



Howard P. Milstein
Chairman

New York State Thruway Authority
New York State Canal Corporation

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Thomas J. Madison, Jr.
Executive Director

Dear Thruway Board Members:

When Governor Cuomo took office last year, he was faced with what was in many ways a dysfunctional state government and a \$10 billion budget deficit. The Governor's approach to dealing with the state's financial situation is to reduce spending without resorting to fiscal gimmickry.

Soon after the Governor asked me to Chair the New York State Thruway Authority, we began a review of revenues and expenses with a view to becoming more effective in managing the Authority's fiscal affairs. With the major undertaking of the replacement of the Tappan Zee bridge ahead of us, along with the need for system-wide improvements throughout the state, it is vital that the Authority's finances and management practices be transparent and be on the soundest possible footing. Toward this end, I requested that an independent review be commenced of the Thruway's financial history and management decisions. The resulting report by Navigant is enclosed.

The report presents a picture of our Thruway Authority that, in the past, had made short-term financial decisions and employed management practices that need to be significantly improved and modified along the lines of the Governor's approach. Most troubling, for many years the Thruway has outspent its revenues to an alarming degree, and then bridged the gap with what Navigant calls "potentially risky" financial practices, including a looming permanent refunding of a substantial short term debt. As those bills come due, the Thruway must act immediately to get its house in order.

Among the key findings of the report:

- Over the years, the Thruway Board approved opaque and potentially risky short term debt to fund long term needs and to make up a growing and recurrent revenue gap. As a result, the Thruway today has \$868 million in short term debt which must be refinanced by mid-July. These financial issues are completely unrelated to, and do not impact, the financing plan for the Tappan Zee Bridge replacement, which will be addressed with separate financing.
- Prior Thruway administrations failed to take remedial action to address structural issues related to capital financing long after such issues were apparent. Prior management and the Board tolerated ballooning deficits, electing to "kick the financial can" for decades.
- A high level of infrastructure investment was maintained in the prior capital program despite the Authority's weakening financial outlook. More should have been done sooner



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to reduce capital expenditures to better align the program with the Authority's financial capacity.

- Thruway has not achieved results in line with its past investments. While 85 percent of the capital funds for the 2005 plan were expended, only 42 percent of major rehabilitation goals were achieved.
- Total Thruway traffic has declined more than 10% from 2005-2011 while operating expenses grew by more than 20%.
- Two-thirds of Thruway employees and retirees make no contribution to the health care coverage. On average, a Thruway employee or retiree pays only \$699 out of \$11,184 in health care costs.
- Thruway commercial toll rates have not kept pace with other toll facilities. For example, per mile rates are 49% higher on the Pennsylvania Turnpike and 85% higher on the New Jersey Turnpike than on the Thruway. Five-axle truck rates are nearly 100 percent higher on Port Authority and MTA bridges – \$65 for the George Washington Bridge versus \$32.75 for the Tappan Zee Bridge. Large commercial trucks cause nearly 10,000 times the damage to the road system as do passenger cars. Yet, cash commercial tolls are only 5 times passenger tolls on the Thruway.
- In short, the Thruway has not maintained the level of fiscal and management discipline that the Governor has demanded of the rest of the state. Navigant has made a series of recommendations for immediate and longer term actions which I will present to the Board for prompt consideration.

In order to correct the mistakes of the past and secure the Authority's future, the report recommends, and the Authority intends to follow through on, aggressive fiscal management reform paired with significant spending reductions. These actions would be supplemented with a modest toll increase on high-axle commercial trucks to bring revenues generated from tolls on these trucks, which inflict far more damage to our roads than smaller trucks and passenger vehicles, in line with comparable and neighboring states. The specific recommendations include:

- Initiating an operational streamlining program, including alignment of employee benefits with other state agencies, to substantially reduce total operating costs and enhance efficiency. Such actions included strategically reducing the Multi-Year Capital Plan by \$300 million and targeting operational cuts at a minimum of \$25 million in 2012. I will present the Board with a 2-year plan to reduce operating expenses by \$100 million.



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- Adjusting the mismatch between the commercial vehicle tolls of the Thruway and neighboring states that cause disproportionate damage to the Thruway system. The proposal would only affect large commercial trucking vehicles, usually used for long haul trucking, not local delivery trucks.
- These two actions will allow the Authority to refinance outstanding short-term debt to create a solid foundation under which the Authority can maintain good infrastructure conditions and preserve its long-term financial health.

A new Executive Director was recently appointed to lead the Authority who has deep experience in the management of government agencies and infrastructure facilities. An enthusiastic management team is also being re-directed to conform to the Board's new focus and direction. This is evidenced by changes implemented in this year's budget, where the need for change was recognized by the Board and actions were taken to begin to stabilize our finances.

Operating reductions and additional streamlining measures will continue, ensuring greater efficiency of our operations. While we always seek to avoid asking drivers and businesses to pay more, in this case, we will be reducing expenses to mitigate any increases on our patrons. The Authority will do more with less as all state agencies and authorities have done under Governor Cuomo's leadership.

These are exciting times for the Thruway Authority. The challenges we face as a Board present us with many opportunities to make effective and meaningful changes, and I'm confident that together we will continue to improve and strengthen our organization and set the stage for the Thruway of the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "H. Milstein", written over a horizontal line.

Howard P. Milstein
Chairman



New York State Thruway Authority

Executive Summary Report

May 24, 2012



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I. Nature of Engagement & Scope

Nature of Engagement & Scope

- Navigant Capital Advisors (“NCA”) submits this Executive Summary Report (the “Report”) at the request of the Thruway Authority (“TA”) to: (i) review and summarize apparent factors that led to the current financial position of the organization, and to (ii) provide preliminary recommendations regarding areas of immediate intervention and future focus to assist the TA in repositioning itself to best meet its challenges
- The Report, subject to the qualifications and limitations set forth in Appendix A, summarizes the review of historical financial and operating reports provided by the agency, as well as certain other publicly available information. Consistent with the requirements of the engagement the Report is based solely in reliance upon:
 - Specific presentations, reports and studies prepared by TA management for internal purposes as well as for its Board of Directors
 - Historical financial information provided by the TA;
 - Certain presentations, studies, bond issuance documents, reports and analysis regarding the TA provided by third-party consultants, financial advisors, the New York State Division of Budget, SAGE Commission; and
 - Interviews with select TA management and Board of Directors members

II. Summary of Key Findings & Recommendations

Summary of Key Findings & Recommendations

❖ *The Thruway is facing an urgent financial need unrelated to the Tappan Zee Bridge*

- Bond Anticipation Notes (“BANs”) totaling in excess of \$868MM must be refinanced by early July
- While certain cost containment initiatives are underway, without decisive action, current capital structure and debt service coverage will unlikely absorb the refunding of BANs with long-term debt, or terming-out of BANs, in addition to contemplated borrowings required to support ongoing capital needs

❖ *Material amounts of short-term debt were utilized in 2009 and extended into 2012, but not reflected in underlying credit ratios*

- The board approved a series of opaque and potentially risky, short-term BANs in the amounts of \$681MM in 2009, then increased to \$868MM and extended in 2011.
- This practice followed a prior period, from 2000-2004, of consecutive short-term debt issuances that avoided significantly weaker debt coverage levels and a likely ratings downgrade at the time
- The decision appears to have been made with a short-term focus and not necessarily a full appreciation for the potential long-term consequences of refunding on future cost of capital, rating agency review and reaction, credit underwriting impact, and interest rate environment uncertainty
- Questions abound about the prudence of the decision at the time, that created a funding mismatch of short-term debt vs. long-term assets in a very weak operating environment

Summary of Key Findings & Recommendations

- ❖ *The 2005-2011 engineering driven capital program was put in place without adequate net revenues to support it. The program was financed heavily with debt*
 - In 2005, the board initiated its most ambitious capital plan to date, with costs estimated to exceed \$2.7 billion over a seven year period, funded substantially by growing debt from \$1.9 billion in 2005 to \$3.2 billion in 2011
 - The need for this magnitude of capital spending appears to have been justified by lifecycle requirements of a 50+ year old highway system, without independent, third party, validating review. At the commencement of this plan, the board expected future revenue adjustments to be required to restore key covenants to acceptable board mandated levels upon program completion
 - While the capital program expended approximately 85% of its board approved levels, management indicates that only 42% of major rehabilitation goals and 81% of reconstruction goals were achieved, suggesting the need for more reliable capital planning and asset management processes
- ❖ *Until recent appointments in leadership, the TA management and Board of Directors took an extremely passive approach to revenue enhancement and cost containment initiatives*
 - From 2000-2004, revenue growths trends were preliminary driven by traffic volume; post 2005, revenue growth was from toll hikes, which were offset by recessionary pressure, and E-ZPass discounting. Commercial and passenger tolls are not rationalized either to peer pricing levels or to recognize disproportionate wear and tear. Performance to non-toll revenues appears average relative to peers
 - Historical revenue trends from 2000-2004 were mostly driven by modest volume increases in both passenger and commercial traffic, with no toll increases introduced during the period. Traffic volume CAGR over the period was 2.5% and traffic revenue CAGR was only 0.7%

Summary of Key Findings & Recommendations

- Substantial passenger and commercial toll hikes were introduced in 2005 followed by modest hikes in each year of 2008-2010, however, traffic volumes subsequently fell due to: (i) recessionary and gas price issues, (ii) regional economic issues, (iii) traffic diversion, (iv) customer switching to discounted E-ZPass driven by toll increases, and (v) elimination of certain barrier tolls, all of which created major revenue challenges as an unprecedented capital plan was launched. With the toll hikes, traffic volumes declined at a CAGR of -1.8% and traffic revenue grew 3.7%
 - Commercial and passenger tolls (both highway and bridge) on a cents per mile basis are relatively inexpensive when benchmarked against comparable tollway systems
 - Commercial tolls are low relative to passenger tolls when factoring the relative contribution of wear-and-tear by commercial vehicles. For example, per a NYDOT analysis, a single max load 80,000 pound gross weight commercial vehicle (typically 5 axle) causes wear and tear equal to approximately 9,600 passenger vehicles (typically 2 axle), yet commercial tolls are only 5 times passenger tolls
 - Non-toll as a % of total revenues place the TA at the median relative to peer benchmarking. If TA achieved the top tier of the benchmark at 6.6% of total revenues, an additional \$10MM of incremental revenue could be achieved
- Since 2001, growth rate of expenses has exceeded revenue further impeding the agencies financial performance
- The Thruway must evaluate austerity measures similar to ones the State of New York has taken, where it expects its State Operations budget in FY2013 to decline inclusive of labor and benefit costs

Summary of Key Findings & Recommendations

- The TA carries 94% of the benefit costs with as many as 67% of all employees (active and retired) not making any contribution for their healthcare benefits
 - If all employees and retirees contributed at the current rates, this could yield in excess of \$7.5MM of savings to the TA
 - While non-payroll expenses have been relatively flat, total operating expenses have grown 66%, from \$257MM in 2000 to \$427MM in 2011, a CAGR of 4.7%
- Had the board of directors and management timely addressed rationalization of tolls, curtailment of operating expenses, employee health benefit contributions and other measures of cost containment, its current circumstance may likely have been avoided

❖ *While the Thruway's asset composition has changed materially since the 1950's, the Board of Directors or management have not recognized or adapted to the structural asset-funding mismatching issues that have been evident for decades*

- The Board and Management historically have taken a “hands-off” approach with assets such as the Canal and have neither identified nor acted upon key revenue enhancement and cost containment initiatives sufficient to offset their burden
- The Canals expenses are excluded from key covenant calculations, and as a result create an inherent disincentive to take action

Summary of Key Findings & Recommendations

- ❖ *New leadership at the TA has provided renewed focus on important revenue and cost initiatives and these processes need to be accelerated and supported with appropriate force amplification if they are to be effective*
 - Until recently, management and the Board of Directors failed to demonstrate fiscal responsibility and curtail the ballooning deficits, electing instead to “kick-the-can” for decades, consequently allowing debt to grow from \$237MM in 1990 to \$3.2 billion a CAGR of 13.1%
 - The Chairman of the Board, and Executive Director, who were both appointed within the last year, have identified certain key initiatives focused on non toll revenue, cost containment and potential toll adjustments to address several of the aforementioned issues, however broader support and a mandate to accelerate these initiatives are essential
 - The Chairman of the Board, Executive Director and management have preliminarily identified potential cost savings currently estimated at \$30MM for the remainder of FY2012 and potentially \$65MM for FY2013. These initiatives need to be validated with specific action plans to ensure effective implementation

Summary of Key Findings & Recommendations

Short-term Actions (30 – 60 days)

1. Consider implementation of appropriate toll increase to alleviate immediate financial stress, and address the refunding of the BANs
2. Implement immediate cost containment initiatives identified by management, including defining labor strategies ahead of contract negotiations as well as collaborating with represented employees to modify work rules and contract limitations that impede productivity and efficiency of the agency
3. Implement austerity measures to effectively restrict future capital spending projects (i.e., other than those projects continued for public safety and other related concerns) until capital planning and execution processes are reviewed and remediated to ensure proper prioritization, and the efficient and effective deployment of capital
4. Consider appointment of a three-member “Special Committee” from the Board of Directors, authorized to lead a restructuring process
5. Authorize an independent third-party to conduct, in support of the Special Committee, a thorough “top-to-bottom” agency review to identify, prioritize, and assist in the development of implementation plans for non-toll revenue enhancements, cost containment and other opportunities for performance improvement, See Appendix C, (The “Independent Review”)
6. Assess the effects of contemplated toll adjustments and cost containment measures being pursued to evaluate the viability and execution success of various considered alternatives in dealing with the July 2012 BANs maturity including: (i) refunding with long-term debts, (ii) terming out and restructuring, or (iii) short-term rollover
7. Delay formal approval of the 2012-2017 Capital Plan, beyond those received for 2012 budget and contracts program, until confidence is established in capital planning and project prioritization process, as well as the execution of critical asset management initiatives

Summary of Key Findings & Recommendations

Medium-term Actions (60 – 180 days)

1. Conduct the aforementioned Independent Review (see Appendix C for Illustrative Work Plan)
 - a) Evaluate range of toll and non-toll revenue enhancement opportunities
 - b) Assess organizational design and inter-agency relationships
 - c) Collaboratively evaluate labor, third-party contracting and vendor programs
 - d) Review of current capital plan and maintenance programs
2. Complete labor negotiations to align incentives and achieve objectives of enhanced productivity and efficiencies
3. Develop a revision to the existing 5-year capital plan that incorporates updated revenue and expense initiatives and other recommendations derived from the aforementioned Independent Review
4. Finalize separate financing alternatives and rating agency support for Tappan Zee bridge financing

Long-term Actions (180 days +)

1. Implement recommendations from the Independent Review
2. Develop a comprehensive rolling 10-year integrated strategic, financial and capital plan which balances current operations, true capital expenditure needs and appropriate identification of risks and contingencies
3. Adopt optimized bond policies relating to the best practices on programmatic debt issuance

III. Situational Assessment

Situational Assessment

Background

- The New York State Thruway Authority (“TA”) was founded in 1952 by the New York State Legislature as an independent public corporation established to build, operate and maintain the high way as a self-liquidating project, financed through bonds. Original construction costs were approximately \$1.0 billion
- The revenue to retire these bonds was dependent primarily on tolls
- A board of three members was appointed by the governor with the advice and consent of the State Senate to establish Thruway policy
- The TA’s 570-mile roadway is the longest continuous toll road system in the world. It passes through over 23 counties, 92 townships, 13 cities and 24 villages
- The TA is currently comprised of 2,818 lane miles, covering the following segments:

Thruway Section Name	Mileage
THE MAINLINE (New York - Buffalo)	426
ERIE SECTION (Buffalo - Pennsylvania Line)	70
NIAGARA SECTION I-190 (Buffalo - Niagara Falls)	21
BERKSHIRE SECTION (Selkirk - Massachusetts Line)	24
NEW ENGLAND SECTION (I-95) (Bronx - Connecticut Line)	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
Total	570

Situational Assessment

Background – Summary of Historical Financials

- During the 1990's, the TA enjoyed moderate revenue growth at 3.1% annually over the decade, driven primarily by consistent increases in traffic
- From 2000 to 2011, while operating revenues continued to increase, at a rate of 4.1% annually, Thruway operating expenses further outgrew revenues at a rate of 4.8% annually
 - Added costs related to the acquisition of the Canal, I-84 and other economic development projects further exceeded revenue gains, growing at an annual rate of 4.4% over the period
- The debt balance grew over 13 times, from \$237MM in 1990 to nearly \$3.2 billion in 2011 due primarily to increasing capital expenditures in excess of available cash flow**

(\$ in millions)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CAGR '00 - '11
Total Thruway Revenue (1)	\$ 427.8	\$ 434.7	\$ 441.7	\$ 445.8	\$ 463.5	\$ 547.3	\$ 594.0	\$ 581.7	\$ 596.2	\$ 638.3	\$ 672.5	\$ 665.5	4.1%
Thruway Operating Expenses	221.6	229.1	268.0	272.5	300.2	307.4	323.7	339.0	337.3	346.7	364.2	370.0	4.8%
Canal, I-84, & Other Operating Expenses	35.4	38.8	48.2	48.4	55.0	55.2	64.0	62.1	49.2	52.2	52.5	56.6	4.4%
Net Revenues (after Canal, I-84, & Other)	\$ 170.8	\$ 166.8	\$ 125.6	\$ 124.9	\$ 108.3	\$ 184.7	\$ 206.2	\$ 180.6	\$ 209.7	\$ 239.4	\$ 255.7	\$ 238.9	3.1%
Sr. Lien Debt Service	78.5	78.2	80.6	81.5	82.1	103.8	127.4	135.8	163.5	166.3	167.3	167.4	
Commercial Paper & BANs Debt Service	4.8	6.7	4.6	3.7	10.5	4.6	1.1	-	-	10.6	23.8	14.4	
Net Debt Service	83.3	84.9	85.2	85.2	92.6	108.4	128.5	135.8	163.5	176.9	191.1	181.8	7.4%
Net Revenues after Debt Service	\$ 87.5	\$ 81.9	\$ 40.4	\$ 39.7	\$ 15.7	\$ 76.3	\$ 77.7	\$ 44.8	\$ 46.2	\$ 62.5	\$ 64.6	\$ 57.1	(3.8%)
Net Revenue used for DSCR (2)	206.2	205.6	173.8	173.3	163.2	239.9	270.2	242.7	258.9	291.6	308.2	295.5	3.3%
DSCR (3)	2.63x	2.63x	2.16x	2.13x	1.99x	2.31x	2.12x	1.79x	1.58x	1.75x	1.84x	1.77x	
Capital Expenditure (incl. Canal, I-84, & other)	233.7	283.2	234.0	228.9	188.6	145.4	244.4	370.5	355.2	321.1	377.7	444.5	6.0%
Ending Debt Balance	1,307.4	1,409.7	1,580.8	1,696.9	1,688.3	1,934.4	1,895.9	2,454.0	2,400.1	3,095.7	3,028.2	3,158.1	8.3%
Pay-Go % (4)	40%	48%	41%	46%	58%	58%	37%	46%	16%	20%	19%	18%	

(1) 2000 – 2005 includes deduction in revenue for CWE special bond expense

(2) Total Thruway Revenue – Thruway Operating Expenses

(3) Calculated as "Net Revenues for DSCR" / Debt Service from Senior Debt only

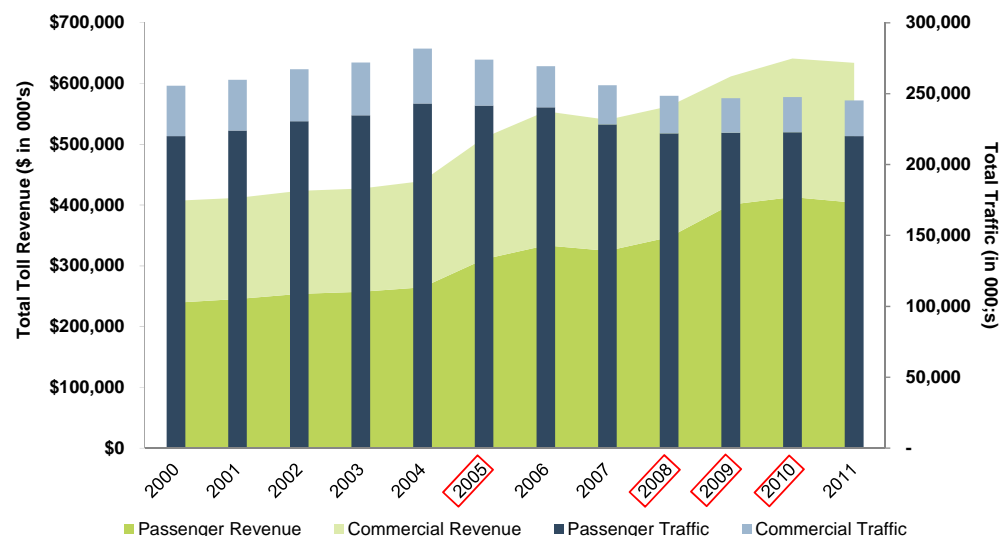
(4) Calculated as money spent from General Revenue and Maintenance Reserve Funds + Federal and State Aid / Total Annual Capital Spend

Source: Data provided internally by the Thruway Authority

Situational Assessment

Background – Historical Traffic Trends

- For the years 2000 – 2004, the TA enjoyed modest year over year growth in both passenger and commercial revenues, with CAGRs of 2.6% and 1.0%, respectively, despite no increase in tolls over the period



- (1) Tolls were increased in May 2005, January 2008, January 2009, and January 2010
- (2) In October 2006, tolls were removed from the Buffalo City Line and Black Rock Barriers
- (3) In 2005, a major vehicle reclassification resulted in volume adjustments

Source: Data provided internally by the Thruway Authority toll increases

(\$ in millions)	2000	2004	% Change	2005	2011	% Change	CAGR '00-'04	CAGR '05-'11
Passenger Traffic	220.0	243.2	11%	241.5	220.1	-9%	2.5%	-1.5%
Commercial Traffic	35.7	38.7	8%	32.5	25.2	-23%	2.0%	-4.2%
Total Traffic	256	282	10%	274	245	-11%	2.5%	-1.8%
Passenger Revenue	\$ 239.3	\$ 264.8	11%	\$ 311.1	\$ 403.9	30%	2.6%	4.4%
Commercial Revenue	\$ 167.8	\$ 174.8	4%	\$ 200.1	\$ 230.2	15%	1.0%	2.4%
Total Revenue	\$407	\$440	8%	\$511	\$634	24%	0.7%	3.7%

- Commercial tolls have always been a significant contributor of revenue. Historical commercial traffic has accounted for approximately 10% of total traffic, but 40% of revenues
- Total traffic on the Thruway declined from 2005 to 2011 at a rate of -1.8% annually, with commercial traffic declining more rapidly at a rate of -4.2%
- The TA implemented a system-wide toll hike in 2005 to support funding of the 2005-2011 capital plan

Situational Assessment

Background – Toll Violations and Collection

- Since 2007, the TA has accrued an average of \$2.0MM in uncollected toll violations and \$5.2MM in fees on an annual basis
- Non E-ZPass customers are fined at a level assuming full distance, because actual distance is not tracked. Management estimates the incremental realizable revenue to be approximately 20% to 30% of the total if the current legislation is changed

(\$ in 000's)					Targeted Realizable Revenue (3)	
					20%	30%
2007	\$	1,044	\$	3,977	\$	1,506
2008		1,635		4,879		1,954
2009		2,043		5,637		2,304
2010		2,640		5,933		2,572
2011		2,515		5,821		2,501
Average	\$	1,975	\$	5,249	\$	2,167

(1) Includes violations for E-ZPass and non-E-ZPass customers

(2) Accounts for the administrative fees associated with notifying and collecting from violators

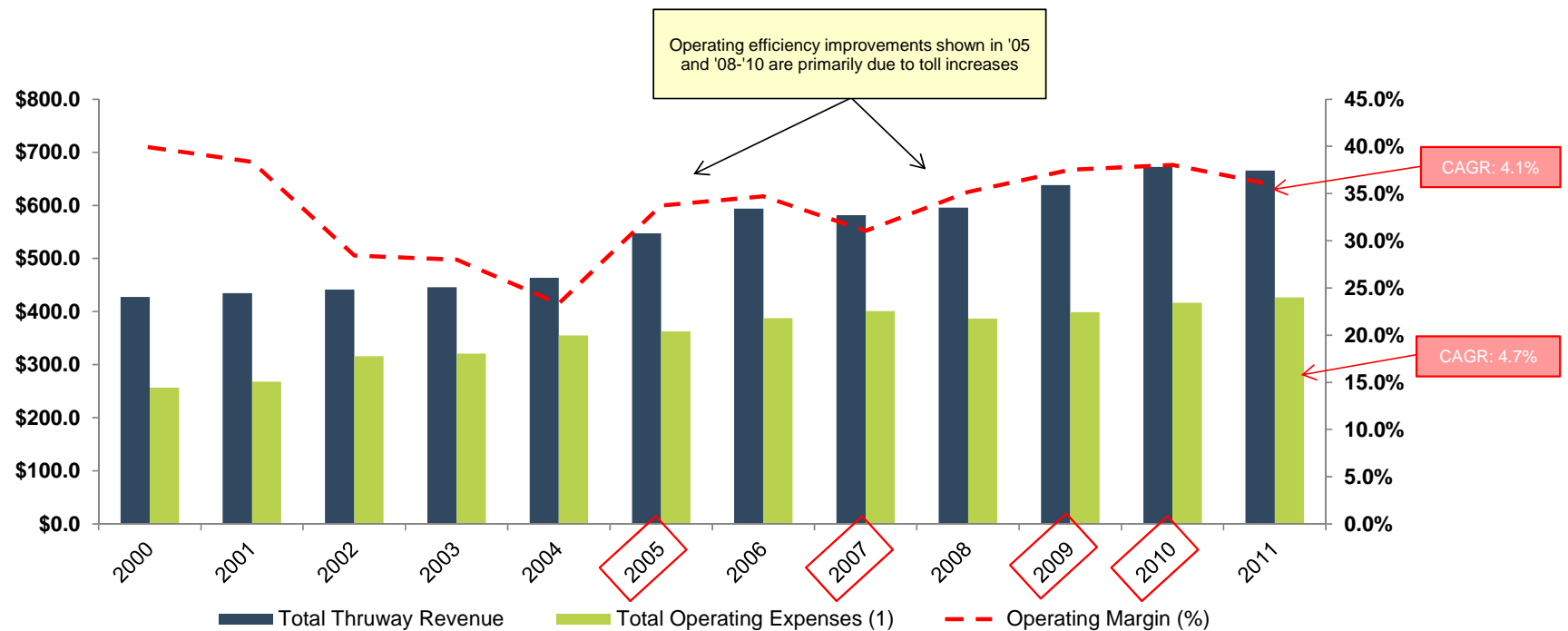
(3) Given complexity with legislation and out-of-state violations, estimates are that 20% - 30% of outstanding collections are recoverable

- While current legislation permits prosecution of violators with enforcement remedies including suspension of vehicle registration rights, any collections refer to local government operating funds and not directly to the benefit of the TA
- Other initiatives being evaluated include public notices of all toll violators via TA's website and linking fees to E-ZPass accounts to ensure payment and reduce cost of collection.

Situational Assessment

Background – Trends in Operating Efficiency

- The increase in tolls in 2005 partially off-set the revenue lost from declining traffic during the period, however, the hikes were insufficient to cover the related operating expense growth
 - From 2000 to 2011, operating revenues grew at a rate of 4.1% annually vs. operating expenses growth at 4.7% annually



(1) Includes Canal, I-84 & Other expenses

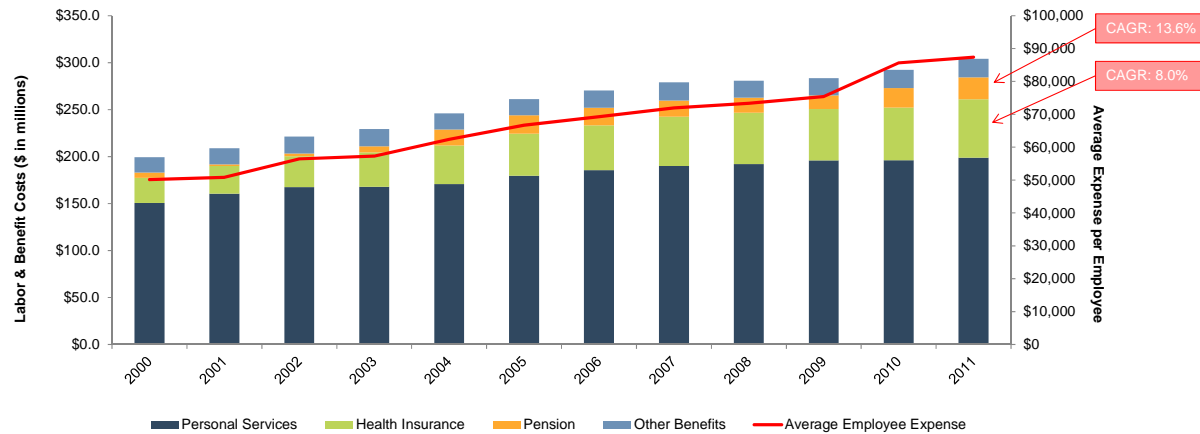
Source: Data provided internally by the Thruway Authority

2005 toll increases

Situational Assessment

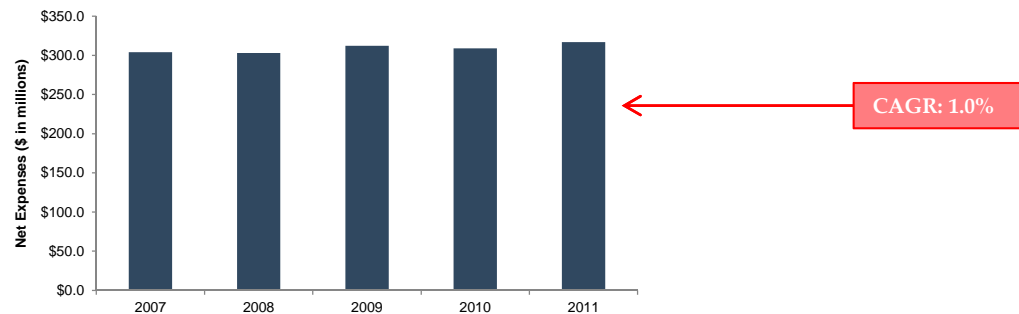
Background – Employee Cost & Benefit Trends

- Labor costs and benefits have grown significantly over recent years



Source: Data provided internally by the Thruway

- Outside of healthcare and pension costs, and extraordinary events such as Hurricane Irene and Tropical Storm Lee, the TA has managed operating costs close to zero growth since 2007
 - While management has mitigated cost growth, significant cost reductions, such as major divisional or departmental consolidation, have not been implemented
 - Recent austerity measures announced by the State of New York, which actually has the FY2013 State Operations budget declining including pension and healthcare, should be closely studied



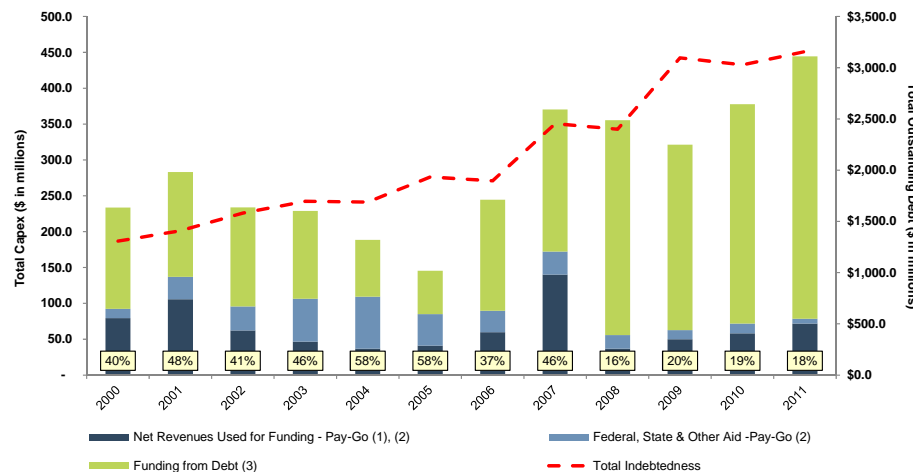
■ Net Total Operating Expenses - Less Pension, Health Insurance, Irene and Lee

Source: Data provided internally by the Thruway Authority

Situational Assessment

Background – Capital Program Funding

- As an asset manager with aging inventory, the TA, in theory, has significant capital expenditure requirements
- The board-approved 2005-2011 Capital Plan authorized an unprecedented \$2.7 billion in capital expenditures, with the objective of significant reconstruction and rehabilitation for substantial lifecycle gains
- To support the 2005-2011 Capital Plan, debt became a larger source of funding, growing from \$1.9 billion in 2005 to \$3.2 billion in 2011
 - Average annual capital expenditures increased from \$233.7MM in 2000-2004 to \$322.9MM 2005-2011
 - At the same time average Pay-Go decreased from 47% in 2000-2004 to 31% 2005-2011 driven by softer net revenue levels



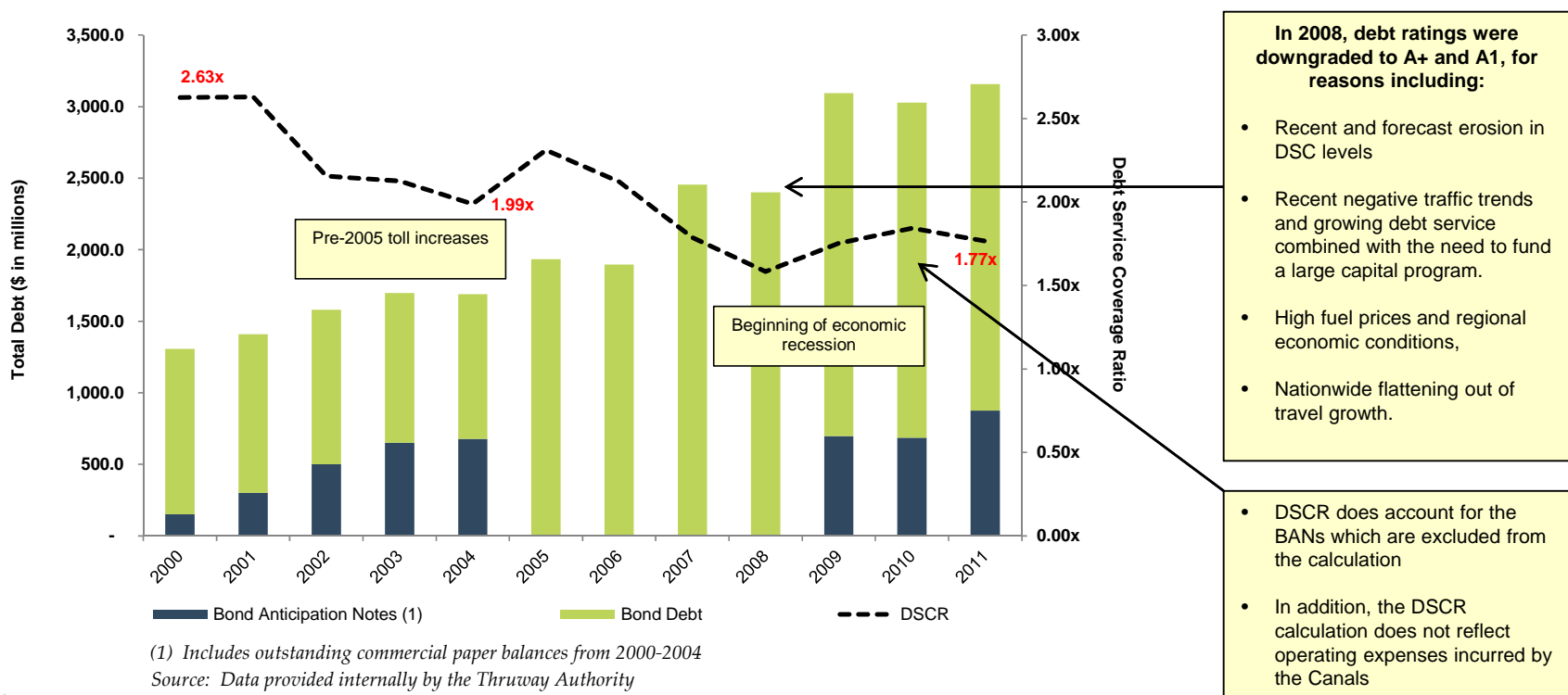
- (1) Does not equal net revenues available to fund capex for the year; reflects money spent from General Reserve and Maintenance Reserve Funds. Net revenues available to fund capex are allocated to these reserve funds on a monthly basis
- (2) Pay-Go % is calculated as money spent from General Revenue and Maintenance Reserve Funds + Federal and State Aid / Total Annual Capital Spend
- (3) Money spent from the Construction Reserve Fund; when debt is issued, proceeds are transferred to the Construction Reserve Fund

Source: Data provided internally by the Thruway Authority

Situational Assessment

Background – Growing Debt Balances

- The TA credit profile has deteriorated over the years
 - Net Revenue declines coupled with increasing capital project needs have resulted in mounting debt and reliance on opaque and potentially risky, short-term funding sources
 - Total debt outstanding more than doubled from \$1.3 billion in 2000 to nearly \$3.2 billion in 2011
 - In 2008, debt ratings were downgraded to A+ and A1 by S&P and Moody's respectively



Situational Assessment

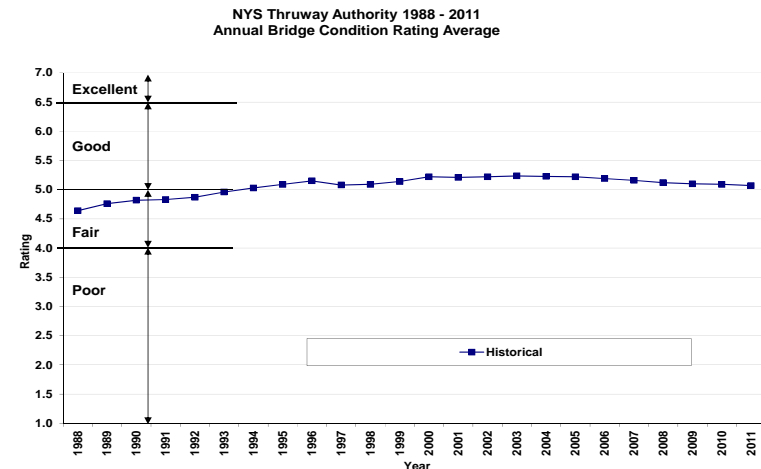
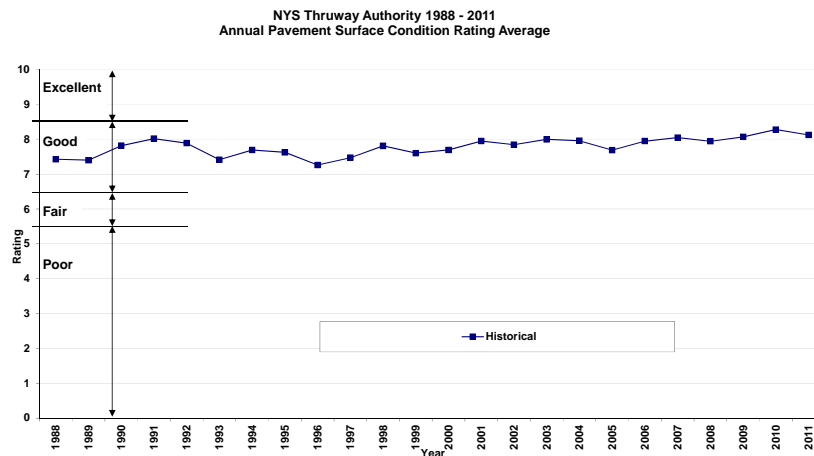
Current Situation – Physical Impact of Commercial Traffic

- **Commercial toll rates** at the TA , unlike other highway systems, **do not keep pace with** the impact of the **relative wear-and-tear from commercial vehicles**
 - Commercial tolls are only 5 times passenger tolls
- **Commercial vehicles, and overweight trucks represent the single greatest demand** on NY State's infrastructure from both an engineering and economic standpoint per a study released by NY State Department of Transportation;
 - **An average passenger vehicle (typically 2-axle) operating at 4,000 pounds causes minimal harm** to highway pavement or bridges
 - Pavement **damage increases exponentially as vehicle weight increases**
 - One legally loaded 80,000 pound gross weight (typically 5-axle) commercial vehicle causes wear-and-tear on the road equal to approximately 9,600 passenger vehicles
 - If a truck is loaded to 95,000 pounds (15,000 pounds overweight/beyond the legal limit), its pavement damaging impact will nearly double to the similar degree of the damage caused by 19,000 passenger vehicles

Situational Assessment

Current Situation – Asset Management

- While fair-to-good surface ratings have been maintained on the aging assets, fundamental rehabilitation needs are inevitable. Extensive rehabilitation and reconstruction efforts always yield extended lifespan value relative to mild mill-and-fill type completions, however, given capital constraints, refinement in decision-making on the selection of alternative means of rehabilitation execution is critical



- Current asset condition ratings are conducted as follows
 - Pavement surface conditions are visual reviews without assessment of underlying subsurface conditions, accident history, and maintenance activity
 - Bridge inspections are detailed bi-annual reviews
 - Canal conditions are based on on-site field inspections
- Given the magnitude of capital spending, enhanced asset management tools are needed to gauge lifecycle extensions relative to costs incurred

Canal Ratings Summary
(5-7 implies "good or better" rating)

Rating	Structure Count	% of Total
0 -	39	5%
1 -	10	1%
2 -	12	1%
3 -	74	9%
4 -	214	26%
5 -	313	37%
6 -	99	12%
7 -	21	3%
None	54	6%
Total	836	

Situational Assessment

Current Situation – SAGE Benchmarking

- Information provided from the SAGE Commission report compares the NYDOT to the Thruway Authority, showing various differences in the systems
- One particular comparison highlights that the administrative/support functions are staffed at equal levels, though the NYDOT has a system of lane miles more than 15 times the size of the Thruway Authority

		Department of Transportation	Thruway Authority
Budget and Agency Scope	Road Miles	15,102	570
	Lane Miles	~43,000	2,818
	Bridges	Over 7,500	885
	Budget ⁽¹⁾	\$4.2 billion	\$1.1 billion
	Debt Outstanding	N/A	\$2.9 billion
Employees	Total Employees	8,784	2,767 (+1,120) ⁽²⁾
	Engineering	2,639	193
	System Maintenance	4,829	2,018
	Administrative/Support	534	556
	Bargaining Units	2	4

(1) Includes operational and capital spend. NYDOT data excludes spending on local transit authorities (e.g., MTA).

(2) 2,767 figure includes Canal Corporation; additional 1,120 within TA

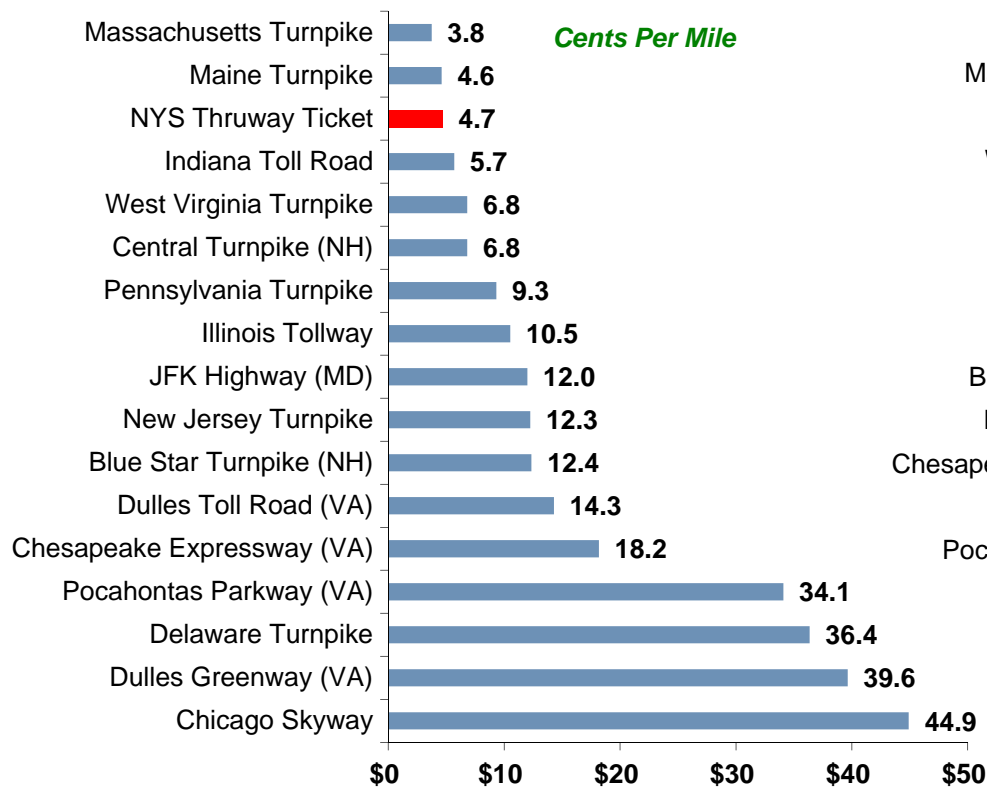
Source: SAGE Commission Study

Situational Assessment

Current Situation - Benchmarks

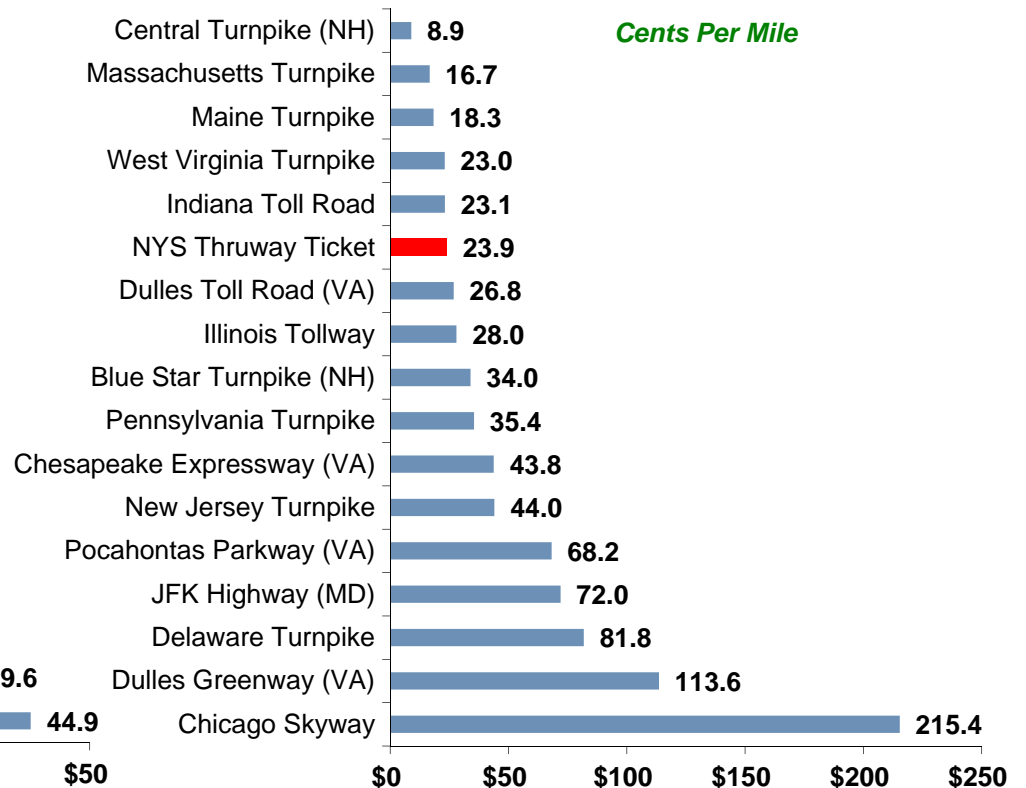
- Compared to the peer group, both **Thruway commercial and passenger toll rates** are relatively low

2L Passenger Tolls (Ticket Cash Rates) (1)



(1) 2L classification includes any vehicle with 2 axles, under 7 feet 6 inches in height
Source: Data provided internally by the Thruway Authority

5H Commercial Tolls (Ticket Cash Rates) (1)



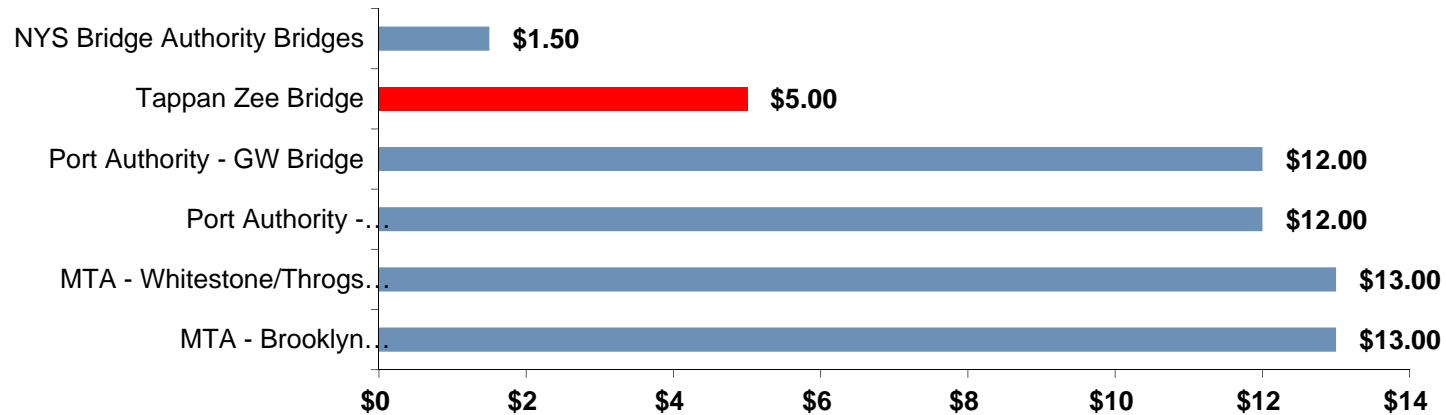
(1) 5H classification includes any vehicle with 5 axles, over 7 feet 6 inches in height
Source: Data provided internally by the Thruway Authority

Situational Assessment

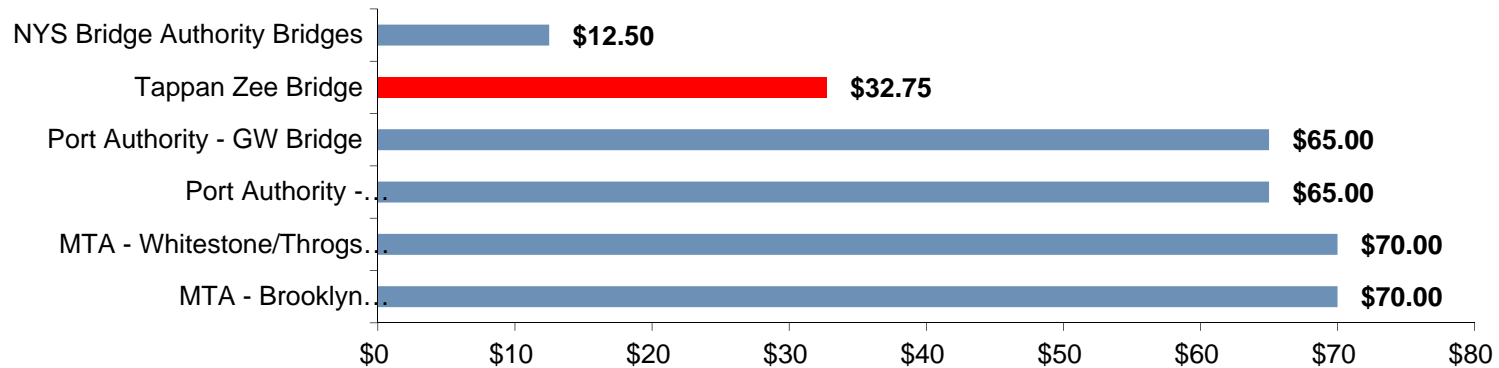
Current Situation - Benchmarks

- Likewise, both **commercial and passenger bridge toll rates** are low in comparison to peers

2L Passenger Tolls - Round Trip Cash Tolls - 2012



5H Commercial Tolls - Round Trip Cash Tolls - 2012



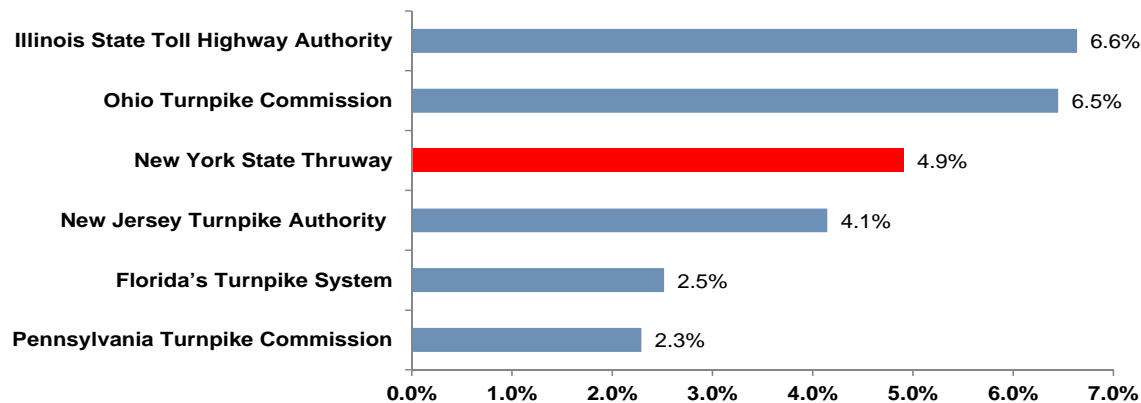
Source: Data provided internally by the Thruway Authority

Situational Assessment

Current Situation - Benchmarks

- With non-toll revenues comprising 4.9% of total revenues, the TA is in the middle of the group
- The TA lags its peers in relative contribution from non-toll revenues, particularly concessions
 - This is partly motivated by a desire to compete with local off-system concession operators
- If the TA managed to achieve the top peer at 6.6% , it would generate an approximate \$10MM in additional revenues

Non-Toll Revenue as a % of Total Revenue



Source: Various Agency annual reports (2010)

Causative Factors

Summary

- There are seven major causative factors that appear to have led to the current situation:
 - Decision in 2009 to **issue a significant amount of short-term Bond Anticipation Notes subsequently upsized and extended in 2011**, resulting in an **overreliance on opaque and potentially risky, short-term** debt funding mechanisms to fund long term capital needs. Decision made in face of:
 - **Realization of a protracted recession** and motivation to continue to fund the capital plan to completion
 - **Fallout of monoline insurer availability** of credit-wraps
 - Potential ratings downgrade and related increases in cost of capital
 - Avoidance of **weaker debt service levels**
 - **Ambitious, engineering driven, capital program initiated in 2005, not ratcheted down significantly when recessionary headwinds were encountered**, and weak project execution reflected by:
 - **Lack of third party independent review** to justify spend
 - **Failure to achieve targeted asset lifecycle curve improvements**
 - **Insufficient** coordination of strategic and financial planning, lacking annual assessment of rolling 10 year capital plan
 - **Sub-optimal asset management** practices
 - Significant traffic and **revenue growth challenges** with absence of clear mitigation strategies

Causative Factors

Summary (cont'd)

- **Operating cost growth outpacing revenues** with no comprehensive review or action plan identifying and tracking key initiatives to achieve meaningful cost savings
- Failure to recognize the structural significance and necessary actions required in **taking on responsibility and funding of the Canals, I-84, I-287 and other economic development projects**
- **Prior to the recent appointments in leadership, the TA historically had systemic corporate governance problems. This resulted in** apparent ineffective strategic planning, and chronically stymied corrective actions (with a **short-term “kick the can” philosophy**), compromising long-term viability. Corrective actions could have otherwise been achieved through proper risk identification, contingency planning, and the integration of strategic, operating, financial and capital planning cycles and goals
- **Diminishing and insufficient federal aid** to meet aggregate funding needs

Causative Factors

Use of Short-Term Debt to Fund Long-Term Assets

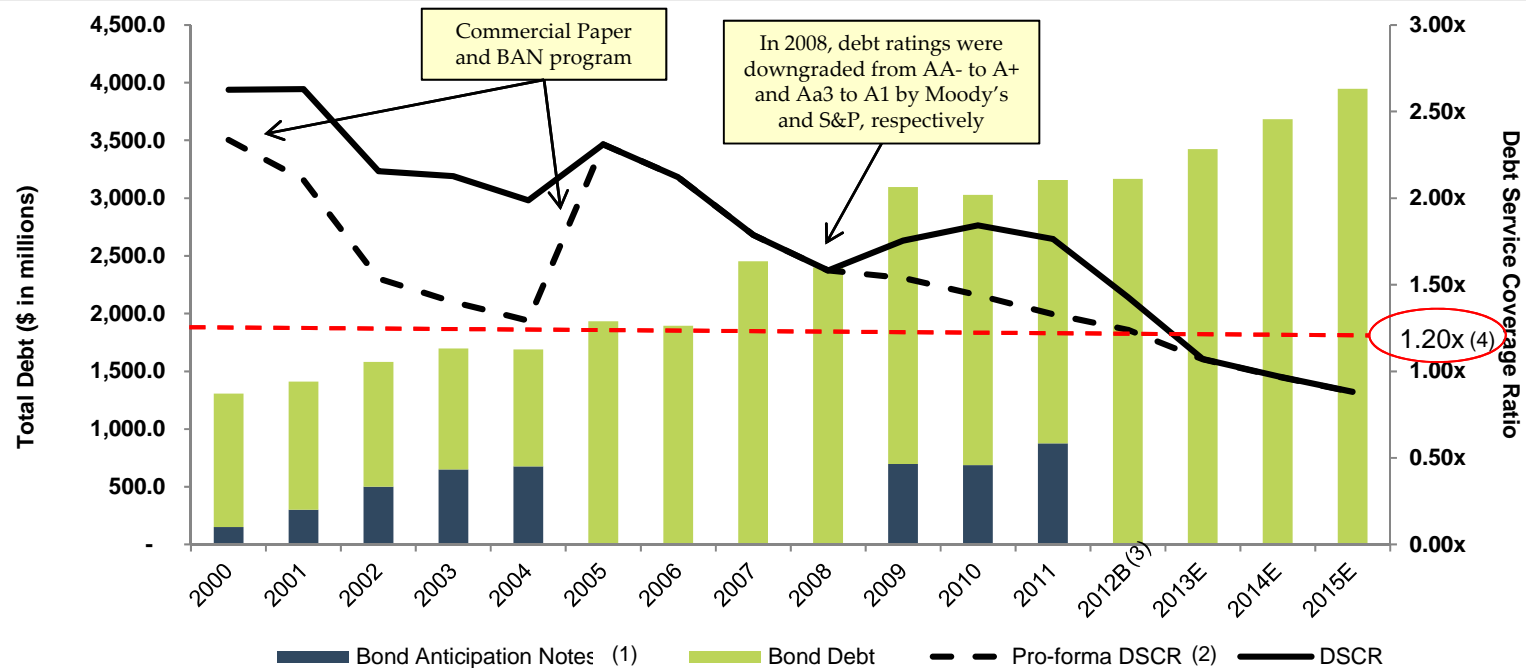
Short-term financing was used to fund a material portion of the TA's capital plan

- In 2009 the TA found itself at a crossroads regarding the nature of debt to issue to fund \$680MM of new capex needs
 - Notwithstanding declining net revenues, adequate bonding capacity existed to fund long-term debt that may have resulted in a debt downgrades and associated increases in pricing by 80-120 bps
 - A debt downgrade would have potentially impacted the ability to issue well-priced long-term debt
- The board approved opaque and potentially risky, short-term BANs
 - Decision taken in light of (i) realization of a protracted recession and motivation to continue to fund the capital plan to completion, (ii) fallout of monoline insurer availability of credit-wraps, (iii) potential ratings downgrade and related increases in cost of capital, and (iv) avoidance of weaker debt service levels
- Questions abound regarding the prudence of the decision at the time, including:
 - Risk established with debt markets' perceptions of potentially "gaming" the capital structure with a sizable piece of near-term paper
 - Mismatch of short-term debt against long-term assets in a weak operating environment
 - Potential consequences of refunding risk on future cost of capital, depending on rating agency review, credit underwritings, and interest rate environment

Causative Factors

Use of Short-Term Debt to Fund Long-Term Assets

Trends on debt service coverage reflect a rapidly eroding credit profile with credit statistics from 2000-2004 and 2009 onwards improved through BANs issuance



(1) Includes commercial paper balance from 2000-2004

(2) From 2000-2004 and 2009-2011, assumes long-term debt issued in place of short-term at a 5% rate over 30 years

(3) Assumes BANs are in effect for a portion of 2012, ultimately refunded by long-term debt in that year

(4) Minimum debt service coverage level per bond covenants

Source: Data provided internally by the Thruway Authority

- BANS are not intended for serial issuance but rather short term bridge to long term debt. By issuing in this fashion, avoided inclusion in the covenant calculation, with same reflecting stronger coverage than what would need to be serviced, and avoided restricted covenants designed to restrain issuance of excess amounts of debt

Causative Factors

Lack of Sophisticated Capital Planning and Asset Management Tools

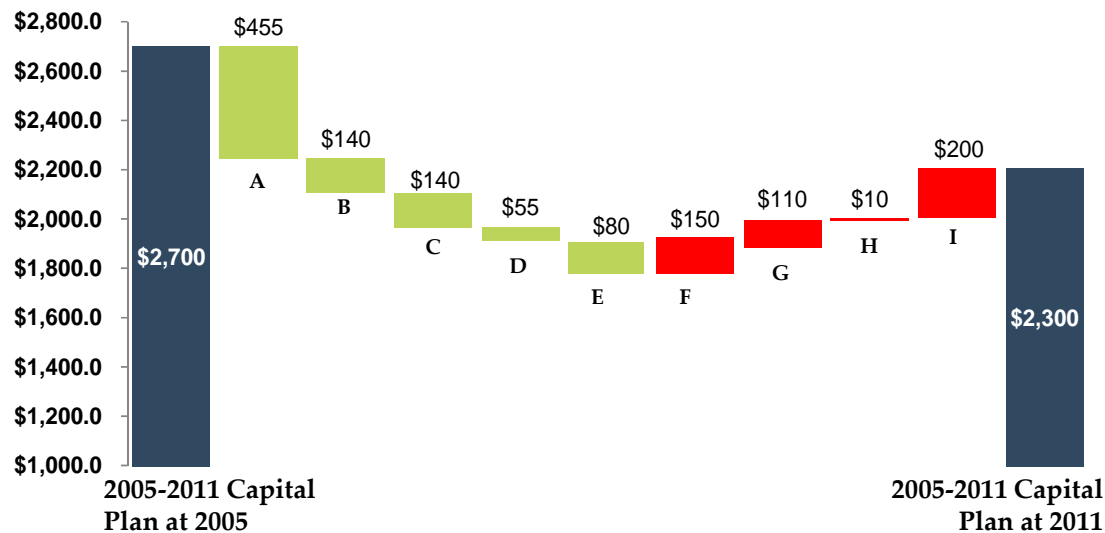
Effective capital planning processes and asset management capabilities must be enhanced

- Prior to 2005, the capital planning process lacked a sophisticated approach to validate its needs, priorities, cost effectiveness, financial capacity, and ensure proper alignment with the TA's strategic goals. Outside consultants and the New York State Office of the Comptroller findings echoed this assessment in prior reviews of the Authority
- The \$2.7 billion 2005-2011 TA capital plan did not utilize independent engineering consultants for verification of the necessity and prioritization of the aggregate spend prior to board approval
- While the process has become more centralized and integrated, additional improvements are warranted such as (i) improved project scoping, prioritizing and cost estimating; (ii) tighter coordination with strategic and financial goals including 10+ year rolling capital plans; (iii) and more sophisticated asset management practices, that are currently lacking in systematic, consistent, robust, and interpretable content deficient in identifying alternative investment scenario perspectives
- TA estimates are that with only 70 of 570 miles of original road replaced and typically 30-40 years of useful life, **there may exist over \$5.0 billion of potential long-term overhaul needs to be enacted** to reconstruct and rehabilitate the road and bridge infrastructure to keep it safe and functional. This should be independently evaluated by third party engineers
- Given the magnitude of potential capital needs, it is critical the TA has independent engineering assessments to support the proper and most efficient means for maintenance of state-of-good-repair

Causative Factors

Capital Execution Didn't Achieve Goals

While the capital program expended approximately 85% of its board approved levels, management indicates that only 42% of major rehabilitation goals and 81% of reconstruction goals were achieved



Source: Data provided internally by the Thruway Authority

Original 2005-2011 Capital Plan Cash Flow Estimates (August 2005)		\$2,700
A) Removed Projects	(455)	
B) Deferred Projects	(140)	
C) Downscoped Projects	(140)	
D) Construction Contract Closeouts	(55)	
E) In House Projects, Equipment and Systems	(80)	
F) Scope Changes/Increases	150	
G) Added Projects	110	
H) Cost Overruns (1)	10	?
I) Inflation/Commodity Price Increases	200	
Actual 2005-2011 Capital Plan Cash Flow		\$2,300

(1) While only \$10MM of cost overruns have been reported, it is likely an understated number based on industry norms, resulting from movement of baseline expected costs associated with project up-scoping, deferrals, and added/removed projects

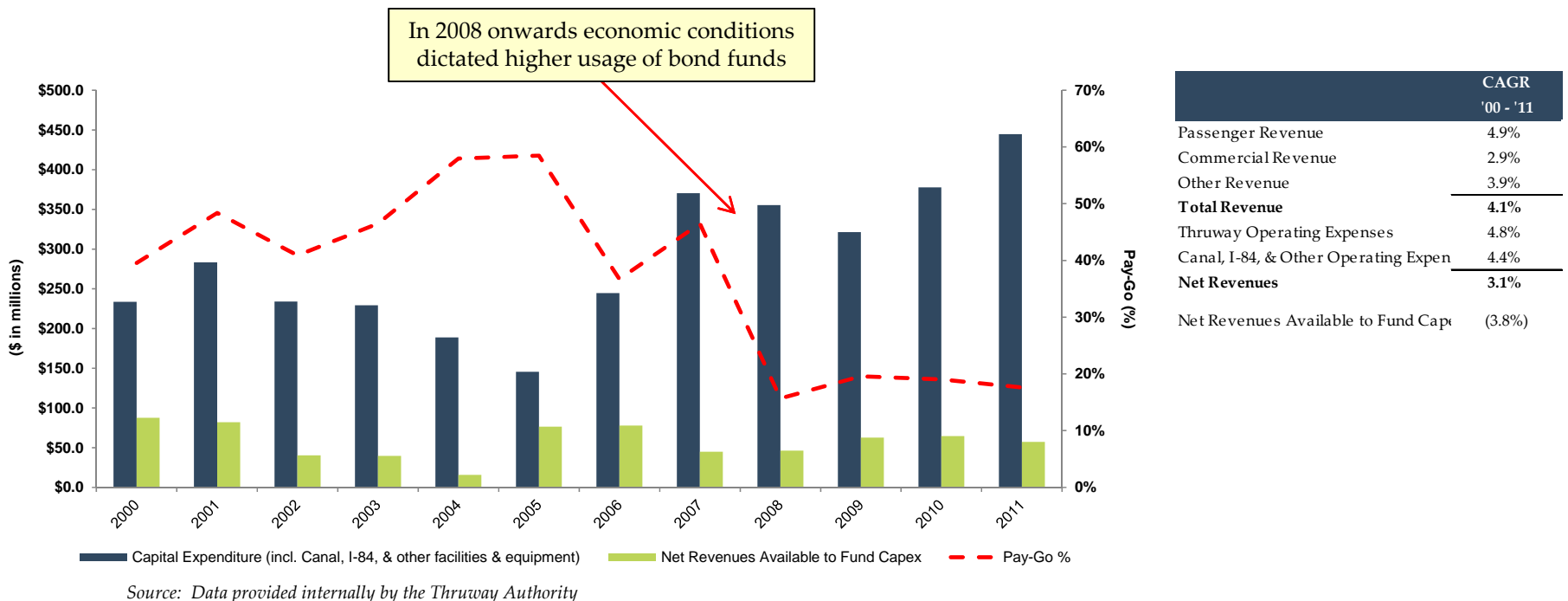
Note: NCA has not reviewed the content and accuracy of these allocations

- The TA's major rehabilitation and reconstruction capital plan failed to realize its objectives due primarily to commodity cost increases, deferral and down scope in projects, and project substitutions
- While over 85% of the funds were expended, considerably less value in completed projects and associated life cycle improvements were realized:
 - Rehabilitations goals: targeted completing 105 of the 570 miles of highway, actually completed 44 miles (42% of target)
 - Reconstruction goals: targeted completing 27 miles, actually completed 22 miles (81% of target)

Causative Factors

Sources of Funding w/ Total Indebtedness

Net revenues available to fund capex have continued to drop, dramatically reducing the Pay-Go% and increasing reliance on debt issuance

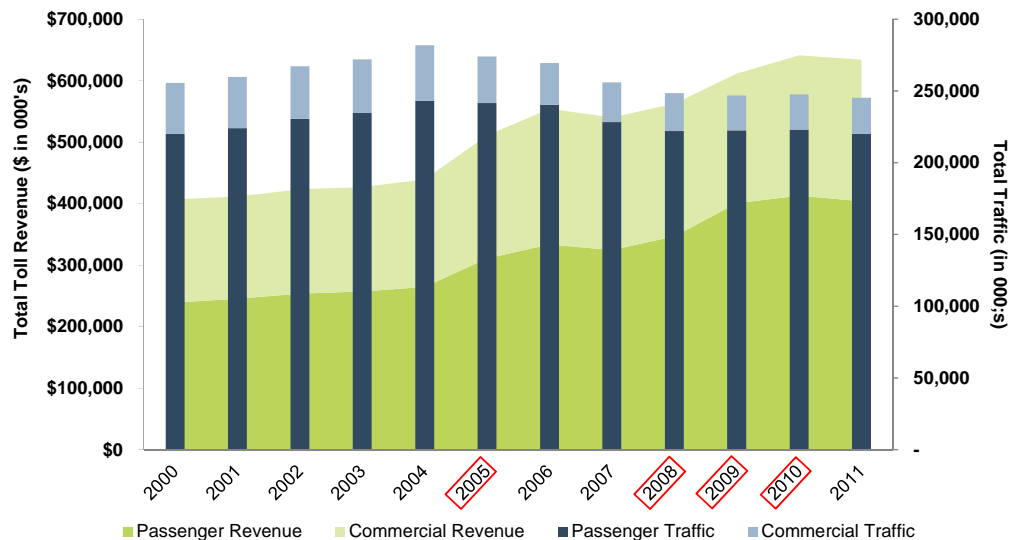


- The 2005-2011 multi-year capital plan was scheduled to be funded by \$1.8 billion of bonds and notes
- Notwithstanding stiff economic challenges and declining Pay-Go levels, the TA continued to fund the program with \$1.6 billion of bonds financings inclusive of \$0.9 billion in short-term debt
- Debt doubled over the period of the 2005 – 2011 capital plan

Causative Factors

Traffic & Revenue Growth Issues

Two differing revenue trends are evident from 2000-2004 and 2005-2011



- (1) Tolls were increased in May 2005, January 2008, January 2009, and January 2010
- (2) In October 2006, tolls were removed from the Buffalo City Line and Black Rock Barriers
- (3) In 2005, a major vehicle reclassification resulted in volume adjustments

Source: Data provided internally by the Thruway Authority

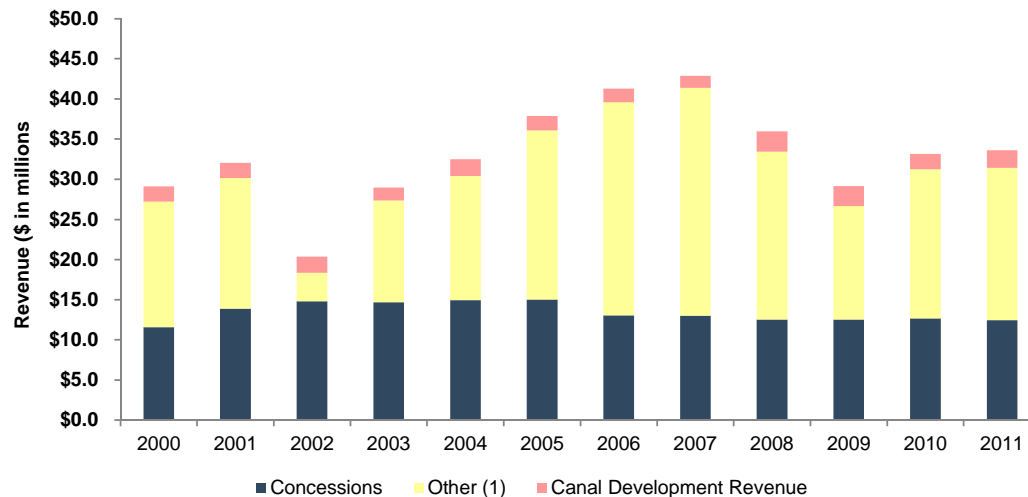
(\$ in millions)	2000	2004	% Change	2005	2011	% Change	CAGR '00-'04	CAGR '05-'11
Passenger Traffic	220.0	243.2	11%	241.5	220.1	-9%	2.5%	-1.5%
Commercial Traffic	35.7	38.7	8%	32.5	25.2	-23%	2.0%	-4.2%
Total Traffic	256	282	10%	274	245	-11%	2.5%	-1.8%
Passenger Revenue	\$ 239.3	\$ 264.8	11%	\$ 311.1	\$ 403.9	30%	2.6%	4.4%
Commercial Revenue	\$ 167.8	\$ 174.8	4%	\$ 200.1	\$ 230.2	15%	1.0%	2.4%
Total Revenue	\$407	\$440	8%	\$511	\$634	24%	0.7%	3.7%

- Historical revenue trends from the period 2000-2004 were almost entirely driven by modest volume increases in both passenger and commercial traffic, and no toll increases were introduced during the period
- Volumes fell from 2005 onwards reflecting (i) recessionary and gas price issues, (ii) regional economic issues, (iii) traffic diversion to alternative routes, (iv) customer switching to discounted E-ZPass driven by toll adjustments, and (v) barrier tolls, which were eliminated at Black Rock and City Line, creating significant revenue challenges just as the TA launched its most ambitious capital plan ever

Causative Factors

Lack of Non-Toll Revenues

Non-Toll Revenues, particularly more predictable concession revenues, remain flat



(1) Includes Interest on Investments, Sundry Revenue, and Special Hauling Revenue

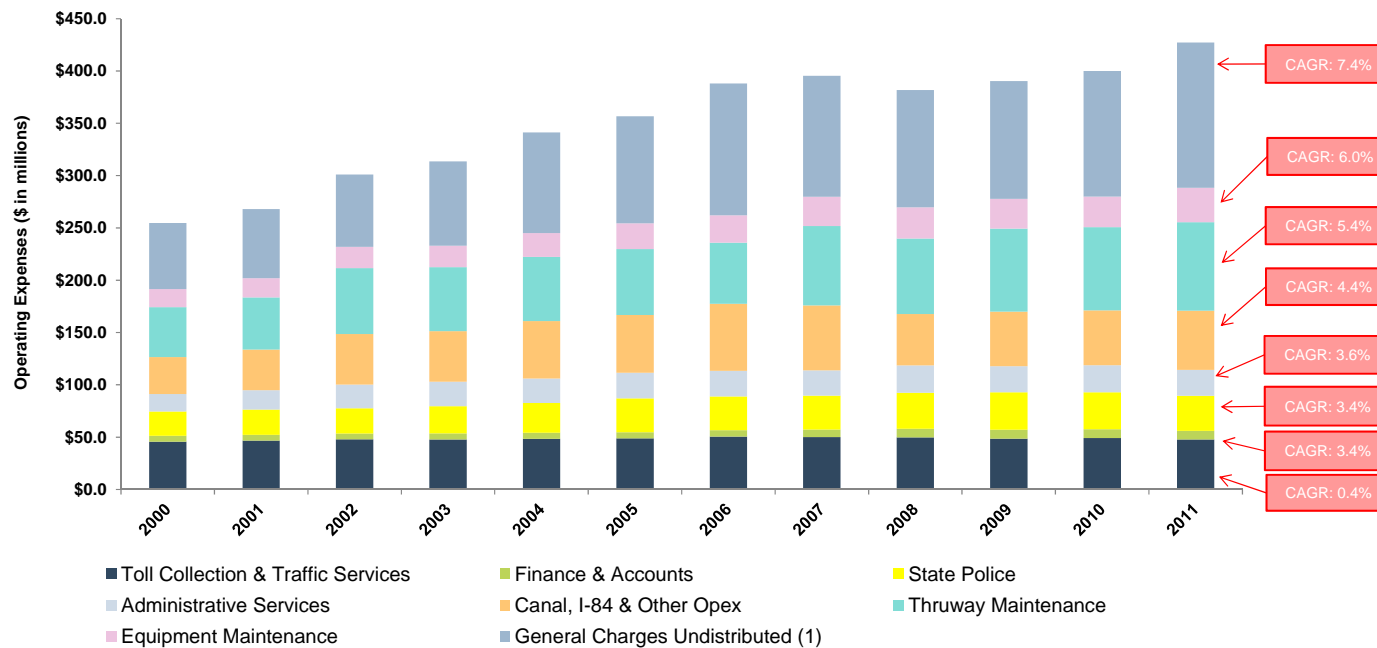
Source: Data provided internally by the Thruway Authority

- Concession revenues are derived from restaurants and gas stations. Other revenues include fees from special permits (such as special hauling fees), E-ZPass violation fees, interest on investments and other miscellaneous revenues
- Concession revenue CAGR was only 0.7% during the period, on a relatively small base
- TA lags its peers in relative contribution from non-toll revenues, particularly concessions, partly due to maintaining concession pricing against off-system concession operators
- Private sector advertising and sponsorship along Thruway roads or on toll booths, has been identified as potential source of revenue enhancement. The TA leadership recently established aspirational goals for \$20-\$50MM per annum in additional non-toll revenues

Causative Factors

Operating Expense Growth

Operating expense growth has materially outpaced revenue growth



(1) Includes employee payroll and benefits expenses

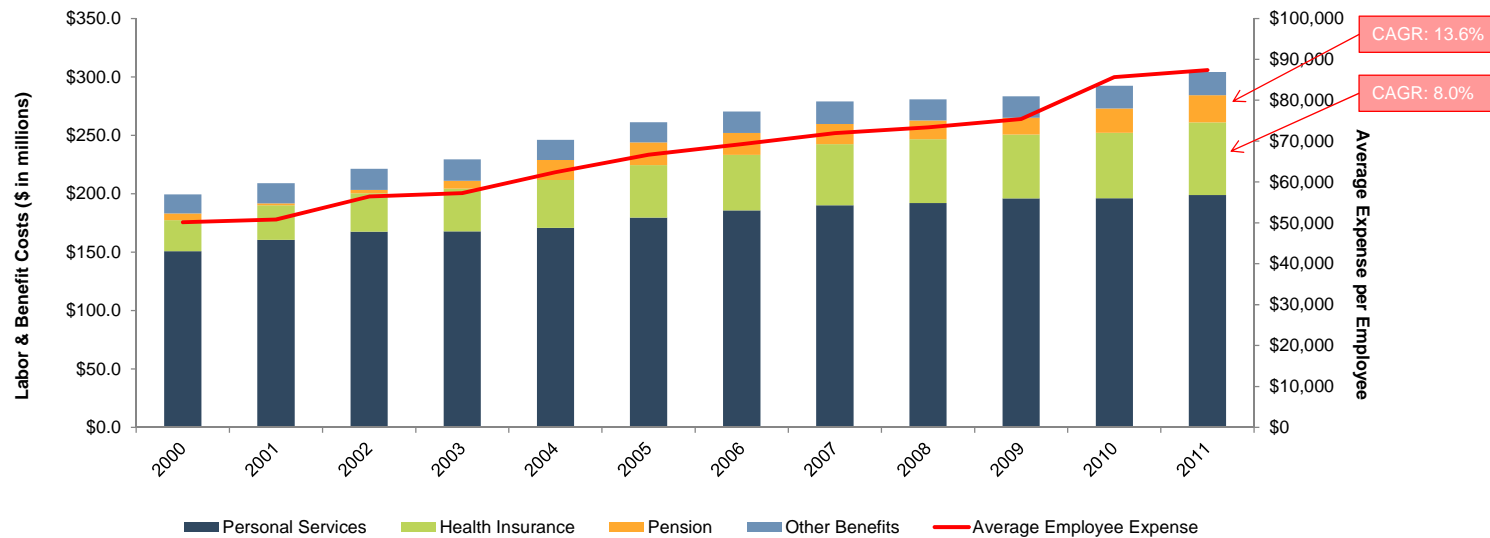
Source: Data provided internally by the Thruway Authority

- Operating expenses, including general charges (includes EE benefits), state police and equipment maintenance, all outpaced revenue growth with a 4.7% operating expense CAGR versus 4.1% on revenues since 2000
- While TA's current management has referenced meaningful potential cost savings, these initiatives are in early stages and NCA has been unable to validate that any have actually been implemented to date
- Expense cost increases have been driven by sizable growth in labor costs and benefits

Causative Factors

Labor Costs and Benefits

Labor costs and benefits have grown significantly over the recent years



Source: Data provided internally by the Thruway Authority

- Health insurance and other benefits continue to grow significantly with fringe benefits growing from \$49MM in 2000 to \$105MM in 2011, or as a % of salary from 32% to 54%
- Union and civil servant statutes limit the ability to harness employee productivity, e.g. such as the inability to interchange TA and Canal employees when a suitable job need arises
- The need to work collaboratively with organized labor to achieve outcomes to work smarter together to remove barriers for (i) greater productivity, (ii) efficiency gains in the current environment
- The SAGE commission benchmarked TA compensation against the NYDOT, with TA higher in the vast majority of categories. Additionally, the SAGE Commission also identified potential synergies which are summarized in Appendix B

Causative Factors

Limited Realized Cost Savings

A majority of TA employees do not currently contribute to healthcare costs

- Currently, the TA covers 94% of the total health insurance expense with as many as 67% of all Thruway employees and retirees not contributing to their health insurance plans. A majority of the contributors are comprised of retirees who pay a small percentage of the cost differences of an individual versus family health plan
- The average gross annual expense per enrollee is \$11,184 while the average contribution is only \$699 on average per employee
 - If all enrollees contributed to their relative cost, the TA could realize an estimated \$7.5MM in cost savings, with contributions now covering a blended 19% of healthcare costs

	Active EE Enrolled	Total Ees Contributing (1)	%	Gross Annual Cost	Gross Annual EE Contribution	%	Net Annual Cost
<u>CURRENT STATE</u>							
Non-Represented	205	41	20%	2,755,473	(98,579)	4%	2,656,894
Represented	2,590	491	19%	28,372,775	(812,419)	3%	27,560,356
Retirees	2,478	1,183	48%	27,846,020	(2,776,312)	10%	25,069,708
Total	5,273	1,715	33%	58,974,269	(3,687,311)	6%	55,286,958 A
<i>Average per Enrollee</i>				<i>\$11,184</i>	<i>(\$699)</i>		<i>\$10,485</i>
<u>ALL EMPLOYEES CONTRIBUTE</u>							
Non-Represented	205	190	93%	2,755,473	(542,093)	20%	2,213,380
Represented	2,590	2,441	94%	28,372,775	(4,808,508)	17%	23,564,268
Retirees	2,478	2,478	100%	27,846,020	(5,783,749)	21%	22,062,271
Total	5,273	5,109	97%	58,974,269	(11,134,350)	19%	47,839,919 B
<i>Average per Enrollee</i>				<i>\$11,184</i>	<i>(\$2,112)</i>		<i>\$9,073</i>

Source: Data provided internally by the Thruway Authority

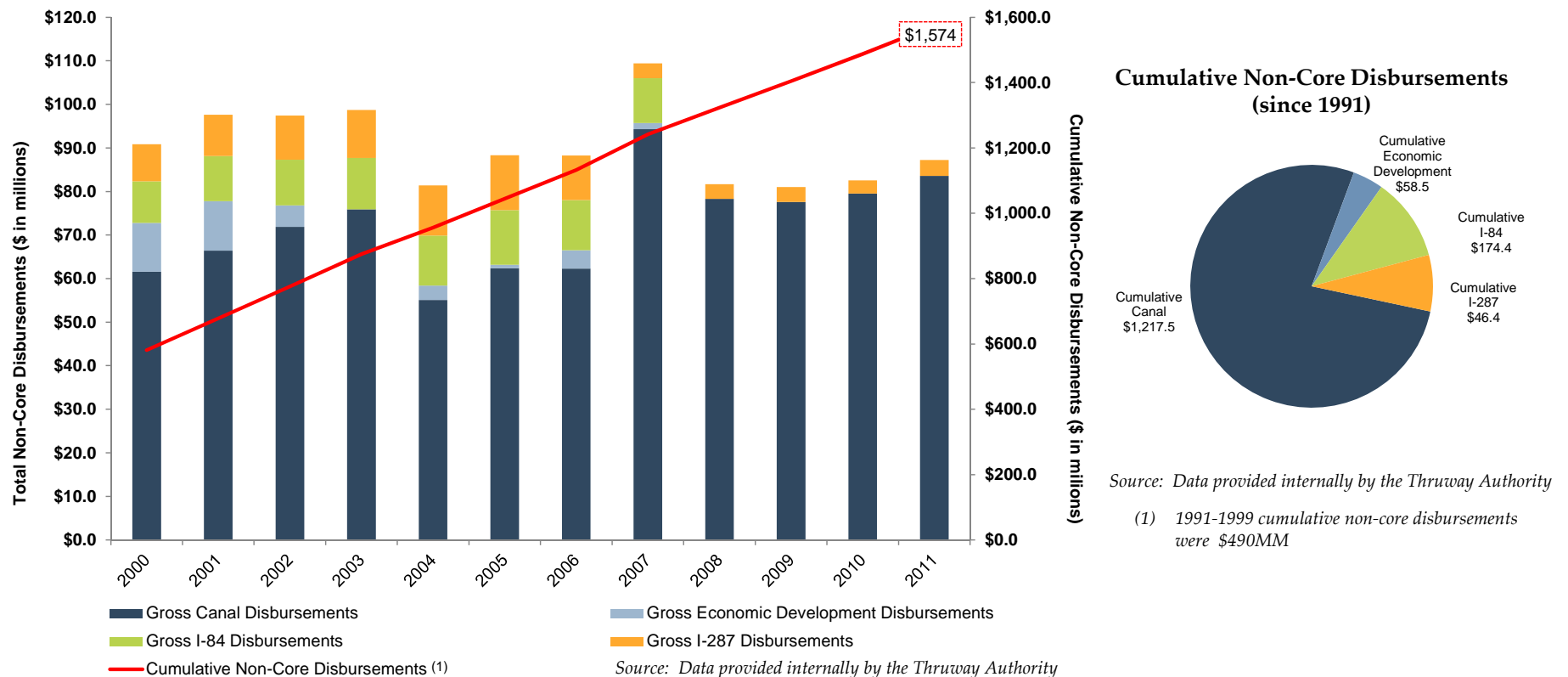
Total Estimated Annual Savings \$ 7,447,039 A-B

(1) Difference in Total EE's contributing and Enrollees in "All Employees Contribute" scenario is for EE's who "opt-out" and choose a plan above the plan offered at the Thruway Authority

Causative Factors

Long-Term Structural Issues

While non-core assets have been a part of Thruway operations for decades, there have been inadequate revenue and cost savings interventions to offset the carrying costs of these assets



- As a consequence, nearly \$1.6 billion of gross operating and capital expenditures have been borne by the TA since 1991, with the potential for an additional \$1.5 billion needed to restore Canal assets alone to a “good” conditions rating

Causative Factors

Long-Term Structural Issues

Aggressive revenue enhancement and cost containment initiatives must be pursued to address the asset funding mismatching that has been evident for decades

- Currently, the Canals cost approximately \$80MM-\$90MM in capital and operating expenses annually, and are only supported by roughly \$2MM in revenues
- Prior to the transfer of the Canal assets, the 1991 Transition Advisory Council report reflected that the TA had strong bonding capacity with a favorable economic outlook
- Canals integration into the operations of the TA have been limited and the Canals do not form part of the credit group that is earmarked for priority capital funding
- Federal aid has historically been received for partial funding of Canal capital needs, however federal aid funding has been declining since 2004 and continues to taper off
- Approximately 50% of Canal structure conditions were recently rated poor/fair as the TA has consistently constrained financial resources to fund Canal capital program needs
- The TA should evaluate the current permit fee structures, including Hydropower easements for potential revenue enhancements
- Alternative ideas for maximizing Canal infrastructure have been considered, including: closing portions of the Canals; monetizing attractive non-core land owned adjacent to the Canals; and public-private-partnership recreational development projects. However to date, no meaningful strategy has been pursued by the TA board or management

Causative Factors

Effectiveness of Governance Structures and Processes

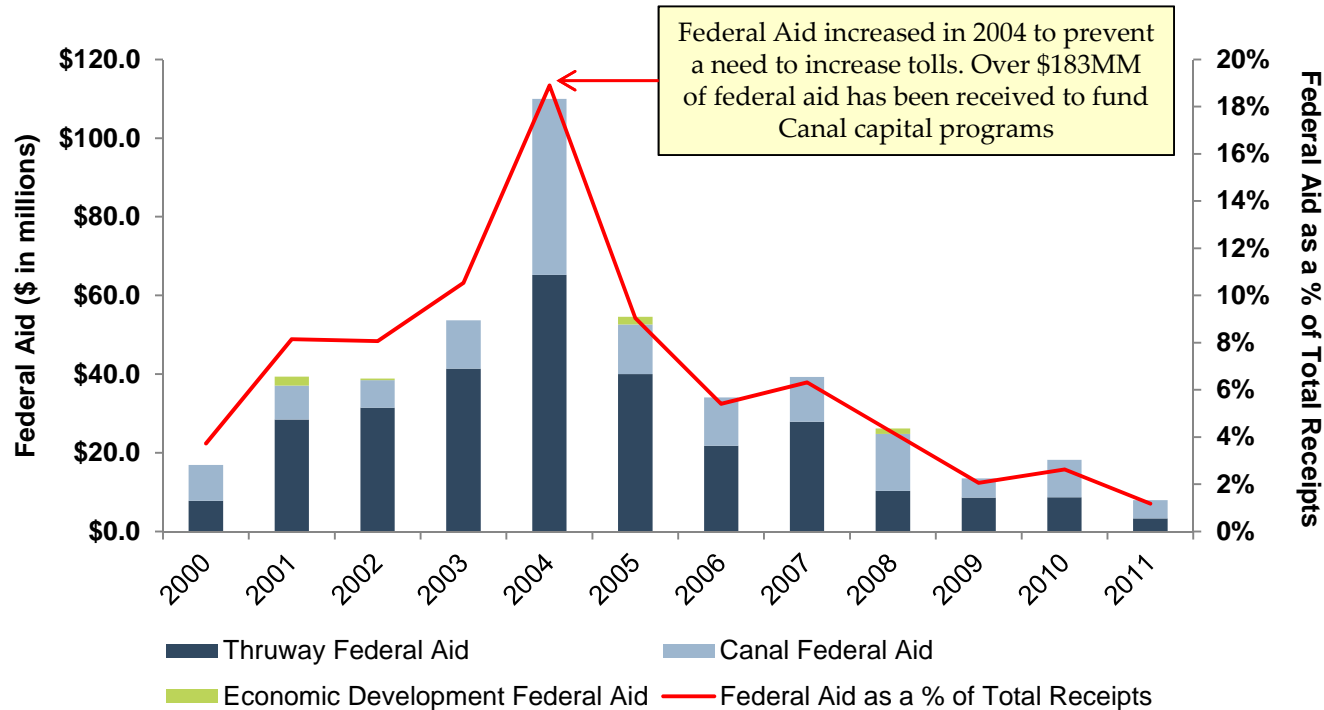
Historically, a lack of comprehensive strategic planning has created an environment of inaction and a short-term “kick the can” philosophy

- Senior executives and board members have identified material shortcomings of the agency including: lack of innovation, lack of cost consciousness, and weak internal processes
- Historically, the Board of Directors and management did not pursue revenue enhancement and cost savings initiatives. However, recent senior appointments to the board have initiated discussions around substantial, identifiable initiatives, yet these initiatives have yet to be embodied in a strategic planning document
- Prior independent reviews on the TA’s policies, processes and operations to assess current management practices, highlighted deficiencies and provided recommendations for improved organizational efficiency and effectiveness. These are in varying stages of execution by TA management however there appears to be lack of definitive work plans, with discrete action steps, and clear accountability
- Organizational changes including consolidation with other transportation agencies and divisions offer substantial potential savings opportunities but have yet to be acted upon. Duplicate division consolidation at Thruway and Canals alone could realize meaningful savings
- Current labor contract work rules and civil service requirements make it difficult to effectuate significant organizational changes, however identification of priority issues and change implementation plans are essential if any meaningful progress is to be made
- An extensive independent management review was completed in May 2010. Recommendations are at varying stages of completion, though certain key recommendations, such as developing a 10-year strategic plan that addresses critical organizational challenges, have yet to be approved by the Board of Directors and executive management

Causative Factors

Declining Trends in Federal Aid

Federal aid has been markedly reduced



Source: Data provided internally by the Thruway Authority

- Federal aid and grants under IM and TEP programs have diminished due to smaller federal allocations to the state and loss of former sharing arrangements with the NYDOT that expired in 2005
- TA should push for reinstated allocations similar to its former arrangement that could yield \$35-\$50MM of annual funding under IM and TEP. Management has no tangible sources currently identified and is working off close-out funding of prior aid projects

IV. Key Findings

Key Findings

Urgent Financial Need

The Thruway is facing an urgent financial need unrelated to the Tappan Zee Bridge

- BANs totaling in excess of \$868MM must be refinanced by early July
- Additional borrowings are projected to support the Thruway's capital plan and operations requirements, in the absence of alternative revenue enhancement and cost containment initiatives
- Without decisive intervention, current capital structure and debt service coverage is insufficient to absorb the refunding of BANs with long-term debt, or terming-out of BANs, in addition to contemplated borrowings required to support ongoing capital needs
- TA needs to present a credible revenue enhancement and cost containment strategy to support short-term and long-term financing horizon and related financing needs
 - The cost of issuing debt, if assumed available, is attractive in the current low-yield environment relative to TA's most recent long-term debt issuances completed prior to 2008

Key Findings

Financial Forecasts Show Immediate Intervention Warranted

- Constraints exist on the Thruway finances that imperil its future outlook absent timely intervention
- Absent current and additional revenue enhancement and cost containment initiatives, **debt service coverage is projected to fall below the 1.2x minimum requirement by 2013**

\$000s	2012B	2013E	2014E	2015E
Total Revenue (1)	664.7	668.0	676.1	685.2
Operating Expenses (1)	375.3	389.9	401.5	413.5
Net Revenues	289.4	278.1	274.6	271.7
Net Debt Service (unadjusted) (2)	202.3	259.6	282.7	308.1
Net Revenues after Net Debt Service	87.1	18.5	(8.1)	(36.4)
DSCR	1.43x	1.07x	0.97x	0.88x
Capital Expenditure (3)	384.0	374.0	377.0	383.5
Canal Operating (4)	55.7	53.2	54.8	56.4
Ending Debt Balance (5)	3,164.9	3,423.8	3,684.2	3,945.9

(1) Excludes I-84 and Canal System

(2) DSCR - Net Revenues / Net Debt Service

(3) Includes Capex for Facilities, Travel Plazas and Equipment and Canal Capital and Other Authority Projects

(4) Canal Operating Costs

(5) Includes General Revenue Bonds, CWE Bonds and BANs, Excludes unamortized bond discounts/premiums and deferred loss on refundings

Source: Data provided internally by the Thruway Authority. Forecasts have not been reviewed by NCA.

	Net Revenue Shortfall - \$000s			
DSCR	2012B	2013E	2014E	2015E
1.2x	NA	(33.4)	(64.6)	(98.0)
1.3x	NA	(59.4)	(92.9)	(128.8)
1.4x	NA	(85.3)	(121.2)	(159.6)
1.5x	(14.1)	(111.3)	(149.5)	(190.5)
1.6x	(34.3)	(137.3)	(177.7)	(221.3)
1.7x	(54.5)	(163.2)	(206.0)	(252.1)

In order to maintain acceptable DSCR, a combination of *revenue enhancement, cost containment, and capital spending reduction initiatives* should be urgently pursued.

Key Findings

Unsupported 2005-2011 Capital Plan

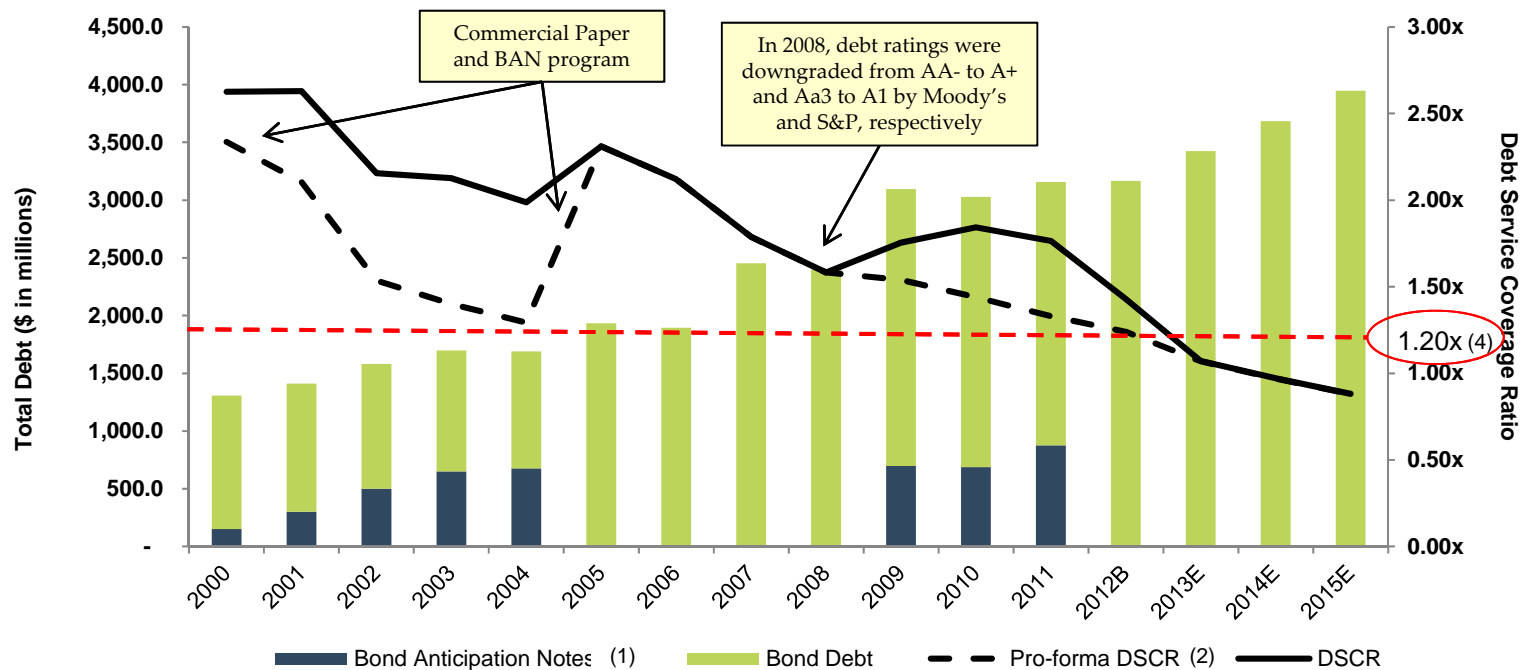
The 2005-2011 aggressive capital program was put in place without adequate net revenues to support it. The program was financed heavily with debt

- Prior to 2005, the capital planning process lacked a sophisticated approach to overall needs, priorities, cost effectiveness, financial capacity, and alignment with the TA's overall strategic goals
- In 2008, the New York State Office of the Comptroller found that the Authority's capital planning process allowed practices that did not sufficiently consider the need for accountability and transparency
- Subsequent independent reviews in 2010, indicated that significant progress had been made in the areas of (i) establishment of Capital Program managers, (ii) Executive Capital Program Steering Committee and in overall tracking of spend and remaining budgets
- While the process has become more centralized and integrated, additional improvements are warranted such as (i) improved project scoping , prioritizing and cost estimating; (ii) tighter coordination with strategic and financial goals including 10+ year rolling capital plans; (iii) and more enhanced asset management practices, which are currently lacking in systematic, consistent and interpretable content deficient in identifying alternative investment scenario perspectives
- In 2005, the board initiated its most ambitious capital plan ever, with costs estimate to exceed \$2.7 billion over a seven year period. The Thruway had no established track record in executing a plan of this magnitude nor had they identified risks and contingencies with appropriate mitigating reserves or other backstops
- The magnitude of capital spending appears to have been internally justified by TA lifecycle assumptions and rudimentary inspections, and no independent engineering consultants were retained for purposes of verification of need and priority of the expenditures prior to the board approval of the \$2.7 billion plan

Key Findings

Use of Short-Term Debt to Fund Long-Term Assets

Short-term debt was utilized that was not reflected in the underlying and deteriorating credit ratios



(1) Includes commercial paper balance from 2000-2004

(2) From 2000-2004 and 2009-2011, assumes long-term debt issued in place of short-term at a 5% rate over 30 years

(3) Assumes BANs are in effect for a portion of 2012, ultimately refunded by long-term debt in that year

(4) Minimum debt service coverage level per bond covenants

Source: Data provided internally by the Thruway Authority

- BANS are not intended for serial issuance but rather short term bridge to long term debt. By issuing in this fashion, avoided inclusion in the covenant calculation, with same reflecting stronger coverage than what would need to be serviced, and avoided restricted covenants designed to restrain issuance of excess amounts of debt.

Key Findings

Refunding Risk Concerns

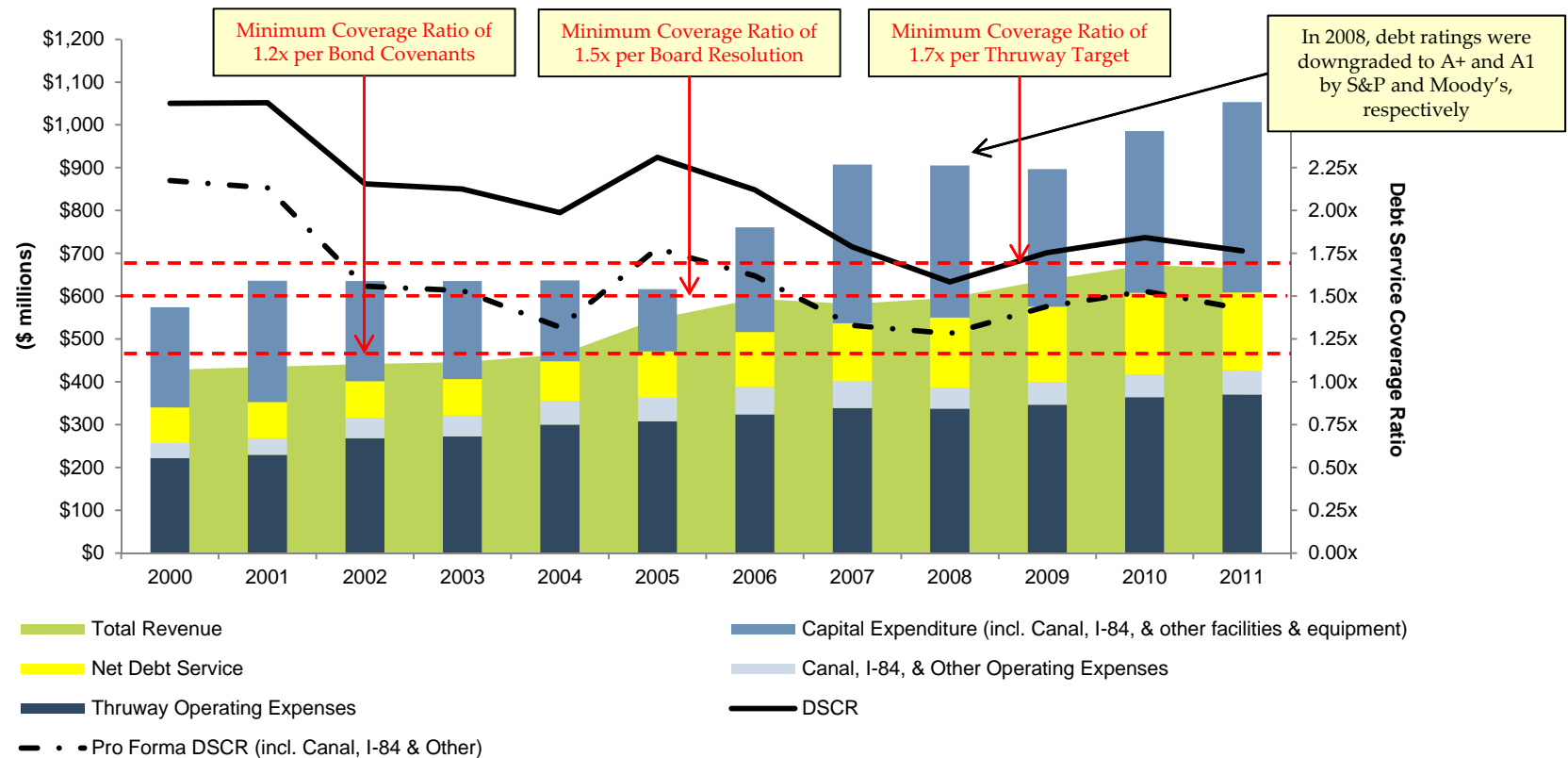
There was significant refunding risk created with the utilization of short term debt

- The board approved opaque and potentially risky, short-term BANs
 - Decision taken in light of (i) realization of a protracted recession and motivation to continue to fund the capital plan to completion, (ii) fallout of mono-line insurer availability of credit-wraps, (iii) potential of ratings downgrade and related pricing increases, and (iv) avoidance of tighter debt service levels
- Questions around the prudence of the decision at the time
 - Risk established with debt markets' perceptions of potentially "gaming" the capital structure with a sizable piece of near-term paper
 - Mismatch of short-term debt against long-term assets in a weak operating environment
 - Potential consequences of refunding risk on future cost of capital, depending on rating agency review, credit underwritings, and interest rate environment

Key Findings

Debt Service Coverage Ratios Declining for Years

Structural issues with asset-funding matching within the Thruway's portfolio have been apparent for years, but yet Thruway management and the Board failed to take action



Source: Data provided internally by the Thruway Authority

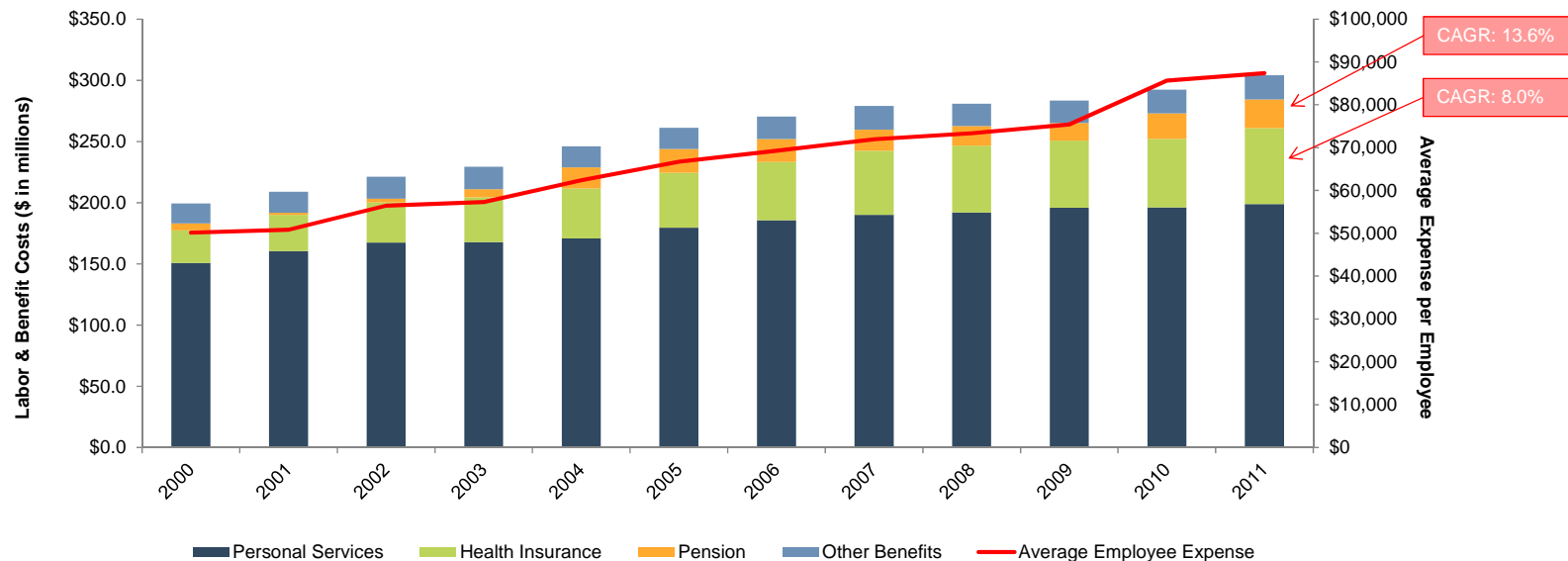
- The Canals do not form part of the credit group yet have their expenses borne by the TA resulting in Debt Service Coverage Ratios that are represented to be higher than economic reality

Key Findings

Revenue Enhancement and True Cost Reduction Must Become A Way of Life

Until recently, the TA management and Board of Directors has taken a passive approach to revenue enhancement and cost containment initiatives

- Significant changes were never taken to address structural asset funding mismatch
- Cost continued to exceed revenue growth
- While operating cost containment was initiated in 2007 to keep non-payroll benefit costs close to zero growth, significant year over year cost reductions have not been addressed



Source: Data provided internally by the Thruway Authority

- The Thruway must take austerity measures comparable to those enacted by the State of New York, which expects its State Operations budget in FY2013 to decline, inclusive of labor and benefit costs

Key Findings

Revenue Enhancement and True Cost Reduction Must Become A Way of Life

The Thruway, to the extent possible, must prioritize and enact immediately identifiable non-toll revenue enhancement and cost containment initiatives

(\$ in millions)	2012 Impact	2013+ Impact
Revenue Enhancement	\$ 1.00	\$ 6.50
Healthcare Contribution Savings	2.00	9.00
Other Employee Benefits	1.00	8.00
Other Operating Initiatives	22.00	35.50
Equipment, Capital, and Debt Service Savings	4.00	6.00
Total (1)	30.00	65.00

(1) Numbers are approximated from data provided by the TA, and have not been reviewed by NCA

- The Board of Directors and management have preliminarily identified potential cost savings currently estimated at \$30MM for the remainder of FY2012 and potentially \$65MM 2013. These initiatives need to be validated with specific action plans to ensure effective implementation
- **Revenue enhancement** initiatives include actively marketing land for lease or sale
- **Healthcare contribution savings** includes adopting New York State plan for retirees and employees
- **Other employee benefits savings** include elimination of sick leave bonus payments and vacation buy-backs as well as implementation of select furlough days
- **Other operating initiatives** include elimination of additional position vacancies, reduce state police Troop T authorized head count, consolidation of E-ZPass walk-in centers, reduced toll lane staffing, reduced overtime, installation of automated toll machines, among others
- **Equipment, Capital and Debt service savings** relate to financing heavy equipment purchases

Key Findings

Revenue Enhancement and True Cost Reduction Must Become A Way of Life

- Other initiatives that should be explored, or are being analyzed include:
 - Greater integration with Canal operating units
 - Thruway divisional consolidation
 - Sale or lease of land rights along key waterfront areas on the canal
 - Explore the SAGE commission findings further to understand Thruway potential savings
 - Strengthen toll violation collection processes and address legislative issue of designating TA beneficiary of funds collected
 - Bridge Authority consolidation and related impact on revenue and expenses

V. Recommendations & Next Steps

Summary of Key Findings & Recommendations

Short-term Actions (30 – 60 days)

1. Consider implementation of appropriate toll increase to alleviate immediate financial stress, and address the refunding of the BANs
2. Implement immediate cost containment initiatives identified by management, including defining labor strategies ahead of contract negotiations as well as collaborating with represented employees to modify work rules and contract limitations that impede productivity and efficiency of the agency
3. Implement austerity measures to effectively restrict future capital spending projects (i.e., other than those projects continued for public safety and other related concerns) until capital planning and execution processes are reviewed and remediated to ensure proper prioritization, and the efficient and effective deployment of capital
4. Consider appointment of a three-member “Special Committee” from the Board of Directors, authorized to lead a restructuring process
5. Authorize an independent third-party to conduct, in support of the Special Committee, a thorough “top-to-bottom” agency review to identify, prioritize, and assist in the development of implementation plans for non-toll revenue enhancements, cost containment and other opportunities for performance improvement, See Appendix C, (The “Independent Review”)
6. Assess the effects of contemplated toll adjustments and cost containment measures being pursued to evaluate the viability and execution success of various considered alternatives in dealing with the July 2012 BANs maturity including: (i) refunding with long-term debts, (ii) terming out and restructuring, or (iii) short-term rollover
7. Delay formal approval of the 2012-2017 Capital Plan, beyond those received for 2012 budget and contracts program, until confidence is established in capital planning and project prioritization process, as well as the execution of critical asset management initiatives

Summary of Key Findings & Recommendations

Medium-term Actions (60 – 180 days)

1. Conduct the aforementioned Independent Review (see Appendix C for Illustrative Work Plan)
 - a) Evaluate range of toll and non-toll revenue enhancement opportunities
 - b) Assess organizational design and inter-agency relationships
 - c) Collaboratively evaluate labor, third-party contracting and vendor programs
 - d) Review of current capital plan and maintenance programs
2. Complete labor negotiations to align incentives and achieve objectives of enhanced productivity and efficiencies
3. Develop a revision to the existing 5-year capital plan that incorporates updated revenue and expense initiatives and other recommendations derived from the aforementioned Independent Review
4. Finalize separate financing alternatives and rating agency support for Tappan Zee bridge financing

Long-term Actions (180 days +)

1. Implement recommendations from the Independent Review
2. Develop a comprehensive rolling 10-year integrated strategic, financial and capital plan which balances current operations, true capital expenditure needs and appropriate identification of risks and contingencies
3. Adopt optimized bond policies relating to the best practices on programmatic debt issuance

VI. Appendix

Appendix - A

Appendix A

Report Qualifications and Limitations

This confidential report has been prepared for the Thruway Authority in conjunction with the Port Authority of New York and New Jersey pursuant to the Agreement, dated as of November 23, 2011, as supplemented by that certain First Supplement to Attachment A, dated as of April 26, 2012, by and between NCA and the Port Authority of New York and New Jersey. This report contains information related to the New York Thruway Authority (the “Thruway Authority”) and is being provided on a strictly confidential basis. The content of this report is not to be used for any other purpose and, except as may be required by law or any other regulatory or governmental authority having jurisdiction over the Thruway Authority, cannot be distributed without the written consent of NCA and may not, in any case, be relied upon by any third parties without NCA’s prior written consent.

Due to time and other limitations, this report has been prepared utilizing limited due diligence. It is based on assumptions, forecasts and estimates made by the management of the Thruway Authority, information provided to NCA by Thruway Authority personnel, information provided by industry sources, and, in some cases, assumptions made by NCA, which may not have been reviewed with Thruway Authority management. Any historical financial information or other information given to, and subsequently presented by NCA may not be reliable. Any financial statements or other data contained herein, including any forecasts, are the financial statements and forecasts of Thruway Authority management, not NCA. NCA has not subjected the information contained herein to an examination in accordance with generally accepted auditing or attestation standards or the Statements on Standards for Prospective Financial Information issued by the AICPA. Further, the work involved did not include a detailed review of any transactions, and cannot be expected to identify errors, irregularities or illegal acts, including fraud or defalcations that may exist. Accordingly, NCA cannot and does not express an opinion or any other form of assurance on the financial information and does not assume responsibility for the accuracy or correctness of the historical and forecasted financial data, information and assessments upon which this report is presented.

In addition but not in any ways limiting the foregoing, it should be noted that the source of all financial information or other information relating to the Thruway Authority contained in the Tables, Figures and body of this Report was information provided to NCA by Thruway Authority personnel.

It must be recognized that any projections of results or benefits set forth in the attached materials are necessarily, by their nature, inherently uncertain, and no warranty or representations, expressed or implied, is given that the results or benefits set forth in such projections will be achieved or realized, or otherwise with respect to any of the information contained herein.

NCA is neither a law firm nor a certified public accounting firm. Accordingly, the information contained herein is not intended to be and should not be relied upon as legal, auditing or accounting advice.

Appendix B

Appendix B

Key Initiatives for the Benefit of the TA

- SAGE Commission completed a preliminary Transportation Assessment in April of 2011
- Focus of study was to evaluate opportunities for shared services and/or functions as well as best practices between the Bridge Authority, New York State DOT and Thruway Authority
- Assumed no change in borrowing structure both for existing debt outstanding and future borrowing needs
- Assumed no new funding sources
- SAGE created 7 working groups by functional roles and identified 40+ opportunities
- Major potential synergies include:

SAGE Initiative	Estimated Synergies (1)
Field support consolidation	\$11MM to \$17MM
Field / core activity consolidation	\$29MM to \$49MM
Strategic realignments	\$20MM to \$37MM

(1) Potential synergy allocation to Thruway Authority has not been determined

- The Thruway should analyze its potential share of these synergies on the organization and quantify estimated impact

Appendix - C

Appendix - C

Illustrative Work Plan for Phase II

Draft work plan for Phase II	Target Due Date	Status / Comments
I. Organizational & Operational Review		
1. Facilitate the Board of Directors' evaluation of the Thruway Authority's vision, mission, and strategy to meet the challenges of the 21st century. <ul style="list-style-type: none"> a) Affirm or reevaluate current strategic mission b) Assist in implementation of concrete strategic planning structures based on recommendations detailed from independent consulting reports c) Assist in development of strategic dashboard, which will facilitate prioritization and tracking of key initiatives at the board of director level and throughout the Thruway Authority d) Assist in Special Committee establishment of mission, including setting goals in reference to above areas e) Identification of specific actions plans and force amplification for implementation support 	TBD	
2. Study potential organizational realignment strategies in light of current economic environment <ul style="list-style-type: none"> a) Review of current Regional/Divisional corporate structure to identify operational and management efficiencies b) Evaluate strategies for integration of Canal system operation within Thruway Authority c) Evaluate opportunities for cost sharing and collaboration/outsourcing of services with other state agencies d) Detailed analysis of potential benefits from the SAGE Commission study. e) Evaluate organizational "best practices" as compare to other agencies. f) Identification of specific actions plans and force amplification for implementation support 	TBD	

Appendix - C

Illustrative Work Plan for Phase II (cont'd)

Draft work plan for Phase II	Target Due Date	Status / Comments
<p>3. Comprehensive operational and financial review of Thruway Authority</p> <ul style="list-style-type: none"> a) Identify any potential revenue enhancement opportunities <ul style="list-style-type: none"> i. Long-term strategic/policy plans for implementation of scheduled toll adjustments ii. Non-toll opportunities (advertising, leasing, recreational programs) b) Benchmarking of labor, materials and third-party services relative to comparable agencies and organizations c) Comprehensive review of current workforce <ul style="list-style-type: none"> a) Evaluate number, classification, description, compensation of all represented and non-represented positions d) Conduct detailed analysis of union contract work rules (in conjunction with special counsel and division managers), the current application of same, and the potential corrective actions to remove impediments to productivity and efficiency, and establish a foundation of focus. e) Review of procurement processes and procedures for all materials and services purchased and develop best practices for implementation. f) Further review and analysis of Thruway Authority's cost containment program to identify additional areas of improvement. g) Identification of specific actions plans and force amplification for implementation support 	TBD	
II. Capital Planning & Financing		
<p>1. Comprehensive Capital Projects Assessment including</p> <ul style="list-style-type: none"> a) Evaluation of existing asset management systems and policies b) Review current capital planning process including prioritization of capital spend, project tracking and reporting throughout all levels of the organization from Board of Directors to project managers c) Review status and composition of 2012-2017 capital plan including assessment of project buildup, viability and necessity in light of liquidity availability and bonding capacity d) Identification of specific actions plans and force amplification for implementation support 	TBD	

Appendix - C

Illustrative Work Plan for Phase II (cont'd)

Draft work plan for Phase II	Target Due Date	Status / Comments
2. Assist in development of longer range capital planning process (ten-plus years) including development of more sophisticated longer-term integrated financial model. Support evaluation of alternative capital structures associated with results from operational and financial review, including scenario discussions around financing of Tappan Zee bridge project. a) Identification of specific actions plans and force amplification for implementation support	TBD	
3. Assessment and support of key financing and treasury support initiatives, including: a) BANs refunding/termining-out obligations – assessment of financing alternatives and optimal path forward including interface with ratings agencies, preparation of key support materials b) Tappan Zee Bridge replacement financing – assessment of alternative sources of funding, positioning of the story, preparation of relevant materials and related modeling, support with key related strategic discussion (such as tie-up with Bridge Authority or collaboration agreement with Newburgh-Beacon Bridge) c) Identification of specific actions plans and force amplification for implementation support	TBD	