

NEW YORK STATE BRIDGE AUTHORITY
A PLAN FOR A NEW CENTURY OF SERVICE

STATEMENT OF NEED FOR PROPOSED TOLL INCREASE

OVERVIEW OF PROPOSED TOLL INCREASE

Overview

The Newburgh Beacon Bridge requires a scheduled and necessary investment of \$100 million. The project to rebuild the entire deck of the south span is the major portion of a \$160 million Capital Plan required to be implemented over the next six years and is part of the cost of operating and maintaining the New York State Bridge Authority's facilities. This investment exceeds the Authority's current toll structure which was last revised in 2000.

Failure to complete the necessary improvements will lead to accelerated deterioration of the facilities resulting in more expensive remediation, an eventual threat to structural integrity and premature facility replacement.

The current toll structure should be amended as soon as possible in order to meet the capital plan requirements. The increase will allow for continued use and safety of these important bridges and generate hundreds of jobs over a three year period, resulting in an estimated infusion of several hundred million dollars into the regional economy.

By utilizing a Project Labor Agreement, in the final stages of negotiation as of August 2011, NYSBA will ensure that the bulk of the employment opportunity remains in the region while delivering overall project savings that are estimated to be at least 10% of labor costs (a net savings of more than \$4 million).

Statement of Need

Over the next 20 years a majority of the bridges that are under the jurisdiction and operation of the New York State Bridge Authority will be entering into their second century of service for the people of the Hudson Valley and New York State. In keeping with its mission as defined in the enabling legislation that created the Bridge Authority in the 1930's, "...to maintain and operate the safe vehicle crossings over the Hudson River entrusted to its jurisdiction for the economic and social benefit of the people of the State of New York," the Authority's management has developed a twenty year strategic capital plan for the re-investment and re-development of its toll revenues to guarantee that this generation of stewards will do its part to ensure the perpetual lifespan of these vital transportation and economically important facilities for our citizens.

The unique structure and operation of the Authority is instrumental in achieving this goal.

Background

Created in 1932, the New York State Bridge Authority is the third oldest New York State Authority. It is a financially sound, single purpose public benefit corporation faced with the challenge of funding the high projected cost of capital improvements to its facilities. In 2010 the Authority's five vehicular bridges, consisting of six spans, carried approximately 58.8 million vehicles in a service area that extends for eighty miles within the mid-Hudson Valley. These bridges and the roads they connect are the lifeblood of the economy of this region.

The New York State Bridge Authority was created during the Great Depression when state finances were in short supply and an originally proposed plan for the state to build the Rip Van Winkle Bridge was vetoed by then Governor Franklin D. Roosevelt. A possible precursor to the 'New Deal', Roosevelt supported the creation of an Authority, separate from state finances, to let bonds for funding construction and repaying debt through the collection of tolls. In 1933, during the construction of the Rip Van Winkle Bridge, the Authority acquired the Mid-Hudson Bridge, originally built by the State Department of Public Works in 1930. Of note, the toll for a round trip across the Mid-Hudson Bridge for a car with 3 passengers in 1933 was \$2.20, more than twice the \$1.00 charged today.

The Rip Van Winkle Bridge was dedicated in 1935. The Bear Mountain Bridge, originally built by a private venture in 1923, was sold to the Authority in 1940. The Authority dedicated the Kingston-Rhinecliff Bridge in 1957, the first span of the Newburgh-Beacon Bridge in 1963 and the second span in 1980.

In 2011, the Authority continued to fulfill its mission as it operated seven superstructures, with a replacement value over \$1.4 billion, together with their ancillary facilities, at one of the lowest tolls anywhere in the nation. In fact, since it came into existence 78 years ago, after having reduced tolls twice in its early years, the Authority has raised tolls only twice.

In late 2010, the Authority was directed by the Governor and Legislature to take ownership of the Poughkeepsie-Highland Railroad Bridge. The bridge, completed in 1888, is now known as the Walkway Over the Hudson State Historic Site. The Authority owns and is responsible for the maintenance of the superstructure for the 1.28 mile long pedestrian walkway that sits over 200 feet above the Hudson River. The Authority is prohibited by state law from charging a toll on the structure to pay for its maintenance.

Entering the second Century of Service – the Age of NYSBA Bridges

Walkway Over the Hudson	123 Years
Bear Mountain Bridge	87 Years
Mid-Hudson Bridge	81 Years
Rip Van Winkle Bridge	76 Years
Kingston – Rhinecliff Bridge	54 Years
Newburgh-Beacon Bridge North Span	48 Years
Newburgh-Beacon Bridge South Span	31 Years

The US Department of Transportation provided funding for the construction of the South Span of the Newburgh-Beacon Bridge and entrusted NYSBA to maintain it. Congress passed federal legislation that solely authorizes NYSBA to collect tolls on the I-84 federal highway with the stipulation that NYSBA utilizes this major toll source only for the NYSBA bridge system. The tolls collected on Newburgh-Beacon Bridge South Span comprise 55% of the system's entire revenue and therefore subsidizes the other five vehicular bridges and the state mandated non-tolled Walkway Over the Hudson Bridge. New York State law mandates that the tolls be uniform on all of NYSBA's vehicular bridges. The Authority is solely funded from bridge tolls and receives no state or federal tax revenues for maintenance and operations.

The NYSBA bridge system is a critical link for patrons living on both sides of the Hudson River. The system is viewed by many residents as an extension of local roads and substantially integrates the local economy. A significant percentage of volume on the smaller bridges is derived from commuter and passenger traffic. Many communities "share" medical, educational and employment resources that are concentrated on only one side of the Hudson River. Residents of the surrounding counties trust and depend on NYSBA to keep safe a critical link for the communities throughout the Hudson Valley.

Looking forward

In terms of maintaining the bridge system, which now averages 71 years of age, there is a need for constant monitoring and care. Given the proper maintenance, these spans have an indefinite lifespan. Failure to complete the necessary capital improvements will lead to deterioration of the facilities and eventually a threat to structural integrity, more expensive repairs and, potentially, premature facility replacement.

Over the past decade NYSBA has contracted for over \$155 million in reconstruction work to maintain the 6 vehicular spans. All contract work was completed at an aggregate 1.4% below the

original award amount. As the system further ages, NYSBA proposes to spend an additional \$603 million on its 20 year capital plan to guarantee the perpetual life of these facilities. The investment in maintenance produces a considerable value as compared to the \$1.4 billion to replace the structures. NYSBA has a commitment to maintaining its infrastructure with major re-decking of three bridges: the North and South spans of Newburgh-Beacon, and the Bear Mountain Bridge, over the next 20 years.

Maintenance

In 2011, too many bridge structures around the state and nation are in substantial disrepair, underfunded, subject to competing resources and victims of a lack of focus and long-range planning. In the face of these daunting challenges, the New York State Bridge Authority has received national recognition for successfully ensuring that the infrastructure entrusted to it is maintained in a safe and efficient manner.

Bridge condition is determined through annual inspections and rated according to a national scale which reflects the extent of deterioration and the need for repairs. Following the I-35W Bridge collapse in 2007, all truss bridges in New York were inspected or re-inspected for major structural deficiencies. According to an audit by the NYS Comptroller, between January 1, 2006 and June 24, 2008, a total of 1,280 red flag defects were identified on 228 State and 495 locally-owned highway bridges (Management and Oversight of Structural Defects on Highway Bridges Report 2008-S-102). The same report noted that delays in maintenance and remedies for red flag conditions are often caused by a lack of funding for bridge repairs, an inability to develop appropriate repair plans quickly, disagreement over the need for the repairs, and disagreement over who is responsible for making the repairs.

Notably, the Lake Champlain Bridge was transferred from a toll authority 20 years prior to a determination by NYS DOT to implode and replace it in 2009 after it was in danger of imminent collapse. Seventy million dollars was initially estimated to replace the structure. As of April, 2011, the project was over budget.

NYSBA's success in its approach to maintenance has resulted in its never having a red flag on any of its vehicular bridges throughout its history. (NYSBA was cited once for a non-structural yellow flag for a malfunctioning navigation light.)

Long span bridges require systematic, closed system support in order to achieve these results. This approach differs sharply from the multi-faceted missions and competing objectives of larger transportation agencies.

To attain perpetual life for a long span bridge, a bridge must be managed based on its life cycle. As outlined below, some bridge components can last as little as 10 years, others as long as 50 years with regular attention.

Substantial maintenance investments are noted in the Maintenance Life Cycle Schedule on the next page. This table indicates the projected useful life for each capital improvement and shows that we are quickly approaching or have already exceeded the projected life of many of the previous NYSBA investments.

Maintenance deferred is maintenance denied. Bridge components that are not properly maintained have a reduced service life. To achieve optimum cost efficiencies, regular preventative maintenance must be continuously provided which requires a dedicated maintenance program and a dedicated revenue stream.

Maintenance on the Walkway Over the Hudson is the subject of current inspections and reviews. While a significant capital investment of \$38 million was undertaken by the State in 2008 to rebuild the deck surface, initial estimates note an additional \$28 million will need to be invested in the next 20 years to extend the lifespan of the structure to 25 years. Thirty-Seven million dollars will be required to extend the lifespan significantly past that point. These considerations equate to approximately \$3-4 million per year in basic maintenance, overhead and immediate repairs over the next few years. The State designated the Authority to receive the 123 year old bridge with the intention that the Authority maintain the structure in perpetuity.

Maintenance Life Cycle Schedule

Component	Rehab. Cycle	Bear Mtn.	Newburgh (S)	Newburgh (N)	Mid-Hudson	Walkway Over Hudson	Kingston	Rip Van Winkle
Electrical System	20 - 25 yrs.	2031	2014	2019	2020	-	2020	2014
Deck Replacement	35 - 40 yrs.	2021 (45yrs.)	2013 (33 yrs.)	2019 (36 yrs.)	2023 (35 yrs.)	-	2035 (35 yrs.)	2027 (35 yrs.)
Joints & Overlay	12 - 15 yrs.	2029	-	-	2012	-	2019 / 2029	2018 / 2028
Approach Roadway	10 - 12 yrs.	2010	2016 / 2026	2016 / 2026	2016 / 2028	-	2013 / 2025	2018 / 2030
Miscellaneous Metalwork	5 - 7 yrs.	2018	2013 - 2016	2010 - 2015	2018	2011-2014	2018	2018
Substructure	5 yrs.	2013 / 18 / 23/ 28	2013 / 18/ 23/ 28	2013 / 18/ 23/ 28	2013 / 18/23/28	2016 / 23/ 28	2013 /18/23/28	2013 / 18/ 23/ 28
Cable Investigation	5 yrs.	2018 / 2028	N/A	N/A	2019 / 2029	N/A	N/A	N/A
Suspender Replacement	80 - 100 yrs.	2018	N/A	N/A	2019	N/A	N/A	N/A

The Authority has developed its **5 Year Capital Plan (See TAB 6 and EXHIBIT C)** to implement this maintenance strategy. In addition, the Authority has developed a longer term **20 year projected maintenance plan (See EXHIBIT B)** in order to provide a foundation for its financial planning.

Cost containment

Toll revenues support maintenance costs, debt service for major capital projects and administration. In addition to the vigilant maintenance program, NYSBA is continuously looking to control costs to keep tolls as low as possible for the Mid-Hudson region.

The Authority performs a large portion of maintenance work with its own forces. NYSBA has negotiated a labor agreement with flexible work rules unique to state transportation agencies and authorities. This allows NYSBA to pay for special skills only when needed as opposed to employing full time craftsmen and specialists in each unique trade who are not allowed to do other work.

Shared services, when they support the mission of NYSBA, have been utilized. The E-ZPass program has been an immensely popular and successful program throughout the Northeast region. The Authority's E-ZPass program customer services and administration are provided on

a shared basis with other New York agencies, which has substantially reduced the costs to each of the authorities.

Financing plan

NYSBA normally pays for maintenance on a pay-go basis, directly financed from toll revenues. As required by its enabling act and the Newburgh-Beacon Bridge U.S.DOT Agreement, toll revenues are to be used only for the NYSBA bridge system. Major projects, when required, may exceed the capacity of toll revenues. In those instances NYSBA has issued bonds which are subsequently paid from toll revenue. The last toll increase in February 2000 was expected to last approximately 10 years. Through a heavy focus on cost containment, the life of the current toll structure has extended to 11 years.

Under the Public Authorities Law, NYSBA is obligated "...to establish and collect 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 its bonds and to fulfill the terms of any agreement made with the holders of its bonds until such bonds and interest thereon are fully met and discharged." Based on the cost of required maintenance, the existing toll structure must be modified to provide sufficient revenues to support ongoing costs.

NYSBA will need to issue debt supported by additional toll revenues in order to finance its largest projects. The NYSBA bond rating allows for lower borrowing costs than other NY tolling authorities (ex. New York State Thruway Authority has a lower rating for its general revenue bonds). The high bond rating that NYSBA enjoys makes debt financing the most attractive alternative for larger projects as it allows for a lower toll increase.

To support the \$100 million dollars of incremental debt required primarily to finance the re-decking of the Newburgh-Beacon Bridge South Span, a toll increase will be needed in 2012. NYSBA has retained ACACIA Financial Group, Inc. as its financial advisors and developed a debt program to support the Newburgh-Beacon project as well as other components of the capital plan. The additional financing will require a 41% increase in toll revenues. NYSBA has retained the traffic consulting firm **Stantec Consulting Services, Inc.** to assist in the development of a proposed toll structure to meet this objective. A copy of the Stantec report is included at **TAB 5**.

In addition to developing a plan for financing its capital needs, the Authority has determined that the issuance of refunding bonds to refund its existing debt at lower rates could achieve significant debt service savings. Issuance of refunding bonds will be dependent on market interest rates. Debt service savings realized as a result of a refunding will not mitigate the need for financing of the \$100,000,000 capital costs required in 2012 and will not allow the Authority to defer a toll increase, but savings will be applied toward the Authority's regular maintenance plan and will potentially defer the need for a future toll increase.

Due to the age of the bridges and the life cycle of the major capital repairs, it is expected that the useful life of the toll structure will become shorter, 5 year periods from the current 10 years. This will allow NYSBA to keep its tolls as low as possible in the near term to support economic recovery in the region.

The proposed toll increase for 2012 is expected to be sufficient through 2018. In that year, an additional toll increase will be required to cover the cost of the re-decking of North Span of the Newburgh-Beacon Bridge. This project is expected to be financed from a combination of toll and debt sources. Specific details regarding the project and the associated financial plan will be developed as the maintenance requirements are finalized in 2017.

As an independent authority, NYSBA receives no state or federal highway funds. In comparison, the State Dedicated Highway Trust Fund is practically depleted and, given the state fiscal crisis, relying on state general revenues for critical infrastructure funding is problematic. In the State Comptroller's report,

"The Dedicated Highway and Bridge Trust Fund: Where Did the Money Go?" October 2009, "The Dedicated Highway and Bridge Trust Fund was established to provide a reliable and predictable revenue source to support road and bridge capital spending in New York State. However, the Fund is now facing an increasing structural imbalance that is also having an impact on the State's overall financial stability."

Summary for A New Century of Service

Long-span bridges require dedicated funding and singular focus to achieve perpetual utility. NYSBA's management structure has resulted in an agency that has been accountable to its patrons. Unlike agencies that have become too large to be held specifically accountable, the consistent singular focus is evident from the exceptionally low and stable tolls on notably safe crossings.

Compromising either the funding or the dedication to proficient maintenance will lead to the premature failure of these older structures, resulting in economic isolation throughout the Hudson Valley and higher costs to the taxpayers of the State. The NYS Bridge Authority performs a critical mission in a cost-efficient and time tested manner.

Overview of Proposed Toll Increase

Process Requirements

The Authority's capital program plan is updated annually, with the most recent plan adopted September 9, 2010 and updated May 19, 2011. In late 2010, the Authority issued an RFP for professional services and in early 2011, hired Stantec Consulting Services, Inc. to prepare a **Traffic and Revenue Forecast** (included as **TAB 5**) to project the revenues needed to cover the cost of the Authority's capital plan through 2016, together with the day to day operating expenses and debt service.

The report finds that without a toll increase the Authority would have a revenue deficit in 2012 and would be unable to proceed with its capital improvement plan.

On August 4, 2011, the New York State Bridge Authority Board adopted a resolution incorporating the following:

- Authorizing publication of the proposed amendment to Part 201 of the Authority's General Rules and Regulations (21 NYCRR Part 201) including a new schedule of tolls projected to raise Authority toll revenues approximately 41% (See **EXHIBIT A** for the **proposed schedule of tolls**);
- A determination to submit the proposed toll schedule to the Commissioner of Transportation for approval in accordance with the New York State Public Authorities Law, Section 538;
- A determination to serve as lead agency for review under the State Environmental Quality Review Act;
- A determination to do all things necessary to comply with the requirements and procedures of section 2804 of the Public Authorities Law.

This report is intended to meet the requirements of Public Authorities Law 2804(1). Copies of this are being sent to the Governor, the Comptroller, the Chairman of the Senate Finance Committee, the Chairman of the Assembly Ways and Means Committee, the ranking minority member of the Senate Finance Committee, and the ranking minority member of the Assembly Ways and Means Committee.

The information required by Section 2804 the Public Authorities Law is arranged in a manner consistent with the statutory language. **TABS 1** through **4** of the report correspond to subparagraphs (a) through (d) of the Public Authorities Law 2804 (1). **TABS 5** and **6** address subparagraphs (e) and (f) of 2804(1).

The Authority is also submitting a copy of this report to its independent auditors and accountants, Toski, Schaefer & Co., P.C., for their review and recommendation. A public report of their findings is expected 60 days after the mailing of this document. Upon receipt it shall be sent to the Governor and all other persons who receive this report.

The Proposed Rule

The proposed rule would implement a revised toll schedule with a discounted rate for those paying through the E-ZPass Electronic Toll System. The current toll schedule does not provide a general discount for E-ZPass users.

For the first time at the Bridge Authority, the proposed toll structure makes a differential between E-ZPass customers and cash customers. It costs substantially more to collect cash tolls than tolls paid through E-ZPass. This differential will encourage more customers to use the E-ZPass system, reducing overhead and enabling future cost reductions.

A greater percentage of E-ZPass use would also enable a more efficient and reliable transition to all-electronic tolling in the future.

A chart of the Toll Structure and proposed changes follows.

Toll Schedule

Vehicle Description	Current Toll	E-ZPass Discounted Toll (Proposed)	Cash Toll (Proposed)
<u>Class 1</u> 2 axles, up to 4 tires	\$1.00	\$1.25	\$1.50
<u>Commuter Discount</u> (Passenger vehicles only, will be billed for a minimum of 17 trips each month)	\$.50	\$1.00	Not Available
<u>Class 2</u> 2 axles, more than 4 tires	\$2.50	\$4.50	\$5.00
<u>Commercial Vehicles (Classes 3 -6)</u>			
3 axles	\$4.50	\$6.75	\$7.50
4 axles	\$6.00	\$9.00	\$10.00
5 axles	\$7.50	\$11.25	\$12.50
6 axles	\$9.00	\$13.50	\$15.00
OTHER			
Extra axle (with class 1)	\$.50	\$.90	\$1.00
Extra axle, (with classes 2-6)	\$1.50	\$2.25	\$2.50

The E-ZPass basic passenger car toll will be increased from \$1.00 to \$1.25. If the fare is paid with cash, which is more costly to collect, the toll would increase from \$1.00 to \$1.50. This is the minimum feasible increase consistent with the proposed revenue goal.

To moderate the potential impact on patrons who depend on daily or frequent passage of the bridges, the Authority is continuing its commuter discount program. The discount is available to passenger car drivers utilizing E-ZPass based on a minimum of 17 trips a month.

The Authority proposes an axle toll of \$2.50 per axle for trucks and other vehicles with more than three (3) axles. The Authority proposes to provide a 10% discount from the cash toll when payment is made through the E-ZPass system. The increase in the cash toll for trucks is higher than the increase proposed for passenger cars; however, the increase is warranted in that experience indicates that it is the heavier vehicles which cause more deterioration to the bridges.

The Authority introduced the E-ZPass electronic toll system in 1998 and payment through E-ZPass now accounts for 64% of all toll transactions; all of the commuter transactions and 58% of the full fare transactions were paid through E-ZPass. Of the truck transactions, two-thirds were paid through E-ZPass.

The Authority

The New York State Bridge Authority is a body corporate and politic created in 1932 and existing pursuant to Title 2 of Article 3 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of New York, as amended.

The Authority is obligated 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 its bonds and to fulfill the terms of any agreement made with the holders of its bonds until such bonds and the interest thereon are fully met and discharged.

Subject to the approval of the Commissioner of the New York State Department of Transportation, the Authority also has the power to construct, reconstruct and improve highway connections to any of the bridges. Upon completion of the construction, reconstruction or improvement of any such highway connections by the Authority, however, the Authority is obligated under the Act to transfer jurisdiction of such connections to the Commissioner of Transportation for maintenance by the State thereafter.

Title to the real property utilized by the Authority is vested in the State of New York, but the Authority has the right, so long as its corporate existence shall continue, to possess and use all real property and rights therein acquired by it or acquired on its behalf by the State. The Authority has the power to acquire, hold and dispose of personal property for its corporate purpose.

The Authority has no taxing power and its obligations are not a debt of the State of New York.

The Act currently assigns jurisdiction of five Hudson River vehicular crossings to the Authority, all of which are located in the Hudson Valley, north of Peekskill and south of Hudson. The Authority has also been charged with the responsibility of maintaining the Walkway Over the Hudson Bridge, a pedestrian walkway.

The Rip Van Winkle Bridge, constructed by the Authority and opened in 1935, spans the Hudson between Columbia and Greene counties. It extends 4,978 feet in length and carries two lanes of vehicular traffic in addition to a pedestrian walkway.

The Kingston-Rhinecliff Bridge connects the two communities whose names it bears. Opened in 1957, it is 7,793 feet long and supports two lanes of vehicular traffic.

The Mid-Hudson Bridge at Poughkeepsie is a 3,000 foot long suspension bridge with a main span of 1,495 feet. Opened in 1930, it was designed to carry two lanes of traffic. During morning and evening peak periods, the bridge now operates in a three lane configuration allowing two lanes of traffic to move in the direction of dominant flow. The bridge also supports two pedestrian walkways.

The Newburgh-Beacon Bridge consists of two parallel 7,800 foot spans carrying three lanes of Interstate 84 in each direction and a single pedestrian walkway. The north bridge was opened in 1963 and reconstructed from 1980 to 1984. The south bridge was opened in 1980.

The Bear Mountain Bridge was the first vehicular bridge across the Hudson south of Albany when it opened in 1924. It has a main span of 1,632 feet and supports a 38 foot wide roadway and two pedestrian walkways.

The Walkway Over the Hudson Bridge is a former railroad bridge that was completed in 1888. It has a main span of 3,094 feet. The west approach is 1,034 feet long and the east approach is 2,640 feet long. In 2009 the Bridge was opened as a state park for pedestrians and bicyclists. The Authority acquired ownership of the Bridge for maintenance purposes December 21, 2010. No tolls are collected on the Bridge.

Other Requirements Applicable to Tolls:

The following additional requirements are applicable to the proposed toll increase:

- Pursuant to Public Authorities Law Section 538, none of the bridges constructed prior to January 1, 1958 (i.e. all but the second Newburgh-Beacon span) can be free from tolls until all of such bridges are free from tolls, and the toll rates must be uniform among all of the Authority's bridges.
- Pursuant to Public Authorities Law Section 528(8), tolls may not be charged on the Walkway Over the Hudson Bridge.

- Pursuant to a 1988 USDOT/Federal Highway Commission Agreement and subsequent Legislation regarding federal funding for the Newburgh/Beacon second span, tolls are allowed to remain on the Newburgh-Beacon Bridge, but are allowed to be used only on NYSBA facilities.
- The Authority has issued its Series 1997 General Revenue Bonds and its Series 2002 General Revenue Bonds. Such bonds were issued pursuant to the General Revenue Bond Resolution. The Authority has covenanted in such Resolution to maintain tolls at levels sufficient to produce annual net revenues at least equal to 175% of annual debt service.
- Federal law (33 U.S.C. Sec. 508) provides that tolls on all bridges constructed over navigable waters must be just and reasonable.