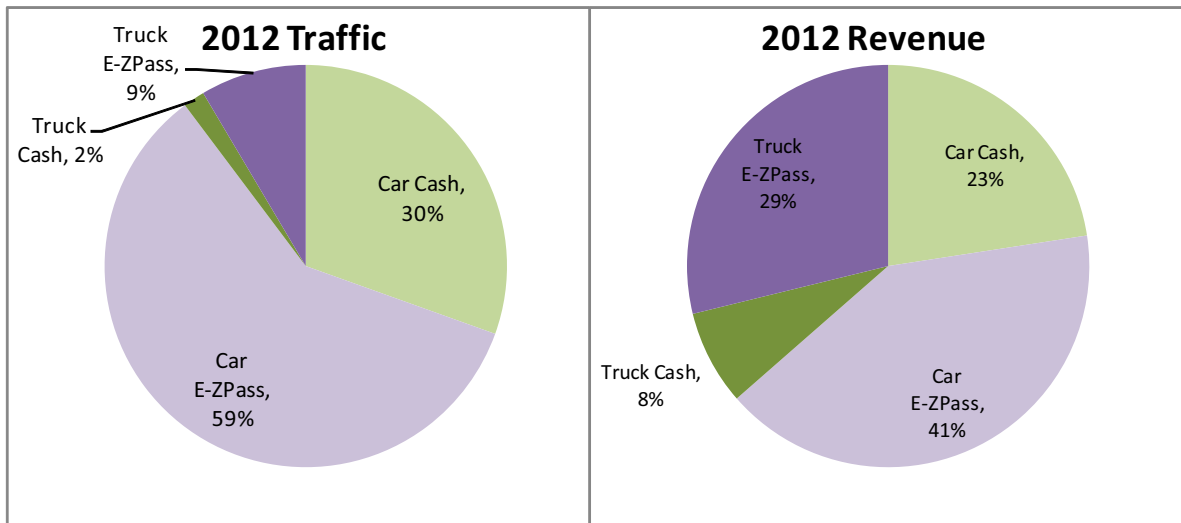
*(2) Tolling discontinued at Black Rock and Buffalo City Line barriers on Oct 30, 2006.*

## 2. Demographics of Toll Paying Patrons

To better understand Thruway revenue trends and the impact toll policy may have on traffic and traffic shifts, it is important to appreciate the make-up of traffic on the Thruway System and its customer base.

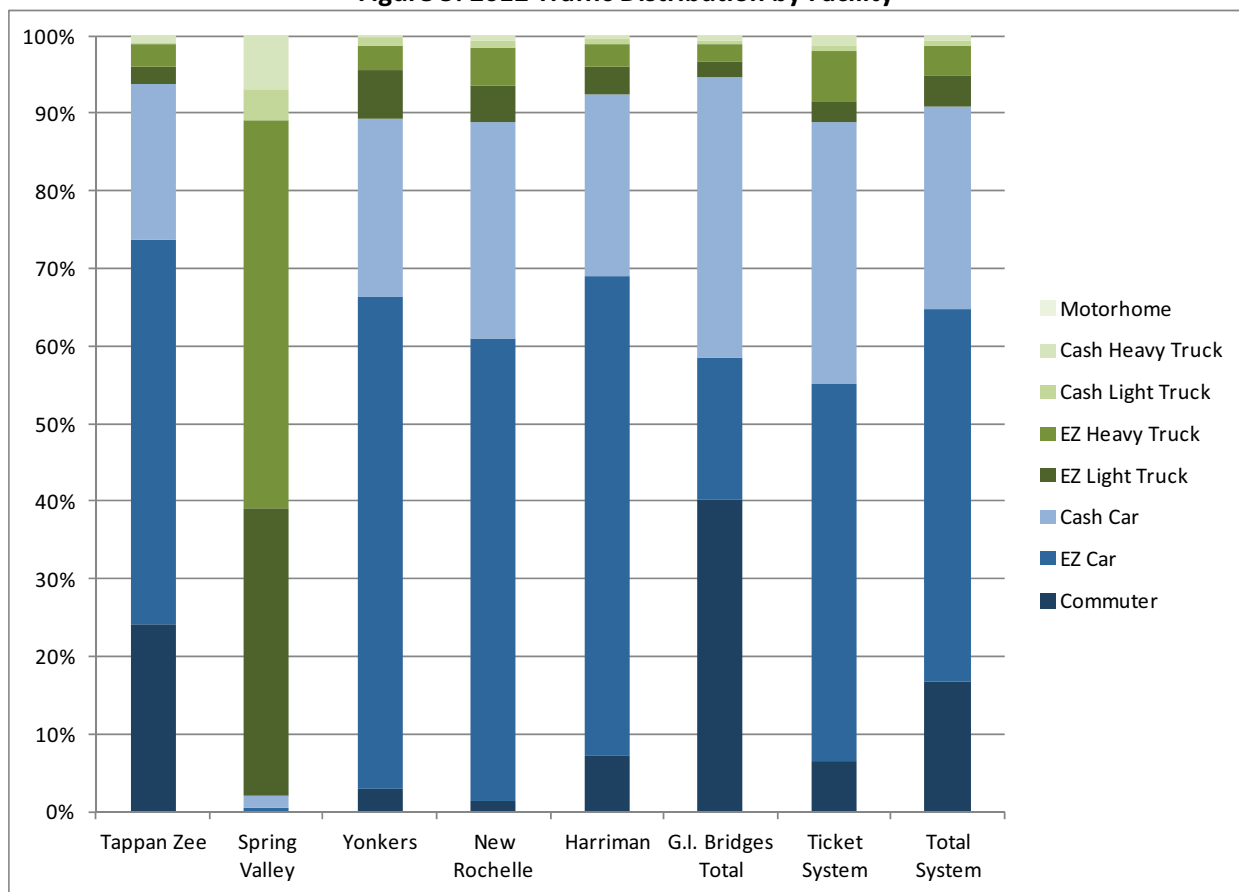
As shown in the following figure, in 2012 roughly 89 percent of traffic on the Thruway System was comprised of passenger cars, with the remaining 11 percent of traffic coming from variety of different commercial vehicle types. Although commercial traffic comprises only a small percentage of system-wide traffic, trucks accounted for nearly 37 percent of all Thruway toll revenues. In addition, the Thruway has seen significant growth in electronic toll collection, with 68 percent of vehicles paying a toll with an *E-ZPass* transponder (66 percent of passenger vehicles and 83 percent of commercial vehicles).

**Figure 4: 2012 System Wide Traffic and Revenue Distribution**



The distributions of vehicle class and payment types vary by facility, as shown in the following figure. The highest passenger car participation in *E-ZPass* is seen at the Tappan Zee Bridge, while the highest truck participation rate in *E-ZPass* payment is seen at the nearby Spring Valley Barrier, which is a truck-only toll facility that offers open road tolling. It should be noted that although *E-ZPass* transactions account for about two-thirds of annual transactions on the Thruway, the majority of customers (individual people) using the Thruway over the course of a year travel infrequently and pay with cash.

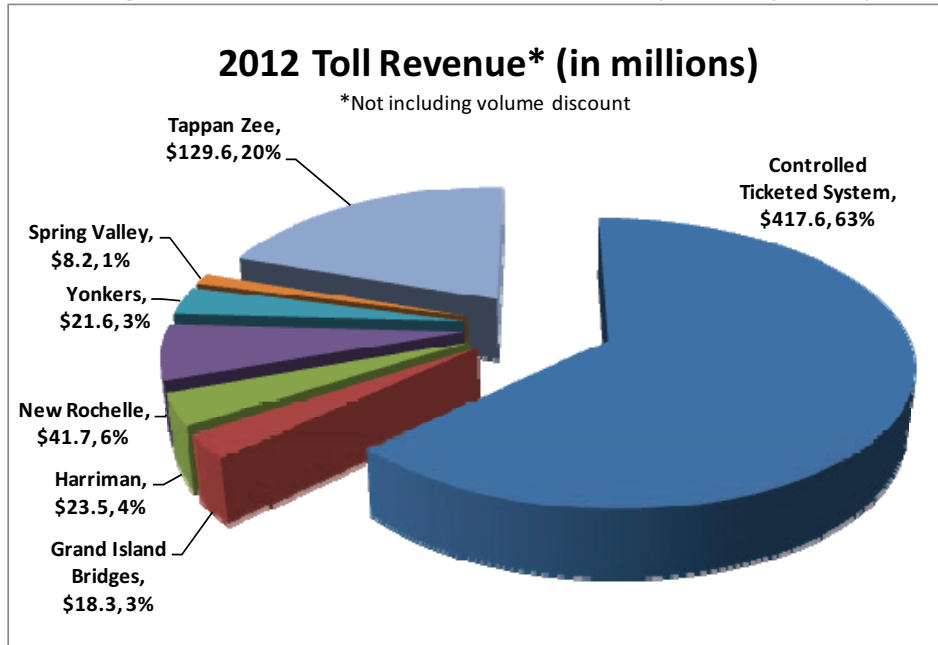
**Figure 5: 2012 Traffic Distribution by Facility**



As noted in Figure 6, the Ticket System and the Tappan Zee Bridge generate the most significant portion of the Thruway's traffic and revenue. In 2012, the Ticket System generated \$417.6 million or more than half (approximately 63 percent) of all Thruway toll revenues and the Tappan Zee Bridge generated \$129.6 million (approximately 20 percent) of total toll revenues. The New York Metropolitan Area barrier tolls (other than the Tappan Zee Bridge) generated about \$95.0 million or a combined 14 percent of 2012 revenues. The Buffalo area – the Grand Island Bridges plus the Erie Section of the mainline – generated approximately 11 percent of 2012 Thruway toll revenues.



**Figure 6: Distribution of 2012 Toll Revenues by Thruway Facility**



Specific regions within the Ticket System that see the most volume include the Albany area, the Buffalo Mainline plazas, and the Woodbury Mainline toll Plaza. The top six plaza volumes for the ticket system in 2012 are shown in Table 8.

**Table 8: Ticket System Toll Plazas with the Highest Volumes, 2012 (millions of transactions)**

Plaza / Interchange	Transactions
Exit 24: Albany, Montreal, I-90 East, I-87 North	13.1
Williamsville	9.4
Lackawanna	8.4
Woodbury	7.3
Exit 25: Schenectady, I-890, NY Routes 7 & 146	6.8
Exit 45: Rochester, Victor, I-490	6.2

Finally, in 2012 approximately 62 percent of the Thruway's *E-ZPass* toll revenues were generated by customers with a Thruway Authority-issued *E-ZPass*. Customers that had a transponder issued by a New York State toll agency (the New York State Thruway Authority, Port Authority of NY & NJ or the Metropolitan Transportation Authority) accounted for about 78 percent of total *E-ZPass* toll revenues. As a result, 22 percent of *E-ZPass* toll revenues were collected from customers that had a non-New York issued transponder, underscoring the importance of the Thruway System in the regional and national economy.

### 3. Toll Rates

#### a) Current Toll Rates

The toll rates set in 2010 continue to be in effect today. The Authority's current toll rate structure is outlined in Table 9.

**Table 9: Current Thruway Toll Structure (\$)**

2010	Controlled (Cents/Mile)		Yonkers		Harriman		Spring Valley		New Rochelle		Tappan Zee		Grand Island	
	Cash	E-Z Pass	Cash	E-Z Pass	Cash	E-Z Pass	Cash	E-Z Pass <sup>(1)</sup>	Cash	E-Z Pass	Cash	E-Z Pass <sup>(1)</sup>	Cash	E-Z Pass
<b>Commuter</b>	-	*	-	0.55	-	0.55	-	-	-	1.10	-	3.00	-	0.28
<b>Motor Cycle</b>	-	0.0235	-	0.63	-	0.63	-	-	-	0.88	-	2.50	-	0.50
<b>2L</b>	0.0470	0.0447	1.25	1.19	1.25	1.19	-	-	1.75	1.66	5.00	4.75 / 4.75	1.00	0.95
<b>3L</b>	0.0728	0.0691	1.50	1.43	1.50	1.43	3.00	3.00 / 1.50	2.50	2.38	11.50	11.50 / 5.75	1.50	1.43
<b>4L</b>	0.0864	0.0821	1.75	1.66	1.75	1.66	4.50	4.50 / 2.25	3.00	2.85	13.75	13.75 / 6.88	1.75	1.66
<b>2H</b>	0.0933	0.0886	2.00	1.90	2.00	1.90	5.25	5.25 / 2.63	3.50	3.33	14.75	14.75 / 7.38	2.00	1.90
<b>3H</b>	0.1604	0.1524	2.25	2.14	2.75	2.61	8.25	8.25 / 4.13	4.25	4.04	20.75	20.75 / 10.38	2.25	2.14
<b>4H</b>	0.1768	0.1680	2.75	2.61	3.00	2.85	8.25	8.25 / 4.13	5.00	4.75	24.75	24.75 / 12.38	2.75	2.61
<b>5H</b>	0.2390	0.2271	4.25	4.04	4.25	4.04	13.50	13.50 / 6.75	8.00	7.60	32.75	32.75 / 16.38	4.25	4.04
<b>6H</b>	0.2963	0.2815	4.50	4.28	5.00	4.75	14.75	14.75 / 7.38	8.75	8.31	41.00	41.00 / 20.50	4.50	4.28
<b>7H</b>	0.3536	0.3359	5.00	4.75	5.75	5.46	16.50	16.50 / 8.25	9.75	9.26	49.25	49.25 / 24.63	5.00	4.75

<sup>1)</sup> Peak/Off Peak E-ZPass Rates

The Authority offers several specialized discount programs administered through the E-ZPass program. Among these are a series of commuter plans designed specifically for frequent users of the Thruway that use one or more of the barrier toll stations. E-ZPass customers can pre-pay a monthly minimum for each facility that they choose and then receive discounted travel for each trip taken in excess of the minimum charge. In addition to the barrier commuter discounts, the control system offers an annual permit that when purchased allows for the first 30 miles of each trip to be free of tolls.

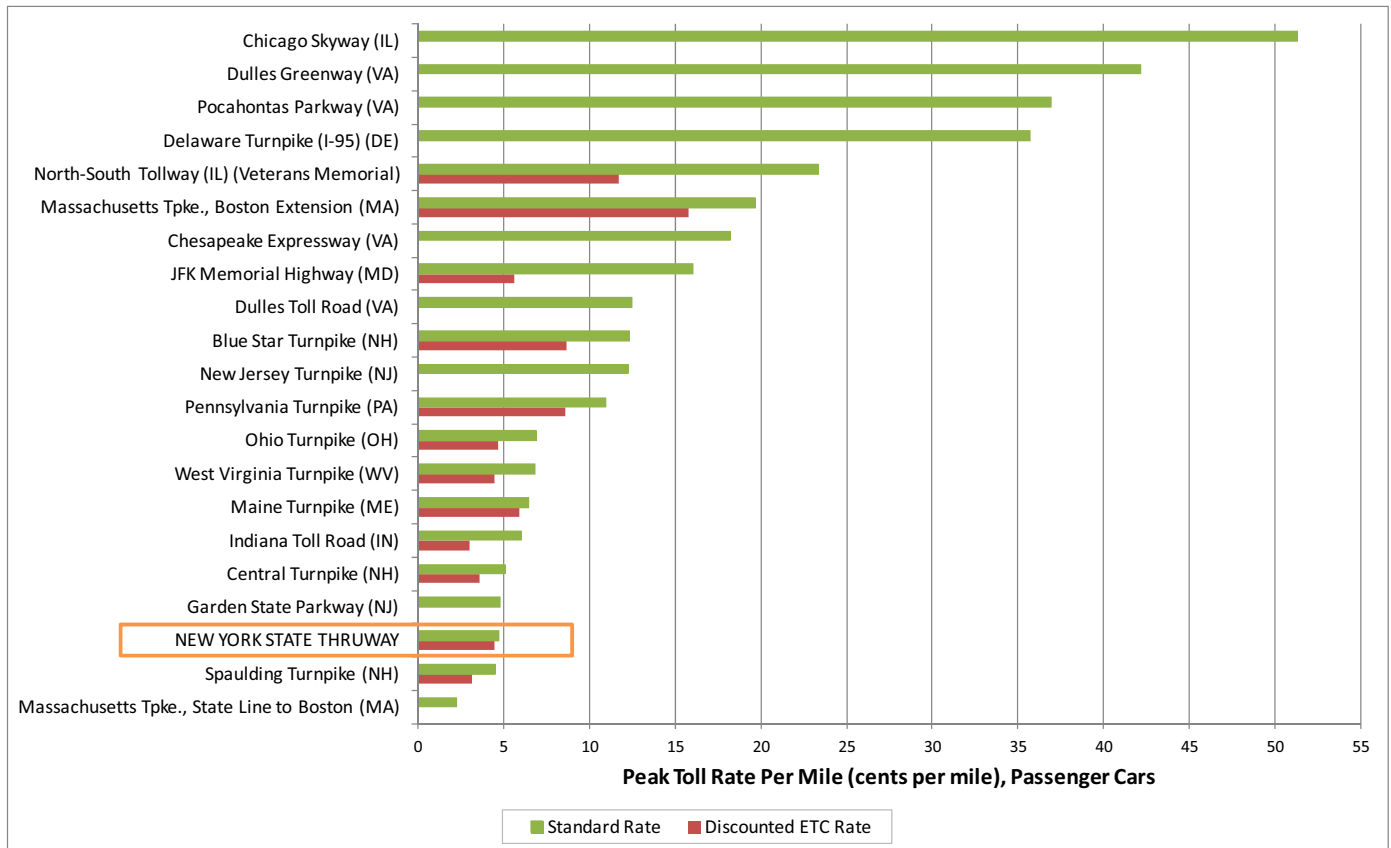
Other passenger car specialized plans include a Tappan Zee Bridge car-pool commuter plan that further reduces the cost of travel for vehicles with three or more occupants, and residents of Grand Island are eligible for a special resident discount when crossing through either of the Grand Island toll barriers. The Authority also offers a green discount that is available to certain high mileage vehicles that both achieve MPG ratings greater than 45 MPG and meet certain emission standards. Motorcycles, motor homes and "5th wheel" or "gooseneck" vehicles or vehicle combinations are also eligible for discounts. These programs are administered through the E-ZPass program and proof of residency or registration for the various plans and vehicle combinations must also be provided.

For commercial vehicles, there are currently two types of discount program offered. The S-Discount is for non-tandem commercial vehicles less than or equal to 48 feet in length and requires a Thruway E-ZPass issued transponder. The second discount program is a commercial volume discount that offers progressively higher discounts based on the monthly toll charges on an account basis. The discount caps at 20 percent for all tolls in excess of \$3,000 in each month.

**b) Comparison of Thruway Toll Rates to Other Regional Toll Facilities**

Figure 7 and Figure 8 compare the cash toll rates and discounted electronic toll rates of several toll roads in the Northeast. Of note is the comparatively low per-mile passenger car toll rate of the Thruway’s controlled system when compared to other toll facilities, as shown in Figure 7. The published 5-axle truck rate, as seen in Figure 8, is also comparatively low to that of other regional facilities, and is effectively lower than the rate shown due to the commercial volume discount program.

**Figure 7: Peak Toll Rates Per-mile on Toll Roads in the Northeast, Passenger Cars**



**Figure 8: Peak Toll Rates Per-mile on Toll Roads in the Northeast, 5-Axle Trucks**

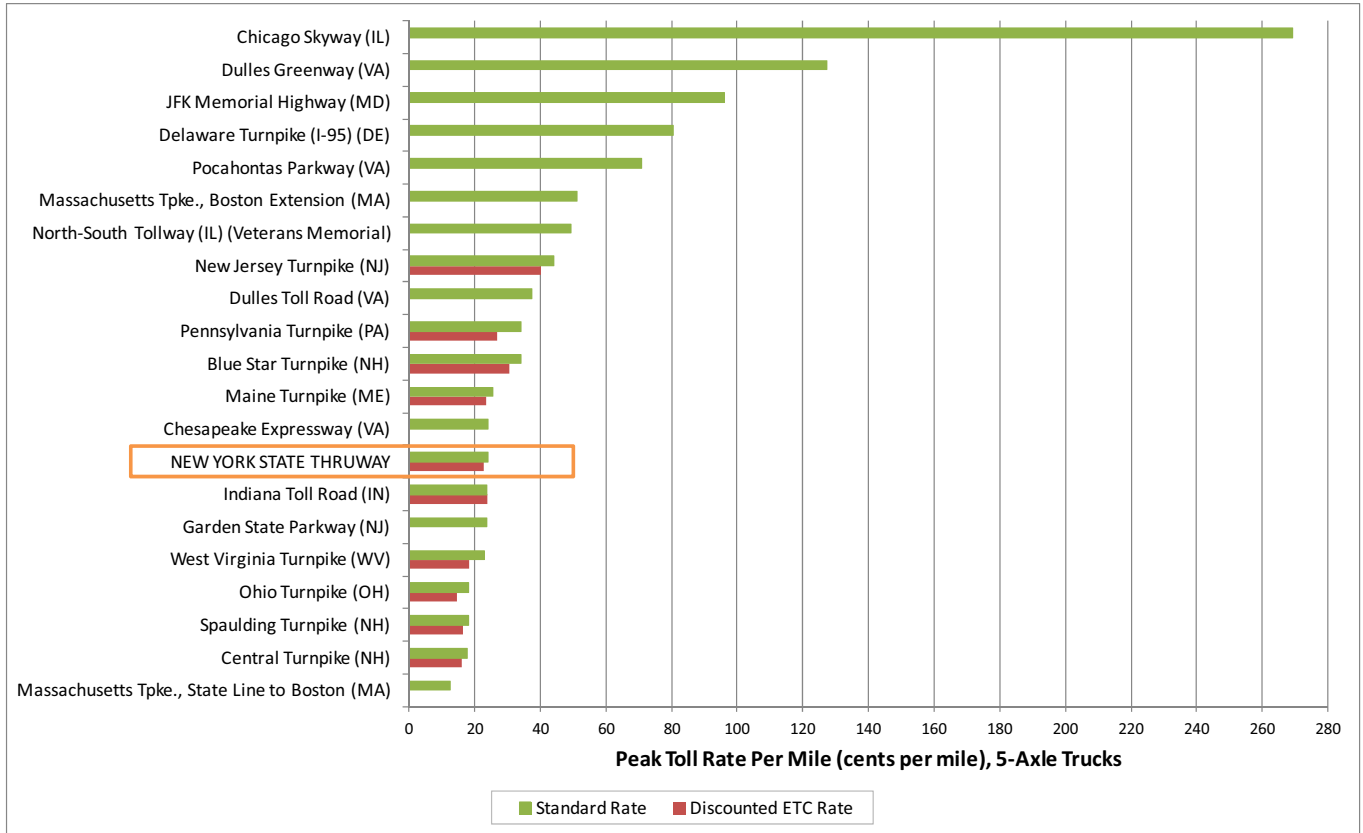
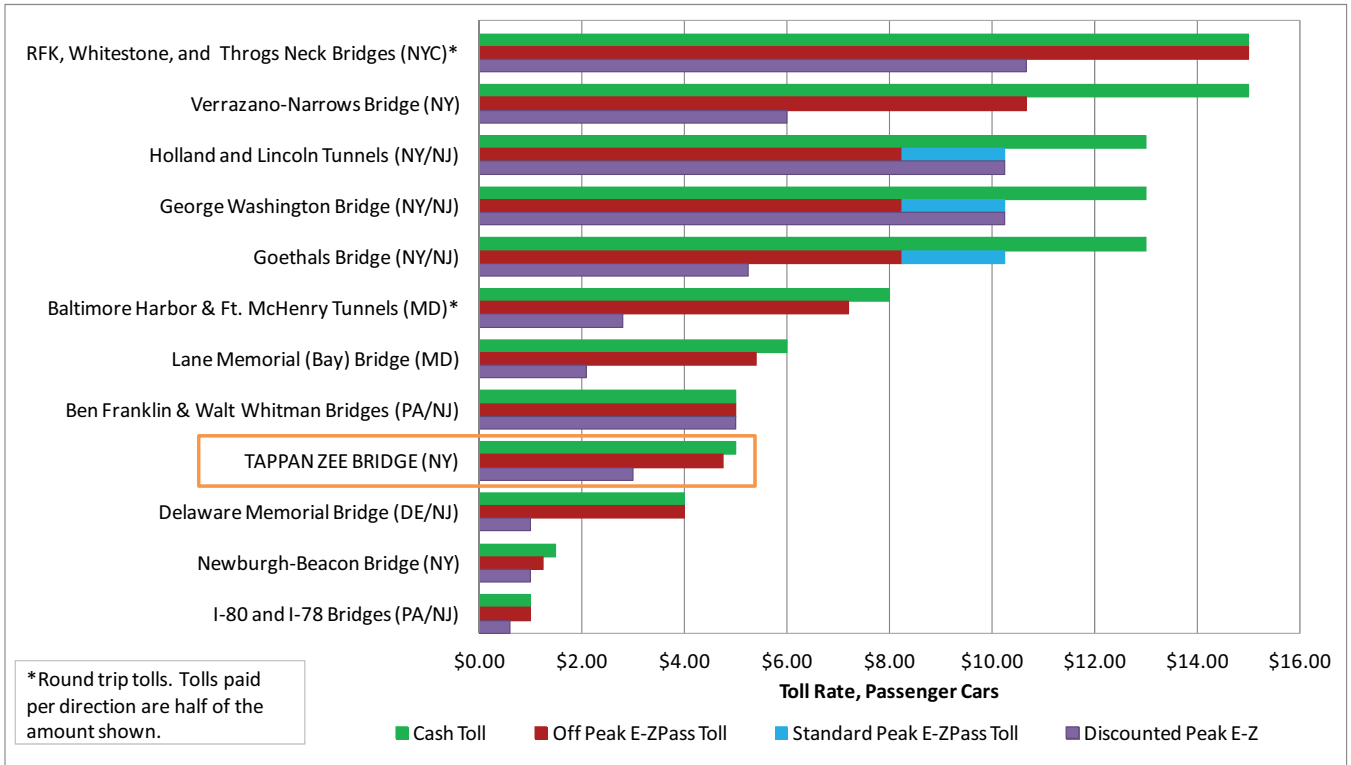
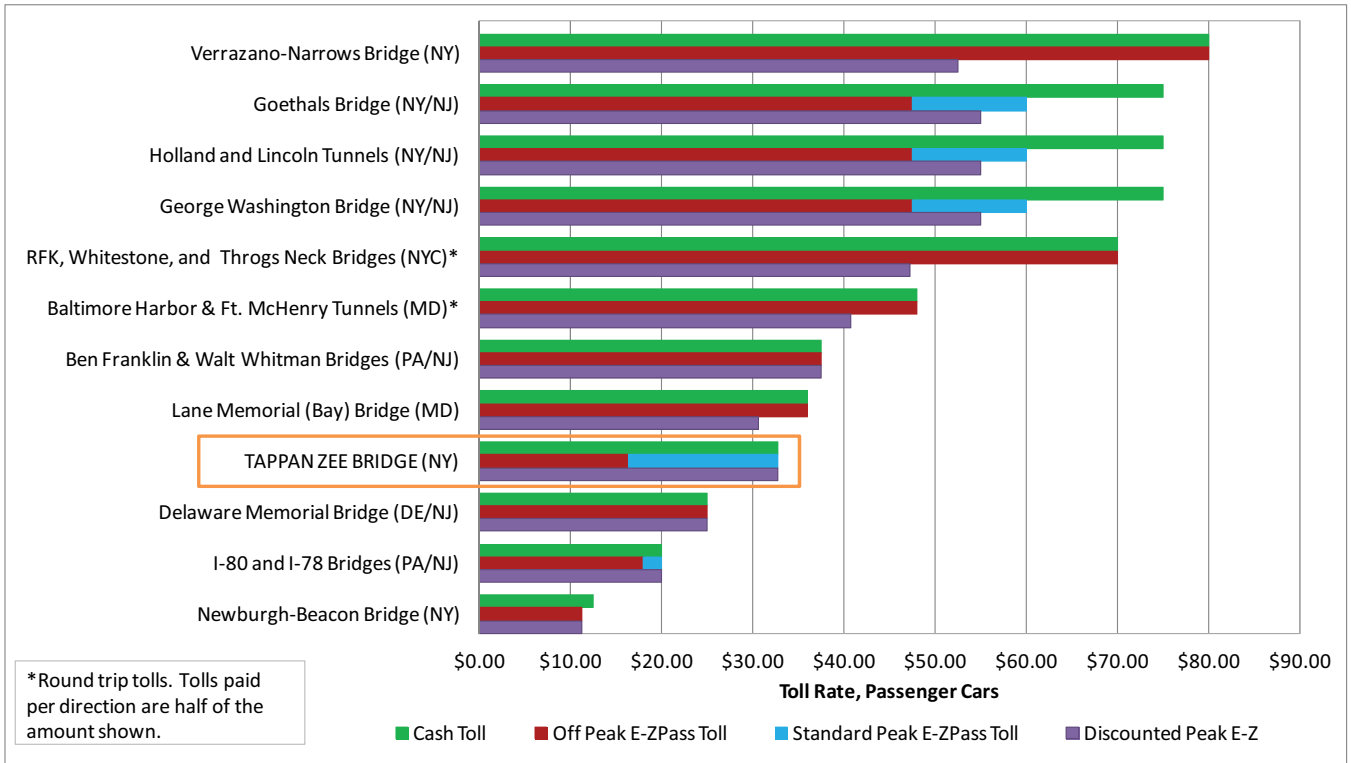


Figure 9 and Figure 10 compare cash toll rates and discounted electronic toll rates of several toll crossings in the Northeast. Of note is the Tappan Zee Bridge tolls are below that of the other Metro-New York crossings and comparable to other major crossings on the interstate highway system, as shown in Figure 9. Similar to the controlled system, the peak 5-axle truck rate is also comparable to that of other regional facilities. A majority of the commercial vehicles travel in off-peak periods and pay using E-ZPass which is one-half of the peak period and cash rate. In addition to the lower off-peak rates, many vehicles further reduce the average toll rate paid through participation in the volume discount program. These reductions in the effective rate make the Tappan Zee Bridge commercial toll rate significantly below that of other metro New York tolled crossings.

**Figure 9: Round Trip Peak Toll Rates on Major Toll Crossings in the Northeast, Passenger Cars**



**Figure 10: Round Trip Peak Toll Rates on Major Toll Crossings in the Northeast, 5-Axle Trucks**



#### 4. Gross Toll Revenues

With the exception of a small amount of Federal aid and other funds, tolls collected on the controlled system and through toll barriers support an overwhelming majority of the Authority's budget. As a result, the Authority closely monitors traffic volumes and toll revenues for the various Thruway sections.

In 2005, a two-stage toll adjustment was implemented by the Authority that generally increased toll rates by 25 percent for all passenger vehicles and 35 percent for all commercial vehicles, and increased cash tolls in 2008 for both passenger and commercial vehicles by 10 percent. Additionally, in 2005 the Authority also implemented a new vehicle classification system (reducing the number of classifications from 43 to 9), created a new *E-ZPass* discount program, continued a graduated volume discount program for commercial customers and expanded the availability of commuter plans to bridges and barriers on the Thruway System.

In response to the financial pressures brought on by high and volatile fuel prices and the state of the national economy, the Authority implemented another series of staged, smaller adjustments to toll rates in 2008. This adjustment was only designed to provide additional funding to assist the Authority in financing operational, maintenance and capital commitments made in the 2005-2011 Capital Program period. The 2008 toll adjustment maintained a 5 percent *E-ZPass* discount for all patrons, but added two five-percent across-the-board increases, which took effect in 2009 and 2010. Table 10 summarizes toll revenues from 2005 through 2012. Additional details on traffic and revenue by facility, vehicle type and payment type can be found in the Appendix.

**Table 10: The Thruway System's Actual Toll Revenues (\$M), 2005 – 2012**

Year	Passenger			Commercial				Total	Growth
	Control System	TZB	Other Barriers	Control System	TZB	Other Barriers	Volume Discount		
2005 <sup>(1)</sup>	\$173.2	\$73.8	\$64.0	\$169.9	\$20.4	\$29.7	-\$19.9	\$511.2	-
2006 <sup>(2)</sup>	183.7	82.0	68.0	188.0	21.9	31.9	-21.1	554.4	8.4%
2007	183.4	82.1	59.2	187.0	21.5	28.2	-21.1	540.3	-2.5%
2008 <sup>(1)</sup>	193.8	85.4	67.9	187.0	21.2	29.1	-21.7	562.7	4.1%
2009 <sup>(1)</sup>	215.0	103.5	82.4	180.7	21.3	30.0	-21.2	611.6	8.7%
2010 <sup>(1)</sup>	226.6	104.7	81.8	194.9	24.6	31.4	-22.8	641.2	4.8%
2011	220.2	102.4	81.3	196.3	24.1	32.4	-22.7	634.1	-1.1%
2012	220.7	103.4	81.2	196.9	26.2	32.1	-22.8	637.7	0.6%

Note: Totals may not add due to rounding.

(1) Toll Adjustments were implemented in 2005, 2008, 2009, and 2010.

(2) Tolling discontinued at Black Rock and Buffalo City Line barriers on Oct 30, 2006.

#### 5. Total Revenues

In addition to toll revenues, the Authority collects a variety of non-toll revenues derived from payments received from concessionaires at the Thruway service areas restaurant and gasoline stations, sales of surplus property, revenues from special hauling permits, *E-ZPass* fees, fiber optic agreements, interest on

various invested funds, and other miscellaneous sources. These revenues have varied considerably over the last fifteen years. Historical gross revenues between 2005 and 2012 are outlined in Table 11.

**Table 11: Summary of 2005 – 2012 Actual Total Thruway System Gross Revenues (Millions)**

Year	Toll Revenues	Other Revenues	Total Revenues
2005 <sup>(1)</sup>	\$511.2	\$36.4	\$547.6
2006	554.4	39.6	594.0
2007	540.3	41.4	581.7
2008 <sup>(1)</sup>	562.7	33.5	596.2
2009 <sup>(1)</sup>	611.6	26.7	638.3
2010 <sup>(1)</sup>	641.2	31.3	672.5
2011	634.1	31.4	665.5
2012	637.7	31.5	669.2

*(1) Toll Adjustments were implemented in 2005, 2008, 2009, and 2010.*

## **E. Historical Flow of Funds**

Table 12 presents total revenue and expenses for 2005 through 2012 in a format that is consistent with the flow of funds required by the Authority’s General Revenue Bond Resolution. As noted in this table, from 2005 through 2012 the Authority was able to maintain fiscal stability and a debt service coverage ratio that warranted its current favorable investment grade credit rating. This was accomplished primarily by the aforementioned operational cost containment efforts, capital program modifications, and implemented toll rate adjustments.

**Table 12: Revenues, Operating Expenses and Reserve Fund Requirements, 2005 – 2012 (in millions)**

	Actual 2005	Actual 2006	Actual 2007	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Total 2005-2012
Total Revenues	\$ 547.6	\$ 594.0	\$ 581.6	\$ 596.2	\$ 638.3	\$ 672.5	\$ 665.5	\$ 669.2	\$ 4,965.0
Less:									
Operating Expenses	305.3	310.7	332.2	334.8	339.3	358.2	365.5	357.0	2,703.1
Operating Reserves	<u>2.0</u>	<u>13.0</u>	<u>6.8</u>	<u>2.5</u>	<u>7.3</u>	<u>6.0</u>	<u>4.6</u>	<u>2.0</u>	<u>44.1</u>
Total	307.3	323.7	339.0	337.3	346.7	364.2	370.0	359.0	2,747.2
Net Revenues	240.3	270.3	242.6	258.9	291.7	308.3	295.5	310.2	2,217.8
Less: Debt Service	<u>103.8</u>	<u>127.4</u>	<u>135.8</u>	<u>163.5</u>	<u>166.3</u>	<u>167.3</u>	<u>167.4</u>	<u>198.5</u>	<u>1,230.0</u>
Net Revenues After Debt Service	136.5	142.9	106.8	95.4	125.4	141.0	128.1	111.7	987.8
Less: Retained for Operating Reserves	5.2	-5.0	-5.0	5.1	(6.8)	(18.8)	(4.3)	(5.5)	(35.2)
Net Revenues	141.7	137.9	101.8	100.5	118.5	122.1	123.8	106.2	952.6
Less:									
RMF Provisions (2)	60.9	69.8	20.7	30.7	34.5	31.0	10.0	36.2	293.8
FCIF Provisions								8.0	8.0
Other Authority Projects (3)	50.7	54.3	53.7	45.2	48.7	46.0	51.3	51.9	401.8
General Reserve Fund	24.9	12.8	26.8	24.4	25.1	21.2	48.2	8.1	191.6
General Reserve Fund - CP1, CP 2 & BAN's	4.6		-	-	10.6	23.8	14.4	2.0	55.4
Balance After Reserve Maintenance Provisions, Other Authority Projects and General Reserve Fund	0.6	1.0	0.6	0.0	-0.3	0.0	-0.1	-0.1	1.8
Adjustments for Cash Basis	(0.6)	(1.0)	(0.6)	-	0.2	(0.1)	0.1	0.1	(1.8)
Net Balance Available for Working Capital	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Debt Service Coverage Ratios	2.31x	2.12x	1.79x	1.58x	1.75x	1.84x	1.77x	1.56x	
Pay-As-You-Go Percentage	58.5%	36.7%	46.5%	15.7%	19.6%	19.0%	17.6%	31.3%	

(1) Totals may not add due to rounding.

(2) Shows the Reserve Maintenance Fund provision will be funded from Debt proceeds when sufficient revenues are not available.

(3) As of 10/31/2007, expenditures for I-84 were funded from NYS Department of Transportation.

#### **IV. Economic Backdrop and Outlook for the Future**

Historically, Thruway traffic trends have been influenced by socioeconomic conditions and correlations have been found between general traffic growth and population growth; passenger car growth and Gross Domestic Product (GDP) growth; and commercial vehicle growth and Industrial Production Index (IPI) growth.



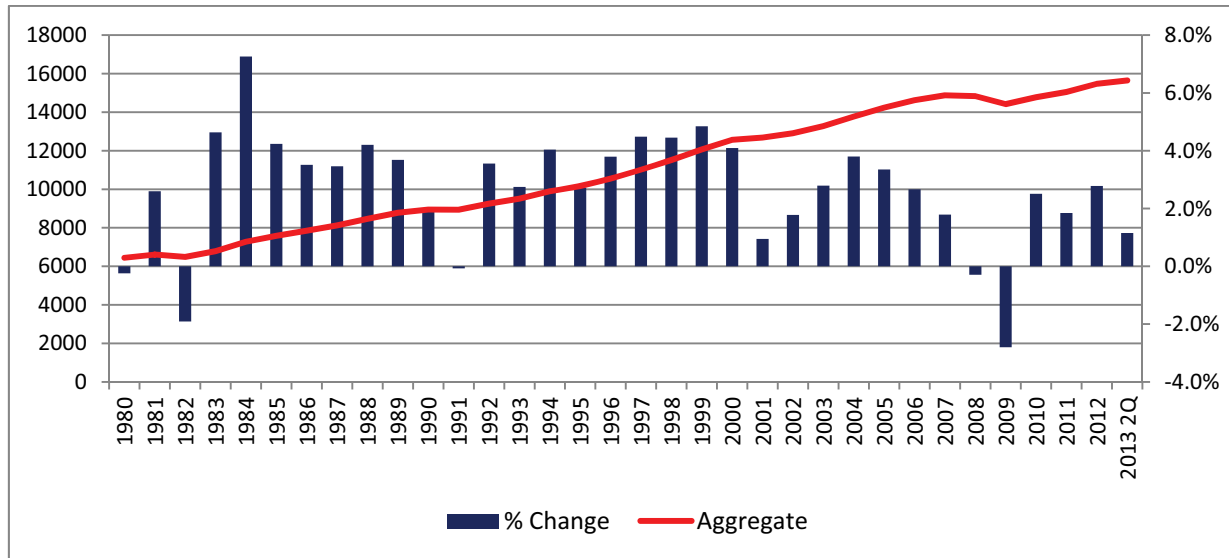
Jacobs typically uses the consensus forecast as an input into its traffic growth forecasts for revenue estimation purposes. The consensus outlook of economists predicts continued flat economic growth with real GDP increasing by 1.6 percent in 2013 and 2.6 percent in 2014. Our forecast also recognizes and takes into account the recent variations in gas pricing and the probability of high prices to the greatest extent possible. However, we believe that a consistent increase in the price of gas will not result in major declines in traffic, as consumers are already modifying their vehicle choice to mitigate these increases.

Any forecast of toll traffic and revenues will, of necessity, recognize the significant variations that can and do occur in the national, regional and local economies and population changes within the Thruway corridors. With this in mind, Jacobs performed a detailed analysis of the historical economic trends seen over the last few decades, particularly as they relate to the recessionary economic influences that occurred and how the Authority's facilities reacted to those trends.

### A. Recent Macroeconomic Trends

From 2000 to 2012, GDP and the IPI in the United States increased by an average of 1.9 percent and 0.6 percent per year, respectively. This time frame included the 2001 recession and the recession that began in late 2007 and ended in June 2009. The 2007-09 Recession, which some economists have termed the “Great Recession”, was far more severe than originally predicted and significantly deeper and longer than previous recessions.

**Figure 11: Annual Percentage Change in Real GDP (2009\$)**



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

As shown in Figure 11, in 2008 real GDP decreased by 0.3 percent and industrial production dropped by 3.3 percent. In 2009, the recession reached its apex, with real GDP decreasing by 2.8 percent and industrial production dropping by 11.9 percent. As the U.S. economy began to recover in 2010-2012, real GDP increased by 2.5 percent, 1.8 percent and 2.8 percent, respectively. During this period, IPI increased by 5.7 percent, 3.4 percent, and 3.6 percent, respectively.

Recessions are technically defined as two consecutive calendar quarters of negative growth. According to the National Bureau of Economic Research, the 2007-09 recession lasted 18 months, making it the longest economic downturn since the Great Depression and likely deeper than the large recessions of the early 1970's and 1980's. Typically, economic downturns that occurred after the Great Depression were triggered by a contraction in monetary supply (typified by higher interest rates) or an external shock (e.g. sudden rise in oil prices, political turmoil, etc.) resulting in decreased consumer confidence, economic growth, and employment. Once expansionary conditions are in place, these historical post-recessionary periods have typically been characterized by rapid, strong and sustained increases in GDP and employment.

In contrast, the most recent recession was caused by the near collapse of the financial sector, the lack of available credit, a rapid decline in the price of real estate assets, and high consumer debt levels. Unlike other recessions in recent history, the subsequent deleveraging by consumers and businesses from these great economic shocks was more severe, having a longer-term impact on the economy than previous economic downturns. Indications of this credit tightening and deleveraging including housing prices tracked by the S&P/Case-Shiller Index decreased by 11 percent in 2008 and dropped by 19 percent in 2009, with a slight recovery beginning in 2012 as shown in Figure 12. Consequently, future economic growth is expected to be relatively sluggish with relatively high unemployment remaining over an extended period.

**Figure 12: S&P/Case-Shiller 10 City Index**



Source: S&P/Case-Shiller Index

## B. Long-Term Structural Trends

The accumulation of the trends of productivity improvements and aging of the general population has had a negative impact on traffic growth across the United States. Similar to other toll facilities, especially in the northeast, the Thruway itself has experienced these impacts.

The recent recession has coincided with a number of long-term structural trends in the United States and internationally that have encumbered economic growth and job creation. First, there have been significant productivity improvements in the form of advances in information technology, computing power,

transportation, and communications which encouraged the transfer of manufacturing facilities and jobs to areas with higher unemployment and lower wages. This shift has altered the engine for economic growth in the U.S., from manufacturing (from 31 percent of GDP in 1970 to 23 percent of GDP in 2010) to services (from 32 percent of GDP in 1970 to 47 percent of GDP in 2010). The technology boom of the 1990s and the subsequent decline in the early 2000s intensified these trends, encouraged the expansion of inexpensive communications technologies, and further flattened wage costs internationally that lead to significant outsourcing of jobs to foreign countries. The accumulation of these trends has had a negative impact on traffic growth in the U.S.

Second, the U.S population is becoming older with the median age increasing from 29.5 in 1960 to 37.2 in 2010. The aging of the population is one of the major factors contributing to slower traffic growth, as older age groups tend to travel less and spend less on transportation. Historical trends and population forecasts indicate that the U.S median age will likely continue to increase in the next 20 years.

Jacobs has taken into consideration these long-term structural changes in nationwide traffic trends in the development of our toll traffic and revenue forecasts for the Thruway.

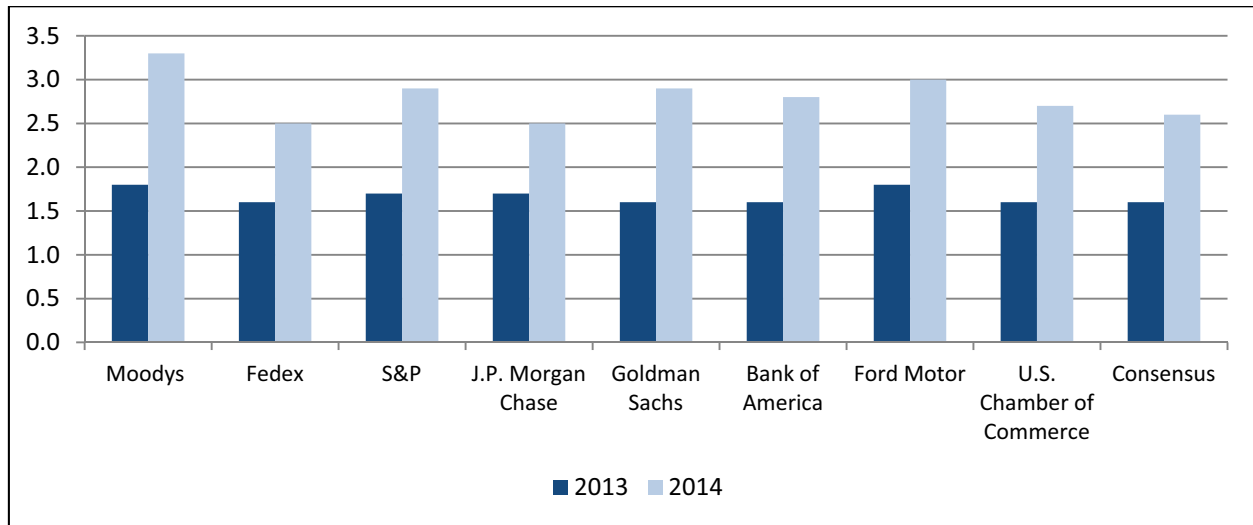
### **C. Short-Term Economic Forecast**

During 2012, there was modest enthusiasm with respect to future economic growth and employment in the United States. Towards the end of the year, this enthusiasm was tempered and recent forecasts are anticipating slightly lower growth rates in real GDP and in the Industrial Production Index.

#### **1. Gross Domestic Product**

The consensus outlook of economists predicts continued flat economic growth with real GDP increasing by 1.6 percent for the current year. This forecast is somewhat lower than the 2.0 percent growth rate predicted in January 2013. It is important to note that the spread of the most recent 2013 forecasts (50+ observations) is relatively small, ranging from 1.5 percent to 1.8 percent. In comparison, the median forecast for real GDP growth in 2014 is 2.6 percent, albeit with a wider range—1.0 percent to 3.5 percent. As a result, there is still quite a bit of uncertainty about the extent of the nation’s recovery in the coming year. As shown in Figure 13, it is anticipated that that a slow recovery will emerge in the medium term in contrast to robust recoveries of previous recessions. This forecast fits with our current base case forecast for Thruway traffic and toll revenues that are contained herein.

**Figure 13: Real GDP Forecasts for 2013 and 2014**

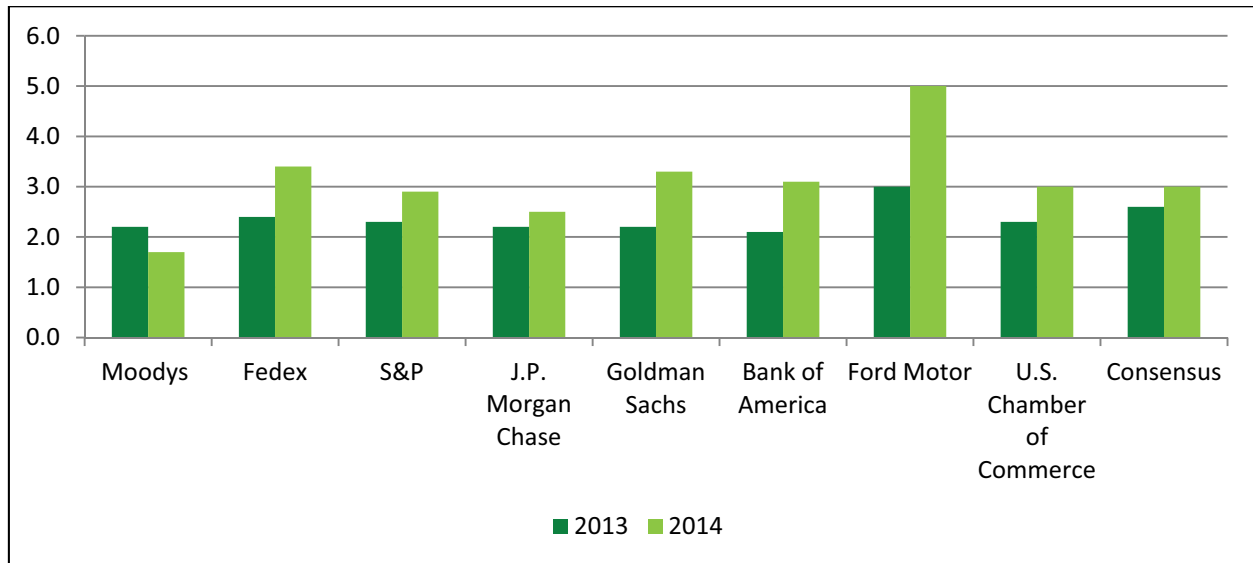


Source: Blue Chip Economic Indicators (BCIE)

## 2. Industrial Production

We expect that the growth in the shipment of goods across the nation's highways will be tempered, resulting in a more modest rate of growth in commercial traffic on the Thruway's facilities than had been experienced in the past. This trend is also seen on other toll facilities in the Northeast and is built into to our traffic and revenue estimates for the Thruway.

**Figure 14: Industrial Production Forecasts for 2013 and 2014**



Source: Blue Chip Economic Indicators (BCIE)

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. Since the previous recession, the IPI has recovered well. However, despite this recovery, the gross value of the IPI for “Final Products and Non-Industrial Supplies” is at 97 percent of its 2007 peak. Based on forecasts developed by financial institutions and industry analysts, the IPI is forecasted to increase by an average of 2.3 percent in 2013 and 3.0 percent in 2014.

### **3. Employment**

The most recent recession has had a more severe impact on employment than previous recessions, and a slow recovery will continue to dampen traffic growth potential on Thruway facilities as well as other toll facilities nationwide. We have built this expectation into our forecast of Thruway traffic and toll revenue.

At the beginning of 2008, the national unemployment rate was 5.0 percent. By October 2009 during the depth of the recent recession, unemployment peaked at approximately 10.0 percent. In addition, during 2008 and 2009, total employment decreased by 2.6 percent and 3.8 percent, respectively. Total employment has started to recover with a 0.8 percent increase in 2010, a 1.6 percent increase in 2011, and a 1.7 percent increase in 2012. From January 2013 to August 2013, total employment increased by 1.1 percent. As of August 2013, the national unemployment rate was 7.3 percent.

Forecasts of employment tend to differ, depending on varying assumptions of the impact of long-term structural trends that have been mentioned herein, such as advances in information technology, outsourcing, and an aging population. The U.S. Congressional Budget Office has forecasted that employment would return to pre-recession levels by 2015. However, other institutions and economic analysts are predicting historically high levels of unemployment in the U.S. through 2015 and beyond.

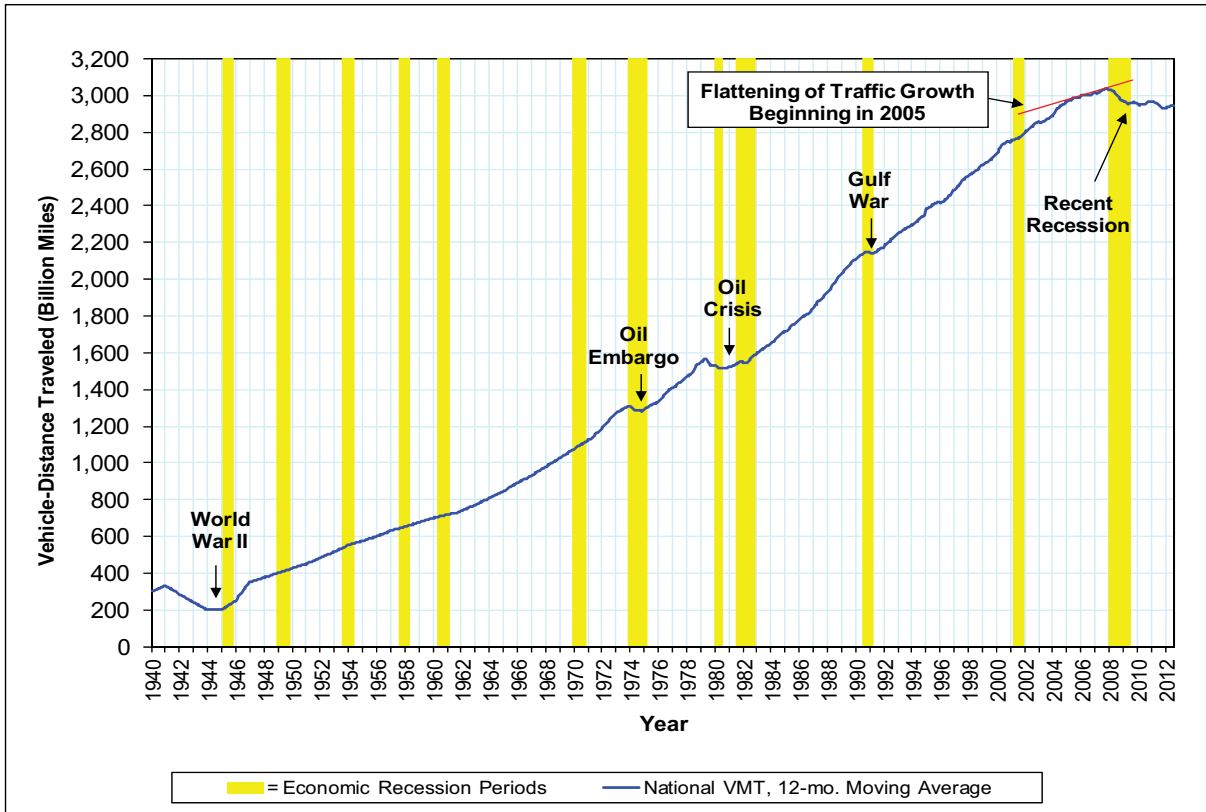
### **4. National Trends in Vehicle Miles Traveled (VMT)**

The United States has experienced a historic flattening and 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 operation, maintenance and capital expenses. Jacobs reviewed and compiled available reports and data to investigate the possible factors contributing to this phenomenon.

Figure 15 depicts the 12-month moving total of national travel mileage on all U.S. highways, from 1940 through 2013. As seen in this figure, there were temporary reductions in VMT during World War II, oil crises and previous 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 the December 2007 peak. While VMT declined throughout 2008, it remained flat in 2009 until the summer months, when there was a slight increase over the previous year, 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 or changes in weather, but generally VMT has been flat.

**Figure 15: US Annual Vehicle Miles Traveled (VMT)**



Source: Federal Highway Administration (FHWA)

## V. 2012-2019 Multi-Year Capital Programs

In order to better understand the Authority’s current and future financial condition, consideration must be given to the size, complexity and capital needs of its highway, bridge and canal infrastructure. The Authority’s Thruway and Canal Systems are vast and aging and require considerable investments to remain reliable. This section summarizes the Authority’s 2012-2019 Multi-Year Capital Programs, the infrastructure investments and program changes that are to be made therein, and the impact that these investments will likely have on facility condition ratings.

### A. Program Details

The Authority’s adopted 2012-2015 Multi-Year Capital Program will complete major, job-sustaining reconstruction projects that were let during the previous 2005-2011 Capital Program and include new highway, bridge and canal construction projects and equipment purchases. The program was originally planned at \$1.8 billion, and excluded the New NY Bridge Project described in the next section of this report.

However, The Authority has deployed a new asset management system that has allowed it to improve project selection and focus investments on high priority, high impact projects. As a result, the program has been reduced by \$300 million, to its current investment level of \$1.5 billion.

New Thruway projects included in the 2012-2015 four-year program include:

- Grand Island Bridge Deck Replacements and Repairs (2012 and 2013 lettings);
- Exit 59 (Dunkirk) to Exit 60 (Westfield) Pavement Resurfacing (2013 letting);
- Exit 17 (Newburgh) to Exit 18 (New Paltz) Pavement Rehabilitation (2013 letting);
- Exit 33 (Verona) to Exit 34 (Canastota) Pavement Resurfacing (2013 letting);
- I-95, Exit 8B (New Rochelle) to Port Chester Pavement Restoration (2014 letting);
- Exit 54 (West Seneca) to Lackawanna Barrier Pavement Resurfacing and Four Bridge Rehabilitations (2015 letting); and
- Near Lackawanna Barrier, Bridge Replacement over NY / CRR / PENN RR (2017 letting).

Since the transfer of the Canal System to the Authority in the 1990s, the Authority has made significant maintenance and capital investments into the waterway's infrastructure. However, given the age of the Canal System, revitalization of infrastructure is necessary to meet the demands of recreational boaters, tour and rental boats and a resurgent commercial shipping sector. While the Authority undertakes an ambitious annual maintenance program, Canal structure conditions continue to deteriorate, with nearly 50 percent of critical Canal structures rated in the fair and poor categories. Complicating efforts to reduce this rate of deterioration, a substantial portion of the Canal's current floating plant equipment consists of a variety of vessels that need to be replaced, and in 2011 Tropical Storms Irene and Lee caused nearly \$90 million in damages to many components of the Canal System. In April 2012, the Authority entered into a \$60 million loan agreement with Citibank, N.A. to finance a portion of these emergency capital repairs and expects Federal Emergency Management Agency to reimburse a substantial portion of the loan.

Due to fiscal restraints, new Canal projects in the 2012-2015 Capital Program are limited and primarily focused on repairing storm damaged facilities with the expectation that nearly 75% of storm-related costs will likely be reimbursed by FEMA. They include the following:

- Canal Dredging, Lock Repairs and Other Contracts (2012 and 2013 lettings);
- Utica Taintor Gate and Dam Rehabilitation (2012 letting)
- Amsterdam Movable Dam Rehabilitation (2013 letting);
- Scotia Moveable Dam Rehabilitation (2015 letting); and
- Oswego Lock Rehabilitation (2016 letting).

It is also important to note that a considerable portion of the 2012-2015 Capital Program (some \$400 million) is dedicated to financing several ongoing and large-scale Thruway reconstruction and rehabilitation improvement projects that were contained in the 2005-2011 Capital Program. Thruway projects currently underway or completed that have a financial impact in 2012 and beyond include:

- Exit 39 (I-690) to Exit 40 (Weedsport) Pavement Reconstruction;
- Exit 23 (I-787) to Exit 24 (Northway) Pavement Reconstruction and Capacity Improvements;
- Exit 57 (Hamburg) to Exit 58 (Silver Creek) Pavement Reconstruction and Bridge Rehabilitations; and
- Phase 2 of the Tappan Zee Bridge Deck Replacement.

As the Authority progresses through the 2012-2015 Capital Program, it will rely on existing and enhanced asset management and capital program management systems to ensure that changes to the program maintain the proper project mix, to maximize investment value, and maintain good condition ratings as the economy and pricing environments change.

The Authority has not adopted a defined Capital program for the period of 2016 through 2019. In preparing our estimate of capital expenditures beyond the current 2012-2015 Multi-Year Capital Program expenditures were estimated at a level that would continue to support the safety, integrity and reliability of the Thruway System.

## **B. The New NY Bridge Project**

The Authority has moved toward undertaking a massive transportation project: the replacement of the Tappan Zee Bridge. This project is one of the Country's most extensive transportation enhancement projects ever envisioned and, in 2011 the Tappan Zee Bridge Project became one of fourteen infrastructure projects that President Obama tapped for expedited Federal environmental review. Pursuant to new statutory authority for the Authority to undertake procurements on a design build contracting basis, in February 2012, four separate private joint ventures made up of large domestic and international firms were short-listed and three of them submitted Design-Build bids to the Authority.

In December 2012, the Authority selected Tappan Zee Constructors (TZC) as the winning team for the New NY Bridge (NNYB) with a bid of \$3.142 billion. The major TZC team members include Fluor, Granite Construction, American Bridge and Traylor Brothers. TZC members both individually and together as team have a proven track record of successfully delivering complex, high profile mega projects. The major design elements for the NNYB consist of:

- Two new bridges with a 100-year design life,
- 3.1 miles long with 45 spans,
- Cable stay main spans with vertical towers,
- Eight general purpose lanes with shoulders, and
- Transit-ready design.



The total estimated Project budget is \$4.0 billion. The Federal Highway Administration has conducted an independent review of the Authority’s cost estimate and verified its reasonableness. Additional information on the New NY Bridge project can be found at: <http://www.newnybridge.com>.

### C. Planned Capital Expenditures

Table 13 shows the total planned expenditures over the period 2012 to 2019 including the costs of the New NY Bridge project. The figures shaded in green make up the adopted 2012-2015 Capital Program.

**Table 13: Projected Total Capital Expenditures (millions)**

Year	Thruway Highway and Bridges Capital Expenditures	Equipment Replacement and Other Facility Capital Needs	Canal Capital Program	Total Capital Program Expenditures	New NY Bridge Capital Costs	Total Capital Costs
2012	\$322.4	\$22.9	\$45.7	\$390.9		\$390.9
2013	189.0	40.6	46.1	275.7	\$562.8	838.5
2014	229.4	76.1	84.5	390.0	1126.1	1516.1
2015	302.7	46.6	53.7	402.9	710.1	1113.0
2016	307.9	40.1	51.2	399.2	683.9	1083.1
2017	334.1	43.4	58.2	435.7	567.7	1003.4
2018	344.1	29.4	31.2	404.7	338.3	743.0
2019	354.4	30.0	32.1	416.5	0.0	416.5
<b>Total 2012-2019</b>	<b>\$2,383.9</b>	<b>\$329.0</b>	<b>\$402.7</b>	<b>\$3,115.6</b>	<b>\$3,988.8</b>	<b>\$7,104.4</b>

*Note: Numbers may not add due to rounding*

### D. The Impact of the Capital Program on Conditions

As previously noted, the main goals of the Authority’s capital and maintenance program is to preserve a high level of patron safety and service, maintain facilities in a state of good repair and ensure the overall reliability of the highway system. One measure of the effectiveness of these maintenance and capital programs is the condition ratings of highway and bridge facilities.

Figure 16 displays the historic average rating of Thruway pavement surface conditions since 1998 and the projected ratings as a result of the current capital program. During the life of the current capital program, it is projected that the pavement ratings for the Thruway facilities will remain in the “good” range, though at a level slightly below that of previous years.

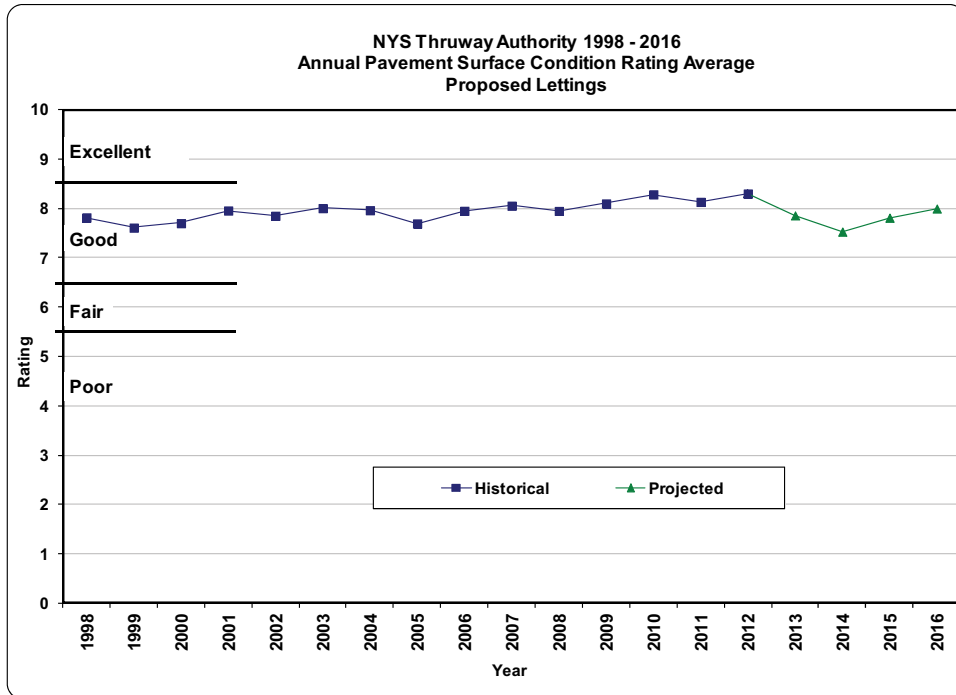
Similarly, the Authority maintains ratings of all of its bridge structures – being responsible for the maintenance and capital expenditures of 809 bridges. Figure 17 shows the bridge condition ratings since 1998. As noted, the current capital program will maintain the average rating of all bridges in the “good” category. However, it is important to note that the average bridge condition rating is closely approaching the “fair” category.

Table 14 presents a summary of bridge and pavement ratings on the Thruway as of December 31, 2012. Slightly over half of the bridges are in poor or fair condition and almost all pavement miles (shown as a two directional total miles) are in good or excellent condition. The Authority strictly complies with all State and Federal bridge inspection requirements and the assessments in this report reflect results of such inspections. It should be noted that the bridge "condition rating" is calculated by a specific formula containing separate components for each of the bridge elements. For a multi span structure, the lowest rated pier, the lowest rated deck, the lowest rated bearing, et cetera, are used to calculate the "condition rating". For example, if a bridge has eight bearings, seven of which are rated “good” and one of which is rated “fair”, the rating of “fair” would be applied as the rating for bearings into the formula for the overall bridge condition.

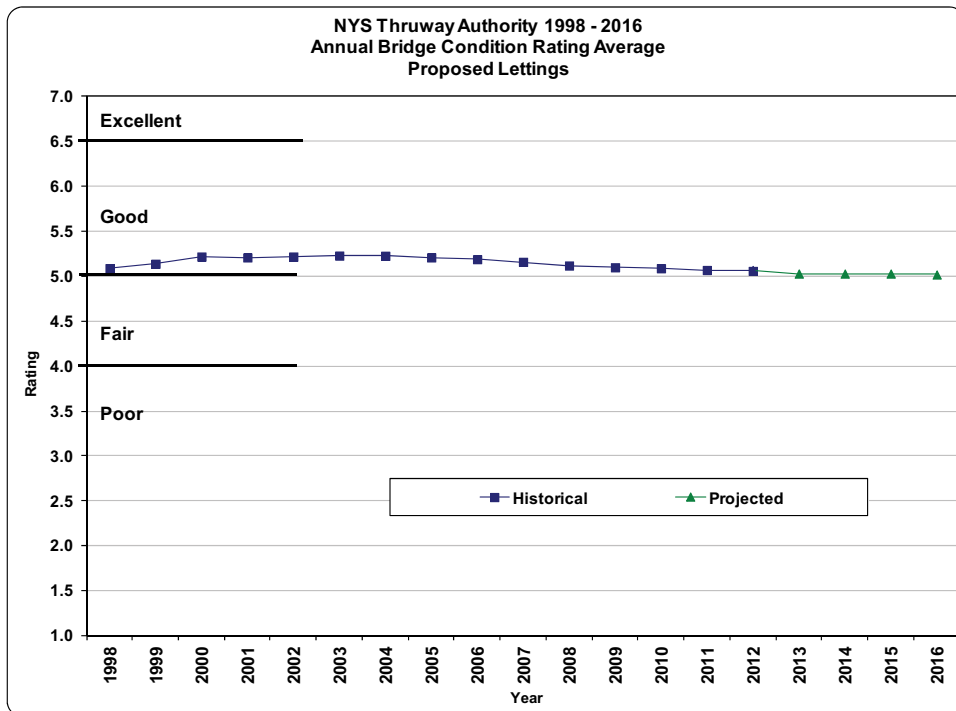
**Table 14: Current Bridge and Pavement Conditions**

Condition	Number of Bridges	Pavement Miles
Excellent	31	505
Good	363	611
Fair	364	2
Poor	51	0
Total	809	1,118

**Figure 16: Thruway Pavement Condition Ratings, 1998 – 2016**



**Figure 17: Thruway Bridge Condition Ratings, 1998 – 2016**



## **VI. Baseline Traffic and Revenue Forecast**

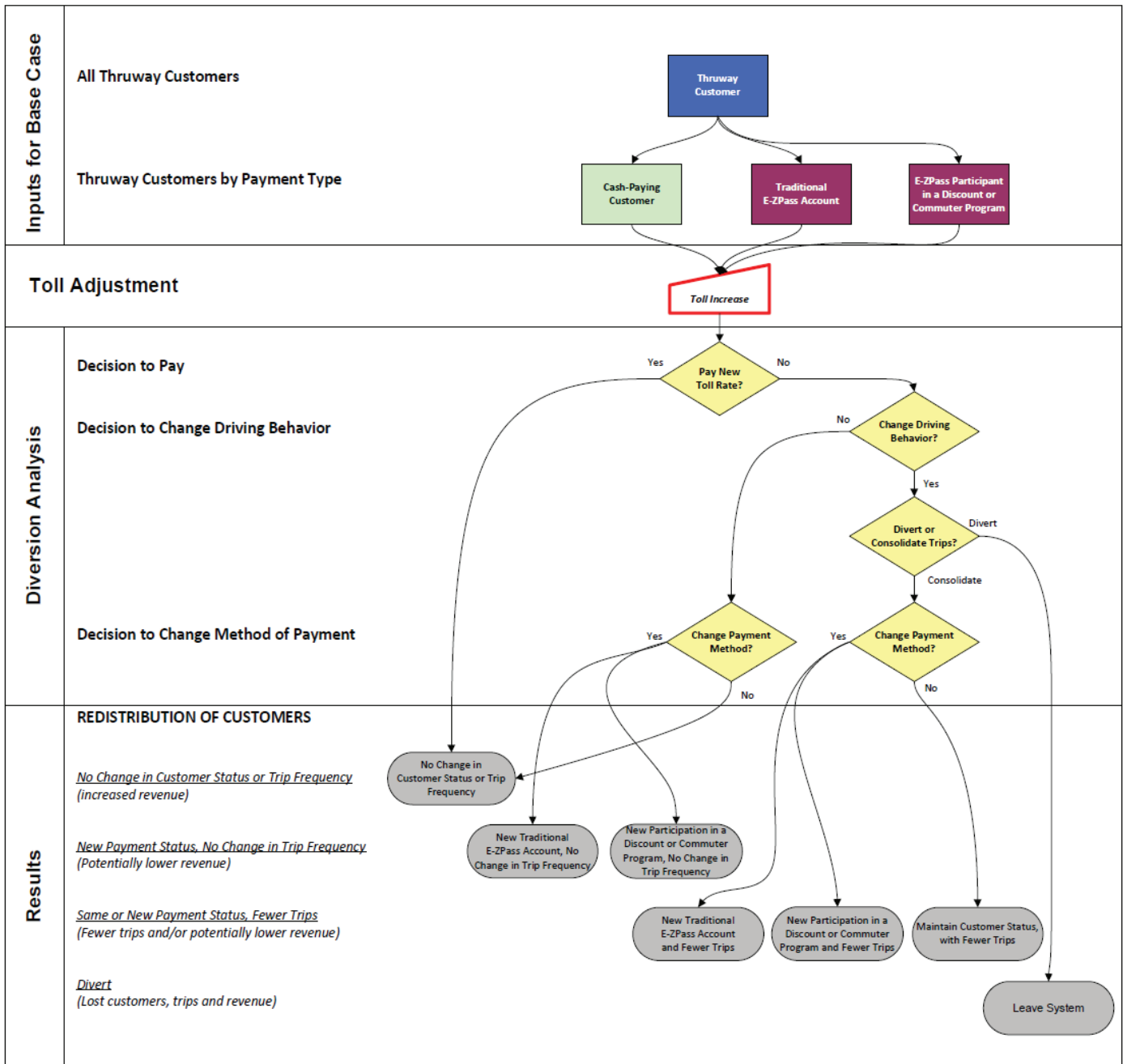
The following sections provide some detail on the processes involved in developing the baseline traffic and toll revenue forecasts for the Thruway presented in this document.

### **A. Overview of Forecasting Methodology**

Toll traffic and revenue forecasts were developed with the aid of a computerized modeling platform created specifically by Jacobs for the Thruway. The base function of this model is to take current traffic volumes by general payment class (car, truck; cash, *E-ZPass*, and commuter) for each Thruway facility (see Appendix) and adjust them for various factors such as underlying socioeconomic/demographic growth in the project corridor, both historic and current. These result in forecasted traffic volumes developed for each year of the forecast period. Toll revenues are then calculated based on these new adjusted traffic volumes by applying average toll rates to each payment class volume.

To develop traffic forecasts for a given toll increase scenario, customer reaction curves are applied to the base traffic forecast (after applying underlying growth rates), to estimate the resulting amount of diverted traffic. Figure 18 presents a diagram detailing the general inputs that go into the toll rate analysis portion of the model, the driver decisions that are approximated by the analysis, and the resulting categories of drivers. Specifically, the toll increase modeling process executes the diversion analysis by approximating driver decisions based on the assumed conditions for each payment and vehicle type. For instance, a cash-paying passenger car traveling occasionally may react differently to a toll increase than would a commuter who participates in the *E-ZPass* program, or a five-axle commercial vehicle that travels the facility as part of its usual cargo route may behave different than an infrequent commercial user.

Figure 18: Driver Decision Path



### 1. Developing the Base Case

Inputs to our base case analysis include the historical traffic distribution of customers under the current toll structure. To develop base toll traffic projections for the Thruway for the period 2013-2019, historical traffic data through August 2013 were analyzed and trends in growth were considered for different toll payment classes on the different geographic regions of the Thruway System. Relevant socioeconomic data were collected, including economic factor consensus forecasts and trends, and used as an aid in our assessment of future Thruway traffic and toll trends and for our determination of when we may see the

Thruway fully recover from the recent economic recession. We estimated separate traffic growth rates for cars and trucks on each facility, as historical trends have pointed to correlations with different economic factors between the two. As noted earlier, passenger car growth has been shown on many facilities to correlate reasonably well with the growth of Gross Domestic Product (GDP), whereas trucks have been shown to correlate reasonably well with the corresponding growth in the Industrial Production Index (IPI).

## **2. Factors to Consider in a Diversion Analysis**

There are a number of factors that affect how large of an impact a toll increase will have on traffic diversion, including:

- **Customer Frequency of Travel:** The frequency with which customers are traveling on the Thruway's facilities and paying tolls are critical to developing customer reaction curves. The sensitivity of a customer to a toll increase, large or small, is likely to depend on how often they use the facility, and how often they will have to pay the larger toll. In general, a vacationer who travels on the Thruway once per year is less likely to feel the impact of a toll increase than a commuter who drives the Thruway and pays the toll on a daily basis. General (high, medium, low) frequency assumptions by class and facility were developed based on the findings of prior Thruway system studies.
- **Customer Reaction to Toll Adjustments:** In the face of a toll increase, some customers opt to change their travel behavior. Jacobs developed customer reaction curves based on travel frequency, payment type, and experience from previous toll increases on the Thruway (and on similar projects elsewhere) to estimate the number of customers that might react and modify their travel behavior if a toll increase occurs. These curves are used to estimate the number of customers reacting to a given toll increase, based on the relative adjustment of the toll increase.
- **Inflation:** The development of customer reaction curves for each payment class and facility is also contingent upon inflation of the dollar versus the proposed toll increase. In the process of developing these curves, Jacobs made every effort to account for inflation and multiple toll increases by considering the cumulative effective toll increase in comparison to today's toll rates and today's weight of the dollar.

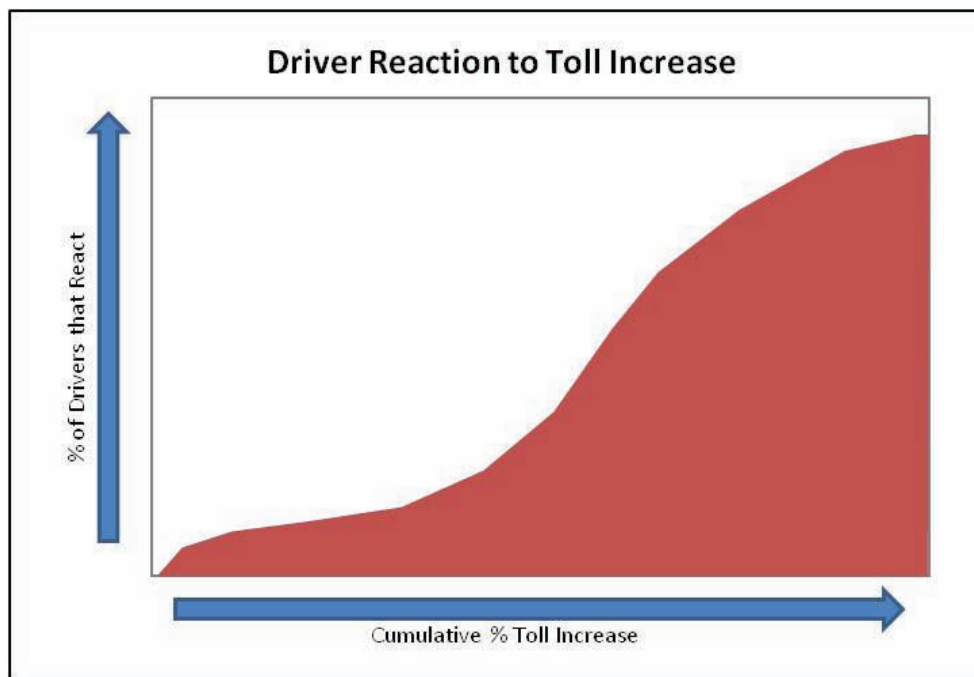
## **3. Our Diversion Analysis**

The toll traffic and revenue model we developed for the Thruway evaluates the impact of the assumed toll schedule on traffic volumes, and estimates the resulting traffic and revenue. Generally, increases in toll rates will cause traffic volumes on toll facilities to decrease. Some customers may not change their behavior at all, while others might decide to use a different route, combine trips, or choose not to make a trip. Still other customers might decide to change how they pay for a trip (e.g., current cash-paying customers may open *E-ZPass* accounts) to lessen the impact on their wallet. This switch to a lower-priced payment method has been observed at the Thruway and many other national toll facilities that also offer multiple payment methods and discount plans, often resulting in an overall lower diversion of traffic from

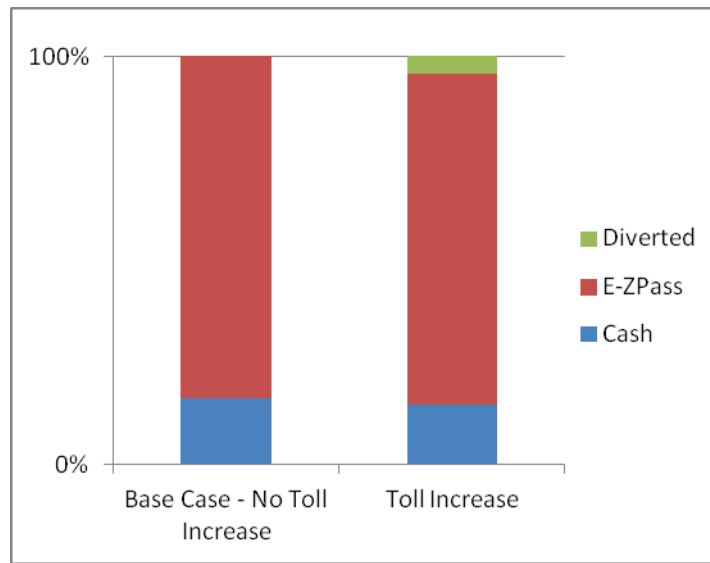
the facility than what was experienced in the past when tolls were increased and there was only cash payment.

Jacobs developed toll reaction curves to estimate the total number of trips that would be impacted by a given toll increase on the Thruway, and to determine what number of trips would remain on the toll facility and pay the new toll rate, how many would divert off of the toll facility, and how many would switch toll payment methods. Figure 19 shows a representative illustration of how customers might react to toll increases of varying degrees. Figure 20 shows a sample of how system-wide traffic may shift due to toll increase, either off the system or to another payment type.

**Figure 19: Representative Driver Reaction to Toll Increase**



**Figure 20: Sample Payment Type Distribution of Traffic, both with No Toll Increase and With Toll Increase**



Viable alternate routes for some of the Thruways facilities either do not exist today or are very limited. Previous studies have identified the major travel corridors for Thruway commercial traffic. It is important to keep in mind that all diversions are not necessarily negative to the Authority. For example, if a trip to New England via the Tappan Zee Bridge diverts to the George Washington Bridge, the driver would still need to pay a toll to the Authority either at Yonkers or New Rochelle to complete their trip.

Other factors were considered in our analysis of diversions of traffic from the facility. We assumed that tolls would also continue to increase at the other competing Hudson River crossings. Annual toll increases on the Port Authority Hudson River crossings have already been approved for 2013 through 2015 and are already in place for the George Washington Bridge. Considering the Bear Mountain and Newburgh Beacon Bridges to the north, there has been a differential in tolls between those facilities and the Tappan Zee Bridge for many years. When considered as a whole, many of the motorists have already chosen not to use the Tappan Zee Bridge, so the potential of large percentages of traffic diverting from the Tappan Zee Bridge are mitigated by those that are remaining. For many of its current customers, the Tappan Zee Bridge is the shortest route, and traveling on one of the alternate routes would significantly lengthen their travel time.

#### **4. Model Summary**

The process of estimating traffic and revenue for a toll scenario builds upon a variety of factors, primarily consisting of existing traffic characteristics, toll assumptions, and driver sensitivity to toll changes. In summary, customers react to toll adjustment increases in various ways:

- Some stay on the toll facility and pay the new higher toll rate,
- Some choose to change their method of payment for one that has a lower toll rate, and
- Some choose to leave the facility, either temporarily or permanently.



Because specific future toll schedules have not been identified, Jacobs prepared a seven-year toll revenue forecasting tool model extension specifically to estimate the total future toll increase required to meet a specific revenue need. The tool is an extension of our core Thruway forecasting model and was used in estimating the traffic impact of meeting the Authority's revenue requirements.

Our forecasting tool has two components: one for the Tappan Zee Bridge and a second for the remaining system. As noted above, we have developed corresponding traffic diversion "curves" based upon our core model, past experience with Thruway toll modifications, our knowledge of Thruway traffic characteristics, the lack of significant alternate routes (specifically for the Tappan Zee Bridge), and other toll facilities. Output from this tool can be used to estimate gross toll revenue increase that corresponds to a specific toll rate increase. For example, the tool estimates that a 42 percent increase in gross toll revenues will result from a 50 percent increase in the average toll rate on the Tappan Zee Bridge.

Historically, the Authority has implemented toll increases unique to specific facilities, vehicle classes and payment classes that resulted in movements among payment classes and/or reductions in traffic at particular facilities or for certain vehicle classes. It is anticipated that future toll increases on the Thruway facilities will continue in this manner, providing the possibility of a different outcome with respect to traffic than what might be suggested in the financial planning exercise.

The Authority Board at the time of each modification will likely define a specific toll increase rate schedule detailed to the facility, vehicle class, and payment levels. For each of those future modifications a more refined estimate of the impact the specific increase will be required to define the specific schedule of tolls. Any future toll modifications will also be required to comply with Section 2804 of the Public Authorities Law and covenants set forth in Section 609(1)(b) of the General Revenue Bond Resolution and comparable Sections of the Junior Indebtedness Resolution.

Upon the introduction of the specific toll adjustments to meet the Authority's revenue needs, a formal impact analysis will be undertaken that will provide specific impacts to traffic and revenues.

## **5. Example of a Similar, Successful Toll Revenue Forecasting Tool**

Previous applications of Jacobs' toll revenue forecasting tool have produced successful results. For example, Jacobs had developed a very similar toll revenue forecasting tool for the Maryland Transportation Authority ("MdTA") for its Bond Sales in November 2009 and July 2010, in order to meet its revenue needs. The toll elasticities in the forecasting tool are developed specific to the facility being analyzed.

Table 15 compares the results of Jacobs' MdTA revenue forecasting tool to actual traffic and toll revenues. While the original revenue need identified for the 2009 Bond Sale required an increase in tolls of 48 percent over the FY 2011 to FY 2013 timeframe, the actual toll rate increases implemented were 20.6 percent in FY 2012 and 12.9 percent in FY 2013, for a total increase of 36.1 percent over two years. The actual toll increases varied because toll revenues were higher than forecast and the capital plan was changed. When the actual toll increases were applied in the Jacobs forecasting tool, results showed a loss of 3.9 percent of traffic and a gain in toll revenue of 30.9 percent over the two-year period. This compares to an actual loss

of 3.1 percent of traffic and a 32.0 percent increase in toll revenue. The modeling tool provided successful, conservative results, as actual traffic and revenue exceeded the forecast by 0.8 percent.

**Table 15: Results of MdTA Forecasting Tool vs. Actual Traffic and Toll Revenue**

Fiscal Year	Normalized Traffic and Toll Revenue (Indexed to 2011 Traffic and Revenue = 100)											
	Toll Increase Forecast						Actual Results					
	Traffic		Toll Revenue		Average Toll		Traffic		Toll Revenue		Average Toll	
	Volume	Growth	Amount	Growth	Amount	Growth	Volume	Growth	Amount	Growth	Amount	Growth
2011	100.0		\$100.0		1.00		100.0		\$100.0		1.00	
2012	97.0	-3.0%	\$117.0	17.0%	1.21	20.6%	99.1	-0.9%	\$119.6	19.6%	1.21	20.6%
2013	96.1	-0.9%	\$130.9	11.9%	1.36	12.9%	96.9	-2.2%	\$132.0	10.4%	1.36	12.9%
2011 to 2013		<b>-3.9%</b>		<b>30.9%</b>		<b>36.1%</b>		<b>-3.1%</b>		<b>32.0%</b>		<b>36.1%</b>

## B. Current Base Case Traffic and Toll Revenue Forecasts

Table 16 and Table 17 present base gross toll revenues and traffic forecasts for 2013 through 2019 that consider the economic information and expectations summarized above. Note that for 2013, traffic has been showing signs of growth in recent months, particularly at the Tappan Zee Bridge, and estimates take into account the effects of Hurricane Sandy on 2012 traffic. In summary, our baseline traffic and forecast is consistent with prior forecasts in that we continue to anticipate a longer period of moderate growth as the economy improves.

Note that construction on the New NY Bridge was considered in the forecasts. Construction began earlier this year, with the first new span anticipated to open in 2016 and the second in 2018. As the same number of lanes will be in operation during each phase of construction as are open today, no measurable reduction of traffic or revenue is anticipated due to construction. Furthermore, it is our understanding that any revenue loss resulting from contractor action will be covered by the contractor.

As seen in the two tables, revenue growth slightly exceeds traffic growth over the seven-year period. This is because growth in commercial traffic, which pays higher tolls, is expected to exceed passenger car traffic growth.

**Table 16: Base Gross Toll Revenue Forecasts, in millions of dollars**

Year	Passenger			Commercial				Total	Growth
	Control System	TZB / New NY Bridge	Other Barriers	Control System	TZB / New NY Bridge	Other Barriers	Volume Discount		
<b>2012</b> <sup>(1)</sup>	\$220.7	\$103.4	\$81.2	\$196.9	\$26.2	\$32.1	-\$22.8	\$637.7	
<b>2013</b>	221.2	104.2	80.7	197.7	28.0	32.7	-23.5	641.1	0.5%
<b>2014</b>	223.5	105.4	81.1	200.3	28.2	33.1	-24.0	647.5	1.0%
<b>2015</b>	226.8	107.2	82.0	203.3	28.5	33.7	-24.6	657.0	1.5%
<b>2016</b>	230.3	109.0	83.0	206.1	28.9	34.3	-25.0	666.6	1.5%
<b>2017</b>	233.9	110.8	84.0	208.8	29.4	35.0	-25.4	676.4	1.5%
<b>2018</b>	237.3	112.6	84.9	211.3	29.9	35.6	-25.7	685.8	1.4%
<b>2019</b>	240.5	114.3	85.8	213.8	30.4	36.2	-26.1	694.7	1.3%

Note: Totals may not add due to rounding.

(1) Actual

**Table 17: Base Toll Traffic Forecasts, in millions**

Year	Passenger			Commercial			Total	Growth
	Control System	TZB / New NY Bridge	Other Barriers	Control System	TZB / New NY Bridge	Other Barriers		
<b>2012</b> <sup>(1)</sup>	127.3	22.9	71.1	15.9	1.5	7.9	246.5	
<b>2013</b>	127.6	23.1	70.8	15.9	1.6	8.1	247.1	0.2%
<b>2014</b>	128.8	23.3	71.2	16.1	1.7	8.2	249.3	0.9%
<b>2015</b>	130.6	23.7	72.1	16.4	1.7	8.4	252.9	1.4%
<b>2016</b> <sup>(2)</sup>	132.6	24.0	73.1	16.6	1.7	8.6	256.6	1.4%
<b>2017</b>	134.6	24.4	74.0	16.8	1.8	8.7	260.3	1.4%
<b>2018</b>	136.5	24.7	74.9	17.0	1.8	8.9	263.8	1.4%
<b>2019</b>	138.3	25.0	75.8	17.2	1.8	9.0	267.2	1.3%

Note: Totals may not add due to rounding. Non-revenue traffic not included.

(1) Actual

(2) Traffic returns to pre-recession levels

## VII. Forecast of Operating and Maintenance Costs

Table 18 shows the Authority’s projected operating and maintenance expenses on the existing Thruway System. These numbers include the impact of the Authority’s operational streamlining program and the 2013 statutory relief of certain expenses, including the transfer of the cost of State Police operations on the Thruway to the State. As noted earlier, over the last six years the Authority has been able to limit core operating expense growth through several streamlining initiatives. The success of these programs has been demonstrated as they continue to show reductions in operational expense figures and below budget results.

**Table 18: Thruway Operating and Maintenance Expense Projections, in millions of dollars**

Year	Thruway Operating and Maintenance Expenses	Growth
2012 <sup>(1)</sup>	\$359.0	
2013	286.3	-20.2%
2014	285.5	-0.3%
2015	295.0	3.3%
2016	303.8	3.0%
2017	312.8	3.0%
2018	325.6	4.1%
2019	337.2	3.5%

*(1) Actual*

## VIII. Traffic and Revenues Needed to Maintain System-wide Debt Service Coverage Targets, No Deficits

### A. Meeting the Authority’s Revenue Needs

The Authority and its independent financial advisors have determined that there will be additional revenues needed for the Authority to successfully complete the New NY Bridge project and fulfill its system-wide operating, debt service, and capital needs through the forecast period. Future funding needs were established by the Authority at amounts necessary to continue high levels of safety and service, maintain good infrastructure conditions, support Thruway and Canal operations, and maintain debt service coverage levels appropriate for its current “A” credit rating.

In determining these needs, it is important to note that the Authority established a minimum debt service coverage ratio requirement for the Senior Lien of 1.55 for 2014 and 2015 and 1.60 times for each year thereafter. Additionally, the Authority has set a minimum debt service coverage ratio for combined senior and junior obligations of 1.35. Table 20 presents the flow of funds and the debt service coverage ratios.

Historically, the Authority has implemented toll increases unique to specific facilities, vehicle classes and payment classes that resulted in movements among payment classes and/or reductions in traffic at particular facilities or vehicle classes. In order for the Authority to meet its needs and satisfy the financial targets it has set, additional revenues will be needed from future toll adjustments, as shown in Table 19. The funding for the Capital Program and estimated debt to be issued is also shown in the table. As noted in the table, there is no additional revenue need until 2015. As a result, the Authority has not proposed a specific toll adjustment at this time.

Based on our independent analysis, and using the aforementioned forecasting tool we provided to the Authority, we have determined that the essentiality of the Thruway system, its currently low relative toll rates, and the size of required future rate adjustments needed to produce these additional revenues will likely result in only small changes to traffic patterns.

**Table 19: Revenue Projections for Thruway, in millions of dollars**

<b>Year</b>	<b>Base Toll Revenues (from Table 16)</b>	<b>Other Revenues</b>	<b>Total Gross Revenues</b>	<b>Gap Closing Revenues</b>	<b>Total Revenue Needs</b>	<b>% Growth</b>
<b>2012<sup>(1)</sup></b>	\$637.7	\$31.5	\$669.2		\$669.2	
<b>2013</b>	641.1	32.2	673.3		673.3	0.6%
<b>2014</b>	647.5	36.4	683.9		683.9	1.6%
<b>2015</b>	657.0	32.7	689.7	\$67.2	756.9	10.7%
<b>2016</b>	666.6	32.8	699.4	193.1	892.5	17.9%
<b>2017</b>	676.4	33.2	709.6	276.1	985.7	10.4%
<b>2018</b>	685.8	33.5	719.3	342.7	1,062.0	7.7%
<b>2019</b>	694.7	33.8	728.6	415.0	1,143.6	7.7%

*Note: Totals may not add due to rounding.*

*(1) Actual*

**Table 20: Thruway Flow of Funds (millions of dollars), and Debt Service Coverage**

	Actual 2012	Proposed						Total 2013-2019	
		Revised 2013	Budget 2014	Estimated 2015	Estimated 2016	Estimated 2017	Estimated 2018		Estimated 2019
Toll Revenue Target	\$637.7	\$641.1	\$647.5	\$724.1	\$859.7	\$952.5	\$1,028.5	\$1,109.8	\$5,963.2
Other Revenues	<u>31.5</u>	<u>32.2</u>	<u>36.4</u>	<u>32.7</u>	<u>32.8</u>	<u>33.2</u>	<u>33.5</u>	<u>33.8</u>	<u>234.7</u>
Total Revenue Target	\$669.2	\$673.3	\$683.9	\$756.9	\$892.5	\$985.7	\$1,062.0	\$1,143.6	\$6,197.9
Thruway Operating Expenses	357.0	284.3	283.5	293.0	301.8	310.8	323.6	335.2	2,132.3
Reserve for Claims and Indemnities and Environmental Remediation	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>2.0</u>	<u>14.0</u>
Net Revenue (A)	310.3	387.0	398.4	461.8	588.7	672.8	736.4	806.5	4,051.6
Less: Net Senior Debt Service (B)	<u>198.5</u>	<u>239.8</u>	<u>256.9</u>	<u>272.8</u>	<u>288.7</u>	<u>305.1</u>	<u>310.8</u>	<u>322.4</u>	<u>1,996.4</u>
Net Revenue after Senior Debt Service	111.7	147.2	141.5	189.1	300.0	367.8	425.6	484.1	2,055.2
Less:									
Retain for Operating Reserves	5.5	(14.3)	0.0	0.0	0.0	0.0	0.0	0.0	(14.3)
Reserve Maintenance Deposit	36.2	72.7	52.7	30.0	30.0	30.0	30.0	30.0	275.4
Net Junior Debt Service (C)	0.0	0.0	0.0	25.0	78.9	115.1	149.3	176.1	544.4
Facilities Capital Improvement Deposit	8.0	25.0	10.0	58.3	109.9	124.7	154.4	183.3	665.6
Canal Corporation (Net of Federal Aid)	51.9	47.7	48.8	52.9	57.1	58.8	60.7	62.5	388.7
General Reserve Fund Provision - Canal Capital	8.1	15.6	29.4	22.2	23.5	39.0	31.2	32.1	193.1
General Reserve Fund - Subordinate Debt	2.0	0.4	0.5	0.5	0.5	0.2	0.0	0.0	2.2
Balance	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	(\$0.0)	\$0.0	\$0.0	\$0.0
Senior Debt Service Coverage Ratio (A/B)	1.56	1.61	1.55	1.69	2.04	2.21	2.37	2.50	(1)
Senior & Junior Debt Service Coverage Ratio (A/(B+C))	1.56	1.61	1.55	1.55	1.60	1.60	1.60	1.62	
Proposed Debt Issuances by Year:									
Senior - General Revenue Bonds			\$ 250.0	\$ 228.7	\$ 226.2	\$ 307.1	\$ 158.9	\$ 197.6	
Junior Indebtedness		\$ 1,589.4	\$ 739.3	\$ 1,136.9	\$ 617.9	\$ 454.1			

(1) Fiscal Management Guidelines require a minimum 1.5 coverage ratio. General Revenue Bond Resolution requires a 1.2 minimum coverage ratio. Note that totals may not add due to rounding.

## B. Estimated Traffic Volumes

Utilizing the special forecasting tool (discussed in Section VI.A.4) we developed for the Thruway, Table 21 shows estimated traffic volume projections that will result from toll adjustments necessary to attain the required revenues through the year 2019. In addition, the table shows the difference in traffic between the forecasts with and without the toll increases.

**Table 21: Traffic Projections for Thruway, and Difference from Base Traffic Volumes**

Year	Tappan Zee / New NY Bridge		Rest of Thruway System		Total System	
	Total Estimated Traffic (Ms)	Difference from Base Traffic	Total Estimated Traffic (Ms)	Difference from Base Traffic	Total Estimated Traffic (Ms)	Difference from Base Traffic
2012 <sup>(1)</sup>	24.4	0%	222.1	0%	246.5	0%
2013	24.7	0%	222.4	0%	247.1	0%
2014	25.0	0%	224.4	0%	249.3	0%
2015	25.1	-1%	223.0	-2%	248.1	-2%
2016	24.8	-4%	219.4	-5%	244.3	-5%
2017	25.0	-4%	220.3	-6%	245.3	-6%
2018	25.2	-5%	221.1	-7%	246.3	-7%
2019	25.4	-5%	221.7	-8%	247.1	-8%

*Note: Totals may not add due to rounding. Non-revenue traffic not included.*

*(1) Actual*

## IX. Conclusion

The Authority's Board has the independent statutory authority to set toll rates and has the obligation to adjust rates (as set forth in the Bond Resolution) to the levels required to satisfy covenants pledged to its debt holders. We have estimated the effects of the required, periodic increases in revenues, both in terms of the potential loss of traffic and shifts of traffic and, in our opinion, the needed toll rate adjustments to fill noted revenue shortfalls will result in only small changes to traffic patterns. In addition, we believe that these additional revenues will allow the Authority to:

- Fund necessary operations, maintenance and capital expenses;
- Preserve good overall infrastructure conditions;
- Maintain targeted levels of debt service coverage; and
- Meet the covenants of the of the General Revenue Bond Resolution and the Junior Indebtedness Obligation Resolution;
- Satisfy the terms of the TIFIA loan; and
- Meet the requirements of the Authority's Fiscal Management Guidelines.

We believe the Authority will continue to be able to provide good service to its customers and will continue to fulfill its critical role in supporting the State's economy through the forecast period. Finally, we found that the needed modifications to toll rates to achieve these goals are attainable and will not result in significant traffic diversions as a result of those increases.

## **X. 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 at the Authority's toll facilities 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 limited synopsis presents the highlighted 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 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 document, 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 the Authority and cannot be predicted with certainty. In many instances, a broad range of alternative assumptions could be considered reasonable with the availability of alternative toll schedules, and any changes in the assumptions used could result in material differences in estimated outcomes.
- Jacobs' traffic and toll revenue estimations only represent our best judgment and we do not warrant or represent that the actual toll revenues will not vary from our estimates.
- 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 Thruway system and its interchanges will remain as discussed in the report.
- Access to and from the system will remain as discussed in the report.
- No other competing highway projects, tolled or non-tolled are assumed to be constructed or significantly improved in the project corridor during the project period, except those identified within the 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 study provide a reasonable basis for the analysis. 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 projections in this Study.

This document, and the opinions, analysis, evaluations, or recommendations contained herein are for the sole use and benefit of the contracting parties. There are no intended third party beneficiaries, and Jacobs Civil Consultants Inc., (and its affiliates) shall have no liability whatsoever to any third parties for any defect, deficiency, error, omission in any statement contained in or in any way related to this document or the services provided.

Neither this document nor any information contained therein or otherwise supplied by Jacobs Civil Consultants Inc. in connection with the study and the services provided to our client shall be used in connection with any financing solicitation, proxy, and proxy statement, proxy soliciting materials, prospectus, Securities Registration Statement or similar document without the express written consent of Jacobs Civil Consultants Inc.

\* \* \* \* \*

We would like to thank the Authority staff for all of their assistance in the preparation of this report.

Sincerely,



Richard J. Gobeille, P.E.

National Toll / Finance Unit Manager

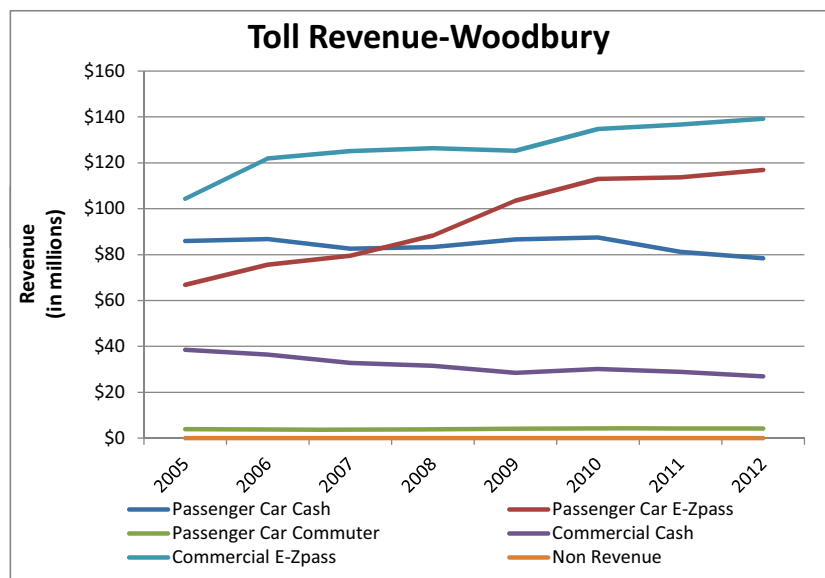
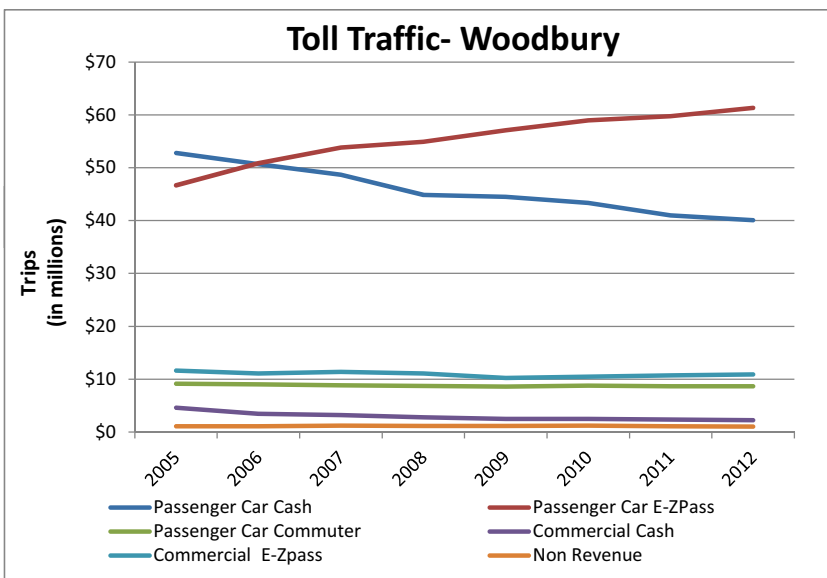
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## **APPENDIX: Historical Traffic and Revenue by Facility**

### Traffic and Revenue- Woodbury Section

Toll Traffic-Woodbury							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	52.8	46.7	9.2	4.6	11.6	1.1	125.9
2006	50.7	50.8	9.0	3.4	11.0	1.1	126.1
2007	48.7	53.9	8.8	3.2	11.4	1.2	127.1
2008	44.9	54.9	8.7	2.8	11.0	1.1	123.5
2009	44.5	57.1	8.6	2.5	10.2	1.1	124.0
2010	43.3	59.0	8.8	2.5	10.4	1.2	125.2
2011	41.0	59.8	8.6	2.4	10.7	1.1	123.6
2012	40.1	61.4	8.6	2.2	10.9	1.0	124.2

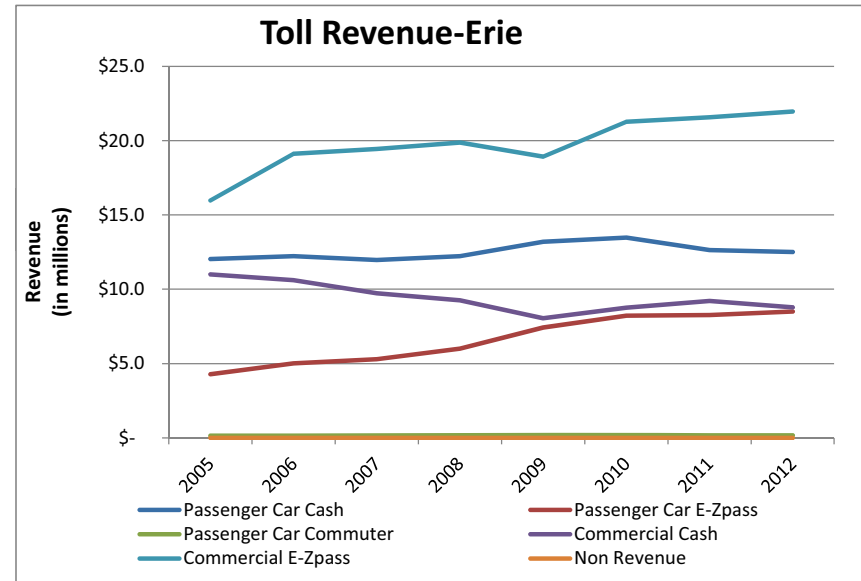
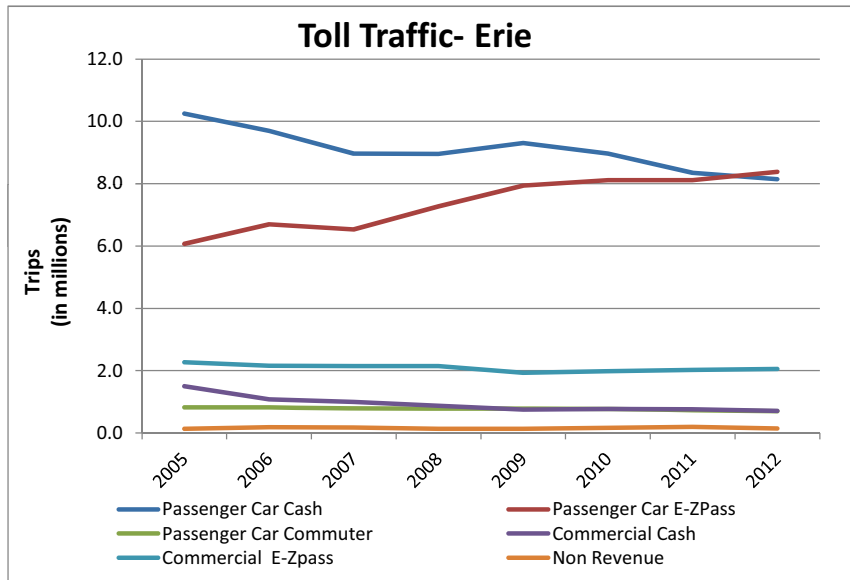
Toll Revenue-Woodbury							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 86.0	\$ 66.8	\$ 4.0	\$ 38.6	\$ 104.4	\$ -	\$ 299.7
2006	\$ 86.8	\$ 75.6	\$ 3.9	\$ 36.4	\$ 121.9	\$ -	\$ 324.6
2007	\$ 82.6	\$ 79.5	\$ 3.8	\$ 32.8	\$ 125.0	\$ -	\$ 323.8
2008	\$ 83.3	\$ 88.3	\$ 3.9	\$ 31.6	\$ 126.3	\$ -	\$ 333.3
2009	\$ 86.6	\$ 103.5	\$ 4.1	\$ 28.5	\$ 125.3	\$ -	\$ 347.9
2010	\$ 87.4	\$ 112.9	\$ 4.4	\$ 30.1	\$ 134.7	\$ -	\$ 369.6
2011	\$ 81.2	\$ 113.7	\$ 4.3	\$ 28.9	\$ 136.6	\$ -	\$ 364.6
2012	\$ 78.4	\$ 116.8	\$ 4.2	\$ 27.0	\$ 139.2	\$ -	\$ 365.7



## Traffic and Revenue- Erie Section

Toll Traffic-Erie							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	10.2	6.1	0.8	1.5	2.3	0.1	21.0
2006	9.7	6.7	0.8	1.1	2.2	0.2	20.6
2007	9.0	6.5	0.8	1.0	2.1	0.2	19.6
2008	9.0	7.3	0.8	0.9	2.1	0.1	20.2
2009	9.3	7.9	0.8	0.7	1.9	0.1	20.8
2010	9.0	8.1	0.8	0.8	2.0	0.2	20.8
2011	8.4	8.1	0.7	0.8	2.0	0.2	20.2
2012	8.1	8.4	0.7	0.7	2.1	0.1	20.1

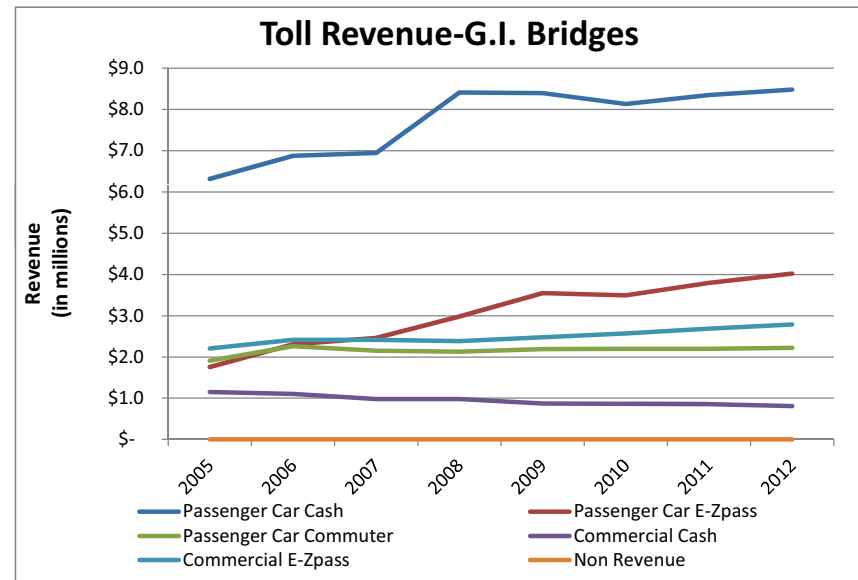
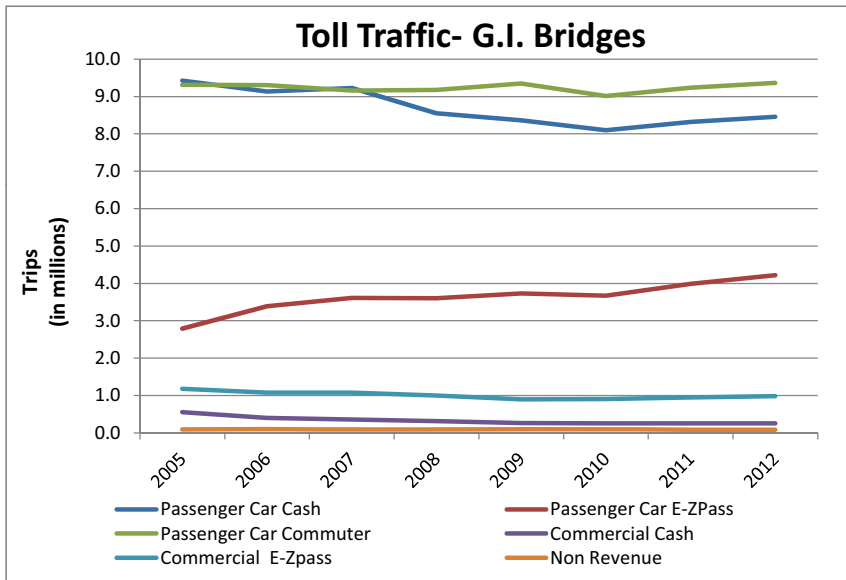
Toll Revenue-Erie							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 12.0	\$ 4.3	\$ 0.2	\$ 11.0	\$ 16.0	\$ -	\$ 43.4
2006	\$ 12.2	\$ 5.0	\$ 0.2	\$ 10.6	\$ 19.1	\$ -	\$ 47.1
2007	\$ 12.0	\$ 5.3	\$ 0.2	\$ 9.7	\$ 19.4	\$ -	\$ 46.6
2008	\$ 12.2	\$ 6.0	\$ 0.2	\$ 9.3	\$ 19.9	\$ -	\$ 47.5
2009	\$ 13.2	\$ 7.4	\$ 0.2	\$ 8.0	\$ 18.9	\$ -	\$ 47.8
2010	\$ 13.5	\$ 8.2	\$ 0.2	\$ 8.8	\$ 21.3	\$ -	\$ 51.9
2011	\$ 12.6	\$ 8.3	\$ 0.2	\$ 9.2	\$ 21.6	\$ -	\$ 51.9
2012	\$ 12.5	\$ 8.5	\$ 0.2	\$ 8.8	\$ 22.0	\$ -	\$ 51.9



## Traffic and Revenue- Grand Island Bridges Total

Toll Traffic-G.I. Bridge							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	9.4	2.8	9.3	0.6	1.2	0.1	23.3
2006	9.1	3.4	9.3	0.4	1.1	0.1	23.4
2007	9.2	3.6	9.2	0.4	1.1	0.1	23.5
2008	8.6	3.6	9.2	0.3	1.0	0.1	22.7
2009	8.4	3.7	9.3	0.3	0.9	0.1	22.7
2010	8.1	3.7	9.0	0.3	0.9	0.1	22.0
2011	8.3	4.0	9.2	0.3	0.9	0.1	22.8
2012	8.5	4.2	9.4	0.3	1.0	0.1	23.4

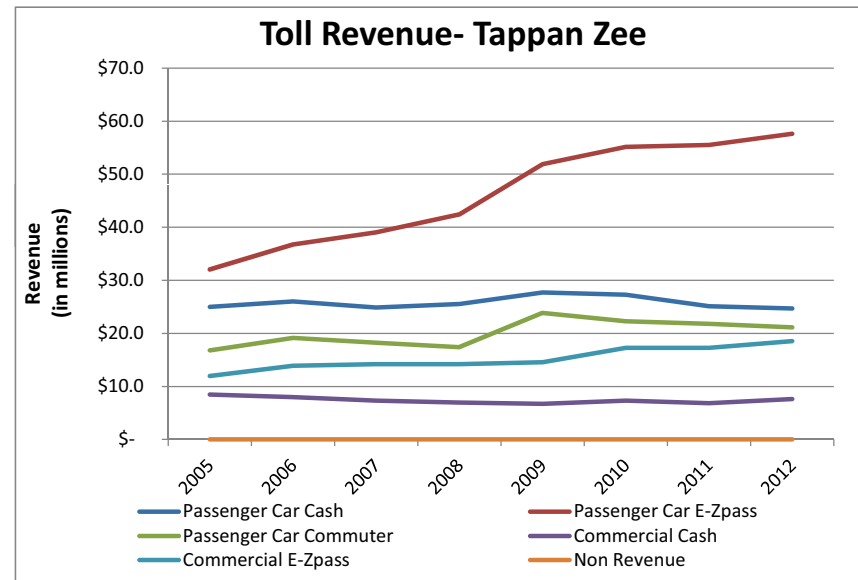
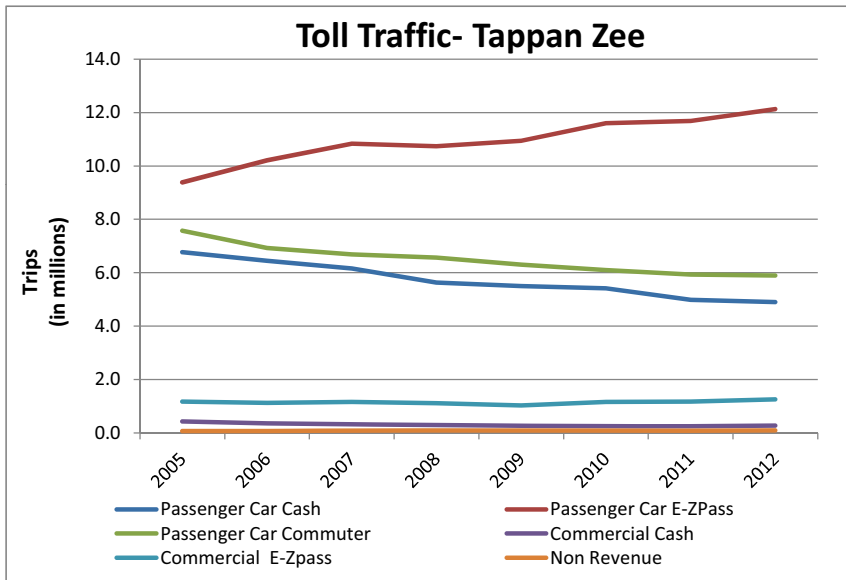
Toll Revenue-G.I. Bridge							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 6.3	\$ 1.8	\$ 1.9	\$ 1.1	\$ 2.2	\$ -	\$ 13.3
2006	\$ 6.9	\$ 2.3	\$ 2.3	\$ 1.1	\$ 2.4	\$ -	\$ 15.0
2007	\$ 6.9	\$ 2.5	\$ 2.1	\$ 1.0	\$ 2.4	\$ -	\$ 14.9
2008	\$ 8.4	\$ 3.0	\$ 2.1	\$ 1.0	\$ 2.4	\$ -	\$ 16.9
2009	\$ 8.4	\$ 3.5	\$ 2.2	\$ 0.9	\$ 2.5	\$ -	\$ 17.5
2010	\$ 8.1	\$ 3.5	\$ 2.2	\$ 0.9	\$ 2.6	\$ -	\$ 17.2
2011	\$ 8.3	\$ 3.8	\$ 2.2	\$ 0.9	\$ 2.7	\$ -	\$ 17.9
2012	\$ 8.5	\$ 4.0	\$ 2.2	\$ 0.8	\$ 2.8	\$ -	\$ 18.3



## Traffic and Revenue- Tappan Zee Bridge

Toll Traffic-Tappan Zee							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	6.8	9.4	7.6	0.4	1.2	0.1	25.4
2006	6.4	10.2	6.9	0.4	1.1	0.1	25.1
2007	6.2	10.8	6.7	0.3	1.2	0.1	25.3
2008	5.6	10.7	6.6	0.3	1.1	0.1	24.4
2009	5.5	10.9	6.3	0.3	1.0	0.1	24.1
2010	5.4	11.6	6.1	0.3	1.2	0.1	24.6
2011	5.0	11.7	5.9	0.2	1.2	0.1	24.1
2012	4.9	12.1	5.9	0.3	1.3	0.1	24.5

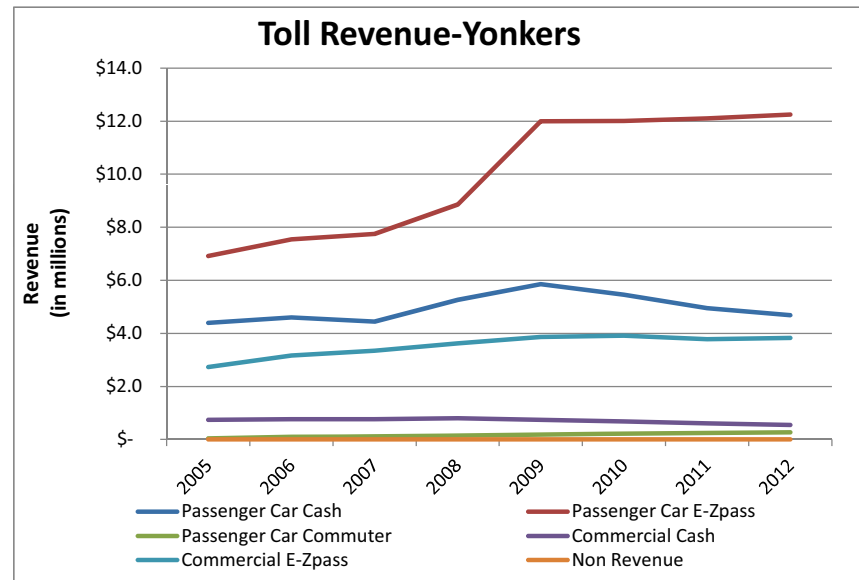
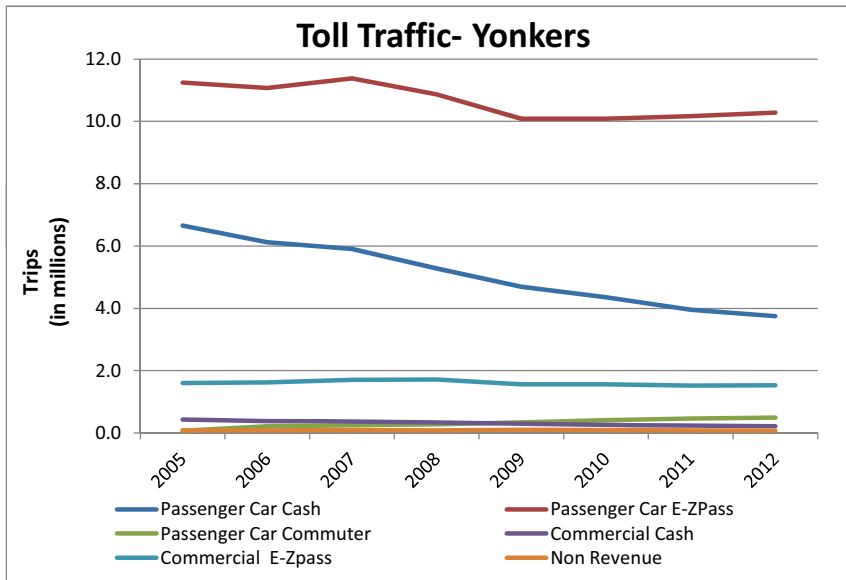
Toll Revenue-Tappan Zee							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 25.0	\$ 32.1	\$ 16.8	\$ 8.4	\$ 11.9	\$ -	\$ 94.2
2006	\$ 26.0	\$ 36.8	\$ 19.2	\$ 8.0	\$ 13.9	\$ -	\$ 103.8
2007	\$ 24.9	\$ 39.0	\$ 18.2	\$ 7.3	\$ 14.2	\$ -	\$ 103.6
2008	\$ 25.5	\$ 42.5	\$ 17.4	\$ 7.0	\$ 14.2	\$ -	\$ 106.5
2009	\$ 27.7	\$ 51.9	\$ 23.8	\$ 6.7	\$ 14.6	\$ -	\$ 124.8
2010	\$ 27.3	\$ 55.1	\$ 22.3	\$ 7.3	\$ 17.3	\$ -	\$ 129.3
2011	\$ 25.1	\$ 55.5	\$ 21.8	\$ 6.8	\$ 17.3	\$ -	\$ 126.6
2012	\$ 24.7	\$ 57.6	\$ 21.1	\$ 7.6	\$ 18.5	\$ -	\$ 129.6



## Traffic and Revenue- Yonkers

Toll Traffic-Yonkers							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	6.7	11.2	0.1	0.4	1.6	0.1	20.1
2006	6.1	11.1	0.2	0.4	1.6	0.1	19.5
2007	5.9	11.4	0.2	0.4	1.7	0.1	19.7
2008	5.3	10.9	0.3	0.3	1.7	0.1	18.5
2009	4.7	10.1	0.3	0.3	1.6	0.1	17.1
2010	4.4	10.1	0.4	0.3	1.6	0.1	16.8
2011	4.0	10.2	0.5	0.2	1.5	0.1	16.4
2012	3.7	10.3	0.5	0.2	1.5	0.1	16.3

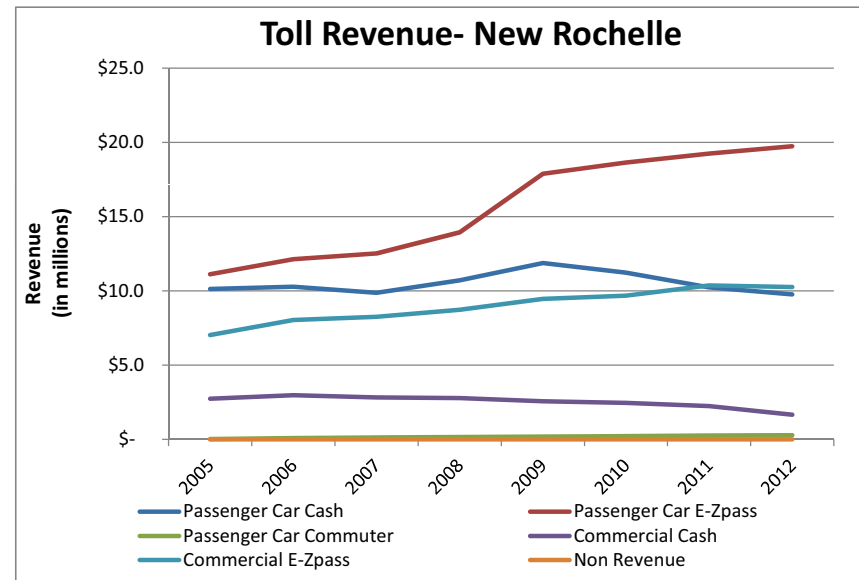
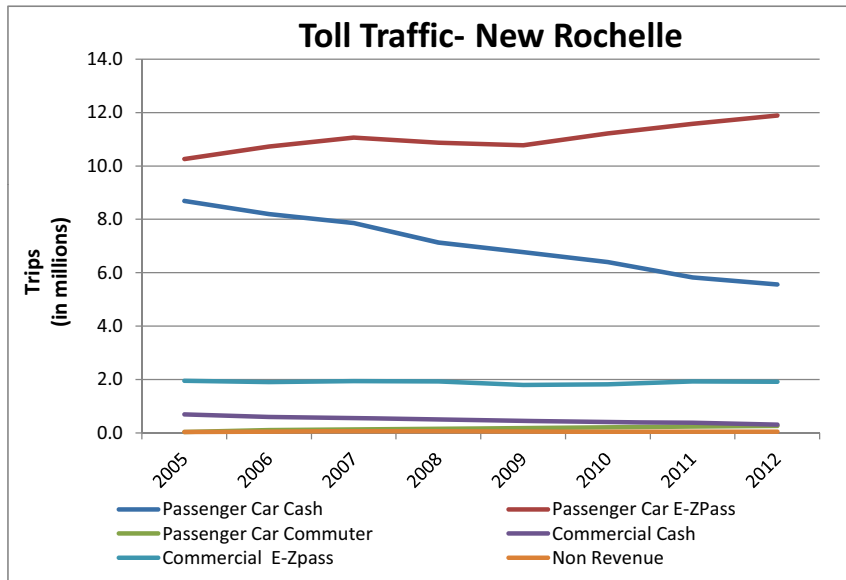
Toll Revenue-Yonkers							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 4.4	\$ 6.9	\$ 0.0	\$ 0.7	\$ 2.7	\$ -	\$ 14.8
2006	\$ 4.6	\$ 7.5	\$ 0.1	\$ 0.8	\$ 3.2	\$ -	\$ 16.2
2007	\$ 4.4	\$ 7.7	\$ 0.1	\$ 0.8	\$ 3.3	\$ -	\$ 16.4
2008	\$ 5.3	\$ 8.9	\$ 0.1	\$ 0.8	\$ 3.6	\$ -	\$ 18.7
2009	\$ 5.9	\$ 12.0	\$ 0.2	\$ 0.7	\$ 3.9	\$ -	\$ 22.7
2010	\$ 5.5	\$ 12.0	\$ 0.2	\$ 0.7	\$ 3.9	\$ -	\$ 22.3
2011	\$ 5.0	\$ 12.1	\$ 0.3	\$ 0.6	\$ 3.8	\$ -	\$ 21.7
2012	\$ 4.7	\$ 12.2	\$ 0.3	\$ 0.5	\$ 3.8	\$ -	\$ 21.6



## Traffic and Revenue- New Rochelle

Toll Traffic-New Rochelle							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	8.7	10.3	0.0	0.7	2.0	0.0	21.7
2006	8.2	10.7	0.1	0.6	1.9	0.0	21.6
2007	7.9	11.1	0.1	0.6	1.9	0.1	21.6
2008	7.1	10.9	0.2	0.5	1.9	0.1	20.6
2009	6.8	10.8	0.2	0.4	1.8	0.0	20.0
2010	6.4	11.2	0.2	0.4	1.8	0.0	20.1
2011	5.8	11.6	0.2	0.4	1.9	0.0	20.0
2012	5.6	11.9	0.3	0.3	1.9	0.0	20.0

Toll Revenue-New Rochelle							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 10.1	\$ 11.1	\$ 0.0	\$ 2.8	\$ 7.0	\$ -	\$ 31.1
2006	\$ 10.3	\$ 12.1	\$ 0.1	\$ 3.0	\$ 8.1	\$ -	\$ 33.6
2007	\$ 9.9	\$ 12.5	\$ 0.1	\$ 2.8	\$ 8.3	\$ -	\$ 33.6
2008	\$ 10.7	\$ 13.9	\$ 0.2	\$ 2.8	\$ 8.7	\$ -	\$ 36.3
2009	\$ 11.9	\$ 17.9	\$ 0.2	\$ 2.6	\$ 9.5	\$ -	\$ 42.0
2010	\$ 11.2	\$ 18.6	\$ 0.2	\$ 2.5	\$ 9.7	\$ -	\$ 42.3
2011	\$ 10.2	\$ 19.2	\$ 0.3	\$ 2.3	\$ 10.4	\$ -	\$ 42.3
2012	\$ 9.8	\$ 19.7	\$ 0.3	\$ 1.7	\$ 10.3	\$ -	\$ 41.7

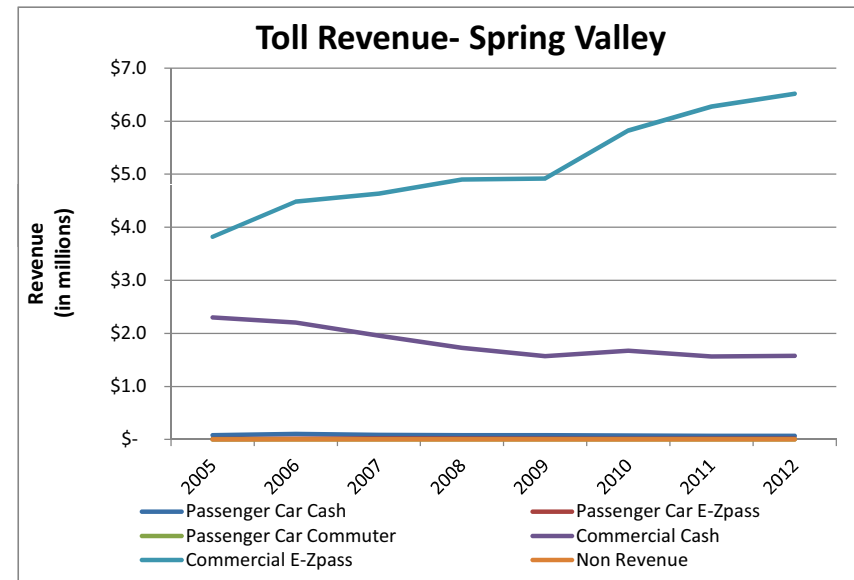
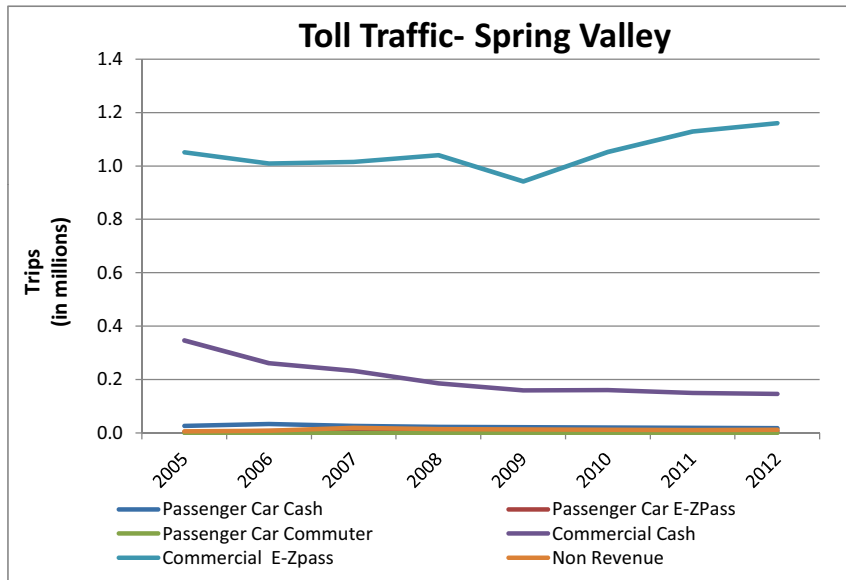




## Traffic and Revenue- Spring Valley

Toll Traffic-Spring Valley							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	0.0	0.0	0.0	0.3	1.1	0.0	1.4
2006	0.0	0.0	0.0	0.3	1.0	0.0	1.3
2007	0.0	0.0	0.0	0.2	1.0	0.0	1.3
2008	0.0	0.0	0.0	0.2	1.0	0.0	1.3
2009	0.0	0.0	0.0	0.2	0.9	0.0	1.1
2010	0.0	0.0	0.0	0.2	1.1	0.0	1.3
2011	0.0	0.0	0.0	0.1	1.1	0.0	1.3
2012	0.0	0.0	0.0	0.1	1.2	0.0	1.3

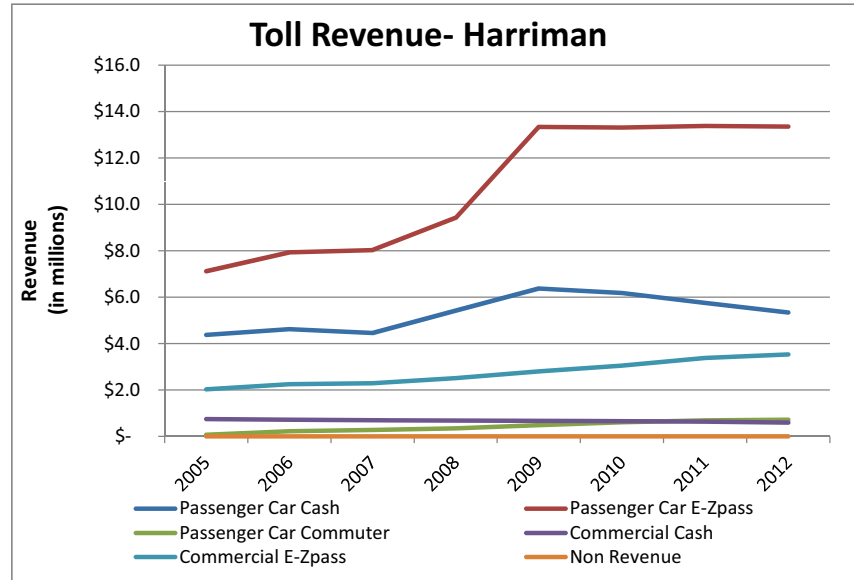
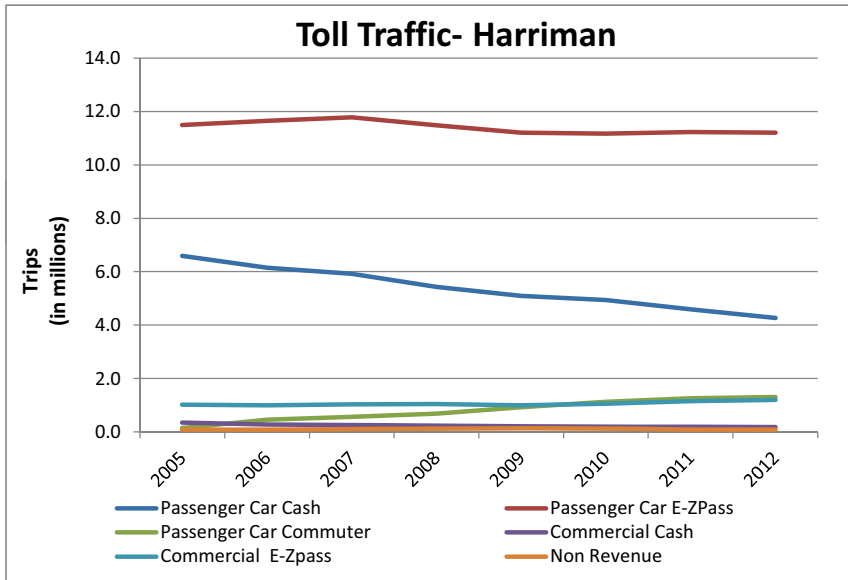
Toll Revenue-Spring Valley							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 0.1	\$ 0.0	\$ -	\$ 2.3	\$ 3.8	\$ -	\$ 6.2
2006	\$ 0.1	\$ 0.0	\$ -	\$ 2.2	\$ 4.5	\$ -	\$ 6.8
2007	\$ 0.1	\$ 0.0	\$ -	\$ 2.0	\$ 4.6	\$ -	\$ 6.7
2008	\$ 0.1	\$ 0.0	\$ -	\$ 1.7	\$ 4.9	\$ -	\$ 6.7
2009	\$ 0.1	\$ 0.0	\$ -	\$ 1.6	\$ 4.9	\$ -	\$ 6.6
2010	\$ 0.1	\$ 0.0	\$ -	\$ 1.7	\$ 5.8	\$ -	\$ 7.6
2011	\$ 0.1	\$ 0.0	\$ -	\$ 1.6	\$ 6.3	\$ -	\$ 7.9
2012	\$ 0.1	\$ 0.0	\$ -	\$ 1.6	\$ 6.5	\$ -	\$ 8.2



## Traffic and Revenue- Harriman

Toll Traffic-Spring Harriman							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	6.6	11.5	0.1	0.3	1.0	0.1	19.7
2006	6.2	11.6	0.5	0.3	1.0	0.1	19.6
2007	5.9	11.8	0.6	0.3	1.0	0.1	19.6
2008	5.4	11.5	0.7	0.2	1.0	0.1	19.0
2009	5.1	11.2	0.9	0.2	1.0	0.1	18.6
2010	4.9	11.2	1.1	0.2	1.1	0.1	18.6
2011	4.6	11.2	1.3	0.2	1.1	0.1	18.5
2012	4.3	11.2	1.3	0.2	1.2	0.1	18.2

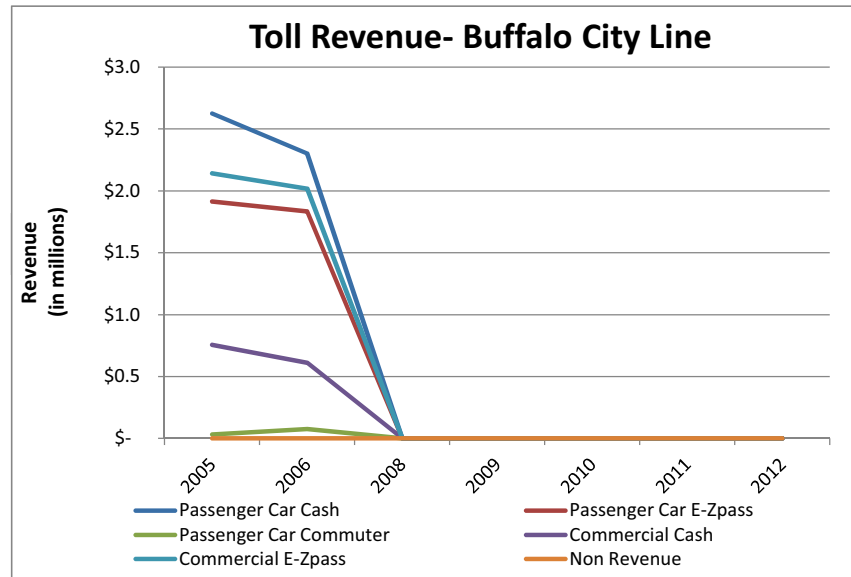
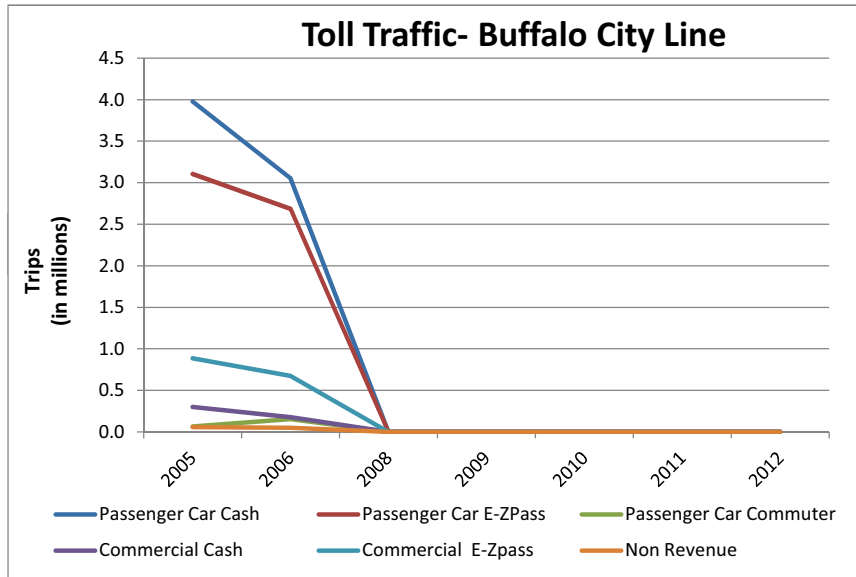
Toll Revenue-Harriman							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 4.4	\$ 7.1	\$ 0.1	\$ 0.7	\$ 2.0	\$ -	\$ 14.3
2006	\$ 4.6	\$ 7.9	\$ 0.2	\$ 0.7	\$ 2.2	\$ -	\$ 15.8
2007	\$ 4.5	\$ 8.0	\$ 0.3	\$ 0.7	\$ 2.3	\$ -	\$ 15.8
2008	\$ 5.4	\$ 9.4	\$ 0.3	\$ 0.7	\$ 2.5	\$ -	\$ 18.4
2009	\$ 6.4	\$ 13.3	\$ 0.5	\$ 0.7	\$ 2.8	\$ -	\$ 23.7
2010	\$ 6.2	\$ 13.3	\$ 0.6	\$ 0.7	\$ 3.1	\$ -	\$ 23.8
2011	\$ 5.7	\$ 13.4	\$ 0.7	\$ 0.6	\$ 3.4	\$ -	\$ 23.8
2012	\$ 5.3	\$ 13.3	\$ 0.7	\$ 0.6	\$ 3.5	\$ -	\$ 23.5



### Traffic and Revenue- Buffalo City Line\*

Toll Traffic-Buffalo City Line							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	4.0	3.1	0.1	0.3	0.9	0.1	8.4
2006	3.1	2.7	0.2	0.2	0.7	0.1	6.8
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Toll Revenue-Buffalo City Line							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 2.6	\$ 1.9	\$ 0.0	\$ 0.8	\$ 2.1	\$ -	\$ 7.5
2006	\$ 2.3	\$ 1.8	\$ 0.1	\$ 0.6	\$ 2.0	\$ -	\$ 6.8
2008	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2010	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2011	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

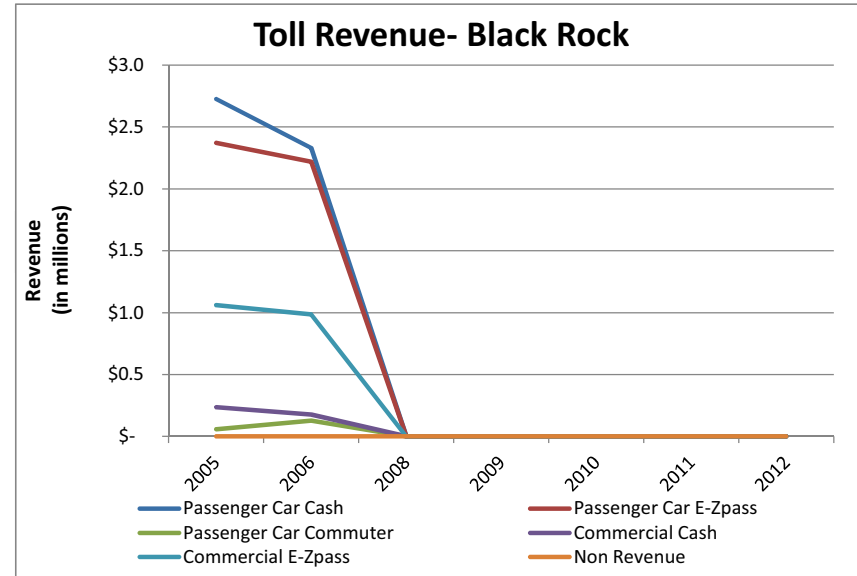
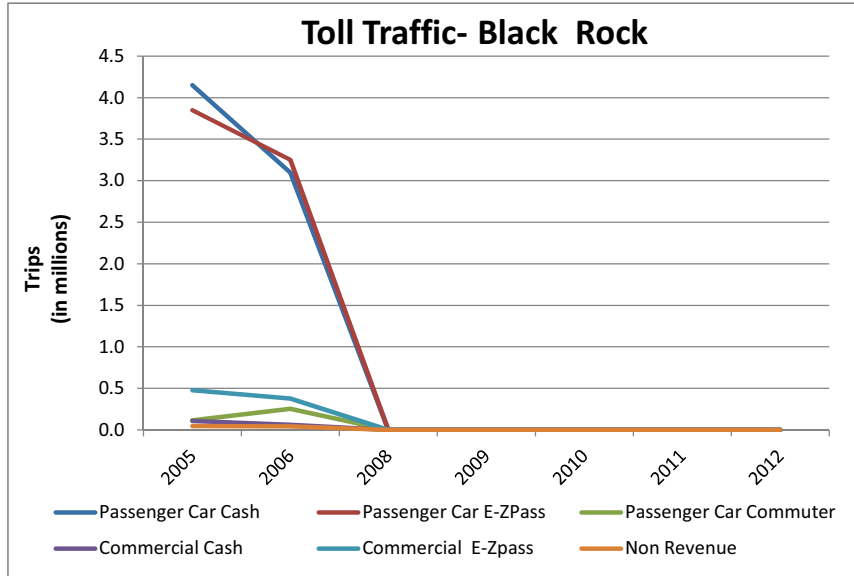


\*Tolls were removed in 2007, and lost revenue was offset by returning I-84 to the New York State Department of Transportation

### Traffic and Revenue- Black Rock\*

Toll Traffic-Black Rock							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	4.1	3.8	0.1	0.1	0.5	0.0	8.7
2006	3.1	3.3	0.3	0.1	0.4	0.0	7.1
2008	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2009	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2010	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2011	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2012	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Toll Revenue-Black Rock							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 2.7	\$ 2.4	\$ 0.1	\$ 0.2	\$ 1.1	\$ -	\$ 6.4
2006	\$ 2.3	\$ 2.2	\$ 0.1	\$ 0.2	\$ 1.0	\$ -	\$ 5.8
2008	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2009	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2010	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2011	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2012	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

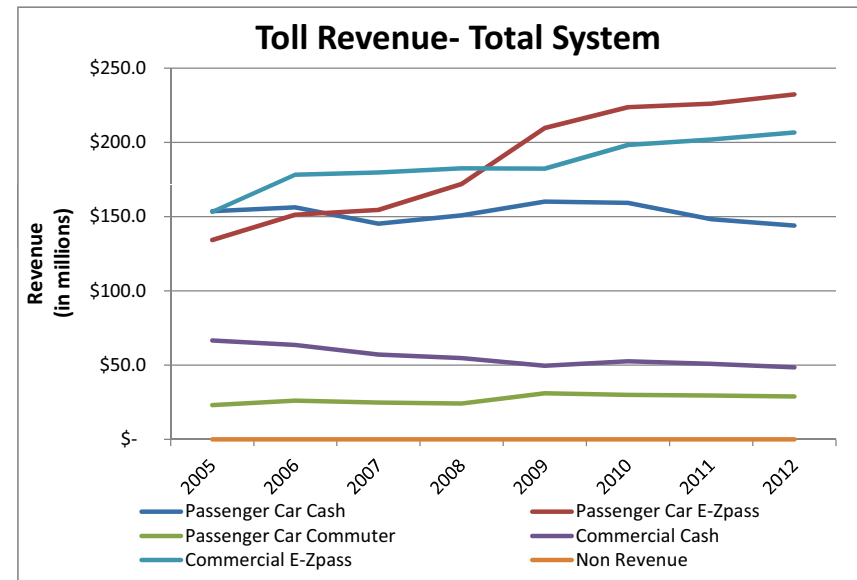
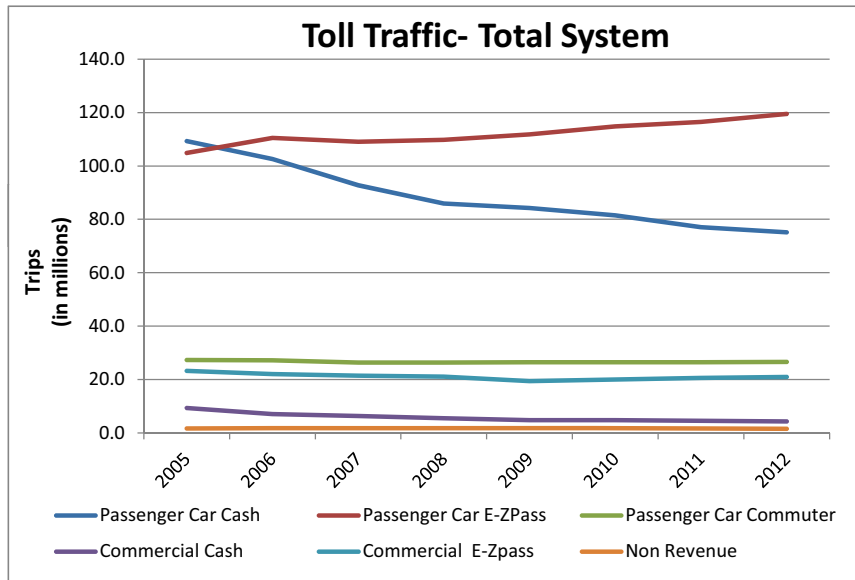


\*Tolls were removed in 2007, and lost revenue was offset by returning I-84 to the New York State Department of Transportation

## Traffic and Revenue- Total System

Toll Traffic-Total System							
Year	Passenger Car Cash	Passenger Car E-ZPass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	109.3	104.9	27.3	9.3	23.2	1.7	275.7
2006	102.6	110.5	27.3	7.0	22.0	1.8	271.2
2007	92.8	109.1	26.4	6.3	21.4	1.8	257.7
2008	85.9	109.7	26.3	5.5	21.0	1.7	250.3
2009	84.3	111.8	26.5	4.8	19.4	1.8	248.5
2010	81.5	114.8	26.4	4.8	20.0	1.8	249.4
2011	77.1	116.5	26.5	4.6	20.6	1.7	246.9
2012	75.1	119.5	26.7	4.3	21.0	1.5	248.1

Toll Revenue-Total System							
Year	Passenger Car Cash	Passenger Car E-Zpass	Passenger Car Commuter	Commercial Cash	Commercial E-Zpass	Non Revenue	Total
2005	\$ 153.6	\$ 134.4	\$ 23.1	\$ 66.7	\$ 153.3	\$ -	\$ 511.2
2006	\$ 156.2	\$ 151.3	\$ 26.1	\$ 63.6	\$ 178.2	\$ -	\$ 554.4
2007	\$ 145.2	\$ 154.6	\$ 24.9	\$ 57.1	\$ 179.6	\$ -	\$ 540.3
2008	\$ 151.0	\$ 171.9	\$ 24.2	\$ 54.8	\$ 182.5	\$ -	\$ 562.7
2009	\$ 160.1	\$ 209.6	\$ 31.1	\$ 49.7	\$ 182.3	\$ -	\$ 611.6
2010	\$ 159.3	\$ 223.7	\$ 30.1	\$ 52.6	\$ 198.3	\$ -	\$ 641.2
2011	\$ 148.3	\$ 226.0	\$ 29.6	\$ 50.8	\$ 202.0	\$ -	\$ 634.1
2012	\$ 144.0	\$ 232.3	\$ 29.0	\$ 48.6	\$ 206.6	\$ -	\$ 637.7



Volume Discount	
2005	\$ 19.89
2006	\$ 21.11
2007	\$ 21.15
2008	\$ 21.69
2009	\$ 21.18
2010	\$ 22.77
2011	\$ 22.70
2012	\$ 22.81



**AUDITED FINANCIAL STATEMENTS OF THE AUTHORITY FOR THE  
YEARS ENDED DECEMBER 31, 2013 AND 2012**

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NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Audited Financial Statements

December 31, 2013 and 2012

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

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## INDEPENDENT AUDITORS' REPORT

Members of the Board  
New York State Thruway Authority:

### Report on the Financial Statements

We have audited the basic financial statements of the New York State Thruway Authority (the Authority), a component unit of the State of New York, as of and for the years ended December 31, 2013 and 2012, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the New York State Thruway Authority as of December 31, 2013 and 2012, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 4 through 15 and schedule of funding progress - other postemployment benefits on page 46 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### Reports on Other Legal and Regulatory Requirements

In accordance with Government Auditing Standards, we have also issued our report dated March 21, 2014, on our consideration of the New York State Thruway Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the New York State Thruway Authority's internal control over financial reporting and compliance.

In accordance with New York State Codes, Rules and Regulations, we have also issued our report dated March 21, 2014 on the New York State Thruway Authority's investment program compliance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York. The purpose of that report is to provide an opinion as to the New York State Thruway Authority's compliance with investment guidelines contained therein. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the New York State Thruway Authority's internal control over financial reporting and compliance.

Toski & Co., CPAs, P.C.

Williamsville, New York  
March 21, 2014

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Management's Discussion and Analysis

December 31, 2013 and 2012

The following discussion and analysis of the New York State Thruway Authority's (Authority) financial performance provides an overview of the Authority's activities for the calendar years ended December 31, 2013 and 2012. Please read it in conjunction with the Authority's financial statements that follow this section. This discussion and analysis is intended to serve as an introduction to the Authority's financial statements which are comprised of the basic financial statements and the notes to the financial statements.

**2013 Financial Highlights**

- Toll revenue for the year was \$648.9 million, an increase of \$11.2 million or 1.8% compared to 2012.
- Total operating expenses for the New York State Thruway and the Canal Corporation, excluding depreciation and amortization were \$419.2 million, a decrease of \$54.3 million or 11.5% compared to 2012.
- Net position as of December 31, 2013 was approximately \$1.57 billion, a decrease of \$128.6 million or 7.6% compared to December 31, 2012.
- Total capital assets (net of depreciation) as of December 31, 2013 were approximately \$5.58 billion, an increase of \$631.5 million or 12.8% compared to December 31, 2012.
- Construction of the New NY Bridge began in 2013 and \$641.0 million was invested in the project during the year.

**2012 Financial Highlights**

- Toll revenue for the year was \$637.7 million, an increase of \$3.6 million or 0.6% compared to 2011.
- Total operating expenses for the New York State Thruway and the Canal Corporation, excluding depreciation and amortization were \$473.5 million, a decrease of \$8.4 million or 1.7% compared to 2011.
- Net position as of December 31, 2012 was approximately \$1.70 billion, a decrease of \$162.3 million or 8.7% compared to December 31, 2011.
- Total capital assets (net of depreciation) as of December 31, 2012 were approximately \$4.95 billion, an increase of \$80.9 million or 1.7% compared to December 31, 2011.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Management's Discussion and Analysis

**Overview of the Financial Statements**

This report consists of three parts: management's discussion and analysis, the basic financial statements, and the notes to the financial statements.

The financial statements provide summary information about the Authority's overall financial condition, including the Authority's net position and related changes. The notes provide explanation and additional disclosures about the financial statements.

The Authority is considered a special-purpose government engaged in business-type activities and follows financial reporting for enterprise funds. The Authority's financial statements are prepared in accordance with generally accepted accounting principles (GAAP). Revenue is recognized in the period in which it is earned and expenses are recognized in the period in which they are incurred.

**Financial Analysis of the Authority**

Net Position

The Authority's net position at December 31, 2013 was approximately \$1.57 billion, a 7.6% decrease compared to December 31, 2012 (see Table A-1). Total assets increased 30.7% to \$7.52 billion and total liabilities increased 46.5% to \$5.98 billion. The Authority's net position at December 31, 2012 was approximately \$1.70 billion, an 8.7% decrease compared to December 31, 2011. In 2012, total assets increased 3.2% to \$5.76 billion and total liabilities increased 9.1% to \$4.08 billion.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Management's Discussion and Analysis

Table A-1

Net Position

December 31, 2013, 2012 and 2011  
(In millions of dollars)

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>Percentage Change 2013-2012</u>
Unrestricted current assets	\$ 316.4	313.4	292.0	1.0
Restricted current assets	1,624.9	490.6	414.4	231.2
Capital assets	<u>5,582.5</u>	<u>4,951.0</u>	<u>4,870.1</u>	<u>12.8</u>
Total assets	<u>7,523.8</u>	<u>5,755.0</u>	<u>5,576.5</u>	<u>30.7</u>
Deferred outflows	<u>23.5</u>	<u>25.5</u>	<u>27.5</u>	<u>(7.8)</u>
Current liabilities	523.1	365.1	1,237.4	43.3
Noncurrent liabilities	<u>5,452.2</u>	<u>3,714.8</u>	<u>2,503.7</u>	<u>46.8</u>
Total liabilities	<u>5,975.3</u>	<u>4,079.9</u>	<u>3,741.1</u>	<u>46.5</u>
Net position:				
Net investment in capital assets	1,496.3	1,568.4	1,778.5	(4.6)
Restricted for debt service	223.6	201.6	144.6	10.9
Restricted for capital	55.1	75.5	57.7	(27.0)
Unrestricted	<u>(203.0)</u>	<u>(144.9)</u>	<u>(117.9)</u>	<u>40.1</u>
Total net position	\$ <u>1,572.0</u>	<u>1,700.6</u>	<u>1,862.9</u>	<u>(7.6)</u>

Restricted current assets increased \$1.13 billion or 231.2% compared to 2012. The increase is primarily due to the issuance of General Revenue Junior Indebtedness Obligations, Series 2013A. This debt issuance generated \$1.82 billion to fund the New NY Bridge. More detailed information regarding restricted current assets is presented in note 5.

Capital assets increased \$631.5 million or 12.8% compared to 2012. This increase is due the significant investment in the New NY Bridge that corresponded with the start of construction in January 2013, as well as the Authority's ongoing investment to preserve existing infrastructure on both the Thruway and Canal Systems. More detailed information regarding Capital assets is presented in note 4.

Current liabilities increased \$158 million or 43.3% compared to 2012. This increase is due to the amount owed for work performed, but not paid for on the New NY Bridge as of December 31, 2013, as well as an increase in the current amount due on outstanding General Revenue Bonds and Junior Indebtedness Obligations.



NEW YORK STATE THRUWAY AUTHORITY  
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Management's Discussion and Analysis

Non-current liabilities increased \$1.74 billion or 46.8% compared to 2012. This increase is primarily due to the debt issuance mentioned above. Non-current liabilities also increased due to the rising liability for unfunded postemployment health care benefits. More detailed information regarding non-current liabilities and postemployment health care benefits is presented in notes 6 and 9, respectively.

Net investment in capital assets consists of capital assets, net of accumulated depreciation, reduced by the amount of outstanding indebtedness attributable to the acquisition, construction, rehabilitation, or improvement of those assets. Net investment in capital assets, decreased \$72.1 million or 4.6% compared to 2012. This decrease is primarily due to the continued use of debt proceeds to fund the majority of the Authority's Multi-Year Capital Plan, including the New NY Bridge.

Restricted for debt service increased \$22 million or 10.9% compared to 2012. This increase is due to additional revenue being provided to the Senior Debt Service Fund in 2013 to provide for a principal payment due on January 1, 2014 for the General Revenue Bonds, Series I. The General Revenue Bonds, Series I, issued in July 2012 did not require a principal payment in either 2012 or 2013.

Unrestricted deficiency increased by \$58.1 million or 40.1% compared to 2012. This increase is due primarily to the increase in non-current liabilities related to postemployment health care benefits.

#### Changes in Net Position

Net position decreased by \$128.6 million in 2013 (see Table A-2). The Authority's total operating revenue for 2013 was \$682.8 million, an increase of \$9.8 million or 1.5% compared to 2012. Total operating expenses including depreciation and amortization were \$751.0 million, a decrease of \$32.5 million or 4.1% compared to 2012. Net position decreased by \$162.3 million in 2012. The Authority's total operating revenue for 2012 was \$673.0 million, an increase of \$5.5 million or 0.8% compared to 2011. Total operating expenses including depreciation and amortization were \$783.5 million, an increase of \$26.8 million or 3.5% compared to 2011.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Management's Discussion and Analysis

Table A-2  
Changes in Net Position  
Years ended December 31, 2013, 2012 and 2011  
(In millions of dollars)

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>Percentage Change 2013-2012</u>
Operating revenue:				
Tolls	\$ 648.9	637.7	634.1	1.8
Concessions	13.3	13.1	12.5	1.5
Other	<u>20.6</u>	<u>22.2</u>	<u>20.9</u>	<u>(7.2)</u>
Total operating revenue	<u>682.8</u>	<u>673.0</u>	<u>667.5</u>	<u>1.5</u>
Operating expenses:				
Administrative	17.8	17.5	18.3	1.7
Engineering services	6.4	6.3	6.6	1.6
Maintenance	112.5	109.2	118.4	3.0
Finance and accounts	8.1	8.5	8.2	(4.7)
Operations	46.2	79.7	81.4	(42.0)
General charges	160.1	186.5	181.2	(14.2)
Canals	68.1	65.8	67.7	3.5
Depreciation and amortization	<u>331.8</u>	<u>310.0</u>	<u>274.9</u>	<u>7.0</u>
Total operating expenses	<u>751.0</u>	<u>783.5</u>	<u>756.7</u>	<u>(4.1)</u>
Operating loss	<u>(68.2)</u>	<u>(110.5)</u>	<u>(89.2)</u>	<u>(38.3)</u>
Non-operating items:				
Interest expense	(134.7)	(115.5)	(103.2)	16.6
Debt issuance expense	(7.4)	(15.5)	(1.6)	(52.3)
Non-operating revenue	<u>37.6</u>	<u>15.0</u>	<u>2.0</u>	<u>150.7</u>
Net non-operating items	<u>(104.5)</u>	<u>(116.0)</u>	<u>(102.8)</u>	<u>(9.9)</u>
Loss before capital contributions and other items	(172.7)	(226.5)	(192.0)	(23.8)
Capital contributions	44.1	64.2	5.7	(31.3)
Extraordinary item - 2011 floods	<u>-</u>	<u>-</u>	<u>(9.3)</u>	<u>-</u>
Change in net position	(128.6)	(162.3)	(195.6)	(20.8)
Net position, beginning of the year	<u>1,700.6</u>	<u>1,862.9</u>	<u>2,058.5</u>	<u>(8.7)</u>
Net position, end of the year	\$ <u>1,572.0</u>	<u>1,700.6</u>	<u>1,862.9</u>	<u>(7.6)</u>

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Management's Discussion and Analysis

Toll revenue increased \$11.2 million or 1.8% compared to 2012. This increase is primarily due to lower revenues in October and November 2012 from travel restriction and road closures related to Hurricane Sandy.

Maintenance expenses increased by \$3.3 million or 3.0% compared to 2012. This increase is primarily due to higher costs for snow and ice control in 2013 as compared to 2012, which had a milder winter. In addition, expenses are higher due to the cost of retrofitting equipment to comply with diesel emission reduction standards.

Operations expenses decreased by \$33.5 million or 42.0% compared to 2012. This decrease is primarily due to the State of New York assuming financial responsibility for policing the Thruway System as of January 1, 2013. In addition, toll collection costs were lower in 2013 due to a reduction in staffing.

General charges decreased by \$26.4 million or 14.2% compared to 2012. This decrease is primarily due to the shift in financial responsibility for policing the Thruway System mentioned above. Beginning January 1, 2013, employee benefit and administrative costs associated with New York State Division of State Police employees assigned to the Thruway System are no longer reflected as a General charge of the Authority. In addition, effective January 1, 2013 the Authority was exempted from reimbursing the State of New York for general administrative costs. In 2012, the State of New York charged the Authority \$5.5 million for these general administrative costs.

Canal expenses increased by \$2.3 million or 3.5% compared to 2012. This increase is primarily due to repairs related to flooding which occurred in June 2013.

Depreciation and amortization increased \$21.8 million or 7.0% compared to 2012. This increase is primarily due to the Authority's significant investment in bridge and highway improvement projects. Bridge improvement projects include substructure and superstructure repairs, replacement of bridge joints and bridge decks, installation of bridge fencing and bridge painting. Highway improvement projects include pavement rehabilitation, primarily in the form of resurfacing and milling. The Authority's significant investment in these types of projects, which have relatively short useful lives (ten to fifteen years), has resulted in an increase in depreciation expense.

Interest expense increased \$19.2 million or 16.6% compared to 2012. The increase is primarily due to higher interest rates on the General Revenue Bonds, Series I compared to the short-term interest rate on the General Revenue Bond Anticipation Notes, Series 2011A. The Series I Bonds, issued in July 2012, have an effective interest rate of 4.1% compared to 0.5% for the Series 2011A Notes which were refunded with Series I bond proceeds. As a result, 2013 was the first full year during which interest expense was impacted by the higher interest rates. In addition, interest costs were higher due to an overall increase in the Authority's outstanding debt.

NEW YORK STATE THRUWAY AUTHORITY  
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Management's Discussion and Analysis

Debt issuance costs decreased \$8.1 million compared to 2012. This decrease is due to a lower overall cost of issuance for the General Revenue Bond Anticipation Notes, Series 2013A and 2013B; and the General Revenue Junior Indebtedness Obligations, Series 2013A issued in 2013 as compared to the cost of issuance for the General Revenue Bonds, Series I issued in 2012.

Non-operating revenue increased \$22.6 million compared to 2012. This increase is primarily due to an agreement, as required by law, between the Authority and the State of New York, effective January 1, 2013, under which the State assumed \$24 million of expenses.

Capital contributions decreased \$20.1 million or 31.3% compared to 2012. Over the past decade, the Authority has worked in partnership with the New York State Department of Transportation and the Metropolitan Transportation Authority to determine how to best address the transportation needs in the corridor that includes the Tappan Zee Bridge. In 2012, the Authority recognized capital contributions totaling \$49.5 million made by the New York State Department of Transportation and the Metropolitan Transportation Authority towards the New NY Bridge project. In 2013, the Authority recognized additional capital contributions of \$19.2 million made by the New York State Department of Transportation towards the New NY Bridge. This decrease in year over year capital contributions was partially offset by a federal grant used to fund a highway resurfacing project between Dunkirk and Westfield.

### **Capital Assets and Debt Administration**

#### Capital Assets

As of December 31, 2013, the Authority had invested approximately \$10.18 billion in capital assets, including roads, bridges, canal structures, buildings, land and equipment. Net of accumulated depreciation, the Authority's capital assets totaled approximately \$5.58 billion (see Table A-3) representing a net increase (including additions, disposals and depreciation) of approximately \$631.4 million or 12.8% compared to December 31, 2012.

As of December 31, 2012, the Authority had invested approximately \$9.26 billion in capital assets, including roads, bridges, canal structures, buildings, land and equipment. Net of accumulated depreciation, the Authority's capital assets totaled approximately \$4.95 billion (see Table A-3) representing a net increase (including additions, disposals and depreciation) of approximately \$80.9 million or 1.7% compared to December 31, 2011.

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Table A-3  
Capital Assets  
December 31, 2013, 2012 and 2011  
(In millions of dollars)

	<u>2013</u>	<u>2012</u>	<u>2011</u>	<u>Percentage Change 2013-2012</u>
Land and land improvements	\$ 827.3	820.5	818.8	0.8
Construction work in progress	1,090.6	677.8	477.7	60.9
Thruway System	7,551.2	7,072.3	6,909.9	6.8
Canal System	482.5	472.7	457.7	2.1
Equipment	230.2	221.5	216.6	3.9
Less accumulated depreciation	<u>(4,599.3)</u>	<u>(4,313.8)</u>	<u>(4,010.6)</u>	<u>6.6</u>
Total net capital assets	\$ <u>5,582.5</u>	<u>4,951.0</u>	<u>4,870.1</u>	<u>12.8</u>

In 2013, construction work in progress increased \$412.8 million, as the Authority began construction of the New NY Bridge and invested \$641 million in the project during the year. Significant projects in progress as of December 31, 2013 include the New NY Bridge, deck replacement and resurfacing of the Grand Island Bridges, rehabilitation of numerous canal structures that were damaged by Hurricane Irene and Tropical Storm Lee, and several other pavement and bridge rehabilitations at various locations. The Thruway System's value increased \$478.9 million compared to 2012. The increase was primarily due to the completion of numerous pavement and bridge rehabilitation projects, including re-decking a portion of the existing Tappan Zee Bridge, the reconstruction of the highway between Exits 23 and 24 in Albany, and pavement rehabilitation and bridge painting near Angola.

In 2012, construction work in progress increased \$200.1 million, as the Authority continued to invest in infrastructure improvements, as well as the New NY Bridge. Significant projects in progress as of December 31, 2012 include re-decking a portion of the existing Tappan Zee Bridge, the New NY Bridge, pavement rehabilitation and bridge painting near Angola, the reconstruction of the highway between Exits 23 and 24 in Albany and several other pavement and bridge rehabilitations at various locations. The Thruway System's value increased \$162.4 million compared to 2011. The increase was primarily due to the completion of numerous pavement and bridge rehabilitation projects, as well as the installation of traffic management equipment. The Canal System's value increased \$15 million compared to 2011. This increase was primarily due to the completion of a painting project at the moveable dam in Tribes Hill and the rehabilitation of miter gates in Seneca Falls and Pittsford.

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Debt Administration

Bond and note sales must be approved by the Authority's Board, members of which are appointed by the Governor with the advice and consent of the New York State Senate. These sales must comply with rules and regulations of the United States Treasury Department and the United States Securities and Exchange Commission. The terms and conditions of Authority bond and note sales must also be approved by the New York State Office of the State Comptroller.

Long-term debt includes general revenue bonds, junior indebtedness obligations, bond anticipation notes and a revolving loan of varying rates and maturities issued primarily to fund a portion of the Authority's Multi-Year Capital Plan and New NY Bridge project costs. At December 31, 2013, the Authority had approximately \$5.23 billion in general revenue bonds, junior indebtedness obligations, and loans outstanding, an increase of \$1.76 billion or 50.5% compared to the amount of general revenue bonds and loans outstanding as of December 31, 2012 (see Table A-4).

Pursuant to a resolution adopted by the Authority's Board in November 2013 (Junior Resolution) the Authority established authorization for the issuance of Junior Indebtedness Obligations (JIO's). The resolution created a junior lien on the Authority's revenue that is subordinate to the pledge of revenues granted to the Authority's general revenue bonds issued pursuant to the General Revenue Bond Resolution. The JIO's are special obligations of the Authority and are additionally secured by a pledge of certain funds and accounts established in the Junior Indebtedness Fund. Proceeds of the JIO's issued in 2013, and to be issued in future years, will be used solely to fund New NY Bridge project costs until the bridge is substantially complete.

The Authority entered into a loan agreement with the United States Department of Transportation, acting through the Federal Highway Administration in December 2013 (TIFIA Loan). The conditions of the TIFIA Loan preclude the use of general revenue bond proceeds for New NY Bridge project costs; as a result, the Authority created the Junior Resolution to provide for the issuance of JIO's to fund these costs. The proceeds of the TIFIA Loan are expected to be drawn no later than one year after substantial completion of the New NY Bridge, and are expected to be available to pay the initial issuance of JIO's.

Of the \$3.40 billion in general revenue bonds outstanding, approximately \$735.6 million are insured by Assured Guaranty Municipal (formerly Financial Security Assurance Inc.) and rated AA- by Standard and Poor's (S&P). The remaining general revenue bonds are rated A2 by Moody's and A by S&P. Of the \$1.82 billion in junior indebtedness obligations outstanding, approximately \$45.7 million are insured by Assured Guaranty Municipal Corp and rated A2 by Moody's and AA- by S&P. The remaining Junior Indebtedness Obligations are rated A3 by Moody's and A- by S&P.

In February 2013, the Authority issued General Revenue Bond Anticipation Notes, Series 2013A which generated proceeds of \$501.9 million. These proceeds were used to fund a portion of the cost of the New NY Bridge Project and to pay costs of issuance.

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In September, 2013 the Authority issued General Revenue Bond Anticipation Notes, Series 2013B, which generated proceeds of \$700 million. These proceeds were used to fund a portion of the cost of the New NY Bridge Project, to pay the principal and interest on the General Revenue Bond Anticipation Notes, Series 2013A and to pay the costs of issuance.

In December, 2013, the Authority issued Junior Indebtedness Obligations - Series 2013A which generated proceeds of \$1,823.7 million. These proceeds will be used to fund a portion of the cost of the New NY Bridge Project, to provide funds to pay the principal and interest on the General Revenue Bond Anticipation Notes, Series 2013B, to pay capitalized interest on the Junior Indebtedness Obligations - Series 2013A through December 31, 2017 and to pay costs of issuance. The Junior Indebtedness Obligations - Series 2013A will mature on May 1, 2019. The proceeds of the TIFIA loan are expected to be disbursed in a single draw in March, 2019 and are expected to be available to pay principal on the Series 2013A Junior Indebtedness Obligations at maturity.

In 2012, the Authority also entered into an agreement with Citibank, N.A. for a revolving loan in an aggregate amount not to exceed \$60 million. The loan matures in 2017 and may be pre-paid at any time by the Authority without penalty. As of December 31, 2013 the Authority has borrowed \$11 million via the revolving loan to reconstruct portions of the Canal System damaged or destroyed by Hurricane Irene and Tropical Storm Lee. The revolving loan is secured in part by a pledge of revenues available in the General Reserve Fund, as well as federal (FEMA) grant funds.

At December 31, 2012, the Authority had approximately \$3.48 billion in general revenue bonds and loans outstanding, an increase of \$289.8 million or 9.1% from December 31, 2011.

Table A-4

Outstanding Debt

Year ended December 31, 2013

(In millions of dollars)

	<u>Beginning balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>Ending balance</u>
General revenue bonds	\$ 3,466.4	-	(69.5)	3,396.9
Junior Indebtedness Obligations	-	1,823.7	(1.4)	1,822.3
Bond anticipation notes	-	1,201.9	(1,201.9)	-
Revolving loan	<u>9.0</u>	<u>2.0</u>	<u>-</u>	<u>11.0</u>
Total bonds, notes and loan	\$ <u>3,475.4</u>	<u>3,027.6</u>	<u>(1,272.8)</u>	<u>5,230.2</u>

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Year ended December 31, 2012  
(In millions of dollars)

	Beginning balance	Additions	Reductions	Ending balance
General revenue bonds	\$ 2,309.8	1,223.4	(66.8)	3,466.4
Bond anticipation notes	875.8	-	(875.8)	-
Revolving loan	<u>-</u>	<u>9.0</u>	<u>-</u>	<u>9.0</u>
Total bonds, notes and loan	\$ <u>3,185.6</u>	<u>1,232.4</u>	<u>(942.6)</u>	<u>3,475.4</u>

More detailed information about the Authority's debt is presented in note 6.

**The New NY Bridge**

Over the past twenty years the Authority has spent more than \$750 million to maintain and repair the current Tappan Zee Bridge. Over the past decade, in partnership with the New York State Department of Transportation and the Metropolitan Transportation Authority, the Authority has conducted alternative analysis, public outreach and environmental studies aimed at how to best address the transportation needs at the Tappan Zee Bridge. Engineering and economic analysis has determined that replacement of the bridge is needed to correct structural deficiencies, address longstanding safety concerns and provide sufficient capacity to serve current usage safely and allow for future economic growth. The existing bridge, which was opened to traffic in 1955, has exceeded its useful life and it is estimated that an additional \$1 billion would be required to maintain it for the next ten years. The bridge was designed to carry 100,000 vehicles on a peak day, but traffic volume has grown to 138,000 vehicles per day. In addition, the geometry and configuration of the bridge, including a 3% grade, lack of shoulders and narrow lanes has led to higher accident rates and difficulty in responding to accidents. These factors combined often cause delays and lengthy traffic back-ups.

In January 2013, the Authority entered into a \$3.1 billion design-build agreement to construct the New NY Bridge. It is anticipated that the new bridge will take six years to complete at a total estimated cost of \$3.9 billion. The new bridge will have a 100 year design life and consist of eight general purpose lanes, as well as emergency access lanes and dedicated bus service. It will conform to current seismic, safety and geometric requirements; have adequate shoulders to manage traffic incidents and emergencies; accommodate bike and pedestrian use; and be capable of accommodating commuter rail.

In 2013, the Authority issued bond anticipation notes and junior indebtedness obligations that generated \$1.8 billion to finance the project. The Authority also entered into a TIFIA Loan agreement with the United States Department of Transportation for the purpose of financing a portion of the project. Additional information regarding the Authority's debt is available in the Debt Administration section above and in note 6.

Additional information regarding the New NY Bridge is available at [www.newnybridge.com](http://www.newnybridge.com).



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**Contacting the New York State Thruway Authority's Financial Management**

This financial report is designed to provide our bondholders, patrons, and other interested parties with a general overview of the Authority's finances and to demonstrate its accountability for the money it receives. If you have questions about this report, or need additional information, contact the New York State Thruway Authority's Department of Finance and Accounts, P.O. Box 189, Albany, New York 12201-0189 or visit our website at [www.thruway.ny.gov](http://www.thruway.ny.gov).

NEW YORK STATE THRUWAY AUTHORITY  
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Statements of Net Position  
December 31, 2013 and 2012

	<u>2013</u>	<u>2012</u>
	(In thousands)	
Assets:		
Current assets:		
Cash and cash equivalents	\$ 188,298	181,528
Investments	46,315	49,015
Accrued interest receivable	133	294
Accounts receivable, net	56,236	57,343
Material and other supplies	15,612	16,206
Prepaid items	9,817	9,067
Restricted:		
Cash and cash equivalents	335,457	218,923
Investments	1,257,968	241,764
Accrued interest receivable	201	348
Accounts receivable, net	28,467	28,744
Other	2,811	813
Total current assets	<u>1,941,315</u>	<u>804,045</u>
Non-current assets - capital assets, net of accumulated depreciation	<u>5,582,461</u>	<u>4,950,979</u>
Total assets	<u>7,523,776</u>	<u>5,755,024</u>
Deferred outflows - loss on bond refunding	<u>23,489</u>	<u>25,486</u>
Liabilities:		
Current liabilities:		
Accounts payable and accrued expenses	230,136	150,282
Accrued wages and employee benefits	7,819	4,589
Unearned revenue	64,997	59,124
Accrued interest payable	81,122	78,289
Current amount due on bonds, notes and other long-term liabilities	<u>138,960</u>	<u>72,793</u>
Total current liabilities	<u>523,034</u>	<u>365,077</u>
Non-current liabilities:		
Bonds, notes and loan payable	5,096,890	3,405,906
Other long-term liabilities	<u>355,326</u>	<u>308,881</u>
Total non-current liabilities	<u>5,452,216</u>	<u>3,714,787</u>
Total liabilities	<u>5,975,250</u>	<u>4,079,864</u>
Net position:		
Net investment in capital assets	1,496,347	1,568,373
Restricted for:		
Debt service	223,638	201,583
Capital	55,101	75,552
Unrestricted (deficiency)	<u>(203,071)</u>	<u>(144,862)</u>
Total net position	<u>\$ 1,572,015</u>	<u>1,700,646</u>

See notes to financial statements.

NEW YORK STATE THRUWAY AUTHORITY  
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Statements of Revenue, Expenses and Changes in Net Position  
Years ended December 31, 2013 and 2012

	<u>2013</u>	<u>2012</u>
	(In thousands)	
Operating revenue:		
Tolls	\$ 648,923	637,731
Concessions	13,322	13,090
Other	20,599	22,137
	682,844	672,958
Total operating revenue		
Operating expenses:		
Administrative	17,819	17,543
Engineering services	6,398	6,346
Maintenance engineering:		
Thruway maintenance	79,459	76,920
Equipment maintenance	33,050	32,305
Finance and accounts	8,065	8,457
Operations:		
Traffic and services	7,631	7,779
State police	-	30,984
Toll collection	38,609	40,920
General charges	160,060	186,456
Canals	68,159	65,750
Depreciation and amortization	331,806	310,040
	751,056	783,500
Total operating expenses		
Operating loss	(68,212)	(110,542)
Non-operating items:		
Interest revenue on investments	579	647
Interest expense	(134,751)	(115,497)
Debt issuance expense	(7,373)	(15,514)
Federal and other aid	37,037	14,421
	(104,508)	(115,943)
Net non-operating items		
Loss before capital contributions	(172,720)	(226,485)
Capital contributions	44,089	64,197
Change in net position	(128,631)	(162,288)
Net position, beginning of the year	1,700,646	1,862,934
Net position, end of the year	\$ 1,572,015	1,700,646

See notes to financial statements.

NEW YORK STATE THRUWAY AUTHORITY  
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Statements of Cash Flows  
Years ended December 31, 2013 and 2012

	<u>2013</u>	<u>2012</u>
	(In thousands)	
Cash flows from operating activities:		
Cash received from toll collections	\$ 665,243	641,846
Cash received from concession sales	13,307	12,959
Other operating cash receipts	17,598	20,041
Personal service payments	(163,741)	(168,823)
Fringe benefits payments	(109,356)	(104,892)
E-ZPass account management payments	(8,474)	(25,348)
Cash payments to vendors and contractors	<u>(69,070)</u>	<u>(128,289)</u>
Net cash provided by operating activities	<u>345,507</u>	<u>247,494</u>
Cash flows from non-capital financing activities - federal aid and other reimbursements	<u>17,757</u>	<u>3,821</u>
Cash flows from capital and related financing activities:		
Proceeds from issuance of debt	3,027,660	1,232,387
Federal aid and other capital contributions	40,351	58,589
Acquisition/construction of capital assets	(867,825)	(386,135)
Principal paid on capital debt	(1,261,795)	(927,130)
Interest paid on capital debt	(166,357)	(140,291)
Proceeds from sale of capital assets	<u>322</u>	<u>562</u>
Net cash provided by (used in) capital and related financing activities	<u>772,356</u>	<u>(162,018)</u>
Cash flows from investing activities:		
Purchase of investments	(1,691,057)	(464,358)
Proceeds from sale and maturities of investments	677,554	480,864
Interest and dividends on investments	<u>1,187</u>	<u>471</u>
Net cash provided by (used in) investing activities	<u>(1,012,316)</u>	<u>16,977</u>
Net increase in cash and cash equivalents	123,304	106,274
Cash and cash equivalents, beginning of the year	<u>400,451</u>	<u>294,177</u>
Cash and cash equivalents, end of the year	<u>\$ 523,755</u>	<u>400,451</u>

(Continued)

See notes to financial statements.

NEW YORK STATE THRUWAY AUTHORITY  
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Statements of Cash Flows, Continued

	<u>2013</u>	<u>2012</u>
	(In thousands)	
Reconciliation of operating loss to net cash provided by operating activities:		
Operating loss	\$ (68,212)	(110,542)
Adjustments to reconcile operating loss to net cash provided by operating activities:		
Depreciation and amortization expense	331,806	310,040
Capitalized interest	137	153
Payments made by New York State	22,572	-
Net changes in assets and liabilities:		
Receivables	(1,874)	(1,430)
Material and supplies	594	2,748
Other assets	(750)	(1,750)
Accounts payables and accrued expenses	52,986	53,274
Accrued wages and employee benefits	2,376	(4,304)
Unearned revenue	5,872	(695)
Net cash provided by operating activities	<u>\$ 345,507</u>	<u>247,494</u>
Reconciliation to statements of net position:		
Cash and cash equivalents	188,298	181,528
Restricted cash and cash equivalents	<u>335,457</u>	<u>218,923</u>
Total cash and cash equivalents	<u>\$ 523,755</u>	<u>400,451</u>
Non-cash operating and capital activities - payments made by the State of New York	<u>\$ 22,681</u>	<u>-</u>

See notes to financial statements.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements

December 31, 2013 and 2012

(1) Financial Reporting Entity

The New York State Thruway Authority (the Authority) is a Public Benefit Corporation created by the New York State Legislature in 1950 to build, operate and maintain the Thruway System. The New York State Canal Corporation (the Canal Corporation), a subsidiary public corporation of the Authority, was created by the New York State Legislature in August 1992 to accept jurisdiction and control over the New York State Canal System from New York State (the State). The Boards of both the Authority and the Canal Corporation each consist of seven members, appointed by the Governor, with the consent of the New York State Senate.

The Authority is responsible for a 570-mile system of highways crossing New York State, the longest toll highway system in the United States. The Authority's 426-mile Thruway mainline connects New York City and Buffalo, the State's two largest cities. Other Thruway sections provide for connections with Connecticut, Massachusetts, Pennsylvania, New Jersey, and to highways that lead to the Midwest and Canada. In accordance with legislation passed by the State Legislature, the Cross-Westchester Expressway (CWE) was added to the Thruway in 1991 and the Authority is prohibited from imposing any tolls or other charges for the use of the CWE.

The Canal Corporation is responsible for a 524-mile Canal System consisting of the Erie, Champlain, Oswego and Cayuga-Seneca canals. The 1992 legislation, which transferred responsibility for maintenance of the Canal System to the Canal Corporation, also authorized and directed the Authority to assist in the financing of certain transportation related projects and facilities under the category of "Other Authority Projects."

The accounts and activities of the Canal Corporation and the "Other Authority Projects" are included in the financial statements of the Authority. Revenues of the Canal System are credited to the New York State Canal Development Fund (the Fund), created by the 1992 legislation, and held by the State where they are available, subject to appropriation, only for purposes of the Canal System as directed by the Canal Recreationway Commission. The State may, from time to time, also authorize the Authority by statute to undertake additional financing activities to finance primarily non-Authority transportation projects in the State. The Authority is responsible for administering these special bond programs as discussed in note 7.

The accompanying financial statements include the accounts and transactions of the New York State Thruway Authority, the New York State Canal Corporation and the Canal Development Fund, henceforth referred to as the "Authority."

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(1) Financial Reporting Entity, Continued

The Authority is a legally and fiscally separate and distinct organization solely responsible for its finances and the credit of the State of New York is not pledged to the operation of the Authority. The Authority is empowered to issue revenue bonds backed solely from Authority revenues. However, under the criteria specified in Government Accounting Standards Board (GASB) Statement No. 14, as amended by GASB Statement No. 61, the Authority is considered a component unit of the State of New York, because the Governor appoints all members of the Authority's Governing Board.

(2) Summary of Significant Accounting Policies

The accompanying financial statements have been prepared in conformity with generally accepted accounting principles as applied to governmental units. The GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Authority's financial statement presentation is prepared in accordance with the provisions of GASB Statement No. 62 - "*Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements.*" This statement codifies all sources of accounting principles generally accepted in the United States of America into the GASB's authoritative literature. The more significant accounting policies are described below:

(a) Basis of Accounting

The Authority's activities are accounted for similar to those often found in the private sector using the flow of economic resources measurement focus and the accrual basis of accounting. All assets, liabilities, deferred outflows of resources, deferred inflows of resources, net position, revenue, and expenses are accounted for through a single enterprise fund with revenue recorded when earned and expenses recorded at the time liabilities are incurred.

The principal revenue of the Authority is toll revenue received from patrons. The Authority also recognizes as operating revenue the rental fees received from concessionaires from operating leases on concession property, special hauling fees charged to overweight or oversize vehicles and certain revenue collected from the lease of property. Operating expenses for the Authority include; maintenance, operations, toll collections, administrative expenses, and depreciation on capital assets. All revenue and expenses not meeting this definition are reported as non-operating items.

The New York State Office of the State Comptroller requires that the Authority report in accordance with generally accepted accounting principles as it is a component unit of the State. The Authority's bond resolution, however, requires that certain funds and accounts be established and maintained. The Authority consolidates these funds and accounts for the purpose of providing an enterprise fund presentation in its basic financial statements.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(2) Summary of Significant Accounting Policies, Continued

(b) Cash, Cash Equivalents and Investments

Cash includes amounts in demand deposits. Cash equivalents include all highly liquid deposits with an original maturity of three months or less when purchased. These deposits are fully collateralized or covered by federal deposit insurance.

Investments include financial instruments with an original maturity of more than three months and are recorded at amortized cost. These investments are not included in cash and cash equivalents in the Statements of Cash Flows.

The Authority manages its investments pursuant to the respective bond resolutions, Public Authorities Law and the Authority's Investment Policy approved annually by the Authority's Board. Permitted investments are defined as obligations in which the State Comptroller may invest pursuant to Section 98(a) of the State Finance Law, including obligations of the United States and its Federal agencies, collateralized time deposits, commercial paper, bankers' acceptances and repurchase agreements.

The Authority's investment policy has established criteria that mitigate certain credit risks and interest rate risks. The policy has established investment concentration limits for each of the Authority's investment portfolios. The policy also requires that deposits and investments be held by a third-party custodian who may not otherwise be counter-party to the transactions, and that securities are held in the name of the Authority.

Custodial credit risk for deposits is the risk that, in the event of a bank failure, the Authority's deposits may not be returned. The Authority's policy to address this risk requires the custodian or depository bank to provide collateral in an amount equal to or greater than the amount on deposit, with a third-party custodian in the Authority's name.

Interest rate risk is also addressed in the Authority's policy which requires the purchase of securities with the intention of holding them to maturity and does not limit the term of any investment. It is the Authority's practice to invest funds to the date of the anticipated need of the funds.

(c) Accounts Receivable

Accounts receivable consist primarily of receivables from commercial transportation companies and Federal and State governments under various Federal and State grant programs. All commercial accounts receivable are guaranteed by surety bonds and/or cash deposits. The allowance for doubtful receivables amounted to \$10,400,000 and \$11,550,000 at December 31, 2013 and 2012, respectively.

(d) Materials and Supplies

Materials and supplies are principally valued at weighted average cost. The cost of such items is recognized as an expense when used.



NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(2) Summary of Significant Accounting Policies, Continued

(e) Unearned Revenue

Unearned revenue consists of prepaid deposits made by private and commercial customers into E-ZPass accounts held by the Authority and 2014 and 2013 annual permit revenues collected in 2013 and 2012, respectively.

(f) Restricted Assets

Certain proceeds of the Thruway revenue bonds and notes are restricted by applicable bond covenants for construction or set aside as reserves to ensure repayment of the Authority's bonds. Certain other assets are accumulated and restricted in accordance with the bond resolutions for the purpose of paying interest and principal debt payments that are due on a semi-annual and annual basis, respectively, and for the purpose of maintaining reserve funds at required levels. Payments from restricted funds are governed by the bond resolutions and, as such, expenses which do not meet these standards are paid from unrestricted funds.

(g) Toll Revenue

Toll revenue is stated net of volume and other discounts approximating \$23.8 million and \$22.8 million in 2013 and 2012.

(h) Pensions

Substantially all Authority employees, as well as the State Police assigned to the Thruway System, are members of cost sharing multiple-employer public employee retirement systems. Expenses are based on billings which are paid currently. In 2013, costs associated with State Police assigned to the Thruway, were assumed by New York State.

(i) Other Postemployment Benefits

In accordance with GASB Statement No. 45, the Authority recognizes in its financial statements, the financial impact of postemployment benefits, principally employer funded health care costs. The impact on the Authority's financial position and results of operations is more fully disclosed under note 9.

(j) Compensated Absences

Vacation leave accumulates for all full-time employees of the Authority, ranging from 13 to 25 days per year, and any unused amounts up to 30 days are considered vested and paid upon retirement or termination. Authority employees also accumulate sick leave at the rate of 10 to 13 days per year and personal leave credits at the rate of 3 to 5 days per year. Employees may use the accumulated sick and personal leave credits according to the established policy; however, generally no cash is paid for these accumulated credits at the time of retirement or termination. The liability for vested compensated absences has been computed to approximate \$10,109,000 and \$10,963,000 at December 31, 2013 and 2012, respectively, and is classified as a long-term liability.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(2) Summary of Significant Accounting Policies, Continued

(k) Bond and Note Premiums

Bond and note premiums are presented as components of bonds payable. The premiums are amortized over the life of the bonds and notes on a straight-line basis. Net amortization related to bond and note premiums were approximately \$11,121,000 and \$15,412,000 for 2013 and 2012, respectively, and were included as an offset of interest expense.

(l) Deferred Outflows of Resources

Deferred outflows, representing the unamortized loss on refunding's for Series F and Series H bonds, amounted to \$23,489,000 and \$25,486,000 at December 31, 2013 and 2012, respectively.

(m) Capital Contributions

Capital contributions consist primarily of federal, state and other grants that are provided to fund specific capital projects. These projects are generally within the Authority's Multi-Year Capital Plan but also include unanticipated projects such as those funded by the U.S. Department of Homeland Security - Federal Emergency Management Agency.

(n) Arbitrage

The Tax Reform Act of 1986 imposed additional restrictive regulations, reporting requirements and an arbitrage rebate liability on issuers of tax-exempt debt. This Act requires the remittance to the IRS of 90% of the cumulative rebatable arbitrage within 60 days of the end of each five-year reporting period following the issuance of governmental bonds. The Authority's policy is to annually record a liability representing the estimated amount owed. The Authority actively manages its invested bond proceeds to minimize any arbitrage liability. The Authority had no cumulative arbitrage rebate liability for the years ended December 31, 2013 and 2012.

(o) Income Taxes

The Authority is a public benefit corporation of the State of New York. As such, income earned in the exercise of its essential government functions is exempt from state and federal income taxes.

(p) Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingencies at the date of the financial statements, and the reporting of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Notes to Financial Statements, Continued

(2) Summary of Significant Accounting Policies, Continued

(q) Non-Exchange Transaction

Section 357-a of the Public Authorities Laws of the State of New York, provides that the State shall be responsible for \$24 million in annual costs of goods and services provided to the Authority and that the Authority and the State of New York Division of Budget shall enter into an agreement identifying such costs assumed by the State. An agreement for 2013 was entered into identifying certain costs associated with E-ZPass account management and workers compensation benefits up to a maximum of \$24 million.

GASB Statement No. 33 - "Accounting and Financial Reporting for Nonexchange Transactions" provides for both revenue and expense recognition in arrangements such as this. Accordingly, the Authority has reported \$24 million in Operating Expenses in the General Charges category and \$24 million of Non-operating revenue in the Federal and other aid category.

(r) Reclassifications

Reclassifications have been made to certain 2012 balances in order to conform them to the 2013 presentation.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(3) Cash and Investments

The Authority's cash and investments as of December 31, 2013 and 2012 were as follows (in thousands):

	2013		2012
	Carrying value	Fair value	Carrying value
<u>Cash and cash equivalents</u>			
Unrestricted:			
Cash:			
Demand deposits	\$ 142,465	142,465	89,568
Toll change funds	126	126	128
Total unrestricted cash	142,591	142,591	89,696
Cash equivalents:			
Government discount notes	9,177	9,174	-
Repurchase agreements	-	-	33,945
U.S. Treasury Securities	28,927	28,915	-
Commercial paper	7,603	7,600	57,887
Total unrestricted cash equivalents	45,707	45,689	91,832
Total unrestricted cash and cash equivalents	\$ 188,298	188,280	181,528
Restricted:			
Cash:			
Demand deposits	128,948	132,018	49,168
Other deposits	3,070	-	2,988
Total restricted cash	132,018	132,018	52,156
Cash equivalents:			
Government discount notes	16,745	16,746	-
Repurchase agreements	-	-	26,514
U.S. Treasury Securities	147,836	147,826	140,253
Commercial paper	38,858	38,855	-
Total restricted cash equivalents	203,439	203,427	166,767
Total restricted cash and cash equivalents	\$ 335,457	335,445	218,923

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(3) Cash and Investments, Continued

	2013		2012
	<u>Carrying</u>	<u>Fair</u>	<u>Carrying</u>
	<u>value</u>	<u>value</u>	<u>value</u>
<u>Investments</u>			
Unrestricted:			
Government agency notes	\$ 37,758	37,656	29,106
Commercial paper	6,872	6,872	-
U.S. Treasury Securities	-	-	3,096
Time deposits	1,685	1,685	16,813
Total unrestricted investments	46,315	46,213	49,015
Restricted:			
Government discount notes	266,823	266,825	86,272
Government agency notes	387,835	388,977	25,497
Commercial paper	369,681	369,887	57,988
U.S. Treasury Securities	233,629	233,489	72,007
Total restricted investments	1,257,968	1,259,178	241,764
Total unrestricted and restricted investments	\$ 1,304,283	1,305,391	290,779

At December 31, 2013, fair value is based on the readily available market value. At December 31, 2012, the fair value of cash and investments approximated carrying value.

The Authority requires collateral, in the form of federal government obligations or agency instruments guaranteed by the federal government, for all investments in repurchase agreements. The Authority also requires delivery to its trustee/custodian of all securities purchased and collateral for repurchase agreements, regardless of the seller institution. All Authority investment securities are classified as securities acquired by a financial institution for the Authority and held by the Authority's trustee/custodian in the Authority's name. Bank balances, which are comprised of demand and other deposits, approximated \$274.5 million and \$141.7 million as of December 31, 2013 and 2012, respectively, and are fully insured or collateralized. Amounts are collateralized with securities transferred to and held by the Authority's trustee/custodian in the Authority's name.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(3) Cash and Investments, Continued

As of December 31, 2013, the Authority had the following concentrations of investments:

<u>Security</u>	<u>Credit Exposure (Rating)</u>	<u>% of Total Investments</u>
<i><u>Agency Obligations</u></i>		
Federal Farm Credit Bank	Aaa/AAA	5.4%
Federal Home Loan Banks	Aaa/AA+	12.6%
Federal Home Loan Mortgage Corporation	Aaa/AAA	15.5%
Federal National Mortgage Association	Aaa/AA+	12.5%
<i><u>Commercial Paper</u></i>		
Bank of Nova Scotia NY	A-1/P-1	8.1%
General Electric Capital Corporation	A-1+/P-1	7.4%
ING US Funding LLC	A-1/P-1	4.9%
Koch Resources LLC	A-1+/P-1	0.3%
Rabobank USA Financial Corporation	A-1+/P-1	4.9%
Walt Disney Company	A-1/P-1	1.9%
<i><u>U.S. Government Securities</u></i>		
Treasury Notes	Aaa/AA+	5.1%
Treasury Bills	A-1+/P-1	21.0%
Treasury Strips	Aaa/AA+	0.3%

(4) Capital Assets

The Authority's capital assets principally include the Thruway System, Canal System and equipment. The Thruway System includes infrastructure assets consisting of bridges, highways, buildings, toll equipment, and intelligent transportation systems. The Canal System includes canal structures and buildings. Equipment includes vehicles, machinery, software systems, and E-ZPass tags.

All capital assets are stated at cost. Capital assets are defined as assets with initial, individual costs exceeding capitalization thresholds of \$5,000 to \$50,000. Depreciation is computed on the straight-line method over the following estimated useful lives:

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(4) Capital Assets, Continued

<u>Category</u>	<u>Useful life</u>	<u>Capitalization Threshold</u>
Bridges	45 years	\$ 50,000
Bridge Improvements	15 years	50,000
Highways	30 years	50,000
Highway Improvements	10 years	50,000
Buildings	30 years	20,000
Fiber Optic System	17 years	50,000
Canal Structures	50-100 years	50,000
Canal Improvements	15-30 years	50,000
Equipment	2-12 years	5,000 - 20,000

The following schedule summarizes the capital assets of the Authority and related changes from December 31, 2012 to December 31, 2013 (in thousands):

	December 31, 2012			December 31, 2013
	<u>Balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>Balance</u>
Capital assets, not being depreciated:				
Land and land improvements	\$ 820,481	6,871	(13)	827,339
Construction in progress	677,778	921,495	(508,658)	1,090,615
Total capital assets, not being depreciated	<u>1,498,259</u>	<u>928,366</u>	<u>(508,671)</u>	<u>1,917,954</u>
Capital assets, being depreciated:				
Thruway System	7,072,266	510,291	(31,380)	7,551,177
Canal System	472,697	9,784	-	482,481
Equipment	221,525	24,272	(15,612)	230,185
Total capital assets, being depreciated	<u>7,766,488</u>	<u>544,347</u>	<u>(46,992)</u>	<u>8,263,843</u>
Less accumulated depreciation for:				
Thruway System	(4,112,068)	(303,631)	31,187	(4,384,512)
Canal System	(65,770)	(7,228)	-	(72,998)
Equipment	(135,930)	(20,891)	14,995	(141,826)
Total accumulated depreciation	<u>(4,313,768)</u>	<u>(331,750)</u>	<u>46,182</u>	<u>(4,599,336)</u>
Net value of capital assets, being depreciated	<u>3,452,720</u>	<u>212,597</u>	<u>(810)</u>	<u>3,664,507</u>
Net value of all capital assets	<u>\$ 4,950,979</u>	<u>1,140,963</u>	<u>(509,481)</u>	<u>5,582,461</u>

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(4) Capital Assets, Continued

Depreciation expense related to capital assets was \$331,750,000 and \$309,984,000 for the years ended December 31, 2013 and 2012, respectively.

Additions to capital assets included capitalized interest of \$18.1 million for the year ending December 31, 2013. The Authority incurred \$153.3 million in total interest expenses in 2013, of which \$18.1 million was capitalized and an additional \$0.4 million was offset against interest earned on the proceeds from various debt issuances. Additions to capital assets included capitalized interest of \$11.5 million for the year ending December 31, 2012. The Authority incurred \$127.3 of total interest expense in 2012, of which \$11.5 was capitalized and an additional \$0.3 million was offset against interest earned on proceeds from various debt issuances.

(5) Restricted Assets

Restricted assets are established pursuant to bond resolutions and other agreements. The related balances at December 31, 2013 and 2012 are as follows:

Senior Debt Service Fund: Established to receive funds from Authority revenues to make periodic payments of interest and principal. The amounts held in this restricted fund at December 31, 2013 and 2012 were \$143,764,000 and \$121,656,000, respectively.

Senior Debt Service Reserve Fund: Established to retain funds equal to the maximum amount of aggregate debt service for any twelve month period on all outstanding General Revenue Bonds secured by the Senior Debt Service Reserve Fund. The amounts held in this restricted fund at December 31, 2013 and 2012 were \$158,060,000 and \$158,146,000, respectively.

Construction Fund: Established to hold moneys paid into it from the sale of bonds and notes to pay for costs of the "Facilities" and "Other Authority Projects" as defined in the bond resolutions. Any remaining money upon completion or abandonment of such projects shall be transferred to other funds in accordance with the terms outlined in the bond resolutions. The amounts held in this restricted fund at December 31, 2013 and 2012 were \$17,379,000 and \$160,745,000, respectively.

Reserve Maintenance Fund: Established to hold funds required to be deposited each year into the Reserve Maintenance Fund. Funds held in the Reserve Maintenance Fund can be disbursed for specific costs relating to the "Facilities," as defined in the bond resolution and certain highway and railroad grade crossings. The amounts held in this restricted fund at December 31, 2013 and 2012 were \$66,948,000 and \$39,057,000, respectively.



NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(5) Restricted Assets, Continued

Junior Indebtedness Fund: Established to hold moneys paid into it from the sale of Junior Indebtedness Obligations which are to be used to fund the Facilities Capital Improvement Fund for a portion of the cost of the Authority's New NY Bridge Project as defined in the Junior Indebtedness Bond Resolution and to pay debt service including capitalized interest on the Junior Indebtedness Obligations - Series 2013A through December 31, 2017. The amounts held in this restricted fund at December 31, 2013 and 2012 were \$1,210,990,000 and \$0, respectively.

Facilities Capital Improvement Fund: Established to hold funds determined to be necessary or appropriate by the Authority Board to fund Project Costs of Facilities or to set up reserves to fund such costs. The Authority has elected to use this fund to hold revenue, debt proceeds and other monies dedicated to the New NY Bridge. The amounts held in this restricted fund at December 31, 2013 and 2012 were \$24,693,000 and \$8,000,000, respectively.

Commercial Charge Surety Account: Established to receive cash surety deposits from Commercial Charge Account customers which are to be used only if the customer does not meet their obligations under their Commercial Charge Account Credit Agreement. The amount held in the account at December 31, 2013 and 2012 was \$3,070,000 and \$2,988,000, respectively.

(6) Long Term Liabilities

The Authority's bond indebtedness and other long-term liabilities as of December 31, 2013 and 2012 are comprised of the following obligations (in thousands):

	Date of <u>Issuance</u>	December 31, 2012 <u>Balance</u>	<u>Additions</u>	<u>Reductions</u>	December 31, 2013 <u>Balance</u>	Due Within <u>One Year</u>
General Revenue Bonds:						
2005 Series F	3/05	\$ 517,795	-	(27,115)	490,680	28,455
2005 Series G	9/05	736,130	-	(525)	735,605	540
2007 Series H	10/07	904,295	-	(34,155)	870,140	35,840
2012 Series I	7/12	1,122,560	-	-	1,122,560	19,035
Unamortized bond premiums		<u>185,627</u>	<u>-</u>	<u>(7,706)</u>	<u>177,921</u>	<u>7,706</u>
General revenue bonds and unamortized premiums		<u>3,466,407</u>	<u>-</u>	<u>(69,501)</u>	<u>3,396,906</u>	<u>91,576</u>
Junior Indebtedness Obligations:						
Series 2013A	12/13	-	1,600,000	-	1,600,000	-
Unamortized bond premiums		<u>-</u>	<u>223,730</u>	<u>(1,485)</u>	<u>222,245</u>	<u>41,685</u>
Junior indebtedness obligations and unamortized premium		<u>-</u>	<u>1,823,730</u>	<u>(1,485)</u>	<u>1,822,245</u>	<u>41,685</u>

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(6) Long Term Liabilities, Continued

	Date of Issuance	December 31, 2012 Balance	Additions	Reductions	December 31, 2013 Balance	Due Within One Year
Bond Anticipation Notes:						
Series 2013A	2/13	\$ -	500,000	(500,000)	-	-
Series 2013B	9/13	-	700,000	(700,000)	-	-
Unamortized Series 2013A premium		-	1,930	(1,930)	-	-
Total bond anticipation notes and unamortized premium		-	1,201,930	(1,201,930)	-	-
Loan payable	4/12	9,000	2,000	-	11,000	-
Total bonds, notes, loan, and unamortized premiums		<u>\$ 3,475,407</u>	<u>3,027,660</u>	<u>(1,272,916)</u>	<u>5,230,151</u>	133,261
Other Long-Term Liabilities:						
Claims liability		900	2,350	-	3,250	3,250
Postemployment benefit obligation		297,691	75,354	(27,895)	345,150	-
Compensated absences		10,963	-	(854)	10,109	-
Environmental remediation obligation		2,619	871	(974)	2,516	2,449
Total other long-term liabilities		<u>\$ 312,173</u>	<u>78,575</u>	<u>(29,723)</u>	<u>361,025</u>	<u>5,699</u>
Total classified as current						<u>\$ 138,960</u>

The debt service requirements for the Authority's general revenue bonds, net of unamortized premiums as of December 31, 2013 are as follows (in thousands):

<u>Due</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2014	83,870	154,508	238,378
2015	87,600	150,826	238,426
2016	91,230	146,912	238,142
2017	95,430	142,578	238,008
2018	99,895	138,175	238,070
2019 - 2023	575,250	611,710	1,186,960
2024 - 2028	733,520	449,357	1,182,877
2029 - 2033	802,945	247,136	1,050,081
2034 - 2038	390,570	107,939	498,509
2039 - 2042	258,675	25,593	284,268
Unamortized premiums	177,921	-	177,921
	<u>\$ 3,396,906</u>	<u>2,174,734</u>	<u>5,571,640</u>

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(6) Long Term Liabilities, Continued

The debt service requirements for the Authority's junior indebtedness obligations, net of unamortized premiums as of December 31, 2013 are as follows (in thousands):

	<u>Due</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2014	\$ -	-	42,630	42,630
2015	-	-	79,517	79,517
2016	-	-	79,517	79,517
2017	-	-	79,517	79,517
2018	-	-	79,517	79,517
2019	1,600,000	-	66,264	1,666,264
Unamortized premiums	<u>222,245</u>	<u>-</u>	<u>-</u>	<u>222,245</u>
	<u>\$ 1,822,245</u>	<u>426,962</u>	<u>2,249,207</u>	<u>2,249,207</u>

General Revenue Bonds - Series F: During March 2005, the Authority issued \$624,570,000 in General Revenue Bonds - Series F which provided funds to: (1) refund \$444,205,000 in outstanding Series B, D, and E Bonds (for a net present value savings of \$18,587,000); (2) refund \$150,000,000 in outstanding General Revenue Bond Anticipation Notes - Series CP-1; (3) provide funds for the Authority's Capital Plan; (4) make a deposit to the Senior Debt Service Reserve Fund; and (5) pay bond issuance costs.

The General Revenue Bonds Series F are comprised of both serial and term bonds, with varying rates and maturities. Amounts outstanding at December 31, 2013 are as follows:

<u>Type</u>	<u>Rates</u>	<u>Maturity</u>	<u>Amount (in thousands)</u>
Serial Bonds	3.75% to 5.00%	2014 - 2026	\$ 424,025
Term Bonds	4.5%	2030	2,915
Term Bonds	5.0%	2030	<u>63,740</u>
			<u>\$ 490,680</u>

Principal payments under the Series F Serial Bonds began in January 2006. The Series F Term Bonds require sinking fund installments, beginning in the year 2027, through the year 2030, of amounts ranging from \$725,000 to \$31,105,000 annually. The Series F Bonds maturing on or after January 1, 2016 are callable at the option of the Authority, in whole or in part, beginning January 1, 2015 at par plus accrued interest.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(6) Long Term Liabilities, Continued

General Revenue Bonds - Series G: During September 2005, the Authority issued \$738,925,000 in General Revenue Bonds - Series G which provided funds to: (1) retire \$525,000,000 in General Revenue Bond Anticipation Notes - Series CP-2 and 2004A; (2) fund a portion of the Authority's Multi-Year Capital Plan; (3) make a deposit to the Senior Debt Service Reserve Fund; and (4) pay bond issuance costs.

The Series G Bonds are comprised of both Serial Bonds and Term Bonds, with varying rates and maturities. The amounts outstanding at December 31, 2013 are as follows:

<u>Type</u>	<u>Rates</u>	<u>Maturity</u>	<u>Amount (in thousands)</u>
Serial Bonds	3.625 to 5.25%	2014 - 2029	\$ 322,505
Term Bonds	4.75%	2030	80,000
Term Bonds	5.0%	2030	88,770
Term Bonds	5.0%	2032	<u>244,330</u>
			\$ <u>735,605</u>

Principal payments under the Series G Serial Bonds began in January 2007. The Series G Term Bonds require sinking fund installments, in 2028 and in 2030 through the year 2032, in amounts ranging from \$30,000,000 to \$125,145,000 annually. The Series G Bonds maturing on or after January 1, 2016 are callable at the option of the Authority, in whole or in part, beginning July 1, 2015 at par, plus accrued interest.

General Revenue Bonds - Series H: During October 2007, the Authority issued \$1,008,910,000 in General Revenue Bonds - Series H which provided funds to: (1) refund \$450,045,000 in then outstanding Series E Bonds (for a net present value savings of \$18,429,000); (2) fund a portion of the Authority's Multi-year Capital Plan; (3) make a deposit to the Reserve Maintenance Fund; (4) make a deposit to the Senior Debt Service Reserve Fund; and (5) pay bond issuance costs.

The Series H Bonds are comprised of both Serial Bonds and Term Bonds, with varying rates and maturities. The amounts outstanding at December 31, 2013 are as follows:

<u>Type</u>	<u>Rates</u>	<u>Maturity</u>	<u>Amount (in thousands)</u>
Serial Bonds	4.0% to 5.0%	2014 - 2030	\$ 660,560
Term Bonds	5.0%	2032	52,765
Term Bonds	5.0%	2037	<u>156,815</u>
			\$ <u>870,140</u>

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(6) Long Term Liabilities, Continued

Principal payments under the Series H Serial Bonds began in January 2009. The Series H Term Bonds require sinking fund installments, beginning in the year 2031, through the year 2037, of amounts ranging from \$25,740,000 to \$34,495,000 annually. The Series H Bonds maturing on or after January 1, 2019 are callable at the option of the Authority, in whole or in part, beginning January 1, 2018 at par plus accrued interest.

General Revenue Bonds - Series I: During July 2012, the Authority issued \$1,122,560,000 in General Revenue Bonds - Series I which provided funds to: (1) retire \$868,045,000 in General Revenue Bond Anticipation Notes - Series 2011A; (2) fund a portion of the Authority's 2012 - 2015 Multi-year Capital Program; (3) make a deposit to the Senior Debt Service Reserve Fund; and (4) pay bond issuance costs.

The Series I Bonds are comprised of both Serial Bonds and Term Bonds with varying rates and maturities. The amounts outstanding at December 31, 2013 are as follows:

<u>Type</u>	<u>Rates</u>	<u>Maturity</u>	<u>Amount (in thousands)</u>
Serial Bonds	3.0% to 5.0%	2014 - 2032	\$ 556,265
Term Bonds	4.125%	2037	64,570
Term Bonds	5.0%	2037	185,620
Term Bonds	4.125%	2042	70,000
Term Bonds	5.0%	2042	<u>246,105</u>
			<u>\$ 1,122,560</u>

Principal payments under the Series I Serial Bonds begin in 2014. The Series I Term Bonds require sinking fund installments in 2033 through 2042, in amounts ranging from \$11,865,000 to \$53,920,000 annually. The Series I Bonds maturing on or after January 1, 2023 are callable at the option of the Authority, in whole or in part, beginning January 1, 2022 at par plus accrued interest.

General Revenue Senior Bonds - Revenue Pledge and Security: The 2005 (Series F), 2005 (Series G), 2007 (Series H) and 2012 (Series I) General Revenue Bonds are all direct obligations of the Authority, secured by a pledge of tolls and other revenue as established under the Bond Resolution. In accordance with the Bond Resolution, a Senior Debt Service Reserve Fund was established to be funded with cash and/or surety in an amount equal to the maximum aggregate debt service for any 12 month period. At both December 31, 2013 and 2012, the Senior Debt Service Reserve Fund, which may be used should amounts in the Senior Debt Service Fund be insufficient to pay debt service payments, was fully funded.

General Revenue Bond Anticipation Notes - 2013A: During February 2013, the Authority issued \$500,000,000 in General Revenue Bond Anticipation Notes Series - 2013A (sold via private placement) to: (1) provide sufficient funds to fund initial New NY Bridge project costs; and (2) pay costs of issuance.

NEW YORK STATE THRUWAY AUTHORITY  
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Notes to Financial Statements, Continued

(6) Long Term Liabilities, Continued

General Revenue Bond Anticipation Notes - 2013B: During September 2013, the Authority issued \$700,000,000 in General Revenue Bond Anticipation Notes - 2013B (sold via private placement) to: (1) redeem the Authority's outstanding General Revenue Bond Anticipation Notes Series - 2013A; (2) pay for ongoing New NY Bridge project costs; and (3) pay costs of issuance.

General Revenue Junior Indebtedness Obligations - Series 2013A: During December 2013, the Authority issued \$1,600,000,000 of General Revenue Junior Indebtedness Obligations - Series 2013A to: (1) fund a portion of the cost of the Authority's New NY Bridge Project, a twin span replacement of the Tappan Zee Bridge; (2) provide funds to refinance the principal and interest on the Authority's General Revenue Bond Anticipation Notes - Series 2013B; (3) pay capitalized interest on the Junior Indebtedness Obligations - Series 2013A through December 31, 2017; and (4) pay the costs of issuance.

The Junior Indebtedness Obligations - Series 2013A (JIO's) are term bonds, payable in a single bullet maturity on May 1, 2019, with varying interest rates from 3% to 5% and are not subject to redemption, prior to maturity. These debt instruments (JIO's), are subordinate to the Authority's General Revenue Bonds (Series F through Series I) mentioned earlier in note 6, as well as General Revenue Bonds - Series J, mentioned later in note 12.

Loan Payable: During April 2012, the Authority entered into a variable rate Loan Agreement with Citibank, N.A., under which the Bank is providing a revolving line of credit, evidenced by a note, in an aggregate amount not to exceed \$60,000,000. The Note matures in April 2017 and may be pre-paid at any time by the Authority without penalty. The proceeds of the Note, as needed, are to be applied to finance capital projects for the State Canal system arising from tropical storm damage caused in August and September 2011. The Authority's reimbursement obligations under the Note are secured in part by a pledge of revenues available in the General Reserve Fund, which pledge constitutes Subordinated Indebtedness under the Bond Resolution. In addition, grant monies expected to be received from the Federal Emergency Management Agency ("FEMA") for these emergency repairs are also pledged to repay the Note, and such FEMA funds are expected to provide a substantial portion of the proceeds to repay the Note. As of December 31, 2013, the outstanding loan amount is \$11,000,000 and during 2013 the interest rate on the loan varied between 0.65% to 0.83% and the fees varied between 0.40% to 0.50%.

(7) Special Bond Programs

The Authority's special bond programs, and the related projects and activities, are entirely separate from the Authority's financing, operation, and maintenance of the Thruway System. As such, these special bond programs are not reflected in the accompanying financial statements. The special bond programs require varying debt service payments which are funded under contractual agreements with the State of New York. The obligation of the State to make such payments is subject to, and dependent upon, annual appropriations by the State Legislature. These bond programs, however, result in no cost to the Authority and provide for no lien on Authority revenues or assets.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Notes to Financial Statements, Continued

(7) Special Bond Programs, Continued

The following are descriptions of the Authority's special bond programs:

Local Highway and Bridge Service Contract Special Bond Program - The Legislature of the State of New York empowered the Authority to issue Local Highway and Bridge Service Contract Bonds, also known as the Consolidated Local Street and Highway Improvement Program (often referred to as the CHIPS Program) to provide funds to reimburse municipalities and other project sponsors throughout the State for qualifying local highway, bridge and multi-modal capital project expenditures under established State programs. The Authority did not issue Local Highway and Bridge Service Contract Bonds in 2013. The Authority receives funds from New York State for debt service on these bonds and related administrative costs. Bonds outstanding under this program were \$753,425,000 and \$916,265,000 at December 31, 2013 and 2012, respectively.

Highway and Bridge Trust Fund Bond Program - The Legislature of the State of New York empowered the Authority to issue Highway and Bridge Trust Fund Bonds to reimburse the State for expenditures made by the State's Department of Transportation in connection with the State's Multi-Year Highway and Bridge Capital Program. The Authority did not issue Highway and Bridge Trust Fund Bonds in 2013. The Authority receives funds from New York State for debt service on these bonds and related administrative costs. Bonds outstanding under this program were \$6,254,720,000 and \$6,991,450,000 at December 31, 2013 and 2012, respectively.

State Personal Income Tax Revenue Bonds (Transportation) - The Legislature of the State of New York empowered the Authority to issue Personal Income Tax (PIT) Revenue Bonds to provide funds to municipalities and other project sponsors throughout the State for qualifying local highway, bridge and multi-modal capital project expenditures under established State programs. In June 2013, the Authority issued \$231,000,000 of State Personal Income Tax Revenue Bonds to fund qualifying projects. The Authority receives funds from New York State for debt service on these bonds and related administrative costs. Bonds outstanding under this program were \$3,047,835,000 and \$3,213,770,000 at December 31, 2013 and 2012, respectively.

(8) Retirement Benefits

The Authority provides its retirees certain retirement benefits made available to participating employers by the New York State Retirement and Social Security Laws, including Chapters 1046 and 1047 of the Laws of 1973.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Notes to Financial Statements, Continued

(8) Retirement Benefits, Continued

The Authority participates in the New York State and Local Employees' Retirement System (ERS) for Authority employees and through December 31, 2012, participated in the Police and Fire Retirement Systems (PFRS) for New York State Police assigned to the Authority. As of 2013, costs associated with State Police assigned to the Thruway, were assumed by New York State. Both ERS and PFRS are cost-sharing multiple-employer retirement systems that provide retirement benefits as well as death and disability benefits. These benefits are provided in accordance with the New York State Retirement and Social Security Law (NYSRSSL), which also governs obligations of employers and employees to contribute. The benefits to employees are guaranteed under the State constitution. The Authority's election to participate in the State plans is irrevocable.

As set forth in the NYSRSSL, the Comptroller of the State of New York (Comptroller) serves as sole trustee and administrative head of ERS and PFRS. The Comptroller shall adopt and may amend rules and regulations for the administration and transaction of the business of ERS and PFRS and for the custody and control of their funds. ERS and PFRS issue a publicly available financial report that includes financial statements and required supplementary information. That report may be obtained by writing to the New York State and Local Retirement Systems, 110 State Street, Albany, New York 12244-0001 or online at [www.osc.state.ny.us](http://www.osc.state.ny.us).

ERS and PFRS Tiers I through IV are noncontributory except for employees with less than 10 years of service who contribute 3% of their salary, Tier V employees who contribute 3% of their salary and Tier VI employees who contributed 3% of their salary in State Fiscal Year 2012-2013. However, beginning April 1, 2013, Tier VI employees will contribute between 3% and 6%, based upon the amount of their annual salary. Under the authority of the NYSRSSL, the Comptroller shall certify annually the rates, expressed as proportions of payroll of members, which shall be used in computing the contributions required to be made by employers.

The rates billed by the Comptroller for ERS during the year ended December 31, 2013 ranged from 11.4% to 28.8% and during the year ended December 31, 2012 ranged from 10.1% to 25.4%. The PFRS was paid as part of a fringe benefit rate billed to the Authority for the State Police. The PFRS benefit rates billed were 13.14% for April, 2012 through December, 2012 and 12.03% for January through March, 2012.

The approximate required contributions for the current year and two preceding years were as follows (in thousands):

	<u>ERS</u>	<u>PFRS</u>
2013	\$ 34,916	0 *
2012	33,006	4,028
2011	37,698	3,912

\* State Police pension costs are no longer paid by the Authority.

The Authority's contributions in 2013 and 2012 were equal to 100% of the contributions required for the period.



NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Notes to Financial Statements, Continued

(9) Other Postemployment Benefits

The Authority reports its Other Postemployment Benefits (OPEB) in compliance with GASB Statement No. 45 - "Accounting and Financial Reporting by Employers for Postemployment Benefits Other than Pensions." Statement No. 45 requires governmental entities, including the Authority, to recognize in its financial statements the financial impact of postemployment benefits, principally employer funded health care and death benefits which the Authority provides for retired employees. Substantially all employees may become eligible for these benefits if they reach normal retirement age while working for the Authority.

The following table summarizes the Authority's valuation of OPEB costs and obligations at December 31, 2013 and 2012 (in thousands):

	2013			2012
	Thruway Authority	Canal Corporation	Total	Total
Present value of future benefit payments	\$ 1,230,128	\$ 239,645	\$ 1,469,773	\$ 1,401,446
Unfunded accrued liability	897,075	165,268	1,062,343	1,071,069
Annual required contribution (30 year amortization)	63,750	12,966	76,716	80,718
Annual OPEB cost	62,630	12,724	75,354	78,495
Valuation payroll	123,161	22,055	145,216	160,733
Annual OPEB expense (as % of payroll)	50.9%	57.7%	51.9%	48.8%
Expected benefit payment	23,809	4,086	27,895	25,723

Actuarial valuations, the most recent of which was completed as of December 16, 2013, involve estimates and assumptions about the probability of events far into the future and are subject to continual revisions as actual results are compared to past expectations and new estimates are made about the future. These calculations are designed to reduce short term volatility in actuarial accrued liabilities. Projected benefits are based on the types of benefits provided at the time of each valuation and on the cost sharing provisions then in effect.

The Authority participates, pursuant to the provisions of Section 163(4) of the New York State Civil Service Law, in the New York State Health Insurance Program (NYSHIP), an Agent Multiple-Employer plan. NYSHIP is administered through the Department of Civil Service and the Authority pays the cost of administration.

NYSHIP does not currently issue a standalone financial report since there are no assets legally segregated for the sole purpose of paying benefits under the plan. The Authority's specific obligation to pay OPEB costs is dependent on the employee's date of hire and labor agreement. Certain retiree costs, described below, are first applied against the value of the retiree's existing sick leave bank balance. A plan summary follows:

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Notes to Financial Statements, Continued

(9) Other Postemployment Benefits, Continued

(a) Plan Types

Medical - New York State Health Insurance Program which includes participation in various insurance plans and HMO's and which also includes drug coverage. Details may be found in the Summary Program Description of the New York State Health Insurance Program Booklet.

Medicare Part B Reimbursement - The Thruway Authority and Canal Corporation reimburse the retiree and his/her Medicare eligible spouse for the Medicare Part B premium.

(b) Eligibility for Employee and Dependents

To be eligible an employee must (1) retire as a member of the New York State Employees' Retirement System, or be at least 55 years old at time of termination; (2) be enrolled in the New York State Health Insurance Program (NYSHIP) on date of retirement; and (3) complete at least 5 years of service for the retiree and dependent to have coverage while employee is living. Ten years of service are needed for continued dependent coverage upon death of the employee.

(c) Benefit/Cost Sharing

The Authority pays 100% of the premium for coverage of the retired employee and 75% of the additional premium for dependent coverage. The premium paid by the Authority is based on the Empire Plan, one of the options available to retirees under the NYSHIP. If a retiree elects for another plan offered under the NYSHIP, the retiree is responsible for costs that exceed the amount of the Empire Plan premium.

(d) Survivor Benefit - \$3,000 payable to retiree's designated beneficiary.

(e) Funding Policy

The obligations of the plan members, employers and other entities are established by action of the Authority pursuant to applicable collective bargaining and employment agreements. The required contribution rates of the employer and the members vary depending on the applicable agreement. The Authority currently contributes enough money to the plan to satisfy current obligations on a pay-as-you-go basis.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Notes to Financial Statements, Continued

(9) Other Postemployment Benefits, Continued

The following summary schedule presents the Annual OPEB Cost and Net OPEB Obligation for the years ended December 31, 2013, 2012 and 2011 (in thousands):

	<u>2013</u>	<u>2012</u>	<u>2011</u>
Normal cost	\$ 34,673	29,345	28,629
Amortization of unfunded actuarial accrued liability	42,043	48,870	45,679
Interest	-	2,503	2,390
Annual required contribution (ARC)	76,716	80,718	76,698
Interest on net OPEB obligation	10,419	9,380	7,415
Adjustment to ARC	<u>(11,781)</u>	<u>(11,603)</u>	<u>(8,991)</u>
Annual OPEB cost	75,354	78,495	75,122
Contribution/expected benefit payment	<u>(27,895)</u>	<u>(25,723)</u>	<u>(23,806)</u>
Increase in net OPEB obligation	47,459	52,772	51,316
Net OPEB obligation at beginning of year	<u>297,691</u>	<u>244,919</u>	<u>193,603</u>
Net OPEB obligation at end of year	<u>\$ 345,150</u>	<u>297,691</u>	<u>244,919</u>

The annual OPEB costs are recorded in the Authority's 2013 and 2012 statements of revenue, expenses, and changes in net position in the amount of \$75,354,000 and \$78,495,000, respectively. The Thruway Authority OPEB costs are recorded as a component of general charges and the Canal Corporation OPEB costs are recorded as a component of Canals. The net OPEB obligation is recorded in the Authority's statement of net position as a component of other long-term liabilities in the amount of \$345,150,000 and \$297,691,000, at December 31, 2013 and 2012, respectively.

The annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for 2011 through 2013 are as follows (in thousands):

Year	Annual OPEB cost			Cost contributed			Net OPEB obligation		
	Thruway Authority	Canal Corporation	Total	Thruway Authority	Canal Corporation	Total	Thruway Authority	Canal Corporation	Total
12/31/11	\$ 62,610	12,512	75,122	32.8%	26.0%	31.7%	\$ 201,417	43,502	244,919
12/31/12	65,401	13,094	78,495	33.8%	27.7%	32.8%	244,723	52,968	297,691
12/31/13	62,630	12,724	75,354	38.0%	32.1%	37.0%	283,544	61,606	345,150

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Notes to Financial Statements, Continued

(9) Other Postemployment Benefits, Continued

The following are the actuarial methods and assumptions used in calculating the obligations related to the Authority's postemployment benefit plan:

Funding interest rate	3.50%
2013 trend rate (Med/Rx)	8%
Ultimate Medical/Rx cost trend rate	4.3%
Year ultimate trend rate reached	2070
Annual payroll growth rate	2.50%
Actuarial cost method	Entry Age Normal
Remaining amortization period at December 31, 2013	23 years
Amortization method	30 year level percentage of payroll

(10) Contingencies and Commitments

(a) Claims and Litigation

The Authority is a party to various legal proceedings, including negligence suits, some of which involve death or serious injury. Many of these actions arise in the normal course of the Authority's operations. The Authority records accruals for claims liability to the extent that management concludes their occurrence is probable and the related damages are estimatable. If the range of the liability is probable and estimatable, the Authority accrues the amount most likely to be paid.

Changes in the Authority's claims liability amounts in years 2011 through 2013 were as follows (in thousands):

	Beginning of Year <u>Liability</u>	Current-Year Claims and Changes in <u>Estimates</u>	Claim <u>Payments</u>	End of Year <u>Liability</u>
2011	\$ 226	1,630	(150)	1,706
2012	1,706	186	(992)	900
2013	900	2,350	-	3,250

In addition, there are claims where liability is not probable, but is possible and estimatable. The range of loss on these claims approximated \$27.4 million to \$52.2 million at December 31, 2013.

Certain other claims cannot be estimated as they involve complex issues. Often these issues are subject to substantial uncertainties and, therefore, the probability of loss or an estimation of damages cannot be determined.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Notes to Financial Statements, Continued

(10) Contingencies and Commitments, Continued

(b) Insurance

Loss of revenues is insured through a use and occupancy policy that covers any interruption in excess of 15 days. Property damage to bridges is insured through various policies from major insurance companies equal to the maximum probable loss from a single occurrence (with deductibles ranging from \$2.5 million to \$5.0 million). In addition, the Authority purchases insurance for workers' compensation benefits and various liability exposures.

The Authority is self-insured for property damage to substantially all buildings and vehicles. The Authority is also self-insured for third party liability, including automobile liability. There are two funded reserves for these exposures, a \$2.5 million insurance fund available to fund certain deductibles and a reserve for public liability claims, which currently totals \$9.9 million.

Insurance for the Authority's service area facilities is provided by the concessionaires. The liability related to construction projects, tandem trailer operations, authorized garage operations and similar risk is transferred through contractual indemnification and compliance with Authority insurance requirements.

(c) Construction Commitments

At December 31, 2013, the amounts of remaining unexpended commitments for projects undertaken, inclusive of the New NY Bridge, and the detail by type of contract are as follows:

<u>Project</u>	<u>Commitments (in thousands)</u>
Highway, bridge and facility, construction and design	\$ 2,879,200
Personal service and miscellaneous	197,200
Canal	<u>120,500</u>
Total	\$ <u>3,196,900</u>

(d) Environmental Remediation

The Authority has adopted GASB Statement No. 49 - "Accounting and Financial Reporting for Pollution Remediation Obligations." Statement No. 49 requires governmental entities, including the Authority, to disclose the nature and estimated cost for environmental remediation obligations. At December 31, 2013, the Authority recorded in its financial statements a cost estimate for environmental remediation at a number of sites on Thruway Authority and Canal Corporation property. These sites have been identified by the New York State Department of Environmental Conservation as locations where operational uses have contributed to various forms of environmental pollution. The estimated costs were developed by Authority engineers and remedial contractors based on the nature of remediation needed and comparable clean-up costs at similar sites and updated for payments made and changes to estimated costs as of December 31, 2013. Estimating environmental

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)

Notes to Financial Statements, Continued

(10) Contingencies and Commitments, Continued

(d) Environmental Remediation, Continued

remediation obligations requires that a number of assumptions be made. Therefore, it is possible that project cost changes due to price fluctuations, changes in technology, changes in potential responsible parties, results of environmental studies and other factors could result in revisions to these estimates.

The Authority has estimated its environmental remediation obligations, net of expected recoveries from other responsible parties. Changes in the Authority's environmental remediation liability amounts in the years 2011 to 2013 were as follows (in thousands):

	Beginning of year <u>liability</u>	<u>Current year</u>		End of year <u>liability</u>
		<u>Estimate</u> <u>changes</u>	<u>Payments</u> <u>made</u>	
2011	\$ 1,940	4,480	(2,813)	3,607
2012	3,607	538	(1,526)	2,619
2013	2,619	871	(974)	2,516

(e) Lease Revenue

The Authority has entered into various non-cancelable contracts with concessionaires to provide patron services on the Thruway System. These contracts provide the Authority with concession revenue, including minimum rentals and contingent revenues based on sales volume. The Authority also leases land, used for antennas and fiber optic cable, under various non-cancelable contracts. Concession contract terms generally range from 16 to 25 years, inclusive of renewal options. Radio tower contract terms generally range from 5 to 10 years, with renewal options up to 10 years, and fiber optic contract terms range from 17 to 20 years.

The following schedule summarizes the future minimum rental revenues to be earned as of December 31, 2013:

<u>Year</u>	Future Minimum Lease Revenue ( <u>in thousands</u> )
2014	\$ 14,300
2015	14,400
2016	14,600
2017	13,500
2018	12,800
Thereafter	<u>24,300</u>
Total	\$ <u>93,900</u>

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Notes to Financial Statements, Continued

(11) Hurricane Irene and Tropical Storm Lee Impact

In August and September of 2011, Hurricane Irene and Tropical Storm Lee caused significant damages to the Canal System. This included structural damage to moveable dams, scouring around approach walls, destroyed buildings, massive ground erosion, as well as electrical, dock and other miscellaneous damages. The vast majority of these damages occurred on the Erie Canal between Locks E-8 in Schenectady County and E-13 in Montgomery County. Governmental Accounting Standards Board Statement 42 (GASB 42) defines the accounting and reporting rules related to the impairment of capital assets. In accordance with GASB 42, we identified the Canal assets that were destroyed or significantly damaged by the storms and have written down their net book value by approximately \$9.3 million as an extraordinary item. The estimated cost to repair storm damage on the Canal System is \$90 million. Expenditures through December 31, 2013 and 2012 were \$44.5 million and \$33.0 million, respectively.

These storms also caused damages to the Thruway System; however, no Thruway assets were damaged to the extent of requiring a write down. The estimated cost to repair storm damage on the Thruway System is now estimated to be \$7.3 million. Expenditures through December 31, 2013 and 2012 were \$6.2 million and \$5.8 million, respectively.

The Authority has received approval for approximately 75% of the storm damage repair work from the U.S. Department of Homeland Security (FEMA) and the U.S. Department of Transportation.

(12) Subsequent Events

In February 2014, the Authority issued General Revenue Bonds - Series J which generated proceeds of \$732.4 million. These proceeds will be used to fund a portion of the cost of the Authority's Multi-Year Capital Program, provide funds to refund a portion of the Authority's General Revenue Bonds - Series F and Series G, and to provide for a required deposit to the Senior Debt Service Reserve Fund. These bonds mature in various amounts through January 1, 2044.

NEW YORK STATE THRUWAY AUTHORITY  
(A Component Unit of the State of New York)  
Required Supplementary Information

Schedule of Funding Progress  
Other Postemployment Benefits  
(In millions of dollars)

<u>Actuarial Valuation Date</u>	Actuarial value of assets (a)	Actuarial accrued liability (AAL) (b)	Unfunded AAL (UAAL) (b-a)	Funded ratio (a/b)	Covered payroll (c)	UAAL as a percentage covered payroll ((b-a)/c)
December 31, 2013	\$ -	1,062	1,062	0.0%	145	732.4%
December 31, 2011	-	1,021	1,021	0.0%	157	650.3%
December 31, 2009	-	982	982	0.0%	167	588.0%
December 31, 2007	-	985	985	0.0%	160	615.6%



INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL  
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF  
FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH  
GOVERNMENT AUDITING STANDARDS

Members of the Board  
New York State Thruway Authority:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of the New York State Thruway Authority (the Authority), as of and for the year ended December 31, 2013, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements, and have issued our report thereon dated March 21, 2014.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

### Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under Government Auditing Standards.

### Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Toski & Co., CPAs, P.C.

Williamsville, New York  
March 21, 2014

## INDEPENDENT ACCOUNTANTS' REPORT ON INVESTMENT PROGRAM COMPLIANCE

Members of the Board  
New York State Thruway Authority:

### Report on Investment Program Compliance

We have audited the New York State Thruway Authority's (the Authority) compliance with the types of compliance requirements described in the Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York related to its investment program during the year ended December 31, 2013.

### Management's Responsibility

Management is responsible for compliance with the requirements of Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York related to its investment program.

### Auditor's Responsibility

Our responsibility is to express an opinion on the compliance for the Authority's investment program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the investment program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the investment program. However, our audit does not provide a legal determination of the Authority's compliance.

### Opinion on Investment Program

In our opinion, New York State Thruway Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its investment program for the year ended December 31, 2013.

## Report on Internal Control Over Compliance

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirement that could have a direct and material effect on the investment program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for the investment program and to test and report on internal control over compliance in accordance with Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of Section 201.3 of Title Two of the Official Compilation of Codes, Rules, and Regulations of the State of New York. Accordingly, this report is not suitable for any other purpose.

Toski & Co., CPAs, P.C.

Williamsville, New York  
March 21, 2014

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

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## SUMMARY OF CERTAIN PROVISIONS OF THE BOND RESOLUTION

The following is a general summary of certain provisions of the Bond Resolution\*. This summary is not to be considered a full statement of the terms of the Bond Resolution and, accordingly, is qualified by reference thereto and is subject to the full text thereof. Copies of the Bond Resolution are available at the office of the Authority.

### Definitions

The following are definitions in summary form of certain terms contained in the Bond Resolution and used in this Official Statement:

“Accrued Debt Service” means, as of any date of calculation, the amount of Debt Service that has accrued with respect to any Series of Bonds, calculating the Debt Service that has accrued with respect to each Series of Bonds as an amount equal to the sum of (1) the interest on the Bonds of such Series that has accrued and is unpaid and that will have accrued by the end of the then current calendar month, including, to the extent not otherwise provided in a Supplemental Resolution, all net amounts due and payable by the Authority and all net amounts to accrue to the end of the then current calendar month pursuant to a Qualified Swap, Qualified Reverse Swap or Parity Reimbursement Obligation; and (2) that portion of the Principal Installments for such Series next due which would be accrued (if deemed to accrue in the manner set forth in the definition of “Debt Service”) to the end of such calendar month; provided that the definition of Accrued Debt Service for any Series of Variable Interest Rate Bonds shall be set forth in the applicable Supplemental Resolution.

“Act” means the New York State Thruway Authority Act, Title 9 of Article 2 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State of New York, as it may be amended from time to time.

“Additional Bonds” means additional Series of Bonds authenticated and delivered on original issuance pursuant to the Bond Resolution.

“Additional Project” shall mean any Other Authority Project designated as an Additional Project by the Authority and in respect of which there has been submitted to the Trustee the documents required by the Bond Resolution and any New Interchange or New Extension; and once designated as an Additional Project, any subsequent Facility Capital Improvements related thereto. See “Additional Projects” hereinafter.

“Additional Project Revenues” means Revenues derived from Additional Projects. “Additional Project Revenues” shall not include the proceeds of any gifts, grants or other income to the Authority from the government of the United States or the State, any public instrumentality of the State or any other individual or entity, to the extent the Authority is precluded by law, the grant or other operative contract or instrument from applying such amounts to the general corporate purposes of the Authority.

“Aggregate Debt Service” means, for any period and as of any date of calculation, the sum of the amounts of Debt Service for such period with respect to all Series of Bonds then Outstanding.

“Authority Engineer’s Certificate” means, in the sole discretion of the Authority, (i) an Independent Consultant’s Certificate (delivered by an Independent Consultant that is a licensed professional engineer) or (ii) a certificate or an opinion signed by a licensed professional engineer employed by the Authority, having

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\* Omitted from this summary is mention of most of the provisions of the Bond Resolution respecting the Authority’s “Guaranteed Bonds” (the last maturity of which was paid in 1995), “Prior General Revenue Bonds” (the outstanding balance of which was refunded in 1992 by the first issue of Bonds under the Bond Resolution) and the Restaurant Concession Bonds (the final maturity of which was January 1, 2006 and which are no longer Outstanding).

knowledge and expertise with respect to the subject matter of such certificate or opinion, and selected by the Authority to deliver such certificate or opinion.

“Authorized Newspaper” means The Bond Buyer or any newspaper customarily published at least once a day for at least five days (other than legal holidays) in each calendar week, printed in the English language and of general circulation in the Borough of Manhattan, City and State of New York, designated by the Authority.

“Authorized Officer” means any member of the Authority Board, its Treasurer, any Assistant Treasurer, its Secretary, any Assistant Secretary, its Executive Director, its Director of Thruway Finance and any other person authorized by a resolution or the by-laws of the Authority to perform the act or execute the document in question.

“Bond” or “Bonds” means any bond or bonds payable from amounts in the Senior Debt Service Fund or, to the extent provided in a Supplemental Resolution, any other indebtedness of the Authority payable from amounts in the Senior Debt Service Fund, which indebtedness may include, but is not limited to, any additional payment obligations in connection with a Qualified Swap, a Qualified Reverse Swap, a Parity Reimbursement Obligation or a capital lease undertaken in connection with the issuance of certificates of participation; provided, however, that such terms shall not include any Bond Anticipation Notes, Junior Indebtedness or Subordinated Indebtedness.

“Bondholder,” “Holder” or “Holder of Bonds,” or any similar term, means any person who shall be the registered owner of any Outstanding Bond or Bonds.

“Business Day” means a day of the year which is not a Saturday, Sunday or legal holiday in the State and not a day on which the Authority, State offices, the Trustee, Paying Agent or provider of a Credit Facility or Reserve Credit Facility are authorized or obligated to close.

“Certificate of Determination” means a certificate of an Authorized Officer of the Authority fixing terms, conditions and other details of Bonds in accordance with the delegation of power to do so under a Supplemental Resolution.

“Code” means the Internal Revenue Code of 1986, as amended. Each reference to a section of the Code shall be deemed to include the Regulations, including temporary and proposed Regulations, relating to such section which are applicable to the Bond Resolution, including the Bonds or the use of Bond proceeds.

“Cost or Costs of Issuance” means the items of expense incurred in connection with the authorization, sale and issuance of a Series of Bonds or Bond Anticipation Notes, which items of expense may include, but are not limited to, Authority expenses, State bond issuance charges, document printing and reproduction costs, filing and recording fees, costs of credit ratings, initial fees and charges of the Trustee, legal fees and charges, professional consultants’ fees, underwriting fees, fees and charges for execution, transportation and safekeeping of Bonds, premiums, fees and charges for Credit Facilities, Reserve Credit Facilities, Qualified Swaps, Qualified Reverse Swaps and other similar financial arrangements, costs and expenses of refunding such Bonds and other costs, charges and fees, including those of the Authority, in connection with the foregoing.

“Counsel’s Opinion” means an opinion signed by an attorney or firm of attorneys of nationally recognized standing in the practice of law relating to municipal, state and public agency financing selected by the Authority.

“Credit Facility” means any letter of credit, line of credit, policy of bond insurance, surety bond, guarantee or similar instrument which is issued by a financial, insurance or other institution and which provides security or liquidity in respect of the Bonds of any Series (and with respect to a policy of bond



insurance, guarantees the payment of principal of and interest on the Bonds), not including any Reserve Credit Facility.

“Date of Completion” means (i) in the case of the construction of any vehicular bridge or road, the date on which such bridge or road is opened to vehicular traffic (as evidenced by an Authority Engineer’s Certificate), and (ii) in any other case, the date on which the acquisition, construction, improvement, reconstruction or rehabilitation of a Facility is completed (as evidenced by an Authority Engineer’s Certificate).

“Debt Service” for any period means, as of any date of calculation and with respect to any Series, an amount equal to the sum of (i) interest accruing during such period on the Bonds of such Series, including, to the extent not otherwise provided in a Supplemental Resolution, all net amounts due and payable by the Authority and all net amounts to accrue to the end of such period pursuant to a Qualified Swap, Qualified Reverse Swap or Parity Reimbursement Obligation, and (ii) that portion of each Principal Installment for such Series which would accrue during such period if such Principal Installment were deemed to accrue daily in equal amounts from the next preceding Principal Installment payment date for such Series (or, if there shall be no such preceding Principal Installment payment date, from a date one year prior to the due date of the first Principal Installment of the Bonds of such Series); provided, however, that in calculating Aggregate Debt Service for purposes of the calculation of “Net Revenue Requirement” in connection with the test for the issuance of Additional Bonds and Refunding Bonds, the rate covenant and the test for an Other Authority Project to become an Authority Project, Debt Service on Outstanding Bonds for which the Authority has entered into a Qualified Swap shall be calculated assuming that the interest rate on such Bonds shall equal the stated fixed rate on the Qualified Swap. Such interest and Principal Installments shall be calculated on the assumption that no Bonds of such Series Outstanding at the date of calculation will cease to be Outstanding except by reason of the payment of each Principal Installment on the due date thereof, provided, however, that there shall be excluded from “Debt Service” (1) interest on Bonds to the extent that Escrowed Interest is available to pay such interest, (2) Principal Installments on Bonds to the extent that Escrowed Principal is available to pay such Principal Installments, and (3) interest funded from Bond proceeds to the extent that such amounts are held by the Trustee in the Senior Debt Service Fund for such purpose. See “Additional Bonds”, “Tolls, Fees and Charges” and “Additional Projects”.

“Defeased Municipal Obligations” means pre-refunded municipal obligations rated “AAA” by S&P and “Aaa” by Moody’s and meeting the following requirements:

(a) the municipal obligations are (i) not subject to redemption prior to maturity or (ii) the Authority, the Trustee or the Paying Agent has been given irrevocable instructions concerning their call and redemption and the issuer of the municipal obligations has covenanted not to redeem such municipal obligations other than as set forth in such instructions; and

(b) the municipal obligations are fully secured by cash or Government Obligations which may be applied only to payment of the principal of and interest and premium, if any, on such municipal obligations.

“Estimated Aggregate Debt Service” means, for any period and as of any particular date of calculation, the sum of the amounts of Debt Service for such period with respect to all Series of Bonds then Outstanding; provided, however, that in computing such Estimated Aggregate Debt Service, any particular Variable Interest Rate Bonds shall be deemed to bear at all times, to the maturity date thereof, the Estimated Average Interest Rate applicable thereto.

“Estimated Average Interest Rate” means as to any Variable Interest Rate Bonds the interest rate that would have been borne by such Bonds if such Bonds had been sold as fixed interest rate Bonds of the Authority (i) without the benefit of any credit enhancement and (ii) with the same final maturity or maturities (without giving effect to puts or tenders) as the Variable Interest Rate Bonds actually sold, as estimated by the Authority on the date of sale of such Bonds.

“Facilities” means the Original Project and any Additional Project (but not including an Other Authority Project that does not constitute an Additional Project).

“Facility Capital Improvements” means, as applicable to the Original Project or any Additional Project, as may be determined by the Authority Board to be necessary or appropriate, any construction, reconstruction, rehabilitation, widening (including construction of any parallel spans or thoroughfares to any existing Facility bridge or tunnel) or relocation thereof, any extraordinary repairs, modifications or improvements thereto or with respect to any portion thereof, or any incidental expansion thereof or incidental extension thereto, or with respect to any portion thereof, including:

(i) incidental connecting tunnels, bridges, overpasses and underpasses, as well as existing interchanges, new interchanges determined by the Authority Board to be necessary or appropriate for the proper operation of the applicable Facility in order to relieve congestion, to promote the efficient operation thereof, or to enhance the safe operation thereof; and

(ii) administration, storage and other buildings, toll facilities and equipment, entrance plazas, service areas and stations, barriers, machinery, equipment and other facilities relating to the construction, reconstruction, operation or maintenance of any Facility, acquisition of rights-of-way or other interests in real property necessary or appropriate for any of the activities described above in this definition.

“Fund” means any one of the funds created and established pursuant to the Bond Resolution.

“Government Obligations” means (a) direct obligations of, or obligations the principal of and the interest on which are unconditionally guaranteed by, the United States of America and entitled to the full faith and credit thereof; (b) certificates, depositary receipts or other instruments which evidence a direct ownership interest in obligations described in clause (a) above or in any specific interest or principal payments due in respect thereof; provided, however, that the custodian of such obligations or specific interest or principal payments shall be a bank or trust company organized under the laws of the United States of America or of any state or territory thereof or of the District of Columbia, with a combined capital stock, surplus and undivided profits of at least \$50,000,000 or the custodian is appointed by or on behalf of the United States of America; and provided, further, that except as may be otherwise required by law, such custodian shall be obligated to pay to the holders of such certificates, depositary receipts or other instruments the full amount received by such custodian in respect of such obligations or specific payments and shall not be permitted to make any deduction therefrom; and (c) Defeased Municipal Obligations.

“Independent Consultant” means an independent licensed professional engineer or firm of independent licensed professional engineers of recognized national standing (who may be an engineer or firm of engineers retained by the Authority for other purposes) selected by the Authority; provided, however, that in connection with an Additional Project, the Authority may, in a Supplemental Resolution, if it determines that the field of engineering is not the most appropriate professional discipline (in terms of knowledge and expertise in connection with such Additional Project) to deliver any Independent Consultant’s Certificates required by the terms of the Bond Resolution, select members of another professional discipline, including but not limited to accounting, as appropriate, as an Independent Consultant in connection with such Additional Project; provided further that any members of such discipline thereafter selected by the Authority shall be independent and shall be of recognized national standing in such discipline.

“Independent Consultant’s Certificate” means a certificate or an opinion signed and delivered by an Independent Consultant pursuant to the terms of the Bond Resolution.

“Interest Payment Date” means, with respect to a Series of Bonds, each date on which interest, if any, is payable pursuant to the Supplemental Resolution authorizing such Bonds.

“Investment Obligations” means, to the extent the same are at the time legal for investment of funds of the Authority under the Act or under other applicable law:

(a) (i) Government Obligations and (ii) bonds, debentures, notes or other obligations issued or guaranteed by any of the following: Federal National Mortgage Association, the Federal Financing Bank, the Federal Home Loan Mortgage Association, the Federal Housing Administration, the Farmers Home Administration, the Government National Mortgage Association, or any other agency controlled by or supervised by and acting as an instrumentality of the United States government,

(b) certificates of deposit issued by, and time deposits in, and bankers' acceptances of, any bank (including any Paying Agent or Trustee), any branch of any bank, national banking association or federally chartered savings and loan association; provided that, with respect to any of the foregoing institutions, whose long-term unsecured indebtedness is rated less than A by Moody's or S&P, such certificates of deposit or time deposits are (i) insured by the Federal Deposit Insurance Corporation for the full face amount thereof or (ii) to the extent not so insured, collateralized by direct obligations of the United States of America having a market value of not less than the face amount of such certificates and deposits,

(c) evidences of ownership of a proportionate interest in specified direct obligations of the United States of America, which obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity of custodian, or when "stripped" by the United States Treasury, then by the custodian designated by the United States Treasury,

(d) obligations of state or local government municipal bond issuers which are rated in one of the two highest Rating Categories by S&P and Moody's,

(e) obligations of state or local government municipal bond issuers, the principal of and interest on which, when due and payable, have been insured by an insurance policy or guaranteed by a letter of credit and which are rated in one of the two highest Rating Categories by S&P and Moody's,

(f) interests in a money market mutual fund registered under the Investment Company Act of 1940, 15 U.S.C. §§ 80-1, et seq., as from time to time amended, the portfolio of which is limited to obligations described in clause (a), (d), or (e) above and repurchase agreements fully collateralized thereby provided that such fund has total assets of at least \$100,000,000 and is rated in the highest Rating Category by S&P and Moody's,

(g) evidences of ownership of a proportionate interest in specified Defeased Municipal Obligations which Defeased Municipal Obligations are held by a bank or trust company organized and existing under the laws of the United States of America or any state thereof in the capacity of custodian,

(h) any repurchase agreement for Government Obligations by the Authority or any Trustee that is with a bank, trust company (including any Trustee) or securities dealer which is a member of the Securities Investors Protective Corporation, each of which is a primary reporting dealer in government securities as determined by the Federal Reserve Bank, or if "primary reporting dealers" cease to be determined by the Federal Reserve Bank, such other comparable standard as the Authority shall implement pursuant to a Supplemental Resolution; provided, however, that the Government Obligations must be transferred to the Authority or any Trustee or a third party agent by physical delivery or by an entry made on the records of the issuer or registrar of such obligations, and the collateral security must continually have a market value at least equal to the amount so invested and the collateral must be free of third party claims. Any investment in a repurchase agreement shall be considered to mature on the date the bank, trust company or recognized securities dealer providing the repurchase agreement is obligated to repurchase the Government Obligations,

(i) commercial paper rated in the highest Rating Category by S&P and Moody's, and

(j) any other obligations from time to time permitted pursuant to the Act or other applicable law, provided, however, that if the funds invested in any such obligation are pledged for the payment of Bonds hereunder and the Bonds are then rated by Moody's or S&P, such obligation shall be rated in one of the two highest Rating Categories of each such rating agency or, if such obligation is not then rated by either rating

agency, an obligation of comparable credit quality of the same issuer is rated in one of the two highest Rating Categories of such rating agency.

Any investment in obligations described in (a), (c), (d), (e), (f), (g), (h) and (i) above may be made in the form of an entry made on the records of the issuer of the particular obligation.

“Junior Indebtedness” means any evidence of indebtedness of the Authority payable out of the Junior Indebtedness Fund.

“Maximum Annual Debt Service” means, as of any date of calculation, an amount equal to the greatest amount of Aggregate Debt Service for the current or any future 12-month period. For purposes of this definition, interest with respect to any Variable Interest Rate Bonds shall be calculated using the Maximum Interest Rate with respect to such Bonds.

“Maximum Interest Rate” means, with respect to any particular Variable Interest Rate Bonds, a numerical rate of interest, which shall be set forth in the Supplemental Resolution authorizing such Bonds, that shall be the maximum rate of interest such Bonds may at any time bear; provided, however, that (a) should the Authority obtain insurance or other coverage which provides that any increase in the variable interest rate on any Variable Interest Rate Bonds above a threshold rate will be reimbursed or paid by the insurer or provider of such other coverage, such threshold rate will be deemed to be the Maximum Interest Rate and (b) with respect to fixed interest rate Bonds deemed to be Variable Interest Rate Bonds because of a Qualified Reverse Swap entered in connection therewith, the Maximum Interest Rate shall be (i) the fixed interest rate of such Bonds for so long as the aggregate Outstanding principal amount of all such fixed interest rate Bonds deemed to be Variable Interest Rate Bonds is less than or equal to 5% of the aggregate principal amount of all Bonds Outstanding, and (ii) otherwise shall be the maximum interest rate of such Qualified Reverse Swap. With respect to the immediately preceding clause (a), the insurer or provider of such other coverage providing such insurance policy or other coverage shall be an insurer or bank whose insurance policies or other coverage are rated in the highest Rating Category by S&P and Moody’s.

“Moody’s” means Moody’s Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and assigns, and, if such corporations shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, “Moody’s” shall be deemed to refer to any other nationally recognized securities rating agency designated by the Authority.

“Net Revenue Requirement” means, with respect to any period of time, an amount equal to the greater of (i) the sum of (A) Aggregate Debt Service, (B) amounts required to make deposits to the Senior Debt Service Reserve Fund, if any, (C) amounts required to make Reserve Maintenance Payments, and (D) amounts required to be deposited in the Junior Indebtedness Fund pursuant to the Supplemental Resolution or other Bond Resolution or agreement authorizing outstanding Junior Indebtedness or (ii) 1.20 times the sum of the Aggregate Debt Service for such period; provided, however, that “Aggregate Debt Service” for purposes of calculating the Net Revenue Requirement may be reduced by an amount equal to investment income on the Senior Debt Service Fund and on the Senior Debt Service Reserve Fund to the extent such investment income is required to be retained in or transferred to the Senior Debt Service Fund, as appropriate, pursuant to a Supplemental Resolution, such amount to be calculated at the rate per annum equal to the lesser of (A) the then current yield on five year obligations of the United States Treasury and (B) the actual income to be earned as estimated by an Authorized Officer.

“Net Revenues” for any period means the amount of the excess of the Revenues over the Operating Expenses during such period; provided, however, that in calculating such amount there shall be excluded from “Revenues” any amounts that (i) are subject to appropriation by the Congress of the United States, the Legislature of the State or any other legislative body of a governmental entity or (ii) are not reasonably expected by the Authority to recur annually in predictable amounts until the scheduled retirement at maturity or pursuant to Sinking Fund Installments of all Bonds Outstanding or then proposed to be Outstanding.

“New Extension” means an additional tolled roadway or an extension to or expansion of any Facility constituting a tolled roadway (including in either case tunnels and bridges), in each case which fully satisfies the requirements of the Bond Resolution and upon such satisfaction is designated by the Authority as an Additional Project; provided that such Additional Project shall be (i) within the jurisdiction and control of the Authority and (ii) undertaken for transportation or transportation-related purposes (including related necessary or appropriate economic development activities). See “Proposed New Interchanges and New Extensions”.

“New Interchange” means an interchange on any Facility constituting a tolled roadway which fully satisfies the requirements of the Bond Resolution and upon such satisfaction is designated by the Authority as an Additional Project; provided that such Additional Project shall be (i) within the jurisdiction and control of the Authority and (ii) undertaken for transportation or transportation-related purposes (including related necessary or appropriate economic development activities). See “Proposed New Interchanges and New Extensions”.

“Operating Expenses” means the expenses incurred for operation, maintenance and repair, ordinary replacement and ordinary reconstruction of any Facility or any part thereof and shall include, without limiting the generality of the foregoing, administrative expenses, premiums and reserves for insurance and self-insurance, fees or premiums for a Credit Facility, Reserve Credit Facility, Qualified Swap or Qualified Reverse Swap, legal and engineering expenses, payments into pension, retirement, health and hospitalization funds, and any other expenses associated with the rehabilitation and reconstruction of a municipal highway, under which passes any portion of the Original Project, and required to be paid by the Authority by Subdivision 4 of Section 359 of the Act, as in effect on August 25, 1992, all to the extent properly and directly attributable to the operation of the Original Project, and rental payments in connection with operating leases entered in the ordinary course of business, all to the extent properly and directly attributable to any Facility, and the expenses and compensation of the Fiduciaries required to be paid under the Bond Resolution; but does not include (i) any costs or expenses for new construction or for major reconstruction or (ii) any provision for interest, depreciation, amortization or similar charges.

“Original Project” means all New York State Thruway sections and connections constituting roads or bridges, authorized by the Act as in effect on, and open to traffic on the original date of adoption of the Bond Resolution, except the portion of I-84 in the State, together with any Facility Capital Improvements related thereto.

“Other Authority Project” means one or more facilities and other real and personal property, or any interest therein, which the Authority may now or hereafter be authorized to acquire, design, construct, maintain, operate, finance, improve, reconstruct, rehabilitate or otherwise undertake for transportation or transportation-related purposes (including related necessary or appropriate economic development activities). Each Other Authority Project shall be within the jurisdiction and control of the Authority and shall be designated as an Other Authority Project by a Supplemental Resolution adopted pursuant to the Bond Resolution, and if not so designated shall not become an Other Authority Project. Notwithstanding the foregoing, the following projects, to the extent authorized by law, shall in any event be deemed Other Authority Projects regardless of whether the Authority has jurisdiction and control of such projects and whether designated by a Supplemental Resolution: (1) the Inner Harbor project and the Intermodal Transportation Center in Syracuse; (2) the Horizons Waterfront project in Buffalo; (3) the Stewart International Airport Access project in Orange County and intended to provide direct access to Stewart International Airport from Interstate Route 84 in the vicinity of the airport; (4) the New York State Canal system; (5) the Thruway Exit 26 project in Schenectady County; and (6) the Tappan Zee Bridge Ferry Service project between Rockland County and Manhattan.

“Other Authority Project Cost” shall have the meaning set forth for such term in the definition of “Project Cost.”

“Outstanding,” when used with reference to Bonds, means, as of any date, all Bonds theretofore or thereupon being authenticated and delivered under the Bond Resolution except:

- (i) Any Bond cancelled or delivered for cancellation at or prior to such date;
- (ii) Any Bond (or portion of a Bond) deemed to have been paid in accordance with the Bond Resolution; or
- (iii) Any Bond in lieu of or in substitution for which other Bonds shall have been authenticated and delivered pursuant to the Bond Resolution.

provided, however, that, unless required pursuant to a Supplemental Resolution, a Qualified Swap, Qualified Reverse Swap or Parity Reimbursement Obligation shall not, by itself, increase the Outstanding principal amount of Bonds.

“Principal” or “principal” means (1) with respect to any capital appreciation bond, the accreted amount thereof (the difference between the stated amount to be paid at maturity and the accreted amount being deemed unearned interest), provided, however, when used in connection with (a) the authorization and issuance of Bonds and (b) the order of priority of payments of Bonds after an Event of Default, “Principal” or “principal” means the original principal amount of a capital appreciation bond (the difference between the accreted amount and the original principal amount being deemed interest), and provided further, however, that when used in connection with determining whether the Bondholders of the requisite principal amount of Outstanding Bonds have given any required consent, notice, waiver, request, demand, authorization, direction or notice, “Principal” or “principal” means the accreted amount, (2) with respect to any capital appreciation and current interest bond, the appreciated value thereof, and (3) with respect to any current interest bond, the principal amount of such bond payable at maturity.

“Principal Installment” means, as of any date of calculation and with respect to any Series, (a) the Principal amount of Outstanding Bonds of such Series, due on the dates and in the amounts, in each case as specified in the Supplemental Resolution authorizing such Series, reduced by the Principal amount of such Bonds which would be retired by reason of the payment when due and application in accordance with the Bond Resolution of Sinking Fund Installments payable before such future date, plus the unsatisfied balance of any Sinking Fund Installment due on such certain future date, together with the aggregate amount of the premiums, if any, applicable on such future date upon the redemption of such Bonds by application of such Sinking Fund Installments in a principal amount equal to such unsatisfied balance, and (b) with respect to any amounts due under any Parity Reimbursement Obligation, the Principal amount of such amounts due under any Parity Reimbursement Obligation.

“Project Cost” with respect to any Facility, shall mean (i) the costs incurred or to be incurred by the Authority in connection with or incidental to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such Facility, including legal, administrative, engineering, planning, design, studies, insurance costs and financing costs of such Facility (except to the extent such costs are funded from the proceeds of any indebtedness of the Authority, the payment of which is included as a Project Cost under clause (iii) below), (ii) amounts, if any, required by the Bond Resolution to be paid into any Fund or account upon the issuance of any Series, (iii) payments when due (whether at the maturity of principal or the due date of interest or upon redemption) on Bond Anticipation Notes, (iv) costs of equipment and supplies and initial working capital and reserves required by the Authority for the commencement of operation of such Facility, (v) costs of acquisition by the Authority of real or personal property or any interest therein, including land required for relocation and relocation costs and land required for environmental mitigation, (vi) any other costs properly attributable to the acquisition, design, construction, improvement, reconstruction or rehabilitation of such Facility, including costs of any Facility Capital Improvements, and (vii) interest on Bonds during the estimated period of construction and for a reasonable period thereafter. As distinguished from Project Costs, any such costs incurred in connection with an Other Authority Project that has not been designated an Additional Project are referred to as “Other Authority Project Costs.”

“Qualified Reverse Swap” means, to the extent from time to time permitted by law, with respect to Bonds, any financial arrangement (i) that is entered into by the Authority in connection with Bonds bearing

interest at a fixed rate of interest in the expectation of lowering the Authority's costs of incurring such indebtedness, (ii) that is entered into by the Authority for a term of more than five years, (iii) the net effect of which, together with the interest rate borne by such Bonds, is a variable rate of interest to the Authority during the term of such arrangement, and (iv) which has been designated in writing to the Trustee by an Authorized Officer as a Qualified Reverse Swap with respect to such Bonds.

“Qualified Swap” means, to the extent from time to time permitted pursuant to law, with respect to Bonds, any financial arrangement (i) that is entered into by the Authority with an entity that is a Qualified Swap Provider at the time the arrangement is entered into; (ii) which provides that the Authority shall pay to such entity an amount based on the interest accruing at a fixed rate on an amount equal either to the principal amount of such Bonds of such Series or a notional principal amount relating to such Series, and that such entity shall pay to the Authority an amount based on the interest accruing on such actual or notional principal amount at a variable rate of interest computed according to a formula set forth in such arrangement (which need not be the same as the actual rate of interest borne by such Bonds) or that one shall pay to the other any net amount due under such arrangement or such other similar arrangement, the net effect of such arrangement and the interest rate borne by such Bonds is at all times a fixed interest rate to the Authority; (iii) which provides for a commencement date and a termination date identical to the term or remaining term of such Bonds, taking into account any conversion of Bonds from a variable interest rate to a fixed interest rate as a termination date; and (iv) which has been designated in writing to the Trustee by an Authorized Officer as a Qualified Swap with respect to such Bonds.

“Qualified Swap Provider” means, with respect to a Series of Bonds, an entity whose senior long term obligations, other senior long term obligations or claims paying ability or whose payment obligations under a Qualified Swap are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability are rated either (i) at least as high as A3 by Moody's, and A $\square$  by S&P, or the equivalent thereof by any successor thereto for so long as such rating agency is then maintaining a rating on the Bonds Outstanding, but in no event lower than any Rating Category designated by each such rating agency for the Bonds Outstanding subject to such Qualified Swap, or (ii) any such lower Rating Categories which each such rating agency then maintaining a rating on the Bonds Outstanding indicates in writing to the Authority and the Trustee will not, by itself, result in a reduction or withdrawal of its rating on the Bonds Outstanding subject to such Qualified Swap that is in effect prior to entering into such Qualified Swap.

“Rating Categories” means one of the generic rating categories of either Moody's or S&P without regard to any refinement or gradation of such rating by a numerical modifier or otherwise.

“Rebate Amount” means, with respect to each Series of Bonds, the amount equal to the rebatable arbitrage and any income attributable to the rebatable arbitrage as required by the Code.

“Rebate Fund” means the Fund designated as the Rebate Fund established in the Bond Resolution.

“Record Date” means with respect to any Interest Payment Date, unless the applicable Supplemental Resolution authorizing a particular Series of Bonds or a Certificate of Determination relating thereto provides otherwise with respect to Bonds of such Series, the fifteenth (15th) day of the calendar month next preceding such Interest Payment Date.

“Redemption Date” means the date upon which Bonds are to be called for redemption pursuant to the Bond Resolution.

“Redemption Price” means, with respect to any Bonds, the Principal amount thereof plus the applicable premium, if any, payable upon the redemption thereof.

“Refunding Bonds” means all Bonds, whether issued in one or more Series of Bonds, authenticated and delivered pursuant to the Bond Resolution, on original issuance to refund Bonds or Junior Indebtedness or

any Subordinated Indebtedness that was issued to finance or refinance Project Costs or Other Authority Project Costs, and any Bonds thereafter authenticated and delivered in lieu of or in substitution for such Bonds pursuant to the Bond Resolution.

“Regulations” means the Income Tax Regulations promulgated by the Department of the Treasury from time to time.

“Reserve Credit Facility” means (a) any irrevocable, unconditional letter of credit issued by a bank or savings and loan association whose long-term uncollateralized debt obligations are rated in one of the two highest rating categories by each nationally recognized rating agency then rating any Series of Bonds, or if no Series of Bonds is then rated, by any nationally recognized rating agency, and (b) any insurance policy providing substantially equivalent liquidity as an irrevocable, unconditional letter of credit, and which is issued by a municipal bond or other insurance company, obligations insured by which are rated in one of the two highest rating categories by each nationally recognized rating agency then rating any Series of Bonds, or if no Series of Bonds is then rated, by a nationally recognized rating agency, and which is used, to the extent permitted under applicable law, including the Act, to fund all or a portion of the Senior Debt Service Reserve Fund Requirement.

“Reserve Maintenance Payments” means an amount described as such for a particular Authority fiscal year in the Authority Budget, which for each fiscal year of the Authority shall be an amount no less than the greater of (i) \$30,000,000 or (ii) the amount specified in an Independent Consultant’s Certificate for such Authority fiscal year (the amount so specified in each Authority Budget being the “Minimum Amount”); provided further that Reserve Maintenance Payments may not exceed an amount or amounts from time to time established by the Authority pursuant to a Supplemental Resolution (the “Maximum Amount”); provided further that any such Maximum Amount shall not be less than the Minimum Amount. For purposes of the tests set forth in the Bond Resolution for an Other Authority Project or for a New Interchange or a New Extension to become an Authority Project, for any period beyond the term of an Authority Budget, “Reserve Maintenance Payments” shall be based upon estimates provided in an Independent Consultant’s Certificate. See “Additional Projects” and “Proposed New Interchanges and New Extensions”.

“Revenues” means (i) all tolls, revenues, fees, charges, rent and other income and receipts derived from the operation, jurisdiction and control of the Facilities, (ii) the proceeds of any use and occupancy insurance relating to the Facilities and of any other insurance which insures against loss of Revenues, and (iii) investment income received on any moneys or securities held under the Bond Resolution other than investment income on amounts held in the Rebate Fund, Junior Indebtedness Fund or any other Fund to the extent the investment income from such Fund or any account thereof is not transferred to the Revenue Fund pursuant to the Bond Resolution. “Revenues” shall not include the proceeds of any gifts, grants or other income to the Authority from the government of the United States or the State, any public instrumentality of the State or any other individual or entity, to the extent the Authority is precluded by law, the grant or other operative contract or instrument from applying such amounts to Operating Expenses and Debt Service.

“S&P” means Standard & Poor’s Ratings Services, a corporation organized and existing under the laws of the State of New York, its successors and assigns, and, if such corporation shall be dissolved or liquidated or shall no longer perform the functions of a securities rating agency, “S&P” shall be deemed to refer to any other nationally recognized securities rating agency designated by the Authority.

“Senior Debt Service Reserve Fund Requirement” means, as of any date of calculation, an amount equal to the maximum amount of Aggregate Debt Service for any 12-month period (exclusive of accrued interest, if any) on all Outstanding Bonds secured by the Senior Debt Service Reserve Fund; provided that (i) with respect to Variable Interest Rate Bonds, interest on such Bonds shall be calculated at the Estimated Average Interest Rate until conversion to a fixed rate of interest at which time such requirement shall be recalculated in accordance with actual Debt Service thereafter due and payable for any ensuing 12-month period with respect to such Bonds and (ii) for the purposes of determining the amount required to be on deposit and thereafter maintained in the Senior Debt Service Reserve Fund with respect to any Series of Bonds the



interest on which is excludable from gross income for federal income tax purposes, to the extent required to maintain the federal tax status of interest on such Bonds, the Senior Debt Service Reserve Fund Requirement shall at no time exceed the sum of the Senior Debt Service Reserve Fund Requirement immediately prior to the issuance of such Series and an amount equal to ten per centum (10%) of the proceeds (as such term is used in Section 148(d) of the Code) from the sale of such Series.

“Series” means all of the Bonds authenticated and delivered on original issuance and denominated as part of the same series, and thereafter delivered in lieu of or in substitution of such Bonds upon transfer of registration or exchange, partial redemption and amendment of the Bond Resolution regardless of variations in maturity, interest rate, Sinking Fund Installments or other provisions.

“Sinking Fund Installment” means, with respect to any Series of Bonds, as of any date of calculation and with respect to any Bonds of such Series, the amount of money required by the applicable Supplemental Resolution pursuant to which such Bonds were issued, to be paid in all events by the Authority on a single future date for the retirement of any Outstanding Bonds of said Series which mature after said future date, but does not include any amount payable by the Authority by reason only of the maturity of such Bond.

“State” means the State of New York.

“Subordinated Indebtedness” means any evidence of indebtedness of the Authority payable out of amounts available in the General Reserve Fund.

“Supplemental Resolution” shall mean any Bond Resolution supplemental to or amendatory of the Bond Resolution, adopted by the Authority and becoming effective in accordance with the Bond Resolution.

“Term Bonds” means with respect to Bonds of a Series, the Bonds so designated in an applicable Supplemental Resolution or the applicable Certificate of Determination and payable from Sinking Fund Installments.

“Test Period” means a period of time consisting of the greater of (i) the next succeeding five Authority fiscal years and (ii) the period extending from the next succeeding Authority fiscal year through the second Authority fiscal year following the estimated Date of Completion of any Facility not then completed.

“Trustee” means a trustee appointed by the Authority pursuant to the Bond Resolution, its successor and assigns, and any other corporation or association which may at any time be substituted in its place as provided in the Bond Resolution.

“Variable Interest Rate Bonds” means Bonds which bear a variable interest rate but does not include any Bond which, during the remainder of the term thereof to maturity, bears interest at a fixed rate; provided, however, that Bonds bearing a variable rate of interest shall not be deemed Variable Interest Rate Bonds if (a) the Authority has entered into a Qualified Swap with respect to such Bonds (but only for so long as such Qualified Swap meets all requirements of a “Qualified Swap”) or (b) each of the following conditions is met: (i) such Bonds are issued concurrently in equal principal amounts with other Bonds bearing a variable rate of interest, (ii) such Bonds and such other Bonds are required to remain Outstanding in equal principal amounts at all times, and (iii) the net effect of such equal principal amounts and variable interest rates is at all times a fixed interest rate to the Authority; provided further that, except for purposes of establishing the amount of the Senior Debt Service Reserve Fund Requirement, (1) Bonds bearing a fixed rate of interest shall be deemed Variable Interest Rate Bonds to the extent that the Authority has entered into a Qualified Reverse Swap and (2) the derivative rate of such arrangement shall be deemed to be the variable interest rate of such Bonds.

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

In consideration of the purchase and acceptance of any and all of the Bonds authorized to be issued under the Bond Resolution by those who shall hold the same from time to time, the Bond Resolution shall be

deemed to be and shall constitute a contract between the Authority and the Holders from time to time of the Bonds; and the pledge made in the Bond Resolution and the covenants and agreements therein set forth to be performed on behalf of the Authority shall be for the equal benefit, protection and security of the Holders of any and all of the Bonds, all of which, regardless of the time or times of their issue or maturity, shall be of equal rank without preference, priority or distinction of any of the Bonds over any other thereof except as expressly provided in or permitted by the Bond Resolution.

### **The Pledge Effected by the Bond Resolution**

The Bonds shall be direct and general obligations of the Authority, and the full faith and credit of the Authority are pledged for the payment of such principal, Redemption Price, interest, and Sinking Fund Installments.

There are pledged for the payment of the principal and Redemption Price of, interest on, and Sinking Fund Installments for, the Bonds, in accordance with their terms and the provisions of the Bond Resolution, subject only to the provisions of the Bond Resolution permitting the application thereof (and to the subordination provisions set forth in the Bond Resolution) for the purposes and on the terms and conditions set forth in the Bond Resolution, (i) the proceeds of the sale of the Bonds, (ii) the Revenues and (iii) all Funds and accounts established by the Bond Resolution (except the Rebate Fund, the Junior Indebtedness Fund and, with respect to any Series of Bonds not secured by the Senior Debt Service Reserve Fund, the Senior Debt Service Reserve Fund), including the investments, if any, thereof. The pledge and lien created by the Bond Resolution for the Bonds is superior in all respects to any pledge or lien created for Junior Indebtedness or Subordinated Indebtedness.

### **General Provisions for Issuance of Bonds**

The Bonds of each Series shall be executed by the Authority, authenticated by the Trustee and delivered to or upon the order of the Authority upon receipt by the Trustee, among other things, of a Counsel's Opinion to the effect that (i) the Authority has the right and power under the Act to adopt the Bond Resolution, and the Bond Resolution has been duly and lawfully adopted by the Authority, is in full force and effect and is valid and binding upon the Authority and enforceable in accordance with its terms, and no other authorization for the Bond Resolution is required, (ii) the Bond Resolution creates the valid pledge to the payment of the Bonds of the proceeds of sale of Bonds, the Revenues, the Funds and accounts established by the Bond Resolution (other than the Rebate Fund, the Junior Indebtedness Fund and, to the extent any Series of Bonds is not secured by the Senior Debt Service Reserve Fund, the Senior Debt Service Reserve Fund), and investment income on pledged Funds and accounts, subject to the provisions of the Bond Resolution permitting the withdrawal, payment, setting apart or appropriation thereof for the purposes and on the terms and conditions set forth in the Bond Resolution, and (iii) upon the execution and delivery thereof and upon authentication by the Trustee, the Bonds of such Series will be valid, binding, direct and general obligations of the Authority payable as provided in, and enforceable in accordance with their terms and the terms of, the Bond Resolution and entitled to the benefits of the Act and the Bond Resolution, and such Bonds have been duly and validly authorized and issued in accordance with law, including the Act, as amended to the date of such Counsel's Opinion, and in accordance with the Bond Resolution; provided, however, that such Counsel's Opinion may be qualified to the extent that the enforceability thereof may be limited by bankruptcy, insolvency and similar laws affecting rights and remedies of creditors.

### **Additional Bonds**

One or more Series of Additional Bonds may be authorized and delivered upon original issuance for the purpose of (i) paying the Project Costs (other than Project Costs provided for in clause (iii)), (ii) paying Other Authority Project Costs, to the extent permitted by subparagraph (B) below, and (iii) paying or providing for the payment of Project Costs of improvement, reconstruction or rehabilitation of one or more Facilities for the purpose of preventing a loss of Net Revenues derived from such Facilities, provided that such loss of Net Revenues would be the result of an emergency or some unusual or extraordinary occurrence and that proceeds

of Additional Bonds would not be used for such purpose to the extent that insurance proceeds relating to such occurrence were then available.

(A) The Bonds of any such Series issued for purposes specified in the foregoing clauses (i) and (ii) above shall be authenticated and delivered by the Trustee only upon receipt by it (in addition to the other documents and moneys required by the Bond Resolution) of:

1. A certificate of an Authorized Officer setting forth (i) the Net Revenues for any period of 12 consecutive calendar months out of the 18 calendar months next preceding the authentication and delivery of the Bonds of such Series, provided that if any adjustment of rates shall have been placed in effect during such 12-month period, such Net Revenues shall reflect the Revenues which an Independent Consultant's Certificate estimates in the certificate delivered pursuant to paragraph 3 below would have resulted had such rate adjustment been in effect for the entire 12-month period, and (ii) the Net Revenue Requirement for such 12 calendar months, which certificate shall demonstrate that such Net Revenues equal or exceed such Net Revenue Requirement;

2. A certificate of an Authorized Officer familiar with such matters and an Independent Consultant's Certificate, in each case stating whether, to the best of such party's knowledge, any federal, State or other agency is then projecting or planning the construction, improvement or acquisition of any highway or other facility which, in the opinion of such person or firm, may be materially competitive with any part of the Facilities, and the estimated date of completion of such highway or other facility;

3. An Independent Consultant's Certificate setting forth, for the then current Authority fiscal year and each of the Authority fiscal years in the Test Period, estimates of Revenues giving effect to (i) the placing in service of any Facility not yet placed in service and on the assumption that any competitive highway or other facility referred to in its certificate delivered pursuant to paragraph 2 above will be completed on the date therein estimated and will thereafter be in operation during the period covered by such estimates, (ii) any adjustment of rates which shall have been placed in effect subsequent to the beginning of the current Authority fiscal year, as if such toll, fee or charge adjustment had been in effect from the beginning of such Authority fiscal year until the effective date of any subsequent adjustment presumed necessary, and (iii) any adjustment of rates which, in the opinion of the Independent Consultant, would be practicable and necessary to comply with the provisions of the toll, fee and charge covenant in the Bond Resolution, as if such adjustment were to be in effect from its effective date to the effective date of any other such adjustment;

4. An Independent Consultant's Certificate setting forth (i) for the years and taking into account the assumptions specified for the Independent Consultant's Certificate pursuant to paragraph 3 above, estimates of the Operating Expenses giving effect to the placing in service of any Facility taken into account in paragraph 3 above, (ii) the estimated total Project Cost, and (iii) the estimated date of placing in service of any Facility taken into account in such paragraph 3; and

5. A certificate of an Authorized Officer setting forth (i) the estimated Net Revenues (based on the certificates delivered pursuant to paragraphs 3 and 4 above) for the current Authority fiscal year and each of the years in the Test Period giving effect to the placing in service of any Facility not yet placed in service and (ii) the opinion that such estimated Net Revenues for the current Authority fiscal year and each of the Authority fiscal years in the Test Period equal or exceed the estimated Net Revenue Requirement (based on the certificate delivered pursuant to paragraph 1 above and assuming the Maximum Interest Rate on any Variable Interest Rate Bonds) for each such year and that estimated Net Revenues in the last full Authority fiscal year of the Test Period equal or exceed Maximum Annual Debt Service on all Bonds Outstanding immediately after the authentication and delivery of the Bonds being issued.

(B) Any Series of Additional Bonds to be issued for the purpose of financing or refinancing Other Authority Project Costs shall be issued only if, in addition to satisfying the conditions of subparagraph (A) above, the Maximum Annual Debt Service on all Outstanding Bonds issued for the purpose of financing or refinancing Other Authority Project Costs (after the issuance of such Series of Additional Bonds) shall be less

than 20% of the amount of Net Revenues calculated pursuant to clause (A)(1)(i) above; provided that there shall not be counted in the calculation of such Maximum Annual Debt Service any Bonds initially issued to finance or refinance an Other Authority Project (1) if such Bonds are no longer Outstanding, (2) if such Other Authority Project has since been designated an “Additional Project” in accordance with provisions of the Bond Resolution, or (3) to the extent that the proceeds of such Bonds were used to finance Project Costs rather than Other Authority Project Costs, in accordance with the terms of the Bond Resolution.

(C) Any Series of Additional Bonds to be issued for the purpose described in clause (iii) of the first paragraph under this heading, shall be authenticated and delivered by the Trustee only upon receipt by it (in addition to the other documents and moneys required by the Bond Resolution) of an Independent Consultant’s Certificate setting forth (i) in reasonable detail the improvement, reconstruction or rehabilitation for which such payment is to be made, (ii) the estimated Project Cost of such improvement, reconstruction or rehabilitation, (iii) the amounts reasonably expected to be available therefor from insurance proceeds, and (iv) that such improvement, reconstruction or rehabilitation is necessary to prevent a loss of Net Revenues derived therefrom, that such loss would result from an emergency or some unusual or extraordinary occurrence that has occurred and that insurance proceeds relating to such occurrence are not then available in amounts sufficient to improve, reconstruct or rehabilitate such Facility or Facilities to prevent such loss of Net Revenues.

### **Refunding Bonds**

One or more Series of Refunding Bonds may be authenticated and delivered to refund all Outstanding Bonds of one or more Series of Bonds, a portion of a Series of Outstanding Bonds, a portion of a maturity of a Series of Outstanding Bonds or any Junior Indebtedness or Subordinated Indebtedness that was issued to finance or refinance Project Costs or Other Authority Project Costs. The Authority Board by resolution of its members may issue Refunding Bonds of a Series in an aggregate principal amount sufficient, together with other moneys available therefor, to accomplish such refunding and to make such deposits required by the Bond Resolution and of the Supplemental Resolution authorizing such Series of Refunding Bonds. Refunding Bonds of any Series issued to refund Outstanding Bonds shall be authenticated by the Trustee only upon satisfaction of the requirements of subparagraph (A) set forth under the heading “Additional Bonds” above or upon the receipt by the Trustee of, among other items, a certificate of an Authorized Officer (a) setting forth the Aggregate Debt Service (assuming with respect to any Variable Interest Rate Bonds a Maximum Interest Rate) for the then current and each future Authority fiscal year to and including the Authority fiscal year in which the latest maturity of any Bonds of any Series then Outstanding matures (i) with respect to the Bonds of all Series Outstanding immediately prior to the date of authentication and delivery of such Refunding Bonds, and (ii) with respect to the Bonds of all Series to be Outstanding immediately thereafter, and (b) demonstrating that the Aggregate Debt Service (assuming with respect to any Variable Interest Rate Bonds a Maximum Interest Rate) set forth for each Authority fiscal year pursuant to (ii) above is no greater than that set forth for such Authority fiscal year pursuant to (i) above.

### **Provisions Regarding Bonds Secured by a Credit Facility**

The Authority may include such provisions in a Supplemental Resolution or related Certificate of Determination authorizing the issuance of a Series of Bonds secured by a Credit Facility as the Authority deems appropriate.

In addition, such Supplemental Resolution or applicable Certificate of Determination may establish such provisions as are necessary (i) to comply with the provisions of each such Credit Facility, (ii) to provide relevant information to the issuer of the Credit Facility, (iii) to provide a mechanism for paying Principal Installments and interest on such Series of Bonds under the Credit Facility, and (iv) to make provision for any events of default or for additional or improved security required by the issuer of a Credit Facility.

In connection therewith the Authority may enter into such agreements with the issuer of such Credit Facility providing for, inter alia: (i) the payment of fees and expenses to such issuer for the issuance of such

Credit Facility; (ii) the terms and conditions of such Credit Facility and the Series of Bonds affected thereby; and (iii) the security, if any, to be provided for the issuance of such Credit Facility.

The Authority may secure such Credit Facility by an agreement providing for the purchase of the Series of Bonds secured thereby with such adjustments to the rate of interest, method of determining interest, maturity, or redemption provisions as specified by the Authority in the applicable Supplemental Resolution. The Authority may also in an agreement with the issuer of such Credit Facility agree to directly reimburse such issuer for amounts paid under the terms of such Credit Facility, together with interest thereon (the "Reimbursement Obligation"); provided, however, that no Reimbursement Obligation shall be created, for purposes of the Bond Resolution, until amounts are paid under such Credit Facility. Any such Reimbursement Obligation (a "Parity Reimbursement Obligation") may be secured by a pledge of, and a lien on, Revenues on a parity with the lien created by the Bond Resolution. Any such Parity Reimbursement Obligation shall be deemed to be a part of the Series of Bonds to which the Credit Facility which gave rise to such Parity Reimbursement Obligation relates.

### **Bond Anticipation Notes**

Whenever the Authority shall have, by Supplemental Resolution, authorized the issuance of a Series of Bonds, the Authority Board may by resolution authorize the issuance of Bond Anticipation Notes in anticipation of the issuance of such authorized Series of Bonds, in a principal amount not exceeding the principal amount of the Bonds of such Series so authorized. The principal of and premium, if any, and interest on such Bond Anticipation Notes and any renewals of such Bond Anticipation Notes shall be payable only (i) from the proceeds of any renewals of such Bond Anticipation Notes issued to repay such Bond Anticipation Notes, (ii) from the proceeds of the sale of the Series of Bonds in anticipation of which such Bond Anticipation Notes are issued, (iii) from any amounts provided by the State and/or the federal government expressly for payment of such Bond Anticipation Notes, or (iv) from the proceeds of such Bond Anticipation Notes deposited in any Fund or account under the Bond Resolution. Such proceeds and other amounts set forth in clauses (i), (ii), (iii) and (iv) may be pledged for the payment of the principal of and premium, if any, and interest on such Bond Anticipation Notes and any such pledge shall have priority over any other pledge created by the Bond Resolution. In any case, such Bond Anticipation Notes shall be retired or provision shall be made for their retirement not later than the date of authentication and delivery of the Series of Bonds in anticipation of which they are issued.

### **Redemption of Bonds**

In the case of any redemption of Bonds of a Series at the election of the Authority, or on a mandatory basis, such Bonds may be redeemed at the option of the Authority, or on a mandatory basis, as provided in the Supplemental Resolution authorizing such Bonds or the Certificate of Determination. In addition, pursuant to the Act, the State may, upon furnishing sufficient funds therefor, require the Authority to redeem, prior to maturity, as a whole, any Series of Bonds on any interest payment date not less than fifteen years after the date of issuance of such Bonds at one hundred four per centum of their face value and accrued interest or at such lower redemption price as may be provided in the Bonds in case of the redemption thereof as a whole on the redemption date.

### **Funds and Revenues**

The Bond Resolution establishes the following Funds, to be held as set forth below:

1. Revenue Fund, to be held by the Authority;
2. Operating Fund, to be held by the Authority;
3. Senior Debt Service Fund, to be held by the Trustee;

4. Senior Debt Service Reserve Fund, to be held by the Trustee;
5. Reserve Maintenance Fund, to be held by the Authority;
6. Junior Indebtedness Fund, to be held as determined in the applicable Supplemental Resolution, indenture or other agreement;
7. Facilities Capital Improvement Fund, to be held by the Authority;
8. Other Authority Projects Operating Fund, to be held by the Authority;
9. General Reserve Fund, to be held by the Authority;
10. Rebate Fund, to be held by the Authority; and
11. Construction Fund, to be held by the Authority.

### **Revenue Fund**

The Authority shall pay into the Revenue Fund all Revenues as received, and on or before the last Business Day of each month, the Authority shall, out of the moneys in the Revenue Fund, pay into the Operating Fund all amounts required for reasonable and necessary Operating Expenses and reserves for Operating Expenses and working capital. The Authority shall, out of the moneys remaining in the Revenue Fund after the deposit to the Operating Fund on or before the last Business Day of each month allocate, transfer and apply the balance in the Revenue Fund as of the last day of the preceding month, to the extent sufficient therefor, as follows, but as to each transfer mentioned, only within the limitation indicated below and only after maximum payment within such limitation to the purposes and into the Funds in the following tabulation:

1. To the Trustee for deposit in the Senior Debt Service Fund, if and to the extent required so that the balance in the Senior Debt Service Fund shall be at least equal to Accrued Debt Service for all Bonds Outstanding as of the last day of such month, after taking into account any other amounts available for payment of Debt Service, including any amounts representing investment earnings retained in the Senior Debt Service Fund or transferred from the Senior Debt Service Reserve Fund;

2. To the Trustee for deposit in the Senior Debt Service Reserve Fund, if and to the extent required so that the balance in said Fund shall equal the Senior Debt Service Reserve Requirement for all Bonds secured by such Fund and Outstanding on said date;

3. To the Reserve Maintenance Fund, amounts such that (a) on or before the first day of the seventh month of the Authority's fiscal year there shall have been deposited an amount equal to or greater than one-half of the amount, and (b) on or before the last day of the Authority's fiscal year there shall have been deposited an amount equal to or greater than the full amount, in each case provided in the Authority Budget for the applicable fiscal year for Reserve Maintenance Payments, plus accrued deficits, if any, with respect to prior required allocations to such Fund;

4. To the Junior Indebtedness Fund, if and to the extent required so that the balance in said Fund shall equal the amounts required to be deposited therein by the Supplemental Resolution or other indenture or agreement authorizing the issuance of Junior Indebtedness outstanding on said date;

5. To the Facilities Capital Improvement Fund, in the amounts and at the times determined to be necessary or appropriate by the Authority Board, to fund Project Costs or to set up reserves to fund such costs;

6. To the Other Authority Projects Operating Fund, in the amounts and at the times determined to be necessary or appropriate by the Authority Board, to fund operating expenses relating to Other Authority Projects or to set up reserves to fund such expenses; and

7. To the General Reserve Fund, to the extent of any remaining balance of such moneys withdrawn from the Revenue Fund.

### **Operating Fund**

Amounts in the Operating Fund shall be paid out from time to time by the Authority for reasonable and necessary Operating Expenses, free and clear of the lien and pledge created by the Bond Resolution.

The Authority shall at all times retain in the Operating Fund reasonable and necessary amounts for working capital and reserves for Operating Expenses including expenses which do not recur annually; provided that the total amount of such working capital and reserves set aside during any year shall not exceed 25% of the amount shown for Operating Expenses for such year in the applicable Authority Budget.

Whenever the Operating Fund exceeds the amount reasonable and necessary for Operating Expenses including reserves and working capital, the Authority shall apply the excess to the purposes and in the Funds established under the Bond Resolution in the same manner as payments from the Revenue Fund.

Investment income on amounts in the Operating Fund shall be deposited into the Revenue Fund.

### **Senior Debt Service Fund**

The Trustee shall on or before each Interest Payment Date or Redemption Date, as the case may be, withdraw from the Senior Debt Service Fund and pay:

- (A) The interest due on all Outstanding Bonds on such Interest Payment Date;
- (B) The Principal Installments due on all Outstanding Bonds on such Interest Payment Date;
- (C) The Sinking Fund Installments, if any, due on all Outstanding Bonds on such Interest Payment Date; and
- (D) The Redemption Price due on all Outstanding Bonds on any Redemption Date in accordance with the Bond Resolution.

The amounts paid out shall be irrevocably pledged to and applied to such payments.

In the event that on any Interest Payment Date, the amount in the Senior Debt Service Fund shall be less than the amounts, respectively, required for payment of interest on the Outstanding Bonds, for the payment of the principal of Outstanding Bonds or for the payment of Sinking Fund Installments of the Outstanding Bonds of any Series due and payable on such Interest Payment Date, the Authority, in the following order of priority, shall withdraw from the unencumbered moneys in the General Reserve Fund, the unencumbered moneys in the Other Authority Projects Operating Fund, the unencumbered moneys in the Facilities Capital Improvement Fund, the unencumbered moneys in the Reserve Maintenance Fund, and, solely to the extent necessary to make any payments with respect to Bonds secured by the Senior Debt Service Reserve Fund, amounts in the Senior Debt Service Reserve Fund, and deposit to the Senior Debt Service Fund such amounts as will increase the amount in the Senior Debt Service Fund to an amount sufficient to make payment of interest on, and principal and Sinking Fund Installments of the Outstanding Bonds of such Series; provided, however, that with respect to any Series of Bonds not secured by amounts in the Senior Debt Service Reserve Fund pursuant to the related Supplemental Resolution, payments relating to any such Bonds shall be made pro rata with all other Bonds from amounts available from unencumbered moneys in the General

Reserve Fund, the Other Authority Projects Operating Fund, the Facilities Capital Improvement Fund and the Reserve Maintenance Fund, but shall not be funded from any amounts in the Senior Debt Service Reserve Fund.

Investment income on amounts in the Senior Debt Service Fund, to the extent permitted in a Supplemental Resolution, shall be retained in such Fund or, upon the direction of an Authorized Officer, shall be transferred to the Rebate Fund, the Construction Fund or the Revenue Fund.

### **Senior Debt Service Reserve Fund**

In addition to the moneys allocated from the Revenue Fund, the Trustee shall deposit into the Senior Debt Service Reserve Fund such portion of the proceeds of the sale of Bonds of any Series, if any, as shall be prescribed in the Supplemental Resolution or the Certificate of Determination for such Series, and any other moneys and investments which may be made available to the Trustee for the purposes of the Senior Debt Service Reserve Fund from any other source or sources in order to increase the amounts on deposit in the Senior Debt Service Reserve Fund to the Senior Debt Service Reserve Fund Requirement.

If necessary, moneys and Investment Obligations held for the credit of the Senior Debt Service Reserve Fund shall be withdrawn by the Trustee, deposited to the credit of the Senior Debt Service Fund and applied to the payment of interest, Principal Installments and Sinking Fund Installments of Bonds secured by the Senior Debt Service Reserve Fund at the times and in the amounts required to permit the Trustee to make timely payment of debt service due and payable on the Bonds.

Except as otherwise provided under this heading, investment income on amounts in the Senior Debt Service Reserve Fund shall be retained therein. If at any time moneys and Investment Obligations on deposit to the credit of the Senior Debt Service Reserve Fund exceed the Senior Debt Service Reserve Fund Requirement, the Trustee shall, to the extent permitted in a Supplemental Resolution, upon the direction of an Authorized Officer, withdraw therefrom and deposit such excess amount into the Senior Debt Service Fund, the Revenue Fund, the Rebate Fund or the Construction Fund.

In lieu of moneys or Investment Obligations, the Authority may, to the extent permitted by law, deposit or cause to be deposited to or substituted for deposit to the Senior Debt Service Reserve Fund a Reserve Credit Facility for the benefit of the Holders of the Bonds secured by the Senior Debt Service Reserve Fund for all or any part of the Senior Debt Service Reserve Fund Requirement. Each Reserve Credit Facility deposited to the Senior Debt Service Reserve Fund shall be payable (upon the giving of such notice as may be required thereby) on any date on which moneys are required to be withdrawn from the Senior Debt Service Reserve Fund and such withdrawal cannot be made without drawing upon such Reserve Credit Facility. In computing the amount on deposit in the Senior Debt Service Reserve Fund, a Reserve Credit Facility shall be valued at the amount available to be drawn or payable thereunder on the date of computation.

In the event of the refunding of any Bonds, the Authority may withdraw from the Senior Debt Service Reserve Fund all or any portion of the amounts accumulated therein with respect to the Bonds being refunded and deposit such amounts with the Trustee to be held for the payment of the principal or Redemption Price, if applicable, and interest on the Bonds being refunded; provided that such withdrawal shall not be made unless (i) upon such refunding, the Bonds being refunded shall be deemed to have been paid within the meaning and with the effect provided in the Bond Resolution, and (ii) the amount remaining in the Senior Debt Service Reserve Fund, after giving effect to any Reserve Credit Facility deposited in such Fund pursuant to the Bond Resolution, shall not be less than the Senior Debt Service Reserve Fund Requirement, and provided, further, that, at the time of such withdrawal, there shall exist no deficiency in the Senior Debt Service Fund.

The Authority may determine by Supplemental Resolution that a Series of Bonds shall not be secured by the Senior Debt Service Reserve Fund, in which case no amounts shall be required from the proceeds of such Series of Bonds for deposit in the Senior Debt Service Reserve Fund and no amounts shall be payable from the Senior Debt Service Reserve Fund to pay amounts due or payable with respect to such Bonds.



## **Reserve Maintenance Fund**

Moneys held for the credit of the Reserve Maintenance Fund shall be disbursed only for the purpose of paying a cost relating to a Facility of:

- (a) maintenance or repairs not recurring annually, and renewals and replacements,
- (b) repairs or replacements resulting from an emergency or caused by some unusual or extraordinary occurrence, to the extent that the moneys in other available Funds, together with insurance proceeds, if any, available therefor are insufficient to meet such emergency,
- (c) items of equipment, and
- (d) engineering expenses incurred under the provisions of the Bond Resolution.

The Authority shall from time to time transfer any moneys from the Reserve Maintenance Fund to the credit of the Revenue Fund upon the receipt of a certificate of an Authorized Officer directing such transfer and certifying that the amount so to be transferred is no longer required for the purposes of the Reserve Maintenance Fund.

Investment income on amounts in the Reserve Maintenance Fund shall be deposited into the Revenue Fund.

In connection with the establishment of Authority Budgets for each fiscal year of the Authority, the Authority shall cause the Independent Consultant, at least once every three Authority fiscal years, to make an estimate or to evaluate the Authority's estimate of Reserve Maintenance Payments and to deliver a certificate or certificates setting forth the amount or amounts it has approved as an estimate of Reserve Maintenance Payments for each fiscal year of the Authority covered by such certificate. Any Independent Consultant's Certificate delivered in connection with the establishment of Reserve Maintenance Payments shall take into account any other moneys available for such purposes in determining the amount of such Reserve Maintenance Payments.

## **Junior Indebtedness Fund**

The Authority may, at any time or from time to time, issue evidences of indebtedness payable out of, and which may be secured by a pledge of, such amounts in the Junior Indebtedness Fund as may from time to time be available for the purpose of payment thereof and of Revenues; provided, however, that any pledge of Revenues shall be, and shall be expressed to be, subordinate in all respects to the pledge created by the Bond Resolution with respect to the Bonds.

Subject to the terms of any pledge securing Junior Indebtedness, amounts in the Junior Indebtedness Fund may be applied to payment of the principal or redemption price of and interest on any Junior Indebtedness. Junior Indebtedness may be issued by the Authority to provide for any Facilities or Other Authority Projects constituting a lawful transportation or transportation-related (including related necessary or appropriate economic development activities) corporate purpose of the Authority.

The Authority shall have the right to covenant with the holders from time to time of Junior Indebtedness to add to the conditions, limitations and restrictions under which any Additional Bonds may be issued; provided, however, that the Supplemental Resolution or indenture or other agreement providing for the issuance of such Junior Indebtedness shall not permit the holders of such obligations to declare the same or instruct such holders' trustee to declare the same to be immediately due and payable notwithstanding the occurrence of an event that would give rise to such a declaration unless all Outstanding Bonds shall have been declared immediately due and payable in accordance with the Bond Resolution.

### **Facilities Capital Improvement Fund**

The Authority may, from time to time, disburse or transfer amounts in the Facilities Capital Improvement Fund for the purposes of providing for transfers to the Construction Fund, for Project Costs or, upon the determination of the Authority Board and after satisfying any deficiencies in the Senior Debt Service Fund, the Senior Debt Service Reserve Fund, the Reserve Maintenance Fund or the Junior Indebtedness Fund, transfer such amounts to any other Fund or account held under the Bond Resolution.

### **Other Authority Projects Operating Fund**

The Authority may, from time to time, disburse or transfer amounts in the Other Authority Projects Operating Fund, free and clear of the lien and pledge created by the Bond Resolution, for the purpose of providing for operating costs of Other Authority Projects, or, upon the determination of the Authority Board, transfer such amounts to the General Reserve Fund.

### **General Reserve Fund**

Amounts in the General Reserve Fund are to be transferred, in the following order, to the Senior Debt Service Fund, the Senior Debt Service Reserve Fund, the Reserve Maintenance Fund, the Junior Indebtedness Fund, the Facilities Capital Improvement Fund and the Other Authority Projects Operating Fund to make up deficiencies in or to set aside reserves for such Funds.

Subject to any lien or pledge securing Subordinated Indebtedness that has been determined by the Authority Board to be superior to such purposes, amounts in the General Reserve Fund not immediately required for the purposes specified in the preceding paragraph shall, pursuant to resolution of the Authority Board, be applied in the following order: (i) to the purchase, redemption or payment at maturity of Bonds or Junior Indebtedness, (ii) to pay the capital costs of Other Authority Projects or (iii) paid to the Authority, free and clear of the lien and pledge created by the Bond Resolution, for any lawful corporate purpose of the Authority, including but not limited to payment of amounts due with respect to Subordinated Indebtedness.

Upon any purchase or redemption, with moneys in the General Reserve Fund, of Bonds of any Series and maturity for which Sinking Fund Installments have been established, there shall be credited toward each such Sinking Fund Installment thereafter to become due (other than that next due), unless otherwise directed by the Authority, an amount bearing the same ratio to such Sinking Fund Installment as the total principal amount of such Bonds so purchased or redeemed bears to the total amount of all remaining Sinking Fund Installments for the Bonds of the same Series and maturity to be credited.

### **Subordinated Indebtedness**

Subordinated Indebtedness may be issued to finance any lawful corporate purpose of the Authority. Subordinated Indebtedness may be secured by a pledge of such amounts in the Subordinated Indebtedness Fund as may from time to time be available for the payment thereof and of Revenues; provided, however, that any pledge of Revenues shall be, and shall be expressed to be, subordinate in all respects to the pledge created by the Bond Resolution with respect to the Bonds and any pledge of Revenues with respect to Junior Indebtedness.

The Authority shall have the right to covenant with the holders from time to time of Subordinated Indebtedness to add to the conditions, limitations and restrictions under which any Additional Bonds or Junior Indebtedness may be issued; provided, however, that the Supplemental Resolution or indenture or other agreement providing for the issuance of such Subordinated Indebtedness shall not permit the holders of such obligations to declare the same or instruct such holders' trustee to declare the same to be immediately due and give rise to such a declaration unless all Outstanding Bonds and Junior Indebtedness shall have been declared immediately due and payable in accordance with the Bond Resolution.

## **Rebate Fund**

Moneys on deposit in the Rebate Fund shall be applied by the Authority to make payments to the Department of the Treasury of the United States of America at such times and in such amounts as the Authority shall determine to be required by the Code to be rebated to the Department of the Treasury of the United States of America in accordance with the provisions of the Arbitrage and Use of Proceeds Certificate, if any, delivered in connection with each Series of Bonds. Moneys which the Authority determines to be in excess of the amount required to be so rebated shall be deposited to the Revenue Fund.

## **Construction Fund**

There shall be paid into the Construction Fund the amounts (if any) required to be so paid by the provisions of the Bond Resolution, and there may be paid into the Construction Fund, at the option of the Authority, any moneys received by the Authority for or in connection with any Facility or Other Authority Project, as appropriate, from any other source, unless required to be otherwise applied as provided by the Bond Resolution.

Amounts deposited in the Construction Fund (i) from proceeds of Bonds shall be applied by the Authority to Project Costs or Costs of Issuance, as appropriate; provided, however, that proceeds from Bonds issued to finance Other Authority Project Costs shall be applied by the Authority to finance such Other Authority Project Costs or, to the extent permitted by a Supplemental Resolution, Project Costs, and (ii) other amounts deposited in the Construction Fund shall be applied to the purpose or purposes specified in the Supplemental Resolutions authorizing Bonds to finance a Facility, or if no Bonds are so issued, to the purpose or purposes specified in a resolution of the Authority, a copy of which, certified by an Authorized Officer, shall be filed with the Trustee. Notwithstanding the foregoing, amounts in the Construction Fund may be applied to the payment of Principal Installments and interest on the applicable Series of Bonds when due (including payments when due under a Qualified Swap or Qualified Reverse Swap), and to the extent that other moneys are not available therefor, amounts in the Construction Fund shall be applied to the payment of Principal Installments and interest on the Bonds when due (including payments when due under a Qualified Swap or Qualified Reverse Swap).

Investment income on amounts in the Construction Fund from proceeds of a Series of Bonds, to the extent permitted in a Supplemental Resolution, may be retained by the Authority in such Fund or transferred to the Revenue Fund, the Senior Debt Service Fund or the Rebate Fund.

## **Application of Moneys in the Senior Debt Service Fund For Redemption of Bonds and Satisfaction of Sinking Fund Installments**

Moneys in the Senior Debt Service Fund to be used for redemption of Bonds of a Series shall be applied by the Authority to the purchase of Outstanding Bonds of such Series at purchase prices not exceeding the Redemption Price applicable on the next Interest Payment Date on which such Bonds are redeemable, plus accrued interest to such date, at such times, at such purchase prices and in such manner as the Authority shall direct.

In satisfaction, in whole or in part, of any Sinking Fund Installment, the Authority may deliver to the Trustee at least 45 days prior to the date of such Sinking Fund Installment, for cancellation, Bonds acquired by purchase or redemption (except Bonds acquired by purchase or redemption pursuant to the preceding paragraph), of the maturity and interest rate entitled to such Sinking Fund Installment. All Bonds so delivered to the Trustee in satisfaction of a Sinking Fund Installment shall reduce the amount thereof by the amount of the aggregate principal amount of such Bonds.

## **Extension of Payment of Bonds**

The Authority shall not directly or indirectly extend or assent to the extension of the maturity of any of the Bonds or the time of payment of any claims for interest by the purchase or funding of such Bonds or claims for interest or by any other arrangement and, in case the maturity of any of the Bonds or the time for payment of any claims for interest shall be extended, such Bonds or claims for interest shall not be entitled, in case of any default under the Bond Resolution to the benefit of the Bond Resolution or to any payment out of any assets of the Authority or the Funds and accounts (except Funds and accounts held in trust for the payment of particular Bonds or claims for interest pursuant to the Bond Resolution) held by the Trustee, except subject to the prior payment of the principal of all Bonds issued and Outstanding the maturity of which has not been extended and of such portion of the accrued interest on the Bonds as shall not be represented by such claims for interest. Nothing in the Bond Resolution shall be deemed to limit the right of the Authority to issue Refunding Bonds as permitted thereby and by the Act and such issuance shall not be deemed to constitute an extension of the maturity of the Bonds refunded.

## **Particular Covenants of the Authority**

The Authority shall duly and punctually pay or cause to be paid the principal, Sinking Fund Installments, if any, Redemption Price of, and interest on every Bond, at the dates and places and in the manner set forth in the Bonds according to the true intent and meaning thereof.

The Authority has and shall have good right and lawful authority to take jurisdiction over, construct, reconstruct, improve, maintain and operate the Original Project and any Additional Project or Other Authority Project and to fix and collect tolls, fees, rentals and other charges, if any, as provided in the Bond Resolution or applicable Supplemental Resolution.

The Authority shall not hereafter issue any bonds or other evidences of indebtedness, other than the Bonds, secured by an equal or prior pledge of all or any part of the Revenues or other moneys, securities or funds held or set aside by the Authority or by the Fiduciaries under the Bond Resolution, and shall not create or cause to be created any equal or prior lien or charge on the Revenues, or such moneys, securities or funds except as provided in the Bond Resolution; provided, however, that nothing contained in the Bond Resolution shall prevent the Authority from issuing (i) evidences of indebtedness payable out of, or secured by a pledge of, Revenues to be derived on and after such date as the pledge of the Revenues provided in the Bond Resolution shall be discharged and satisfied as provided under "Defeasance", or (ii) Junior Indebtedness or Subordinated Indebtedness.

No part of the Facilities shall be sold, mortgaged, leased or otherwise disposed of or encumbered, provided that the Authority (i) may sell or exchange at any time and from time to time any property or facilities constituting part of the Facilities and not useful, in its opinion, in the operation thereof, but any proceeds of any such sale or exchange, not used to replace such property so sold or exchanged, shall, subject to the rights of other parties, including the State, be deposited to the Revenue Fund to be applied in the manner provided in the Bond Resolution or (ii) at any time or from time to time, in any manner deemed appropriate by the Authority Board, may dispose of any portion of the Facilities with respect to which it is forbidden by law to impose tolls or other charges and which, in its opinion, is not useful in the operation of the Facilities, but any proceeds of any such disposition, shall, subject to the rights of other parties, including the State, be deposited to the Revenue Fund to be applied in the manner provided in the Bond Resolution.

Notwithstanding the provisions of the preceding paragraph, the Authority may lease or make contracts or grant licenses for the operation of, or grant easements or other rights with respect to, any part of the Facilities, provided that any such lease, contract, license, easement or right does not, in the opinion of the Authority, impede or restrict the operation or maintenance by the Authority of the Facilities.

## **Operation and Maintenance of the Facilities**

The Authority shall at all times operate or cause to be operated the Facilities properly and in a sound and economical manner and shall maintain, preserve, reconstruct and keep the same or cause the same to be so maintained, preserved, reconstructed and kept, with the appurtenances and every part and parcel thereof, in good repair, working order and condition, and shall from time to time make, or cause to be made, all necessary and proper repairs, replacements and renewals so that at all times the operation of the Facilities may be properly and advantageously conducted.

## **Tolls, Fees and Charges**

The Authority covenants that:

(a) it shall at all times, fix, charge and collect such tolls, fees and charges for the use of the Facilities as are required in order that, in each Authority fiscal year, Net Revenues shall at least equal the Net Revenue Requirement for such year.

(b) On or before the sixtieth day preceding the first day of each Authority fiscal year, the Authority shall review its financial condition in order to estimate and determine whether Net Revenues for such Authority fiscal year and for the following Authority fiscal year will be sufficient to comply with the revenue covenant described above; provided that, for purposes of determining the portion of the Net Revenue Requirement relating to Variable Interest Rate Bonds for any prospective period of time, such amounts shall be calculated for each Series or subseries of Bonds bearing interest at the same rate by multiplying the principal amount of such Variable Interest Rate Bonds to be Outstanding during such prospective period by the product of the average rate of interest borne by such Variable Interest Rate Bonds during the immediately preceding 12-month period by 1.25%; provided further that for any partial year such amounts shall be prorated by multiplying the foregoing product by the actual number of days of interest accrual to be determined, and by dividing that product by 365 or 366 days, as appropriate for the particular year. If the Authority determines that Net Revenues may be inadequate, it shall cause a study to be made by an Independent Consultant that shall recommend a schedule of tolls, fees and charges which will provide sufficient Net Revenues in the following Authority fiscal year to comply with the revenue covenant described above and which will provide additional Net Revenues to eliminate any deficiency in Funds and accounts held under the Bond Resolution at the earliest practicable time, and the Authority will place in effect as soon as practicable either (i) the recommended schedule of tolls, fees and charges, or, (ii) a different schedule of tolls, fees and charges developed by the Authority which will provide sufficient Net Revenues in the following Authority fiscal year to comply with the revenue covenant described above and which will provide additional Net Revenues in such following Authority fiscal year to eliminate any deficiency at the earliest practicable time, which conclusion is concurred in by an Independent Consultant's Certificate delivered to the Authority and the Trustee.

The tolls, fees and charges to be established pursuant to paragraph (a) under this heading on the Original Project or on any Additional Project constituting a tolled road, bridge or tunnel, in the sole discretion of the Authority, shall be based on any reasonable vehicle classification, use or occupancy, and further, may consist either alone or in combination of (i) point-to-point tolls based on mileage rates, (ii) fixed or single-trip tolls or commutation rates for passage through a barrier station or bridge, including each Grand Island Bridge and a bridge for crossing the Hudson River via the Hudson section, (iii) a surcharge for crossing the Hudson River via the Berkshire section or, if determined to be necessary or appropriate by the Authority Board, a surcharge for any other location, (iv) congestion pricing, and (v) an annual, seasonal or periodic fee for a permit for the limited use of or access to all or any part of the Original Project or an Additional Project constituting a tolled road, bridge or tunnel.

The Authority covenants that tolls, fees or charges for the use of a Facility constituting a tolled road or bridge will be classified in a reasonable way to cover all traffic within any class regardless of the status or character of any person, firm or corporation participating in the traffic, and that no reduced rate of toll, fee or charge will be allowed within any such class except that provision may be made for the use of commutation or

other tickets or privileges based upon frequency, volume, occupancy, congestion pricing or to facilitate implementation of electronic or other new toll collection technologies, or relating to incentives for use of newly tolled facilities which incentives last no longer than three years from the date of introduction of such incentives. The Authority further covenants that no free vehicular passage will be permitted over any portion of the Original Project that was subject to tolls on August 3, 1992 when the Bond Resolution was adopted or any portion of an Additional Project constituting a tolled road or bridge except, to the extent determined necessary and appropriate from time to time in the sole discretion of the Authority, (i) to members, officers and employees of the Authority and the New York State Police, in each case to the extent assigned to any Facility actually in the performance of their duties or in the course of traveling to or from the place of the performance of such duties or as contractually provided, (ii) by means of passes or otherwise, to such vehicles owned by individuals, corporations or partnerships with which the Authority has entered into leases, concession contracts or service and maintenance contracts, as in its discretion may be deemed necessary for the operation of concessions and facilities upon the Facilities, for the maintenance of such concessions or facilities and for the prompt and economical furnishing of emergency services to patrons of the Facilities or any concession or facility thereof, (iii) in a manner and in amounts such that as a result thereof, based upon projections furnished in a report to the Authority and the Trustee by an Independent Consultant, the Authority projects that there will be no material decrease in Revenues, except to the extent offset by a corresponding decrease in Operating Expenses and/or the operating expenses of any Other Authority Projects; provided that for purposes of its report, the Independent Consultant shall take into account implemented or approved toll adjustments and other contemporaneous or prospective changes in the operations of the Original Project and any portion of any Additional Project constituting a tolled road or bridge that shall have been approved by the Authority or any Other Authority Projects, and (iv) otherwise in de minimis amounts.

### **Insurance**

The Authority covenants that it shall maintain with responsible insurers all insurance required and reasonably obtainable, in the judgment of the Authority, to provide against loss of or damage to the Facilities and loss of revenues, to the extent necessary to protect the interests of the Authority and the Bondholders.

### **Accounts and Reports**

The Authority shall keep or cause to be kept proper books of record and account in which complete and correct entries shall be made of all its transactions relating to all Funds established by the Bond Resolution which shall at all reasonable times be subject to the inspection of the Holders of an aggregate of not less than five per cent (5%) in the principal amount of the Bonds then Outstanding or their representatives duly authorized in writing.

The Authority shall annually, within 120 days after the close of each calendar year, file with the Trustee a copy of an annual report for such year, accompanied by a certificate of an Authorized Officer, including statements in reasonable detail of: financial condition as of the end of such year and income and expenses for such year, all to the extent relating to the Facilities; a statement of all classifications of income for such year; and a summary of statement with respect to each Fund and account established under the Bond Resolution.

### **Tax Covenants**

The Authority shall at all times do and perform all acts and things necessary or desirable in order to assure that interest paid on the Bonds shall be not included in the gross income of the owners thereof for purposes of federal income taxation.

The Authority shall not permit at any time any of the proceeds of the Bonds or any other funds of the Authority to be used directly or indirectly to acquire any investment property, the acquisition of which would cause any Bond to be an "arbitrage bond" as defined in Section 148 of the Code.

The Authority shall not permit at any time any proceeds of any Bonds or any other funds of the Authority to be used, directly or indirectly, in a manner which would result in the classification of any Bond as a “private activity bond” within the meaning of Section 141 of the Code.

Notwithstanding the foregoing, the Authority reserves the right to elect to issue obligations the interest on which is not exempt from federal income taxation, if such election is made prior to the issuance of such obligations, and the covenants contained under this heading shall not apply to such obligations.

### **Notice as to Event of Default**

The Authority shall notify each issuer of a Credit Facility and the Trustee in writing that an “Event of Default” has occurred and is continuing, which notice shall be given within five (5) days after the Authority has obtained actual knowledge thereof; provided, however, that the Authority shall provide the issuer of a Credit Facility with immediate notice of any payment default after the Authority has obtained actual knowledge thereof. See “Events of Default” hereinafter.

### **Covenants with Credit Facility Providers**

The Authority may make such covenants as it may in its sole discretion determine to be appropriate with any provider of a Credit Facility or Reserve Credit Facility that shall agree to provide a Credit Facility or Reserve Credit Facility for Bonds of any one or more Series that shall enhance the security or the value of such Bonds and thereby reduce the principal and interest requirements on such Bonds. Such covenants may be set forth in or provided for by the applicable Supplemental Resolution and shall be binding on the Authority, the Trustee, the Paying Agents, and all the owners of Bonds the same as if such covenants were set forth in full in the Bond Resolution.

### **Additional Projects**

The Authority may designate an Other Authority Project to be an Additional Project if and only if there has been submitted to the Trustee with respect to such Other Authority Project at or prior to the date of such designation:

1. A certificate of an Authorized Officer to the effect that the Other Authority Project has been in operation (whether or not by the Authority) for a period of at least twelve (12) months prior to the date of such designation, and that for the 12-month period ending on the last day of a month no more than 90 days preceding the date of designation as an Additional Project the revenues derived from the operation of such Project exceeded the operating expenses for such Other Authority Project;

2. A Counsel’s Opinion to the effect that the Authority has good right and lawful authority to acquire, design, construct, maintain, operate, finance, improve, reconstruct, rehabilitate or otherwise undertake such Other Authority Project and to establish, levy, maintain and collect, during the term of the Bonds, tolls, rentals, rates, fees or other charges in connection therewith, which establishment, levy, maintenance or collection shall not then require or be subject to (a) in the case of any Additional Project constituting a tolled road, bridge or tunnel, any governmental approval not applicable to the Original Project, or (b) in the case of any Additional Project not constituting a tolled road, bridge or tunnel, any direct governmental approval;

3. A Counsel’s Opinion stating whether or not the Authority is required by law to have a license, order or other authority from any federal, State or other governmental agency or regulatory body having lawful jurisdiction in connection with such Facility and, if so required, that such license, order or other authority has been obtained;

4. A certificate of an Authorized Officer setting forth (A) the Revenues and Operating Expenses of the Authority for the 12-month period set forth in subparagraph (1) above, including revenues and operating expenses relating to the Other Authority Project being designated an Additional Project; provided that if

(a) any previously designated Additional Project had not been an Additional Project for any part of the 12-month period, such Additional Project Revenues and Operating Expenses shall be respectively increased by the revenues and operating expenses of such Additional Project for such 12-month period calculated as if the respective definitions of Additional Project Revenues and Operating Expenses had been applicable thereto for the entire 12-month period, and (b) if on the date of such designation by the Authority the amount of the tolls, fees or charges for any Facility shall be less than it was during any part of the period covered by such certificate, the Revenues for such part of such period shall be decreased as if such tolls, fees or charges had been in effect for all of such period, and (B) that for such 12-month period the Net Revenues as calculated pursuant to clause (A) of this subparagraph (4), are at least equal to the Net Revenue Requirement;

5. An Independent Consultant's Certificate setting forth (A) the estimated Net Revenues for all Facilities, together with estimated Reserve Maintenance Payments, excluding the proposed Additional Project, for each of the Authority fiscal years in the Test Period, and (B) the estimated Net Revenues for all Facilities, together with estimated Reserve Maintenance Payments, including the proposed Additional Project, for each of the Authority fiscal years in the Test Period;

6. A certificate of an Authorized Officer to the effect that the amount of the estimated Net Revenues less Reserve Maintenance Payments determined pursuant to subsection (5)(B) above in each of the Authority fiscal years in the Test Period is not less than 100% of the estimated Net Revenues less estimated Reserve Maintenance Payments for each of the same years in subsection (5)(A) above; and

7. A copy of the Supplemental Resolution designating such Other Authority Project as an Additional Project certified by an Authorized Officer.

### **Additional Project Revenues**

The Authority shall not designate a project as an Additional Project, unless the Authority has jurisdiction and control of such project and the Supplemental Resolution designating the same provides that all tolls, rentals and other charges and other earned income or receipts, if any, derived by the Authority from such Project are and shall be deemed to be Additional Project Revenues.

### **Authority Budgets**

The Authority shall prepare an Authority Budget on an annual basis, or on such other periodic basis as the Authority Board shall determine, but in no event on a less frequent basis than biennially, which shall include amounts for all anticipated Operating Expenses and reserves therefor, Reserve Maintenance Payments and provision for anticipated deposits into each Fund under the Bond Resolution for the period of such budget. Such Authority Budget may set forth such additional material as the Authority may determine. On or before the first day of each fiscal year or for such applicable period for the Authority Budget as aforesaid, the Authority shall finally adopt the Authority Budget for such period and shall mail such Authority Budget to the Trustee. The Authority may at any time adopt an amended Authority Budget for the remainder of the then current fiscal year or other applicable period.

### **Inspection of Facilities; Duties of Independent Consultants**

The Authority shall make, or cause the Independent Consultant to make, an inspection of the Facilities at least once every three Authority fiscal years, and, on or before the first day of the first Authority fiscal year in such period to report as to proper maintenance, repair and operation together with an estimate of the moneys necessary for such purposes during each such Authority fiscal year. In any event, the Authority shall cause an Independent Consultant to deliver an Independent Consultant's Certificate either concurring in and approving or making such determinations, as appropriate.



## **Proposed New Interchanges and New Extensions**

The Authority may construct, acquire or accept any additional tolled roadway or any extension to or expansion of any Facility constituting a tolled roadway or any interchange on any Facility constituting a tolled roadway if and only if there has been submitted to the Trustee with respect to such proposed New Interchange or such proposed New Extension at or prior to the date of undertaking the construction, acquisition or acceptance thereof the following:

1. A Counsel's Opinion stating whether or not the Authority is required by law to have a license, order or other authority from any federal, State or other governmental agency or regulatory body having lawful jurisdiction in connection with such New Interchange or New Extension, as applicable, and, if so required, that such license, order or other authority has been obtained;

2. A Counsel's Opinion to the effect that the Authority has good right and lawful authority to acquire, design, construct, maintain, operate, finance, improve, reconstruct, rehabilitate or otherwise undertake such New Interchange or New Extension, and to establish, levy, maintain, collect and adjust, during the term of the Bonds, tolls, rentals, rates, fees or other charges in connection therewith, which establishment, levy, maintenance, collection or adjustment shall not then require or be subject to any governmental approval not applicable to the Original Project;

3. An Independent Consultant's Certificate setting forth (A) the estimated Net Revenues for all Facilities, together with estimated Reserve Maintenance Payments, excluding the proposed New Interchange or New Extension, for each of the successive five complete Authority fiscal years following the later of (i) two complete Authority fiscal years following its estimated Date of Completion and (ii) the date of its acquisition or acceptance by the Authority, and (B) the estimated Net Revenues for all Facilities, together with estimated Reserve Maintenance Payments, including the proposed New Interchange or New Extension for each of the same five complete Authority fiscal years;

4. A certificate of an Authorized Officer to the effect that the amount of the estimated Net Revenues less estimated Reserve Maintenance Payments determined pursuant to subparagraph 3(B) above in each of the five Authority fiscal years is not less than 100% of the estimated Net Revenues less estimated Reserve Maintenance Payments for each of the same five years determined pursuant to subparagraph 3(A) above;

5. Solely with respect to New Interchanges, the Independent Consultant shall include in its estimate of Net Revenues for each year calculated for purposes of subsection 3(B) above, the amount of any payments to be received in cash upon undertaking such New Interchange together with any payment obligations that have or would have a long-term rating of "A" or better (if so determined by the Authority, such cash payments to be allocated pro rata for each of the years of the test period, whether such payments are in fact applied for capital or operating expenses of such New Interchange); provided, however, that if the Authority Board determines that a period longer than five years will be necessary for the New Interchange to meet the test in paragraph 4 without the benefit of such cash payments or payment obligations, the test period shall be expanded accordingly; provided further that no such cash payments or payment obligations may be included for purposes of Subsection 3(B) above in estimating Net Revenues for a New Extension; and

6. A copy of the Supplemental Resolution designating such project to be an Additional Project certified by an Authorized Officer.

The foregoing requirements do not apply to an interchange or an extension that meets the requirements under the Bond Resolution for a "Facility Capital Improvement" (See the definition hereinabove) or an "Additional Project" (see "Additional Projects" hereinabove).

### **Limitation on Certain Acquisitions**

Except for amounts released from the lien of the Bond Resolution pursuant to the provisions relating to the General Reserve Fund, the Authority covenants that no Revenues, Bond proceeds, or proceeds of Junior Indebtedness shall be applied to the purchase or acquisition of any existing facility not, in the opinion of the Authority Board, necessary for the proper operation of an existing Facility or an existing Other Authority Project, except to the extent necessary to pay, in due course or through refunding, any outstanding bonds, notes or other evidences of indebtedness of a public corporation transferring such facility.

### **Investment of Funds**

Amounts in the Funds and accounts established by the Bond Resolution may be invested only in Investment Obligations. Investment Obligations on deposit in the Funds and accounts held under the Bond Resolution shall have maturity dates, or shall be subject to redemption or tender at the option of the Authority or the Trustee on the respective dates specified by an Authorized Officer, as appropriate, which dates shall be on or prior to the respective dates on which the moneys invested therein are payable for the purposes of such Funds and accounts; provided that in no event shall the remaining term to maturity or redemption upon the demand of the holder thereof of any Investment Obligation credited to the Senior Debt Service Reserve Fund be greater than seven (7) years from the date such Investment Obligation is credited to such Fund. The Authority, or the Trustee, upon the instructions of an Authorized Officer, shall sell any Investment Obligations held in any Fund or account to the extent required for payments from such Fund or account. The proceeds of such sales, and of all payments at maturity or upon redemption of such investments, shall be held in the applicable Fund or account to the extent required to meet the requirements of such Fund or account. Losses, if any, realized on Investment Obligations held in any Fund or account shall be debited to such Fund or account. In computing the amount of such Funds and accounts, investments shall be valued at par, or if purchased at other than par, shall be valued at Amortized Value. Accrued interest received upon the sale of any Investment Obligation to the extent such amount exceeds any accrued interest paid on the purchase of such Investment Obligation shall be treated as interest earned on such Investment Obligation.

### **Trustee**

The Trustee may at any time resign and be discharged of its duties and obligations under the Bond Resolution by giving not less than sixty (60) days' written notice to the Authority, specifying the date when such resignation shall take effect; provided, however, that any resignation or removal of the Trustee shall in no event take effect until a successor shall have been appointed and accepted the duties of Trustee.

The Authority may at any time remove the Trustee initially appointed or any successor thereto by written notice of such removal mailed by first class mail to the Trustee except that the Trustee may not be removed during the pendency of an Event of Default; provided, however, that any resignation or removal of the Trustee shall in no event take effect until a successor shall have been appointed and accepted the duties of Trustee.

Any Trustee appointed in succession to the original Trustee shall be a bank or trust company organized under the laws of the State of New York or a national banking association and having Capital Funds of at least \$100,000,000, if there be such a bank or trust company or national banking association willing and able to accept the office on reasonable and customary terms and authorized by law to perform all the duties imposed upon it by the Bond Resolution.

### **Supplemental Resolutions**

The Authority may adopt, for, among other things, any one or more of the following purposes and at any time or from time to time, a Supplemental Resolution which, upon adoption thereof and filing with the Trustee shall be fully effective in accordance with its terms:

1. To modify any of the provisions of the Bond Resolution in any respect whatever, provided that (i) such modification shall be, and be expressed to be, effective only after all Bonds of any Series Outstanding at the date of the adoption of such Supplemental Resolution shall cease to be Outstanding and (ii) such Supplemental Resolution shall be specifically referred to in the text of all Bonds of any Series authenticated and delivered on original issuance after the date of the adoption of such Supplemental Resolution and of Bonds issued in exchange therefor or in place thereof;
2. To insert such provisions clarifying matters or questions arising under the Bond Resolution as are necessary or desirable and are not contrary to or inconsistent with the Bond Resolution as theretofore in effect;
3. To authorize Bonds of a Series;
4. To designate or confirm the designation of any project as an Other Authority Project or to designate an Other Authority Project, New Interchange or New Extension as an Additional Project under the Bond Resolution;
5. To modify, amend, insert or delete such provisions of the Bond Resolution as, in Counsel's Opinion, shall be necessary or desirable to ensure the continued federal tax exemption of the interest on any Series of Bonds Outstanding under the Bond Resolution, so long as the Authority determines that such Supplemental Resolution does not materially adversely affect the right, security and interest of the Holders of Outstanding Bonds;
6. To modify, amend or supplement the Bond Resolution in any manner in order to provide for a Credit Facility or a Reserve Credit Facility for any Series of Bonds, under the Bond Resolution, so long as the Authority determines that such Supplemental Resolution does not materially adversely affect the right, security and interest of the Holders of Outstanding Bonds;
7. To cure any ambiguity, supply any omission, or cure or correct any defect or inconsistent provision in the Bond Resolution, under the Bond Resolution, so long as the Authority determines that such Supplemental Resolution does not materially adversely affect the right, security and interest of the Holders of Outstanding Bonds;
8. To provide for the application of the proceeds of any sale, exchange, lease or other disposition of any Facility permitted by the Bond Resolution;
9. To provide for additional investments that may be delivered in lieu of Government Obligations in order to cause Bonds of a Series then or thereafter being initially issued and delivered to be deemed paid by the Bond Resolution;
10. To the extent authorized by law and to the extent the Authority shall have received a Counsel's Opinion that it will not adversely affect the exclusion of interest from the income of holders of Bonds for federal income tax purposes for any Bonds issued on a tax-exempt basis, to provide for the delivery of Bonds that are not in registered form;
11. To the extent authorized by law and to the extent that it will not adversely affect the exclusion of interest from the income of holders of Bonds for federal income tax purposes for any Bonds issued on a tax-exempt basis, to provide for the delivery of a Series of Bonds or a portion of a Series of Bonds incorporating detachable call options.

In addition, the Authority may adopt a Supplemental Resolution amending any provision of the Bond Resolution, effective upon filing with the Authority of a written determination of the Trustee and a Counsel's Opinion that such amendment will not materially adversely affect the rights of any Holder of Bonds.

## **Powers of Amendment**

Any modification or amendment of the Bond Resolution and of the rights and obligations of the Authority and of the Holders of the Bonds thereunder, in any particular, may be made by a Supplemental Resolution, with the written consent given, and not revoked, as provided in the Bond Resolution, (a) by the Holders of at least a majority in principal amount of the Bonds Outstanding at the time such consent is given, and (b) in case less than all of the Bonds then Outstanding are affected by the modification or amendment, by the Holders of at least a majority in principal amount of the Bonds so affected and Outstanding at the time such consent is given; provided, however, that if such modification or amendment will, by its terms, not take effect so long as any Bonds of any specified like Series and maturity remain Outstanding, the consent of the Holders of such Bonds shall not be required and such Bonds shall not be deemed to be Outstanding for the purpose of any calculation of Outstanding Bonds under this heading. No such modification or amendment shall permit a change in the terms of redemption or maturity of the principal of any Outstanding Bond or of any installment of interest thereon or a reduction in the principal amount or the Redemption Price thereof or in the rate of interest thereon without the consent of the Holders of such Bonds, or shall reduce the percentages or otherwise affect the classes of Bonds the consent of the Holders of which is required to effect any such modification or amendment, or shall change or modify any of the rights or obligations of the Trustee without its written assent thereto. A Series shall be deemed to be affected by a modification or amendment of the Bond Resolution if the same materially adversely affects or diminishes the right, security and interest of the Holders of Bonds of such Series. The Authority may in its discretion determine whether or not in accordance with the foregoing, Bonds of any particular Series or maturity would be affected by any modification or amendment of the Bond Resolution and any such determination shall be binding and conclusive on all Holders of Bonds. The Authority shall, prior to making any such determination, receive a Counsel's Opinion as conclusive evidence as to whether the Bonds of a Series or maturity would be so affected by any such modification or amendment thereof.

## **Events of Default**

The occurrence of one or more of the following events shall constitute an "Event of Default":

(a) payment of principal, Sinking Fund Installments, interest or premium on any Bond shall not be made when the same shall have become due, whether at maturity or upon call for redemption or otherwise, which default shall continue for a period of five (5) days; or

(b) failure by the Authority to observe any of the covenants, agreements or conditions on its part contained in the Bond Resolution or in the Bonds contained, and failure to remedy the same for a period of thirty (30) days after written notice thereof, specifying such failure and requiring the same to be remedied, shall have been given to the Authority by the Trustee or to the Authority and the Trustee by the Holders of not less than a majority in aggregate principal amount of Bonds at the time Outstanding; provided that, if such default cannot be corrected within such thirty (30)-day period, it shall not constitute an Event of Default if corrective action is instituted by the Authority within such period and is diligently pursued until the default is corrected; or

(c) if the Authority (i) admits in writing its inability to pay its debts generally as they become due, (ii) commences voluntary proceedings in bankruptcy or seeking a composition of indebtedness, (iii) makes an assignment for the benefit of its creditors, (iv) consents to the appointment of a receiver of the whole or any substantial part of the Facilities, or (v) consents to the assumption by any court of competent jurisdiction under any law for the relief of debtors of custody or control of the Authority or of the whole or any substantial part of the Facilities.

## Remedies

Upon the occurrence and continuance of any Event of Default, the Trustee may, and upon written request of the Holders of not less than a majority in aggregate principal amount of such Bonds then Outstanding, shall:

(a) by mandamus or other suit, action or proceeding at law or in equity enforce all rights of the Holders of Bonds under the Bond Resolution;

(b) bring suit upon such Bonds;

(c) by action or suit in equity, require the Authority to account as if it were the trustee of an express trust for the Holders of such Bonds;

(d) by action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the Holders of such Bonds;

(e) declare all such Bonds due and payable, and if all defaults shall be made good then with the consent of the Holders of not less than a majority in aggregate principal amount of such Bonds then outstanding, annul such declaration and its consequences.

The Supreme Court of the State shall have jurisdiction of any suit, action or proceeding by the Trustee on behalf of the Holders of Bonds, and venue of any such suit, action or proceeding shall be laid in the County of Albany.

No remedy by the terms of the Bond Resolution conferred upon or reserved to the Trustee or the Holders of the Bonds is intended to be exclusive of any other remedy but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under the Bond Resolution or existing at law or in equity or by statute on or after the date of adoption of the Bond Resolution, except that the Bondholders shall not have the statutory rights afforded by Section 368 of the Act as in effect on August 3, 1992 respecting the appointment of a trustee subsequent to a payment default on the Bonds.

No Holder of any of the Bonds shall have any right to institute any suit, action or proceeding in equity or at law for the enforcement of any trust under the Bond Resolution, or any other remedy thereunder or under the Bonds, unless such Holder previously shall have given to the Trustee written notice of an Event of Default as provided in the Bond Resolution and unless also the Holders of not less than a majority in aggregate principal amount of the Bonds then Outstanding shall have made written request of the Trustee so to do, after the right to exercise such powers or rights of action, as the case may be, shall have accrued, and shall have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted under the Bond Resolution, or to institute such action, suit or proceeding in its or their name; nor unless there also shall have been offered to the Trustee security and indemnity satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall not have complied with such request within a reasonable time; and such notification, request and offer of indemnity are declared in every such case, at the option of the Trustee, to be conditions precedent to the execution of the trusts of the Bond Resolution, or to enforce any right thereunder or under the Bonds, except in the manner therein provided, and that all proceedings at law or in equity shall be instituted, had and maintained in the manner therein provided and for the equal benefit of all Holders of Outstanding Bonds, subject, however, to the provisions of the Bond Resolution regarding the extension of payment for the Bonds. Nothing in the Bond Resolution or in the Bonds contained shall affect or impair the right of action, which is also absolute and unconditional, of any Holder of any Bond to enforce payment of the principal of and premium, if any, and interest on such Bond at the respective dates of maturity of each of the foregoing and at the places therein expressed.

All rights of action under the Bond Resolution or under any of the Bonds which are enforceable by the Trustee may be enforced by it without the possession of any of the Bonds, or the production thereof on the trial

or other proceedings relative thereto, and any such suit, action or proceeding instituted by the Trustee shall be brought in its name, as trustee, for the equal and ratable benefit of the Holders of the Bonds, subject to the provisions of the Bond Resolution.

No delay or omission of the Trustee or of any Holder of the Bonds to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default, or an acquiescence therein; and every power and remedy given by the Bond Resolution to the Trustee and to the Holders of the Bonds, respectively, may be exercised from time to time as often as may be deemed expedient.

### **No Cross-Default**

Except as provided in the Bond Resolution, a Supplemental Resolution or a Certificate of Determination, no default under the Act or any resolution, agreement, or other instrument shall constitute or give rise to a default under the Bond Resolution.

### **Priority of Payments After Default**

In the event that the funds held by the Authority, the Trustee or by the Paying Agents shall be insufficient for the payment of principal, Sinking Fund Installments, if any, or Redemption Price and interest then due on the Bonds, such funds (other than funds held for the payment of particular Bonds which have theretofore become due at maturity or by call for redemption and funds which at the time of their deposit into any Fund or account under the Bond Resolution have been designated to be applied solely to the payment of the principal of and premium, if any, and interest on any series of Bond Anticipation Notes and subject to the provisions governing the application of any separate account in the Senior Debt Service Reserve Fund for a particular Series of Bonds established in the Supplemental Resolution authorizing such Series of Bonds) and any other moneys received or collected by the Trustee or any Paying Agents, or a trustee appointed pursuant to the terms of the Bond Resolution and in accordance with the Act, after making provision for the payment of any expenses necessary in the opinion of the Authority to preserve the continuity of the Revenues, or otherwise protect the interests of the Holders of the Bonds, and after making provision for the payment of the reasonable charges and expenses and liabilities incurred and advances made by the Trustee or any Paying Agents in the performance of their duties under the Bond Resolution, shall be applied as follows:

FIRST: To the payment to the persons entitled thereto of all installments of interest then due in the order of the maturity of the installments of such interest.

SECOND: To the payment to the persons entitled thereto of the unpaid principal, Sinking Fund Installments or Redemption Price of any Bonds which shall have become due whether at maturity or by call for redemption.

If the principal of all of the Bonds shall have become or have been declared due and payable, all such moneys shall be applied to the payment of the principal and interest then due and unpaid upon the Bonds without preference or priority.

### **Defeasance**

Any Bonds of any Series shall prior to the maturity or Redemption Date thereof be deemed to have been paid within the meaning and with the effect expressed in the Bond Resolution if (a) in case any of said Bonds are to be redeemed on any date prior to their maturity, the Authority shall have published or caused to be published notice of redemption on said date of such Bonds, (b) there shall have been deposited with the Authority either moneys in an amount which shall be sufficient, or Government Obligations or other investments authorized for such purpose ("Other Authorized Investments") the principal of and the interest on which when due will provide moneys which, together with the moneys, if any, deposited with the Authority at the same time, shall be sufficient, to pay when due the principal, Sinking Fund Installments, if any, or

Redemption Price, if applicable, and interest due and to become due on said Bonds on and prior to the Redemption Date or maturity date as the case may be, and (c) in the event such Bonds are not by their terms subject to redemption within the next succeeding sixty (60) days, the Authority shall (i) publish, as soon as practicable, at least twice, at an interval of not less than seven (7) days between publications, in an Authorized Newspaper a notice to the Holders of such Bonds, and (ii) mail by registered or certified mail, postage prepaid, a notice to the Holders of such Bonds, in each case that the deposit required by (b) above has been made and that said Bonds are deemed to have been paid in accordance with the Bond Resolution and stating such maturity date or Redemption Date upon which moneys are to be available for the payment of the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, on said Bonds. The Authority shall select which Bonds of a Series and which maturity thereof shall be paid in accordance with the Bond Resolution. Neither Government Obligations, Other Authorized Investments or moneys deposited pursuant to this heading nor principal or interest payments on any such Government Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, and interest on said Bonds; provided that any moneys received from such principal or interest payments on such Government Obligations or Other Authorized Investments so deposited, if not then needed for such purpose, shall, to the extent practicable, be reinvested in Government Obligations or Other Authorized Investments maturing at times and in amounts sufficient to pay when due the principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, and interest to become due on said Bonds on and prior to such Redemption Date, payment date or maturity date thereof, as the case may be. Any income or interest earned by, or increment to, the investment of any such moneys so deposited shall, to the extent in excess of the amounts required in the Bond Resolution to pay principal, Sinking Fund Installments, if any, or Redemption Price, if applicable, of and interest on such Bonds, as realized, be applied as follows: first to the Rebate Fund, the amount, if any, required to be deposited therein; and, then the balance thereof to the Authority, and any such moneys so paid shall be released of any trust, pledge, lien, encumbrance or security interest created by the Bond Resolution.

#### **Payments due on Saturdays, Sundays and Holidays**

In any case where the date of maturity of interest on or principal of the Bonds or the date fixed for redemption of any Bonds shall be on a day that is not a Business Day, then payment of interest or principal and premium, if any, need not be made on such date but may be made (without additional interest) on the next succeeding Business Day, with the same force and effect as if made on the date of maturity or the date fixed for redemption, as the case may be.

#### **No Additional Restaurant Concession Bonds**

The Authority covenants that it shall not further amend or supplement the Restaurant Concession Bonds resolution, or take any other action, to allow the authentication and delivery of additional indebtedness under such resolution

#### **Reserve Credit Facilities in the Senior Debt Service Reserve Fund**

Pursuant to Supplemental Resolutions adopted in 1995 and 2004, the Authority Board authorized the deposit or substitution of Reserve Credit Facilities for cash and Investment Obligations that would otherwise have been required to be on deposit to the credit of the Senior Debt Service Reserve Fund. See “SOURCES OF PAYMENT AND SECURITY FOR THE BONDS — Senior Debt Service Reserve Fund” in the forepart of this Official Statement. The Authority has entered into agreements with the municipal bond insurance companies (collectively, the “Providers”) providing such Reserve Credit Facilities (“Reserve Fund Policies”) that, together with such Supplemental Resolutions (collectively, the “SDSRF Contracts”), provide in effect that in the event that the Trustee shall be required to draw on the Senior Debt Service Reserve Fund to pay principal or interest due and payable on any Bonds, the Trustee shall first exhaust any cash and Investment Obligations to the credit of such Fund and then to the extent necessary and subject to the respective maximum amounts of the Reserve Fund Policies, after giving the required notice, demand payment on such Policies pro rata. The SDSRF Contracts obligate the Authority to reimburse the Providers the amounts of such payments,

with interest, within 12 months of such payments. Reimbursement of the Providers in accordance with the SDSRF Contracts will reinstate the amounts that can be drawn on the Reserve Fund Policies. Under the SDSRF Contracts and the Bond Resolution, the obligation of the Authority to reimburse the Providers with interest for any payments on the Reserve Fund Policies ranks on a parity with the Authority's obligation to maintain the Senior Debt Service Reserve Fund at the Senior Debt Service Reserve Fund Requirement.

### **Bond Insurance**

Concurrently with the issuance of the Series K Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy") for the Series K Bonds maturing on January 1 in the years 2028 (5.0% rate, 2.880% yield, CUSIP No. 650009H30), 2031 (4.0% rate, 3.260% yield, CUSIP No. 650009H63) and 2031 (5.0% rate, 3.070% yield, CUSIP No. 650009H71) (the "Insured Bonds"). The Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the Policy included as **Appendix G** to this Official Statement. The Authority has granted AGM certain rights authorized under the Bond Resolution, including the right to be deemed the sole Holder of the Insured Bonds whenever the approval, consent or action of the Holders is required. See "BOND INSURANCE ON CERTAIN MATURITIES" in the forepart of this Official Statement.



## **APPENDIX D**

### **BOOK-ENTRY ONLY SYSTEM**

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## **Book-Entry Only System**

The Depository Trust Company (“DTC”), New York, New York, will act as securities depository for the Series K Bonds. The Series K Bonds will be issued as fully-registered bonds 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 Series K Bond certificate will be issued for each stated maturity of the Series K Bonds, each in the aggregate principal amount of such maturity, and will be deposited with DTC. SO LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE SERIES K BONDS, AS PARTNERSHIP NOMINEE FOR DTC, REFERENCES HEREIN TO BONDHOLDERS OR OWNERS OF THE SERIES K BONDS (OTHER THAN UNDER THE CAPTIONS “TAX MATTERS” AND “CONTINUING DISCLOSURE UNDER SEC RULE 15c2-12”) SHALL MEAN CEDE & CO. AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES K BONDS.

DTC 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 a Standard & Poor’s rating of 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).

Purchases of Series K Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series K Bonds on DTC’s records. The ownership interest of each actual purchaser of each Series K Bond (“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 the Series K Bonds 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 Series K Bonds, except in the event that use of the book-entry system for the Series K Bonds is discontinued.

To facilitate subsequent transfers, all Series K Bonds 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 Series K Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee does not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series K Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Series K Bonds 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. Beneficial Owners of Series K Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Series K Bonds, such as redemptions, tenders, defaults, and proposed amendments to the security documents. For example, Beneficial Owners of Series K Bonds may wish to ascertain that the nominee holding the Series K Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series K Bonds within a stated maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series K Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority 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 Series K Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal of, redemption premium, if any, and interest payments on the Series K Bonds 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 Authority or 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, the Paying Agent or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal, redemption premium, if any, and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or the Paying Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series K Bonds at any time by giving reasonable notice to the Authority or the Paying Agent. Under such circumstances, in the event that a successor depository is not obtained, Series K Bond certificates are required to be printed and delivered.

The Authority may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event Series K Bond certificates will be printed and delivered to DTC.

NEITHER THE AUTHORITY NOR THE UNDERWRITERS (IN SUCH CAPACITY) WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO PARTICIPANTS, TO INDIRECT PARTICIPANTS OR TO ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, ANY PARTICIPANT OR INDIRECT PARTICIPANT; (ii) THE PAYMENT BY DTC OR ANY PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OF, OR REDEMPTION PREMIUM, IF ANY, OR INTEREST ON, THE SERIES K BONDS; (iii) ANY NOTICE WHICH IS PERMITTED OR REQUIRED TO BE GIVEN TO SERIES K BONDHOLDERS; (iv) ANY CONSENT GIVEN BY DTC OR OTHER ACTION TAKEN BY DTC AS A SERIES K BONDHOLDER; OR (v) THE SELECTION BY DTC OR ANY PARTICIPANT OR INDIRECT PARTICIPANT OF ANY BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF THE SERIES K BONDS.

The information in this section concerning DTC and DTC's book-entry system has been obtained from DTC or other sources that the Authority believes to be reliable, but neither the Authority nor the Underwriters take any responsibility for the accuracy thereof.

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**FORM OF OPINION OF CO-BOND COUNSEL**

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Upon delivery of the Series K Bonds in definitive form, Hawkins Delafield & Wood LLP and Hardwick Law Firm, LLC, Co-Bond Counsel to the Authority, propose to render their respective final opinions in substantially the following form:

December 17, 2014

New York State Thruway Authority  
200 Southern Boulevard  
Albany, New York 12209

Ladies and Gentlemen:

As co-bond counsel to New York State Thruway Authority (herein called the “Authority”), we have examined a record of proceedings relating to the issuance of \$743,865,000 aggregate principal amount of General Revenue Refunding Bonds, Series K (herein called the “Series K Bonds”), by the Authority, a body corporate and politic constituting a public corporation of the State of New York (herein sometimes called the “State”). We have also examined such certificates, documents, records and matters of law as we have deemed necessary for the purpose of rendering the opinions set forth below.

Capitalized terms used herein and not otherwise defined have the meanings set forth in the Resolution (hereinafter defined).

The Series K Bonds are to be issued under and pursuant to the New York State Thruway Authority Act, Title 9 of Article 2 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State, as amended (herein called the “Act”), and the General Revenue Bond Resolution of the Authority, adopted by the Authority on August 3, 1992 and amended January 5, 2007 (herein called the “General Resolution”), as supplemented, including as supplemented by the Sixteenth Supplemental Revenue Bond Resolution Authorizing General Revenue Refunding Bonds, Series K adopted by the Authority on October 20, 2014 (the “Series K Bond Resolution”; the General Resolution as so supplemented and amended is herein called the “Resolution”). The Series K Bonds are being issued for the purposes set forth in the Series K Bond Resolution.

The Internal Revenue Code of 1986, as amended (the “Code”), establishes certain ongoing requirements that must be met subsequent to the issuance and delivery of the Series K Bonds in order that interest on the Series K Bonds be and remain excluded from gross income for Federal income tax purposes under Section 103 of the Code. We have examined the Arbitrage and Use of Proceeds Certificate of the Authority, dated the date hereof (the “Arbitrage and Use of Proceeds Certificate”), in which the Authority has made representations, statements of intention and reasonable expectation, certifications of fact and covenants relating to the Federal tax status of interest on the Series K Bonds, including, but not limited to, certain representations with respect to the use of the proceeds of the Series K Bonds and the investment of certain funds. The Arbitrage and Use of Proceeds Certificate obligates the Authority to take certain actions necessary to cause interest on the Series K Bonds to be excluded from gross income pursuant to Section 103 of the Code. Noncompliance with the requirements of the Code could cause interest on the Series K Bonds to be included in gross income for Federal income tax purposes retroactive to the date of issuance, irrespective of the date on which such noncompliance occurs or is ascertained. The Authority has covenanted in the Resolution to maintain the exclusion of the interest on the Series K Bonds from gross income for Federal income tax purposes pursuant to Section 103(a) of the Code.

In rendering the opinion in paragraph 5 hereof, we have relied upon and assumed the material accuracy of the representations, statements of intention and reasonable expectation and certifications of fact contained in the Arbitrage and Use of Proceeds Certificate with respect to matters affecting the exclusion of interest on the Series K Bonds from gross income for Federal income tax purposes under Section 103 of the Code and compliance by the Authority with procedures and covenants set forth in the Arbitrage and Use of Proceeds Certificate as to such tax matters.

A portion of the proceeds of the Series K Bonds is being used to refund certain Outstanding Bonds of the Authority issued pursuant to the General Resolution, such Bonds as described in the hereinafter defined Escrow Agreement as being refunded with proceeds of the Series K Bonds (collectively, the “Refunded Bonds”). A portion of the proceeds of the Series K Bonds, together with any other amounts made available by the Authority (the “Defeasance Deposit”), has been used to purchase direct obligations of the United States of America in an aggregate amount sufficient, together with any amounts held uninvested, to pay when due the principal or Redemption Price and interest due and to become due on said Refunded Bonds (the “Defeasance Requirement”). Such Defeasance Deposit is being held in trust under the Series K General Revenue Refunding Bonds Escrow Agreement, dated December 17, 2014 (the “Escrow Agreement”), by and between the Authority and The Bank of New York Mellon, as escrow agent thereunder and as Trustee. The Authority has given the Trustee, in form satisfactory to it, irrevocable instructions to give notice in accordance with the General Resolution of the redemption of the Refunded Bonds and the deposit of the Defeasance Deposit. American Municipal Tax-Exempt Compliance Corporation has prepared a report stating that they have reviewed the accuracy of the mathematical computations of the adequacy of the Defeasance Deposit, as invested, to pay in full the Defeasance Requirement when due. We have undertaken no independent verification of the adequacy of the Defeasance Deposit.

The Authority reserves the right to issue additional Bonds under the General Resolution on the terms and conditions, and for the purposes, stated in the General Resolution. Under the General Resolution, all such Bonds will rank equally as to security and payment with the Series K Bonds, except as otherwise provided for a Series of Bonds in a Supplemental Resolution with respect to the Senior Debt Service Reserve Fund.

We are of the opinion that:

1. The Authority is duly created and validly existing under the provisions of the Act.
2. The Authority has the right and power under the Act to adopt the Resolution and issue the Series K Bonds thereunder, and the Resolution has been duly and lawfully adopted by the Authority, is in full force and effect and is valid and binding upon the Authority and enforceable in accordance with its terms, and no other authorization for the Resolution is required.
3. The Resolution creates the valid pledge which it purports to create of the proceeds of sale of the Series K Bonds, the Revenues, and the Funds and accounts established by the General Resolution (other than the Rebate Fund, the Junior Indebtedness Fund and, to the extent any Series of Bonds is not secured by the Senior Debt Service Reserve Fund, the Senior Debt Service Reserve Fund) and certain investment income referred to therein subject to the application thereof to the purposes and on the terms and conditions permitted by the Resolution.
4. The Series K Bonds are valid, binding, direct and general obligations of the Authority payable as provided in the Resolution and the full faith and credit of the Authority are pledged to the payment thereof. The Series K Bonds are enforceable against the Authority in accordance with their terms and the terms of the Resolution and entitled to the benefits of the Act and of the Resolution, and such Series K Bonds have been duly and validly authorized and issued in accordance with the Constitution and statutes of the State, including the Act, and in accordance with the Resolution.
5. Under existing statutes and court decisions (i) interest on the Series K Bonds is excluded from gross income for Federal income tax purposes pursuant to Section 103 of the Code, and (ii) interest on the Series K Bonds is not treated as a preference item in calculating the alternative minimum tax imposed on individuals and corporations under the Code; such interest, however, is included in the adjusted current earnings of certain corporations for purposes of calculating the alternative minimum tax imposed on such corporations.

“Original issue discount” (“OID”) is the excess of the sum of all of all amounts payable at the stated maturity of a Series K Bond (excluding certain “qualified stated interest” that is unconditionally payable at

least annually at prescribed rates) over the issue price of that maturity. We are further of the opinion that, for any Series K Bonds having OID (a "Discount Bond"), OID that has accrued and is properly allocable to the owners of the Discount Bonds under Section 1288 of the Code is excludable from gross income for Federal income tax purposes to the same extent as other interest on the Series K Bonds.

6. Under existing statutes, the interest on the Series K Bonds is exempt from personal income taxes imposed by the State or any political subdivision thereof, including The City of New York and the City of Yonkers.

7. The Escrow Agreement has been duly authorized, executed and delivered by the Authority and, assuming the due authorization, execution and delivery by the Trustee, is a valid and binding obligation of the Authority, enforceable in accordance with its terms. The Refunded Bonds have been paid within the meaning and with the effect expressed in the General Resolution, and the covenants, agreements and other obligations of the Authority to the holders of the Refunded Bonds have been discharged and satisfied.

We have examined a fully executed Series K Bond and, in our opinion, the form of said Series K Bond and its execution are regular and proper.

Except as stated in paragraphs 5 and 6 above, we express no opinion as to any Federal, state or local tax consequences arising with respect to the Series K Bonds or ownership or disposition thereof. Furthermore, we express no opinion as to the effect of any action taken or not taken in reliance upon an opinion of counsel other than ourselves on the exclusion from gross income for Federal income tax purposes of interest on the Series K Bonds, or the exemption from personal income taxes of the interest on the Series K Bonds under state and local tax law.

The foregoing opinions are qualified only to the extent that the enforceability of the Resolution and the Series K Bonds may be limited by bankruptcy, moratorium, insolvency, reorganization or other laws affecting creditors' rights or remedies heretofore or hereafter enacted and is subject to general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

We express no opinion as to the accuracy, adequacy or sufficiency of any financial or other information which has been or will be supplied to purchasers of the Series K Bonds.

This opinion is rendered solely with regard to the matters expressly opined on above and does not consider or extend to any documents, agreements, representations or other material of any kind not specifically opined on above. No other opinions are intended nor should they be inferred. This opinion is issued as of the date hereof, and we assume no obligation to update, revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law, or in interpretations thereof, that may hereafter occur, or for any other reason whatsoever.

Very truly yours,

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**INFORMATION RELATING TO THE REFUNDED BONDS**

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## INFORMATION RELATING TO THE REFUNDED BONDS

The following table provides information regarding the Refunded Bonds. Except as otherwise indicated, all of the Outstanding Bonds of each maturity shown below are being refunded.

Series	Dated Date (March 30,)	Par Amount	Maturity (January 1,)	Interest Rate	Redemption Date (January 16,)	Redemption Price	CUSIP* Number (Base # 650009)
F	2005	\$22,125,000**	2016	5.000%	2015	100%	D42
F	2005	22,005,000**	2017	5.000	2015	100	D59
F	2005	3,730,000	2018	4.000	2015	100	LY7
F	2005	19,320,000	2018	5.000	2015	100	D67
F	2005	815,000	2019	4.125	2015	100	MA8
F	2005	23,345,000	2019	5.000	2015	100	D75
F	2005	345,000	2020	4.125	2015	100	MC4
F	2005	25,020,000	2020	5.000	2015	100	D83
F	2005	25,000	2021	4.200	2015	100	ME0
F	2005	26,670,000	2021	5.000	2015	100	D91
F	2005	120,000	2022	4.250	2015	100	MG5
F	2005	27,895,000	2022	5.000	2015	100	E25
F	2005	50,000	2023	4.300	2015	100	MJ9
F	2005	29,370,000	2023	5.000	2015	100	E33
F	2005	100,000	2024	4.300	2015	100	ML4
F	2005	30,795,000	2024	5.000	2015	100	E41
F	2005	275,000	2025	4.375	2015	100	MN0
F	2005	19,055,000	2025	5.000	2015	100	E58
F	2005	20,285,000	2026	5.000	2015	100	E66
F	2005	2,915,000	2030	4.500	2015	100	MR1
F	2005	20,580,000	2030	5.000	2015	100	E74
<b>Total</b>		<u>\$294,840,000</u>					

\* CUSIP numbers have been assigned by Standard & Poor's CUSIP Service Bureau, a division of the McGraw-Hill Companies, Inc. and are included solely for the convenience of the holders of the Refunded Bonds. The Authority is not responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Refunded Bonds or as indicated above.

\*\* Partially refunded by the Series K Bonds. Upon defeasance of the refunded Series F or Series I Bonds, it is expected that new CUSIP numbers will be assigned to the unrefunded portion of each maturity of the Series F or Series I Bonds and to the refunded portion of each maturity of the Series F or Series I Bonds. The CUSIP number for the unrefunded portion of each maturity of the Series F or Series I Bonds is also subject to being changed as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series F or Series I Bonds.

Series	Dated Date (September 29,)	Par Amount	Maturity (January 1,)	Interest Rate	Redemption Date (July 1,)	Redemption Price	CUSIP* Number (Base # 650009)
G	2005	\$ 580,000	2016	3.75%	2015	100%	PW7
G	2005	25,000,000	2028	5.00	2015	100	QK2
G	2005	96,855,000	2029	4.75	2015	100	QL0
G	2005	80,000,000	2030	4.75	2015	100	QN6
G	2005	88,770,000	2030	5.00	2015	100	QM8
G	2005	<u>244,330,000</u>	2032	5.00	2015	100	QP1
<b>Total</b>		<u>\$535,535,000</u>					

Series	Dated Date (July 11,)	Par Amount	Maturity (January 1,)	Interest Rate	Maturity Date (January 1,)	Redemption Price	CUSIP* Number (Base # 650009)
I	2012	\$ 585,000**	2016	3.00%	2016	100%	XT5
I	2012	2,415,000**	2016	5.00	2016	100	YQ0
I	2012	580,000**	2017	3.00	2017	100	XU2
I	2012	<u>3,420,000**</u>	2017	5.00	2017	100	YS6
<b>Total</b>		<u>\$7,000,000</u>					

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\* CUSIP numbers have been assigned by Standard & Poor's CUSIP Service Bureau, a division of the McGraw-Hill Companies, Inc. and are included solely for the convenience of the holders of the Refunded Bonds. The Authority is not responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the Refunded Bonds or as indicated above.

\*\* Partially refunded by the Series K Bonds. Upon defeasance of the refunded Series F or Series I Bonds, it is expected that new CUSIP numbers will be assigned to the unrefunded portion of each maturity of the Series F or Series I Bonds and to the refunded portion of each maturity of the Series F or Series I Bonds. The CUSIP number for the unrefunded portion of each maturity of the Series F or Series I Bonds is also subject to being changed as a result of various subsequent actions including, but not limited to, a refunding in whole or in part of such maturity or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Series F or Series I Bonds.



**APPENDIX G**

**SPECIMEN MUNICIPAL BOND INSURANCE POLICY**

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# MUNICIPAL BOND INSURANCE POLICY

ISSUER:

Policy No: -N

BONDS: \$ in aggregate principal amount of

Effective Date:

Premium: \$

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the

United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.

ASSURED GUARANTY MUNICIPAL CORP.

By \_\_\_\_\_  
Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc.  
31 West 52nd Street, New York, N.Y. 10019  
(212) 974-0100

Form 500NY (5/90)

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