

**DELAWARE RIVER JOINT TOLL BRIDGE
COMMISSION - BRIDGE SYSTEM**

Financial Statements
and
Supplementary Information

Years Ended December 31, 2006 and 2005

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

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INDEPENDENT AUDITORS' REPORT

To The Board of Commissioners of
Delaware River Joint Toll Bridge Commission - Bridge System
Morrisville, Pennsylvania

We have audited the accompanying financial statements of Delaware River Joint Toll Bridge Commission - Bridge System (the "Commission") as of and for the years ended December 31, 2006 and 2005. These financial statements are the responsibility of the Commission's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Accounting Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Delaware River Joint Toll Bridge Commission - Bridge System as of December 31, 2006 and 2005, and the changes in its financial position and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards*, we have also issued our report dated June 13, 2007, on our consideration of Delaware River Joint Toll Bridge Commission - Bridge System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, bond resolutions, contracts, compact and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audits.

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INDEPENDENT AUDITORS' REPORT (CONTINUED)

Management's discussion and analysis, as shown on pages 3-6, is not a required part of the basic financial statements but is supplementary information required by accounting principles generally accepted in the United States of America. We have applied certain limited procedures, which consisted principally of inquiries of management, regarding the methods of measurement and presentation of management's discussion and analysis. However, we did not audit the information, and we express no opinion on it.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements of Delaware River Joint Toll Bridge Commission - Bridge System taken as a whole. The supplementary schedules on pages 24-32 are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Mercaderes, P.C.
Certified Public Accountants

June 13, 2007

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Delaware River Joint Toll Bridge Commission - Bridge System (the "Commission"), we offer readers of the Commission's financial statements this narrative overview and analysis of the financial activities of the Commission's fiscal years ended December 31, 2006 and 2005. We encourage readers to consider the information presented here in conjunction with the audited financial statements and supplementary information as a whole.

Financial Highlights

Total toll revenues for the Commission totaled \$80,153,960 for the year ended December 31, 2006, which represents an increase of 0.92% over the previous year. The increase in 2006 is the result of a 2.79% increase in total toll traffic.

In 2006, net operating revenues totaled \$39,114,254 and change in net assets totaled \$29,903,137, as compared to \$42,574,606 and \$29,379,377, respectively, for 2005.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Commission's financial statements, which are comprised of the financial statements, the notes to the financial statements and certain required supplementary information. The supplementary information includes schedules of operations, expenses, cash and equivalent balances, investments and traffic and revenues.

Basic Financial Statements

The basic financial statements are designed to provide readers with a broad understanding of the Commission's finances, in a manner similar to that provided in the financial statements of private-sector businesses.

The statements of net assets present information on the Commission's assets and liabilities at December 31, 2006 and 2005, with the difference between the two reported as net assets. Over time, increases or decreases in net assets may serve as useful indicators of whether the financial position of the Commission is improving or deteriorating. At December 31, 2006, the Commission's net assets equaled \$346,667,833, as compared to \$316,764,696 in 2005 - an increase of 9.4%. Net assets increase when revenues exceed expenses.

The statements of revenues, expenses and changes in net assets present information showing how net assets changed during the fiscal year. All changes in net assets are reported as soon as the underlying event occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in these statements for some items that will not result in cash flows until future fiscal periods or for items that have resulted in cash flows in previous periods.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Notes to Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the basic financial presentation.

Other Information

In addition to the basic financial statements and accompanying notes, this report also presents certain supplementary information concerning expenses, investments and traffic.

Financial Analysis

Commission assets, consisting of restricted and unrestricted assets, totaled \$549,931,676. Unrestricted current assets, totaling \$12,249,436 (an increase of \$2,684,465, or 28.07%), represents cash in the operating accounts, cash equivalent investments and E-ZPass toll receivables. These unrestricted assets will be used to pay current expenses, to pay current debt service or to be transferred to the general reserve fund. Restricted assets, totaling \$534,183,444, are broken into two categories. Restricted current assets of \$68,520,697 increased 101.85% from the previous year end as a result of changes in investment security maturity terms. Total non-current assets totaled \$469,161,543, which represents a decrease of \$11,351,077, or 2.36%, from the 2005 year-end balance. Restricted cash and investments totaling \$260,505,076, which represents an increase of \$17,407,345, or 7.16%, from the previous year, are restricted under the Trust Indenture, to be used only for purposes listed on pages 11-12 of this report. Capital assets totaling \$269,372,685 consist of land, infrastructure and equipment with an original value of approximately \$441.7 million less accumulated depreciation of approximately \$172.3 million. The land and infrastructure consist of twenty bridge crossings and related access roads spread over a 140-mile-long stretch of the Delaware River extending from Trenton, New Jersey north to Milford, Pennsylvania/Montague, New Jersey.

At December 31, 2006, the Commission had current and non-current liabilities of \$203,263,843, with the majority related to its series 2003 and 2005A bond issues, which represents a decrease of \$3,995,900 from 2005. The purpose of the 2003 issue was for the current refunding of the 1992 series, refunding of the 2002 Bond Anticipation Notes, financing of the first portion of the Commission's ten-year capital program, and related bond-issuance cost. The purpose of the 2005A issue was for the refunding of \$32,165,000 of the 2003 series bonds and the financing of the Commission's \$40 million Compact Authorized Investment program.

The following table contains condensed financial information derived from the December 31, 2006 and 2005 financial statements of the Commission:

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Financial Analysis (Continued)

	2006	2005
Net Assets		
Current and other assets	\$ 280,558,991	\$ 259,602,441
Capital assets	269,372,685	264,421,998
Total assets	<u>549,931,676</u>	<u>524,024,439</u>
Bond indebtedness	186,842,968	193,521,282
Other liabilities	16,420,875	13,738,461
Total liabilities	<u>203,263,843</u>	<u>207,259,743</u>
Net assets		
Investment in capital assets, net of related debt	193,889,970	190,394,663
Restricted	148,807,737	122,664,875
Unrestricted	<u>3,970,126</u>	<u>3,705,158</u>
Total net assets	<u>\$ 346,667,833</u>	<u>\$ 316,764,696</u>
Changes in Net Assets		
Operating revenues	\$ 80,153,960	\$ 79,421,406
Operating expenses	<u>(41,039,706)</u>	<u>(36,846,800)</u>
Net operating revenues	39,114,254	42,574,606
Depreciation	<u>(12,489,830)</u>	<u>(11,812,571)</u>
Non-operating revenues	13,348,021	7,491,251
Non-operating expenses	<u>(10,069,308)</u>	<u>(8,873,909)</u>
Change in net assets	29,903,137	29,379,377
Net assets, beginning of year	<u>316,764,696</u>	<u>287,385,319</u>
Net assets, end of year	<u>\$ 346,667,833</u>	<u>\$ 316,764,696</u>

Significant Events

In December 2001, the Commission approved a plan that provides major bridge rehabilitation, bridge enhancement, and installation of E-ZPass and other traffic management systems, as well as state-of-the-art bridge security and surveillance.

A toll rate structure was approved by the Commission to fund its Capital Improvement Program for system protection, preservation, management and enhancement of the Commission's infrastructure including twenty bridges, seven toll plazas and administration and maintenance facilities that it owns, operates and maintains, as well as operating expenses for the Commission.

The Capital Improvement Program continues to evolve as the need for additional projects are identified, program costs are re-evaluated and the Commission undertakes new initiatives to fund transportation infrastructure programs in bridge host communities.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Significant Events (Continued)

The Commission has maintained more than adequate debt service coverage on its 2003 and 2005 bonds as well as the minimum balance required under the 2003 and 2005 bond indentures.

However, in order to fund the Capital Improvement Program as presently contemplated, the Commission anticipates issuing \$300 million in additional bonds in 2007. Truck toll adjustments planned by the Commission will provide sufficient funds to adequately maintain the Capital Improvement Program at its current level.

<u>Summary of Cash Flows</u>	<u>2006</u>	<u>2005</u>
Cash provided by operating activities	\$ 41,214,970	\$ 42,510,702
Cash flows provided by (used in) investing activities	9,787,380	(69,875,194)
Cash flows (used in) provided by financing activities	<u>(15,068,209)</u>	<u>29,934,851</u>
Net increase in cash and cash equivalents	35,934,141	2,570,359
Cash and equivalents, beginning of the year	<u>35,699,126</u>	<u>33,128,767</u>
Cash and equivalents, end of the year	<u>\$ 71,633,267</u>	<u>\$ 35,699,126</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENTS OF NET ASSETS

		December 31,	
		2006	2005
ASSETS			
Current Assets			
Unrestricted			
Cash and equivalents	\$ 5,116,204	\$ 3,143,099	
Other assets	2,005,226	1,929,204	
E-ZPass clearing account	5,128,006	4,492,668	
Total Unrestricted	<u>12,249,436</u>	<u>9,564,971</u>	
Restricted			
Cash and equivalents	66,517,063	32,556,027	
Accrued interest on investments	1,836,112	1,223,299	
Bond issuance costs - current portion	167,522	167,522	
Total Restricted	<u>68,520,697</u>	<u>33,946,848</u>	
Total Current Assets	<u>80,770,133</u>	<u>43,511,819</u>	
Non-Current Assets			
Unrestricted			
Investments	<u>3,498,796</u>	<u>3,106,217</u>	
Restricted			
Investments	193,988,013	210,541,704	
Bond issuance costs - long-term portion	2,302,049	2,442,701	
Capital assets	<u>269,372,685</u>	<u>264,421,998</u>	
Total Restricted	<u>465,662,747</u>	<u>477,406,403</u>	
Total Non-Current Assets	<u>469,161,543</u>	<u>480,512,620</u>	
Total Assets	<u>\$549,931,676</u>	<u>\$524,024,439</u>	
LIABILITIES AND NET ASSETS			
Current Liabilities			
Accounts payable and accrued expenses	\$ 6,720,609	\$ 4,354,078	
E-ZPass customer accounts	3,184,257	2,748,815	
Accrued interest on bond indebtedness	4,642,769	4,772,431	
Compensated absences - current portion	120,000	120,000	
Bridge system revenue bonds, series 2003 and 2005A - current portion	5,685,393	5,420,393	
Premium on bonds - current portion	<u>1,167,663</u>	<u>1,073,612</u>	
Total Current Liabilities	<u>21,520,691</u>	<u>18,489,329</u>	
Non-Current Liabilities			
Compensated absences	1,753,240	1,743,137	
Bridge system revenue bonds, series 2003 and 2005A	174,441,537	180,126,929	
Premium on bonds - long-term portion	<u>5,548,375</u>	<u>6,900,348</u>	
Total Non-Current Liabilities	<u>181,743,152</u>	<u>188,770,414</u>	
Total Liabilities	<u>203,263,843</u>	<u>207,259,743</u>	
Net Assets			
Invested in capital assets, net of related debt	193,889,970	190,394,663	
Restricted	148,807,737	122,664,875	
Unrestricted	<u>3,970,126</u>	<u>3,705,158</u>	
Total Net Assets	<u>346,667,833</u>	<u>316,764,696</u>	
Total Liabilities and Net Assets	<u>\$549,931,676</u>	<u>\$524,024,439</u>	

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

	<u>Year Ended December 31,</u>	
	<u>2006</u>	<u>2005</u>
Operating Revenues		
Toll bridge operations		
Cash toll revenues, net	\$ 32,713,985	\$ 35,664,785
E-ZPass revenues, net	47,296,858	43,619,719
Miscellaneous revenues	<u>143,117</u>	<u>136,902</u>
Total toll revenues	<u>80,153,960</u>	<u>79,421,406</u>
Operating Expenses		
Toll bridge operating expenses		
Operating and maintenance expenses	26,601,978	23,666,583
Administrative expenses	7,118,477	6,737,800
Toll-supported bridge expenses	<u>7,319,251</u>	<u>6,442,417</u>
Total operating expenses	<u>41,039,706</u>	<u>36,846,800</u>
Net Operating Revenues	<u>39,114,254</u>	<u>42,574,606</u>
Non-Operating Revenues (Expenses)		
Investment return	11,969,547	6,261,686
Interest on bond indebtedness	(8,316,843)	(7,926,600)
Amortization of bond premium	1,257,922	1,182,550
Amortization of bond issuance costs	(176,527)	(160,120)
Amortization of loss on defeasance	(109,608)	(109,607)
Compact Authorized Investment program	(884,386)	(107,191)
Emergency repairs	(581,944)	(570,391)
Depreciation	(12,489,830)	(11,812,571)
Gain on sale of fixed assets	<u>120,552</u>	<u>47,015</u>
Total other expenses	<u>(9,211,117)</u>	<u>(13,195,229)</u>
Change in net assets	29,903,137	29,379,377
Net assets, beginning of year	<u>316,764,696</u>	<u>287,385,319</u>
Net assets, end of year	<u>\$ 346,667,833</u>	<u>\$ 316,764,696</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENTS OF CASH FLOWS

	Year Ended December 31,	
	2006	2005
Cash Flows from Operating Activities		
Receipts from toll bridges	\$ 32,713,985	\$ 35,664,785
Receipts from E-ZPass	47,096,962	43,509,316
Payments to suppliers, employees, and others	(38,739,094)	(36,800,301)
Other receipts	143,117	136,902
Net cash provided by operating activities	<u>41,214,970</u>	<u>42,510,702</u>
Cash Flows from Investing Activities		
Sales (purchases) of investments, net	16,708,201	(64,409,810)
Investment return	10,894,324	6,495,720
Compact Authorized Investment program expense	(884,386)	(107,189)
Emergency repairs	(581,944)	(570,391)
Purchases of capital assets	<u>(16,348,815)</u>	<u>(11,283,524)</u>
Net cash provided by (used in) investing activities	<u>9,787,380</u>	<u>(69,875,194)</u>
Cash Flows from Financing Activities		
Bond proceeds, including premium	-	79,189,528
Principal paid on bond and notes indebtedness	(5,530,000)	(36,950,000)
Deposit to escrow account for interest on defeased debt	-	(2,611,947)
Interest paid on bond indebtedness	(9,538,209)	(7,897,454)
Bond issuance costs	<u>-</u>	<u>(1,795,276)</u>
Net cash (used in) provided by financing activities	<u>(15,068,209)</u>	<u>29,934,851</u>
Net increase in cash	35,934,141	2,570,359
Cash and equivalents, beginning of year	<u>35,699,126</u>	<u>33,128,767</u>
Cash and equivalents, end of year	<u>\$ 71,633,267</u>	<u>\$ 35,699,126</u>
Reconciliation of net operating revenues to net cash provided by operating activities		
Net operating revenues	\$ 39,114,254	\$ 42,574,606
Changes in net assets and liabilities		
Other assets	(76,022)	76,938
E-ZPass clearing account	(635,338)	(540,275)
Accounts payable and accrued expenses	2,366,531	46,453
E-ZPass customer accounts	435,442	429,871
Compensated absences	<u>10,103</u>	<u>(76,891)</u>
Net cash provided by operating activities	<u>\$ 41,214,970</u>	<u>\$ 42,510,702</u>
Non-cash investing activities		
Unrealized gain (loss) on investments	<u>\$ 462,411</u>	<u>\$ (234,034)</u>
Non-cash financing activities		
Amortization of bond premium	\$ 1,257,922	\$ 1,182,550
Amortization of loss on defeasance	(109,608)	(109,607)
Amortization of bond issuance costs	<u>(176,527)</u>	<u>(160,120)</u>
Total non-cash financing activities	<u>\$ 971,787</u>	<u>\$ 912,823</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

A. AUTHORIZED LEGISLATION AND NATURE OF ORGANIZATION

The Delaware River Joint Toll Bridge Commission - Bridge System (the "Commission"), a body corporate and politic, was created in 1934 by a compact, subsequently amended and supplemented, between the Commonwealth of Pennsylvania (the "Commonwealth") and the State of New Jersey, with the approval of the Congress of the United States. The Commission is authorized and empowered, with federal government approval required in certain cases, to acquire, construct, administer, operate and maintain such bridges as the Commission deems necessary to advance the interests of the two states, to issue bonds and other obligations, and to make payment of interest thereon. The compact provides that Commission indebtedness shall not be deemed to constitute a debt or liability or a pledge of the faith and credit of the two states or any subdivision thereof.

In 1985, a proposed compact change was enacted and approved by the State of New Jersey that was similar to the legislation that had been enacted by the Commonwealth of Pennsylvania in 1984. This proposed compact change received the required consent of the Congress of the United States in early 1987. The compact, as approved, required the Commission to refinance its bonded indebtedness. In addition, the Commission was obligated to assume full financial responsibility for the cost of operating and maintaining the toll-supported bridges that were financed by appropriations from the Commonwealth of Pennsylvania and the State of New Jersey. Accordingly, on July 1, 1987, the Commission defeased all of its then-outstanding bonded indebtedness. Due to this compact change, the accompanying financial statements include the operations of the toll-supported bridges.

The Commission has jurisdiction for vehicular and pedestrian traffic across the Delaware River between the Commonwealth of Pennsylvania and the State of New Jersey from the Philadelphia/Bucks County line to the New York state line. The Commission's duties include the maintenance and operation of all the bridges over the Delaware River in its jurisdiction, with the following exceptions: the New Jersey-Pennsylvania Turnpike Bridge and the Burlington-Bristol Toll Bridge, both south of Trenton, and the Dingman's Ferry Toll Bridge, which is north of the Delaware Water Gap.

Effective with the issuance of the 1988 Bridge System and I-78 Revenue Bonds and pursuant to the respective bond resolutions, the financial activity of the I-78 Bridge was previously reported separately from that of the Commission. Due to the in-substance defeasance of the 1988 Bridge System and I-78 Revenue Bonds, effective with the 1992 financial statements, the financial activity of the I-78 Bridge is included with that of the Bridge System.

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Commission have been prepared under the economic resources measurement focus, on the accrual basis of accounting and in accordance with accounting principles generally accepted in the United States of America that are applicable to governmental proprietary-type funds. Revenues are recognized when earned, and expenses are recognized when incurred.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Basis of Accounting (Continued)

GASB Statement No. 20, *Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities that Use Proprietary Fund Accounting*, provides proprietary activities with a choice of authoritative guidance issued after November 30, 1989. The Commission has elected to follow GASB pronouncements exclusively after that date.

Revenues

Revenues consist primarily of cash tolls and E-ZPass revenues. Cash toll revenues are recognized as received. E-ZPass revenues are recognized when vehicles with E-ZPass utilize the Commission's toll bridges. Prepayments received from the Commission's E-ZPass customers are deferred and recognized as revenue as utilized at the Commission toll bridges. Investment income is recognized when earned.

Basis of Investments

The Commission has adopted GASB No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment Pools*. Under GASB No. 31, investments in equity securities with readily determinable fair values, and all investments in debt securities, are reported at fair value, with gains and losses included in the statement of revenues, expenses and changes in net assets.

Cash and Equivalents

For the purpose of the statement of cash flows, cash includes time deposits, certificates of deposit and all highly liquid debt instruments with original maturities of three months or less. Deposits are with contracted depository banks in interest-bearing accounts, which are insured pursuant to the requirements of Act 72 of the General Assembly of the Commonwealth of Pennsylvania, approved August 6, 1991.

Fund Groups

In accordance with the Bond Resolution relating to the Bridge System Revenue Bonds, Series 2003 and Series 2005A, the Commission has established the following funds and accounts:

Construction Fund – Bond proceeds for project costs are deposited into this fund.

Revenue Fund – All revenues received by the Commission are deposited in the Revenue Fund. No later than the last business day of each month, the Commission shall withdraw from the Revenue Fund and deposit to the Operating Fund the amount equal to (i) the amount shown by the annual operating budget to be necessary to pay current expenses for the ensuing month and (ii) an amount determined by a Commission official as being reasonably necessary to pay current expenses which are expected for each month, after taking into account the amount on deposit in the Operating Account (including the amount described in clause (i) above), it being recognized that the annual operating budget may have to be amended accordingly.

Operating Account – Amounts on deposit in the Operating Account are used by the Commission to pay the Commission's operating expenses.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Groups (Continued)

Debt Service Fund – Transfers are made from the Revenue Fund to the Debt Service Fund to provide for the debt service on all series of bonds. Payments are made from the Debt Service Fund for interest on the bonds, for principal installments on the bonds, and for the redemption price for any bonds to be redeemed.

Debt Service Reserve Fund – Transfers are made to this fund from the Revenue Fund in an amount necessary to meet the Debt Service Reserve Requirement. Amounts held in the Debt Service Reserve Fund shall be used for the purpose of paying interest on maturing principal and mandatory sinking fund redemption price of Debt Service Reserve Fund Bonds whenever and to the extent that the monies held for the credit of the Debt Service Fund shall be insufficient for such purpose.

Reserve Maintenance Fund – On or before the last business day of each month, the Commission shall transfer the amount shown in the annual capital budget for the ensuing month from the Revenue Fund to the credit of the Reserve Maintenance Fund.

General Reserve Fund – On or before the last business day of each month (or more frequently, if desired) the Commission transfers from the Revenue Fund to the credit of the General Reserve Fund any funds which a Commission official determines to be in excess of the amount required to be reserved therein for future transfers to the Debt Service Fund.

Monies in the General Reserve Fund may be expended by the Commission to restore deficiencies in any funds or accounts created under the Trust Indenture and, absent any such deficiency, for any of the following purposes, with no one item having priority over any of the others:

- (a) To purchase or redeem bonds;
- (b) To secure and pay the principal or redemption price of and any interest on any subordinated indebtedness;
- (c) To make payments into the Construction Fund;
- (d) To fund improvements, extensions and replacements of the Bridge System;
- (e) As a self-insurance reserve; or
- (f) To further any corporate purpose.

The Commission is authorized to apply monies on deposit in the General Reserve Fund for any of these purposes.

The Rebate Fund - The Rebate Fund is a trust fund, but the amounts therein do not constitute part of the trust estate, which consists of assets that secure payment of debt service on the bonds. Amounts on deposit in the Rebate Fund may be used solely to make payments to the United States of America under Section 148 of the Internal Revenue Code and to pay costs related to the calculation of the amounts due. Upon satisfaction of the Commission's covenants to calculate and pay Section 148 requirements, any amounts remaining in the Rebate Fund shall be deposited in the General Reserve Fund.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Net Assets

Invested in Capital Assets, Net of Related Debt

The net assets invested in capital assets represent the cost basis of capital assets, less the related accumulated depreciation, less the bonds outstanding and unspent bond proceeds that were used to finance the acquisition of the capital assets.

Restricted

In accordance with the terms of the bond resolution, cash and equivalents of all funds required under such bond resolution are classified as restricted assets. The amounts by which the restricted assets exceed the corresponding liabilities they will liquidate constitute restrictions of net assets, as these excesses are not available for the payment of current operating expenses. Such net assets are restricted primarily for capital projects.

Unrestricted

The unrestricted net assets represent resources available for current operating expenses in compliance with legal restrictions.

Capital Assets

Purchased or constructed capital assets are recorded at cost or estimated historical cost. Infrastructure assets acquired prior to January 1, 2003, are reported primarily at estimated historical cost using deflated replacement cost. The Commission capitalizes purchases of property and equipment of \$5,000 or more. Depreciation is provided over the estimated useful lives of the assets using the straight-line method. The estimated useful lives are as follows:

Infrastructure	15-50 years
Vehicles	5-15 years
Office furniture and equipment	5-7 years

The cost of maintenance and repairs that do not add to the value of the asset or materially extend assets' lives are expensed when incurred.

Capitalization of Interest

The Commission capitalizes interest related to projects under construction. Capitalized interest amounted to \$1,091,704 and \$894,335 for 2006 and 2005, respectively.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. In addition, certain prior year amounts have been reclassified to conform to current year presentation.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Deferred Bond Costs

Costs related to the issuance of bonds, including legal, printing and financing costs, are capitalized and amortized by the interest method over the life of the bonds until maturity.

Rounding

Some schedules in the financial statements may have dollar differences due to rounding adjustments.

C. CASH AND EQUIVALENTS AND INVESTMENTS

General Information

The Commission's cash and equivalents and investments are summarized as follows:

	December 31,	
	2006	2005
Cash and equivalents	\$ 71,633,267	\$ 35,699,126
Investments	<u>197,486,809</u>	<u>213,647,921</u>
	<u>\$ 269,120,076</u>	<u>\$ 249,347,047</u>

Investment Policy

The primary objectives of the Commission's investment policy are safety of principal, liquidity, and yield.

Safety of principal is the foremost objective of the investment program. Investments are undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective is to mitigate credit risk and interest rate risk. The Commission's policies for limiting credit risk and interest rate risk are described below.

The portfolio is designed to remain sufficiently liquid to meet all requirements that may be reasonably anticipated. This is accomplished by structuring the portfolio so that securities mature concurrent with cash needs to meet anticipated demands. Since all possible cash demands cannot be anticipated, the portfolio consists largely of securities with active secondary or resale markets. Also, a portion of the portfolio is placed in money market mutual funds or local government investment pools, which offer same-day liquidity for short-term funds.

The investment portfolio is designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary importance compared to the safety and liquidity objectives described above. The core of investments are limited to relatively low risk securities in anticipation of earning a fair return relative to the risk being assumed. Securities are not permitted to be sold prior to maturity except under the following conditions:

- 1) A security with declining credit may be sold early to minimize loss of principal.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

C. CASH AND EQUIVALENTS AND INVESTMENTS (CONTINUED)

Investment Policy (Continued)

2) A security swap would improve the quality, yield, or target duration in the portfolio.

3) Liquidity needs of the portfolio require that the security be sold.

Custodial Credit Risk - Deposits

Custodial credit risk is the risk that, in the event of a bank failure, the Commission's deposits may not be returned to it. The Commission does not have a deposit policy for custodial credit risk. As of December 31, 2006 and 2005, the Commission's cash balances were exposed to custodial credit risk as follows:

	December 31, 2006		December 31, 2005	
	Carrying Amount	Bank Balance	Carrying Amount	Bank Balance
Amount insured by the FDIC or collateralized with securities held in its name by the Commission.	\$ 4,877,366	\$ 7,001,838	\$ 2,655,614	\$ 4,388,802
Amount collateralized with securities held by the pledging financial institution's trust department in the Commission's name.	66,682,151	66,682,151	32,969,762	32,969,763
Uncategorized Petty cash and collectors' change funds	73,750	-	73,750	-
	<u>\$71,633,267</u>	<u>\$73,683,989</u>	<u>\$35,699,126</u>	<u>\$37,358,565</u>

Credit Risk - Investments

The Commission minimizes credit risk, which is the risk of loss due to the failure of the security issuer or backer by limiting investments to the safest type of securities, pre-qualifying the financial institutions, broker/dealers, intermediaries, and advisors with which the Commission will do business, and diversifying the investment portfolio so that potential losses on individual securities will be minimized. As of December 31, 2006, the Commission's investments were rated AAA by Standard & Poor's, AAA by Fitch Ratings, and Aaa by Moody's Investors Service. The Commission historically has not experienced any credit related losses with respect to their investment in these securities. U.S. Treasury notes are explicitly guaranteed by the U.S. government and are not subject to credit risk or custodial credit risk. The Commission's investment in the Pennsylvania Investment Fund is also excluded from credit risk and custodial credit risk as a pooled investment.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM**NOTES TO FINANCIAL STATEMENTS****C. CASH AND EQUIVALENTS AND INVESTMENTS (CONTINUED)****Interest Rate Risk**

The Commission minimizes the risk that the market value of securities in the portfolio will fall due to changes in general interest rates by structuring the investment portfolio so that securities mature to meet any cash requirements associated with individual funds, which avoids selling the security prior to maturity. The Commission also invests operating funds primarily in shorter-term securities, money market mutual funds, or local government investment pools.

As of December 31, 2006, the Commission had the following investments and maturities:

Investment Type	Fair Value	Investment Maturities (in Years)			
		Less Than 1	1-5	6-10	More Than 10
FHLB	\$ 80,445,864	\$ 56,567,104	\$ 23,878,760	\$ -	\$ -
FHLMC	34,903,850	18,913,710	15,990,140	-	-
FNMA	38,252,890	26,776,270	11,476,620	-	-
FHLMCDN	9,939,500	9,939,500	-	-	-
FNMADN	16,415,000	16,415,000	-	-	-
FHLBDN	16,414,000	16,414,000	-	-	-
PA INVEST	1,115,705	1,115,705	-	-	-
Total	<u>\$197,486,809</u>	<u>\$146,141,289</u>	<u>\$ 51,345,520</u>	<u>\$ -</u>	<u>\$ -</u>

As of December 31, 2005, the Commission had the following investments and maturities:

Investment Type	Fair Value	Investment Maturities (in Years)			
		Less Than 1	1-5	6-10	More Than 10
FHLB	\$ 52,655,608	\$ 21,740,830	\$ 30,914,778	\$ -	\$ -
FHLMC	37,134,360	19,233,790	17,900,570	-	-
FMCDN	34,884,780	34,884,780	-	-	-
FNMA	48,018,848	35,124,408	12,894,440	-	-
FHLMCDN	3,900,000	3,900,000	-	-	-
FNMADN	3,986,400	3,986,400	-	-	-
FHLBDN	3,882,840	3,882,840	-	-	-
FNMDM	23,191,480	23,191,480	-	-	-
FNDN	4,926,500	4,926,500	-	-	-
PA INVEST	1,067,105	1,067,105	-	-	-
Total	<u>\$213,647,921</u>	<u>\$151,938,133</u>	<u>\$ 61,709,788</u>	<u>\$ -</u>	<u>\$ -</u>

D. CAPITAL ASSETS

Capital assets activities for the year ended December 31, 2006, were as follows:

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

D. CAPITAL ASSETS (CONTINUED)

	December 31, 2005	Additions	Reductions	December 31, 2006
Non-Depreciable Assets				
Land	\$129,619,844	\$ -	\$ -	\$129,619,844
Infrastructure in progress	28,550,758	15,776,045	15,301,665	29,025,138
Depreciable Assets				
Bridges/road network	240,740,968	15,479,973	-	256,220,941
Equipment	25,855,116	1,486,164	489,562	26,851,718
Total at Historical Cost	<u>424,766,686</u>	<u>32,742,182</u>	<u>15,791,227</u>	<u>441,717,641</u>
Less Accumulated Depreciation				
Bridge/road network	151,677,892	8,941,801	-	160,619,693
Equipment	<u>8,666,796</u>	<u>3,548,029</u>	<u>489,562</u>	<u>11,725,263</u>
Total Accumulated Depreciation	<u>160,344,688</u>	<u>12,489,830</u>	<u>489,562</u>	<u>172,344,956</u>
Total Capital Assets	<u>\$264,421,998</u>	<u>\$ 20,252,352</u>	<u>\$ 15,301,665</u>	<u>\$269,372,685</u>
Depreciation expense was as follows:				
Bridges/road networks	\$ 8,941,801			
Equipment	<u>3,548,029</u>			
Total Depreciation Expense	<u>\$ 12,489,830</u>			

Capital assets activities for the year ended December 31, 2005, were as follows:

	December 31, 2004	Additions	Reductions	December 31, 2005
Non-Depreciable Assets				
Land	\$129,604,374	\$ 15,470	\$ -	\$129,619,844
Infrastructure in progress	26,604,613	7,675,690	5,729,545	28,550,758
Depreciable Assets				
Bridges/road network	232,446,393	8,294,575	-	240,740,968
Equipment	<u>24,189,011</u>	<u>1,921,669</u>	<u>255,564</u>	<u>25,855,116</u>
Total at Historical Cost	<u>412,844,391</u>	<u>17,907,404</u>	<u>5,985,109</u>	<u>424,766,686</u>
Less Accumulated Depreciation				
Bridges/road network	143,229,234	8,448,658	-	151,677,892
Equipment	<u>5,558,447</u>	<u>3,363,913</u>	<u>255,564</u>	<u>8,666,796</u>
Total Accumulated Depreciation	<u>148,787,681</u>	<u>11,812,571</u>	<u>255,564</u>	<u>160,344,688</u>
Total Capital Assets	<u>\$264,056,710</u>	<u>\$ 6,094,833</u>	<u>\$ 5,729,545</u>	<u>\$264,421,998</u>
Depreciation expense was as follows:				
Bridges/road networks	\$ 8,448,658			
Equipment	<u>3,363,913</u>			
Total Depreciation Expense	<u>\$ 11,812,571</u>			

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

E. BONDS PAYABLE

The following is a summary of bonds payable:

<u>Bonds Payable</u>	<u>Maturity Dates</u>	<u>Interest Rate</u>	<u>Bonds Outstanding (in thousands) December 31, 2005</u>	<u>Additions</u>	<u>Reductions</u>	<u>Bonds Outstanding (in thousands) December 31, 2006</u>	<u>Amounts due within one year</u>
2003 series revenue bonds	2003-2024	3.00%- 5.25%	\$ 85,180	\$ -	\$ 4,635	\$ 80,545	\$ 4,865
2003 series revenue bonds	2025-2028	5.00%	29,390	-	-	29,390	-
2005A series revenue bonds	2005-2025	4.00%- 5.50%	59,490	-	895	58,595	930
2005A series revenue bonds	2026-2030	4.50%	12,825	-	-	12,825	-
Total bond principal payable			186,885	-	5,530	181,355	5,795
Loss on defeasance			(1,338)	-	(110)	(1,228)	(110)
Net bonds payable			<u>\$ 185,547</u>	<u>\$ -</u>	<u>\$ 5,420</u>	<u>\$ 180,127</u>	<u>\$ 5,685</u>

Debt service requirements on bonds outstanding at December 31, 2006, are as follows (in thousands):

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2007	\$ 5,795	\$ 9,137	\$ 14,932
2008	6,080	8,850	14,930
2009	6,375	8,548	14,923
2010	6,680	8,220	14,900
2011	7,025	7,863	14,888
2012-2016	36,280	33,247	69,527
2017-2021	44,035	21,784	65,819
2022-2026	26,870	12,469	39,339
2027-2030	42,215	3,173	45,388
	<u>\$ 181,355</u>	<u>\$ 113,291</u>	<u>\$ 294,646</u>

Defeasance of Series 2003 Bonds

In March 2005, the Commission issued \$72,645,000 Bridge System Revenue Bonds, Series 2005A. The proceeds of the bonds were used to advance-refund \$32,165,000 of the Commission's Bridge System Revenue Bonds, Series 2003. This refunding was done to achieve interest cost savings. Proceeds of the bonds were used to establish an irrevocable escrow account. Funds in the escrow account were invested in special direct obligations of the United States Treasury or other obligations of the United States government or its agencies. The escrow securities and their earnings are structured to pay the principal and interest on the refunded 2003 bonds as such payments become due, until the call dates of the respective refunded bonds, at which time the escrow account will pay the principal of the refunded bonds at a price of par plus accrued interest. Since these funds have been placed in an irrevocable trust, they are considered defeased for these financial statements.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

E. BONDS PAYABLE (CONTINUED)

Defeasance of Series 2003 Bonds (Continued)

The advance-refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt of approximately \$1.4 million. The accumulated loss on defeasance is reported as a contra-liability on the statement of net assets and is being charged to net assets using a method which approximates the effective interest method over the shorter of the remaining life of the old debt or the life of the new debt. The accumulated capitalized loss on defeasance at December 31, 2006 and 2005 was \$1,228,070 and \$1,337,678, respectively.

Bridge System Revenue Bonds, Series 2007 (SWAP)

Objective of the swaps. In October of 2005, the Commission entered into two forward starting swaps with two counterparties to hedge against future interest rates. The intention of the swaps was to take advantage of the current historically low interest rate environment in advance of the issuance of bonds by the Commission (as authorized by its trust indenture) in 2007.

Terms. The swaps were entered into with Merrill Lynch Capital Services, Inc. ("MLCS") and Morgan Stanley Capital Services, Inc. ("MSCS"). The swaps will be effective on October 1, 2007, and will mature on July 1, 2032. On the trade date, MLCS and MSCS were both rated AA- by Standard & Poor's Ratings Services ("S&P"), a division of The McGraw-Hill Companies, and Aa3 by Moody's Investors Service, Inc. ("Moody's"). The swaps were priced at a fixed rate of 4.184% based on an amortizing notional schedule with a combined \$150,000,000 initial notional amount. Under the swaps starting October 1, 2007, the Commission pays a fixed rate of 4.184% and receives a variable payment equal to the Bond Market Association Municipal Swap Index (the "BMA" Index). The bonds' variable-rate coupons, when issued, will be based on a remarketing rate that is highly correlated to the BMA Index. As part of the swap transactions, the Commission also purchased two interest rate swap insurance policies dated October 6, 2005, issued by MBIA Insurance Corporation for the account of the Commission, as principal, and the counterparties, as beneficiary. The insurance policies provide for risk mitigation and limit the need for the Commission to post eligible collateral.

Fair Value. As of December 31, 2006 and 2005, the swaps had a negative fair value of \$4,939,632 and \$2,305,521, respectively. The fair value was estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement of the swap.

Credit Risk. As of December 31, 2006 and 2005, the Commission was not exposed to credit risk because the swaps had a negative fair value. Should interest rates change and the fair value of the swaps become positive, the Commission would be exposed to credit risk in the amount of the swaps' fair value. Agreed upon collateral threshold levels per the Credit Support Annex ("CSA") require collateral to be posted based on counterparty ratings as set forth in the CSA.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

E. BONDS PAYABLE (CONTINUED)

Bridge System Revenue Bonds, Series 2007 (SWAP) (Continued)

Termination Risk. The swaps are governed by the International Swap Dealers Association Master Agreement, which includes standard termination events. The swaps also include an "Additional Termination Event" whereby the swaps may be terminated if the Insurer fails to issue the swap insurance policies on or before the effective date. In addition, the swaps may be terminated if the long-term, unenhanced rating on the bonds issued by the Commission is withdrawn, suspended or falls below Baa3 as determined by Moody's, or BBB- as determined by S&P. Furthermore, the swaps may be terminated if the counterparties' credit support provider fails to have any rated long-term, unsecured, unenhanced senior debt or if the rating of the senior debt is withdrawn, suspended or falls below Baa2 as determined by Moody's, or BBB as determined by S&P.

In connection with the aforementioned swaps, no amounts are recorded in the financial statements other than the prepaid cost of issuance of the swaps.

F. PENSION PLAN

The Commission contributes to the Commonwealth of Pennsylvania State Employees' Retirement System (the "System"). The System is the administrator of a cost-sharing, multiple-employer, defined-benefit retirement system. The System was established by the Commonwealth to provide retirement, death, and disability benefits for employees of state government and certain independent agencies. Ad hoc cost-of-living adjustments are provided at the discretion of the General Assembly. Article II of the Commonwealth's Constitution assigns the authority to establish and amend the benefit provisions of the plan to the General Assembly. The System issues a publicly available financial report that includes financial statements and required supplementary information for the retirement plan. That report may be obtained by writing to the Commonwealth of Pennsylvania State Employees' Retirement System, 30 North Third Street, P.O. Box 1147, Harrisburg, PA 17108-1147 or by calling 1-717-787-9657. Employees of the Commission are required to pay 5%-6.25% of their salaries into the System, and the Commission is required to contribute at an actuarially determined rate. The rate is computed based upon actuarial valuations on the System's fiscal year end of December 31 and applied to the Commonwealth based on its fiscal year end of June 30. Therefore, the employer contribution rate in effect for the System's year end of December 31 reflects a blended average of calculated rates. The contribution requirements of plan members and the Commission are established and may be amended by the System's board of trustees.

The Commission also has three employees who participate in the Public Employees' Retirement System of New Jersey ("PERS"). PERS is a part of the Division of Pensions in the Department of the Treasury, State of New Jersey. PERS is funded annually based on the projected benefit method with aggregate level normal cost and frozen initial unfunded accrued liability. PERS, which covers public employees throughout the state, does not maintain separate records for each reporting unit, and accordingly, the actuarial data for the employees of the Commission who are members of PERS is not available.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

F. PENSION PLAN (CONTINUED)

The Commission's pension contribution for the years ended December 31, 2006 and 2005, was \$471,413 and \$309,273, respectively, which equaled the required contribution.

G. SELF INSURANCE

The Commission self-insures the risk for health insurance claims. In addition to the self-insured risk, the Commission carries a stop-loss policy that limits its exposure to a maximum of \$150,000 per plan year per individual and \$5,538,002 in the aggregate for all active and retired employees.

H. POST-EMPLOYMENT BENEFITS

The Commission provides certain post-employment life and health insurance benefits to its employees if they retire while working for the Commission. In accordance with the provisions of Statement No. 12 of the Governmental Accounting Standards Board, "Disclosure of Information on Post-Employment Benefits Other Than Pension Benefits by State and Local Governmental Employers," expenditures for post-employment life and health insurance benefits are recognized on a pay-as-you-go basis and were approximately \$2,238,121 and \$1,705,022 in 2006 and 2005, respectively. Effective April 1, 1995, the Commission suspended post-employment life and health insurance benefits for all new hires (see Note K for summary of new accounting pronouncement).

As of December 31, 2006 and 2005, 119 and 120 retired employees, respectively, were eligible for both life and health insurance benefits. As of December 31, 2006, one other retired employee was eligible for health insurance benefits only. An additional 37 and 49 retired employees were eligible for life insurance benefits only as of December 31, 2006 and 2005, respectively, in a range of \$2,000-\$4,000 per person.

I. COMMITMENTS AND CONTINGENCIES

Subsequent to the implementation of the toll rates' increase on November 30, 2003, the Trucker Toll Increase case had been filed in the United States District Court for the Eastern District of Pennsylvania by the American Trucking Association, Inc., PA Motor Truck Association, NJ Motor Truck Association and Roadway Express (collectively, the "Truckers"). The suit was decided in favor of the Commission in February 2005. The Truckers filed an appeal, and in 2006, the court upheld the decision in favor of the Commission. The period within which the Truckers would be required to file an appeal to the United States Supreme Court expired in early 2007. The court's decision is now final and unappealable.

The Commission is involved in various claims and lawsuits arising in the normal course of business, including claims for right-of-way acquisition, handicapped discrimination and hiring practices. In the opinion of management, the ultimate outcome of these claims and lawsuits will not have a material adverse effect on the Commission's financial position.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

I. COMMITMENTS AND CONTINGENCIES (CONTINUED)

In 2004, the Commission established a \$40 million dollar program, which is included in restricted net assets, to provide funding for transportation infrastructure related projects in New Jersey and Pennsylvania communities that host its bridges. As of December 31, 2006, the Commission had committed \$32,591,610 in grants to municipalities participating in the Compact Authorized Investment ("CAI") program, of which \$32,023,269 was unexpended at December 31, 2006. Examples of appropriate projects that would be considered for funding under the CAI program include installation of upgrades to traffic signalization around Commission facilities, road widening in areas affected by Commission crossings, bicycle or pedestrian paths leading up to Commission facilities, park and ride facilities, safety lighting, and right of way renovation, protection or beautification.

In 2001, the Commission approved a 10-year, \$526 million Capital Improvement Program for the protection, preservation, management and enhancement of the 20 bridges it owns, maintains and operates. With the addition of the CAI program, along with additions and changes in the original projects, the Capital Improvement Program currently stands well in excess of the original amount. As of December 31, 2006, the Commission has approved more than \$211.9 million in contracts to study and improve various facilities and systems as part of that program. At December 31, 2006, the Commission had approved contracts that had not yet been completed or paid totaling approximately \$124.2 million.

In 2002, the Commission began the installation and operation of a new toll collection system which provided E-ZPass (electronic) toll processing on all of its seven toll bridges. The Commission has entered into a long-term contract to maintain its E-ZPass system hardware. The unpaid portion of the contract amounted to \$625,000. The system maintenance contract runs through July 2008.

J. ARBITRAGE RULES

The Commission is subject to certain arbitrage rules pursuant to current federal income tax law and in accordance with the Trust Indenture. Under these rules, interest earnings on certain investments of proceeds of the Commission's bonds are subject to the limitations imposed by the arbitrage provisions of the Internal Revenue Code. The Commission is required to rebate certain arbitrage profits on non-purpose investments at least once every five years. At December 31, 2006 and 2005, there were no material arbitrage profits subject to rebate.

K. NEW ACCOUNTING PRONOUNCEMENT

GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, requires that state and local governmental employers account for and report the annual cost of other postemployment benefits ("OPEB") and the outstanding obligations and commitments related to other postemployment benefits in the same manner as they currently do for pensions. Annual OPEB cost for most employers will be based on actuarially determined amounts that, if paid on an ongoing basis, generally would provide sufficient resources to pay benefits as they come due. The provisions of this statement do not require governments to fund their OPEB plans.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

K. NEW ACCOUNTING PRONOUNCEMENT (CONTINUED)

Statement No. 45 also establishes disclosure requirements for information about the plans in which an employer participates, the funding policy followed, the actuarial valuation process and assumptions, and, for certain employers, the extent to which the plan has been funded over time.

The Commission is required to implement GASB Statement No. 45 for the year ending December 31, 2008.

SUPPLEMENTARY INFORMATION

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF CASH AND EQUIVALENT BALANCES

December 31, 2006

	Total	Revenue Fund	Operating Fund	Clearing Fund	Construction Fund	Reserve Maintenance Fund	Debt Service Fund	Debt Service Reserve Fund	General Reserve Fund
Commerce Bank	\$ 66,682,151	\$ -	\$ 165,088	\$ 43,818	\$ 24,200,094	\$ 2,103,664	\$ 5,601,746	\$ 15,158,414	\$ 19,409,327
Wachovia Bank	4,877,366	4,797,305	80,061	-	-	-	-	-	-
Petty cash and collectors' change funds	<u>73,750</u>	<u>-</u>	<u>73,750</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total cash and equivalent balances	<u>\$ 71,633,267</u>	<u>\$ 4,797,305</u>	<u>\$ 318,899</u>	<u>\$ 43,818</u>	<u>\$ 24,200,094</u>	<u>\$ 2,103,664</u>	<u>\$ 5,601,746</u>	<u>\$ 15,158,414</u>	<u>\$ 19,409,327</u>

December 31, 2005

	Total	Reserve Fund	Operating Fund	Clearing Fund	Construction Fund	Reserve Maintenance Fund	Debt Service Fund	Debt Service Reserve Fund	General Reserve Fund
Commerce Bank	\$ 32,969,762	\$ -	\$ 413,735	\$ 42,121	\$ 4,721,947	\$ 7,653	\$ 5,641,289	\$ 15,726,820	\$ 6,416,197
Wachovia Bank	2,655,614	2,548,796	106,818	-	-	-	-	-	-
Petty cash and collectors' change funds	<u>73,750</u>	<u>-</u>	<u>73,750</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total cash and equivalent balances	<u>\$ 35,699,126</u>	<u>\$ 2,548,796</u>	<u>\$ 594,303</u>	<u>\$ 42,121</u>	<u>\$ 4,721,947</u>	<u>\$ 7,653</u>	<u>\$ 5,641,289</u>	<u>\$ 15,726,820</u>	<u>\$ 6,416,197</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF INVESTMENTS

December 31, 2006

Construction Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
FHLMCDN	\$ 5,000,000	0.00%	5.26%	01-26-07	\$ 4,962,127	\$ 4,983,500
FNMADN	5,000,000	0.00%	5.25%	01-26-07	4,959,308	4,983,500
FHLBDN	6,500,000	0.00%	5.27%	01-31-07	6,442,337	6,474,000
FHLBDN	5,000,000	0.00%	5.17%	02-28-07	4,938,964	4,960,000
FNMADN	6,500,000	0.00%	5.26%	02-28-07	6,420,420	6,448,000
FHLMCDN	5,000,000	0.00%	5.26%	03-06-07	4,935,289	4,956,000
FNMADN	5,000,000	0.00%	5.18%	01-26-07	4,959,308	4,983,500
FHLBDN	5,000,000	0.00%	5.27%	01-31-07	4,955,610	4,980,000
FNMADN	5,000,000	0.00%	5.28%	02-28-07	4,935,750	4,960,000
Total Construction Fund					47,509,113	47,728,500

Operating Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
FHLB	1,500,000	5.00%	5.03%	03-20-07	1,499,415	1,499,535
FHLMC	1,000,000	5.13%	5.12%	04-24-07	1,000,000	999,880
FHLB	1,000,000	5.26%	5.26%	10-19-07	1,000,000	999,380
Total Operating Fund					3,499,415	3,498,795

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF INVESTMENTS (CONTINUED)

December 31, 2006

General Reserve Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
PA INVEST	1,115,705	5.21%	5.21%	01-01-07	1,115,705	1,115,705
FNMA	3,400,000	5.00%	5.07%	01-15-07	3,397,960	3,400,000
FHLB	5,000,000	5.08%	5.08%	02-22-07	5,000,000	4,998,450
FHLMC	5,000,000	4.25%	4.63%	02-28-07	4,975,800	4,992,650
FHLB	5,000,000	4.25%	4.64%	03-09-07	4,974,150	4,990,650
FHLB	5,000,000	5.00%	5.03%	03-20-07	4,998,050	4,998,450
FHLB	5,000,000	4.50%	4.66%	04-17-07	4,989,063	4,990,650
FHLMC	4,000,000	4.50%	4.77%	04-18-07	3,985,080	3,990,840
FHLB	3,000,000	5.23%	5.23%	04-30-07	3,000,000	2,999,070
FHLB	5,000,000	4.50%	4.64%	05-21-07	4,989,550	4,987,500
FHLMC	9,000,000	3.55%	3.80%	06-22-07	8,998,594	8,930,340
FHLB	3,200,000	4.25%	4.32%	08-08-07	3,195,776	3,179,009
FNMA	3,000,000	4.25%	4.38%	08-08-07	2,992,500	2,982,180
FNMA	5,000,000	3.75%	3.87%	08-15-07	4,985,938	4,954,700
FHLB	5,000,000	3.76%	3.92%	09-07-07	4,981,250	4,950,000
FHLB	3,000,000	5.28%	5.28%	10-05-07	3,000,000	2,998,140
FHLB	4,000,000	5.25%	5.25%	10-05-07	4,000,000	3,997,520
FNMA	5,500,000	5.26%	5.26%	10-19-07	5,500,000	5,496,590
FHLB	5,000,000	5.22%	5.22%	12-05-07	5,000,000	4,993,750
FHLB	6,000,000	5.15%	5.15%	12-07-07	6,000,000	5,985,000
FNMA	5,000,000	4.90%	4.90%	12-27-07	5,000,000	4,982,800
FHLB	8,000,000	4.10%	4.10%	03-14-08	8,000,000	7,900,000
FHLB	6,000,000	5.32%	5.32%	04-10-08	6,000,000	5,994,360
FHLMC	5,000,000	5.20%	5.60%	05-27-08	4,990,950	4,999,250
FHLMC	5,000,000	5.50%	5.55%	06-13-08	4,995,250	5,002,350
FNMA	6,500,000	5.13%	5.18%	10-03-08	6,493,500	6,479,720
FHLMC	6,000,000	5.35%	5.53%	10-20-08	5,976,563	5,988,540
FNMA	5,000,000	5.50%	5.60%	11-17-08	4,988,850	4,996,900
FHLB	5,000,000	5.50%	5.50%	10-05-09	5,000,000	4,990,650
FHLB	5,000,000	5.55%	5.55%	10-19-09	5,000,000	4,993,750
Total General Reserve Fund					<u>146,524,529</u>	<u>146,259,514</u>
Total Investments					<u>\$197,533,057</u>	<u>\$197,486,809</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF INVESTMENTS (CONTINUED)

December 31, 2005

Construction Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
FHLMCDN	\$ 3,900,000	0.00%	3.82%	01-03-06	\$ 3,844,536	\$ 3,900,000
FNMADN	4,000,000	0.00%	3.91%	02-01-06	3,929,347	3,986,400
FHLBDN	3,900,000	0.00%	3.92%	02-10-06	3,827,737	3,882,840
FMCDN	7,600,000	0.00%	4.26%	03-03-06	7,541,062	7,546,800
FMCDN	7,600,000	0.00%	4.33%	04-18-06	7,497,856	7,503,480
FNMDN	7,600,000	0.00%	4.52%	05-15-06	7,471,471	7,476,880
FMCDN	5,000,000	0.00%	4.16%	01-31-06	4,949,814	4,984,000
FNMDN	5,000,000	0.00%	4.17%	02-01-06	4,949,063	4,983,000
FMCDN	5,000,000	0.00%	4.41%	03-06-06	4,932,071	4,965,000
FMCDN	5,000,000	0.00%	4.20%	03-07-06	4,931,575	4,962,500
FNDN	5,000,000	0.00%	4.41%	05-03-06	4,893,475	4,926,500
FMCDN	5,000,000	0.00%	4.45%	05-09-06	4,891,432	4,923,000
FMNDN	5,500,000	0.00%	4.55%	06-02-06	5,394,461	5,397,150
FMNDN	5,500,000	0.00%	4.64%	08-28-06	5,333,741	5,334,450
Total Construction Fund					<u>74,387,641</u>	<u>74,772,000</u>

Operating Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
FNMA	2,125,000	2.00%	1.68%	03-15-06	2,128,320	2,113,716
FHLMC	1,000,000	2.27%	2.56%	04-28-06	994,375	992,500
Total Operating Fund					<u>3,122,695</u>	<u>3,106,216</u>

Reserve Maintenance Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
FHLB	2,000,000	4.70%	4.70%	12-29-06	<u>2,000,000</u>	<u>2,000,000</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF INVESTMENTS (CONTINUED)

December 31, 2005

General Reserve Fund						
Security Description	Investment Description			Maturity Date	Cost	Market Value
	Face Value	Rate	Yield			
PA INVEST	1,067,105	3.64%	4.00%	01-01-06	1,067,105	1,067,105
FHLB	2,100,000	5.38%	4.95%	02-15-06	2,100,000	2,101,323
FHLB	3,875,000	2.24%	1.74%	06-23-06	3,884,688	3,832,608
FHLB	4,000,000	2.29%	2.59%	07-28-06	3,965,000	3,947,520
FHLB	3,000,000	2.55%	2.55%	08-23-06	3,000,000	2,960,640
FHLB	2,000,000	2.60%	2.60%	09-01-06	2,000,000	1,973,120
FHLB	2,000,000	2.80%	2.80%	10-16-06	2,000,000	1,970,620
FHLB	3,000,000	3.22%	3.22%	12-29-06	3,000,000	2,955,000
FHLB	5,000,000	4.25%	4.64%	03-09-07	4,974,150	4,970,300
FHLB	5,000,000	4.50%	4.66%	04-17-07	4,989,063	4,981,250
FHLB	5,000,000	4.50%	4.64%	05-21-07	4,989,550	4,982,800
FHLB	3,200,000	4.25%	4.32%	08-08-07	3,195,776	3,171,007
FHLB	5,000,000	3.76%	3.92%	09-07-07	4,981,250	4,921,900
FHLB	8,000,000	4.10%	4.10%	03-14-08	8,000,000	7,887,520
FHLMC	3,000,000	2.01%	2.04%	01-27-06	2,998,125	2,994,750
FHLMC	3,000,000	2.34%	1.99%	04-28-06	2,985,938	2,978,460
FHLMC	5,000,000	3.00%	3.11%	05-26-06	4,990,000	4,968,500
FHLMC	3,500,000	2.50%	2.52%	08-09-06	3,498,359	3,456,110
FHLMC	2,000,000	3.10%	3.10%	08-25-06	2,000,000	1,980,360
FHLMC	2,000,000	2.65%	2.65%	10-12-06	2,000,000	1,969,040
FHLMC	5,000,000	4.25%	4.63%	02-28-07	4,975,800	4,970,600
FHLMC	4,000,000	4.50%	4.77%	04-18-07	3,985,080	3,979,920
FHLMC	9,000,000	3.55%	3.80%	06-22-07	8,998,594	8,844,120
FNMA	2,000,000	2.40%	2.50%	02-27-06	1,995,000	1,993,120
FNMA	3,000,000	2.30%	1.99%	04-28-06	2,988,750	2,978,430
FNMA	4,500,000	2.25%	1.99%	05-26-06	4,505,625	4,459,230
FNMA	1,700,000	2.55%	2.55%	06-01-06	1,700,000	1,684,071
FNMA	5,000,000	3.13%	3.13%	06-21-06	5,000,000	4,965,650
FNMA	1,500,000	2.50%	2.51%	07-28-06	1,499,531	1,482,195
FNMA	7,700,000	2.10%	2.10%	09-22-06	7,700,000	7,560,476
FNMA	8,000,000	3.25%	3.30%	12-21-06	7,995,000	7,887,520
FNMA	5,000,000	4.90%	4.90%	12-27-07	5,000,000	4,996,900
FNMA	3,000,000	4.25%	4.38%	08-08-07	2,992,500	2,975,640
FNMA	5,000,000	3.75%	3.87%	08-15-07	4,985,938	4,921,900
Total General Reserve Fund					<u>134,940,822</u>	<u>133,769,705</u>
Total Investments					<u>\$214,451,158</u>	<u>\$213,647,921</u>

Year Ended December 31, 2006
(With Comparative Totals for the Year Ended December 31, 2005)

	Total Year Ended December 31,		Trenton- Morrisville Bridge	New Hope- Lambertville Bridge	I-78 Bridge	Easton- Phillipsburg Bridge	Portland- Columbia Bridge	Delaware Water Gap Bridge	Millford- Montague Bridge
	2005	2006							
Cash toll revenues	\$ 35,703,480	\$ 32,728,041	\$ 3,481,659	\$ 836,806	\$ 13,017,051	\$ 3,773,937	\$ 732,128	\$ 10,276,162	\$ 610,298
Tickets, token refunds	(6,927)	-	-	-	-	-	-	-	-
Cash toll shortage	(31,769)	(14,056)	(12,601)	(6,051)	1,750	592	(474)	3,195	(467)
E-ZPass revenues	44,285,097	48,152,808	5,786,258	1,276,694	21,442,101	5,216,112	887,249	12,958,348	586,046
E-ZPass discounts and allowances	(665,377)	(855,950)	(162,783)	(61,967)	(292,576)	(135,849)	(31,655)	(141,105)	(30,015)
Miscellaneous revenues	136,902	143,117	-	2,056	135,454	331	-	5,276	-
Total Toll Revenues	79,421,406	80,153,960	9,092,533	2,047,538	34,303,780	8,855,123	1,587,248	23,101,876	1,165,862
Operating and maintenance expenses									
Salaries and wages									
Toll									
Maintenance	3,692,002	3,923,744	511,109	361,484	899,331	540,302	323,394	1,050,071	238,053
Clerical	2,750,414	2,753,005	388,116	267,647	641,696	437,369	185,839	568,446	263,892
Supervision	755,855	835,827	104,998	83,005	156,746	141,351	79,422	190,979	79,326
	2,525,012	2,579,098	492,068	202,561	498,224	501,313	224,005	451,735	209,192
Total salaries and wages	9,723,283	10,091,674	1,496,291	914,697	2,195,997	1,620,335	812,660	2,261,231	790,463
Social security taxes	744,819	769,781	115,309	72,474	166,364	122,652	61,787	171,435	59,760
Retirees' costs	1,059,479	1,381,796	220,568	129,746	304,903	207,594	103,797	317,870	97,310
Pension contributions	185,217	287,924	43,402	33,205	61,006	44,996	21,103	63,840	20,372
Group insurance	2,547,367	3,054,902	478,497	275,077	683,127	480,255	208,714	704,207	225,025
Heat, light and power	517,323	538,926	134,968	86,400	83,794	87,002	39,117	59,291	48,354
Office expenses	62,128	83,613	7,144	16,532	12,806	12,660	10,238	12,137	12,096
Operating supplies and expenses	1,339,302	1,134,199	189,032	124,983	210,642	171,192	90,211	245,821	102,318
Education, conference and communication expenses									
Uniforms	91,709	97,706	34,096	11,448	11,303	10,235	8,376	11,554	10,694
E-ZPass operating expenses	45,962	48,133	9,949	1,632	8,976	10,925	215	6,040	10,396
State police bridge security	2,802,136	3,407,877	637,107	184,805	933,406	573,781	108,750	855,879	114,149
Maintenance supplies and expenses	2,020,882	2,913,565	656,011	122,694	735,747	487,079	93,821	710,327	107,886
Automotive	175,887	226,139	36,210	46,207	56,958	10,494	10,611	46,027	19,632
Buildings and grounds	251,049	209,414	51,565	44,791	35,752	27,874	12,560	13,004	23,868
Toll collecting equipment	64,057	45,393	11,240	4,111	4,900	7,853	2,527	11,934	2,828
Roadways, sidewalks and approaches	388,847	325,788	53,594	27,317	86,260	61,235	13,965	23,290	60,127
Insurance	1,647,136	1,985,148	293,703	207,035	633,016	225,566	131,034	400,009	94,785
Total Operating and Maintenance Expenses	23,666,583	26,601,978	4,468,686	2,303,154	6,224,957	4,161,728	1,779,486	5,913,904	1,800,063
Net revenues from toll bridges before state police bridge security, administrative expenses and toll-supported bridge expenses	\$ 55,754,823	\$ 53,551,982	\$ 4,623,847	\$ (255,616)	\$ 28,078,823	\$ 4,693,395	\$ (142		

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF ADMINISTRATIVE EXPENSES

	<u>Year Ended December 31,</u>	
	<u>2006</u>	<u>2005</u>
Salaries and wages	\$ 3,630,079	\$ 3,271,542
Social security taxes	267,568	240,629
Trustee and paying agents' fees	19,271	13,209
Pension contributions	97,904	66,403
Group insurance	787,282	644,000
Retirees' costs	382,751	285,813
Unemployment compensation	78,761	7,702
Heat, light and power	291	390
Office expenses	235,905	251,092
Operating supplies and expenses	204,857	209,033
Travel and meeting expenses	6,937	5,695
Education, meeting and conference expenses	118,784	97,149
Automotive repairs and expenses	208	1,896
Buildings and grounds maintenance	-	878
Professional services and legal expenses	877,763	1,228,240
Advertising	38,665	21,941
Insurance	371,451	392,188
	<u>\$ 7,118,477</u>	<u>\$ 6,737,800</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF TOLL-SUPPORTED BRIDGE EXPENSES

	Year Ended December 31,			
	2006		2005	
	Total	Southern Division Bridges	Northern Division Bridges	Total
Salaries and wages	\$ 3,225,704	\$ 1,752,336	\$ 1,473,368	\$ 3,162,993
Social security taxes	243,436	131,728	111,708	241,916
Pension contributions	85,585	47,044	38,541	57,654
Group insurance	1,057,247	588,244	469,003	866,837
Retirees' costs	473,573	259,492	214,081	359,730
Heat, light and power	62,854	38,747	24,107	61,791
Office expenses	17,084	9,207	7,877	13,742
Operating supplies and expenses	14,915	11,034	3,881	7,452
Education and conference expenses	1,065	-	1,065	716
Uniforms	30,172	20,153	10,019	16,819
State police bridge security	1,047,767	775,264	272,503	721,876
Maintenance supplies and expenses				
Automotive	13,030	783	12,247	10,693
Buildings and grounds	9,764	7,381	2,383	4,849
Roadways, sidewalks and approaches	107,250	79,028	28,222	46,305
Insurance	914,805	613,628	301,177	854,044
Civil claim	15,000	15,000	-	15,000
	<u>\$ 7,319,251</u>	<u>\$ 4,349,069</u>	<u>\$ 2,970,182</u>	<u>\$ 6,442,417</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF TOLL BRIDGE TRAFFIC AND REVENUES Years Ended December 31, 2006 (With Comparative Totals for the Year Ended December 31, 2005)

	Total		Trenton-Morrisville Bridge	New Hope-Lambertville Bridge	J-78 Bridge	Easton-Phillipsburg Bridge	Portland-Columbia Bridge	Delaware Water Gap Bridge	Milford-Montague Bridge
	2005	2006							
Number of Vehicles Crossing Toll Bridges, by Class									
Passenger Cars, Vans and Pickups	32,216,911	33,190,771	6,854,645	1,737,396	7,703,207	5,707,890	1,237,480	8,638,001	1,312,152
Two-Axle Trucks, Buses and Tractors	842,174	858,549	182,005	55,933	236,641	166,731	30,459	162,425	24,355
Three-Axle Trucks, Buses, Tractor and Trailer	375,712	391,648	78,446	30,822	106,263	64,384	10,109	96,420	5,204
Four-Axle Trucks, Tractor and Trailer	295,790	320,643	57,810	6,736	129,880	51,327	8,819	64,103	1,968
Five-Axle Trucks, Tractor and Trailer	3,563,813	3,572,288	193,925	27,167	1,936,664	244,704	33,736	1,126,772	9,320
Six-Axle Trucks, Tractor and Trailer	68,714	72,285	1,769	789	42,331	6,234	559	20,535	68
Vehicles Requiring Special Permits	80	54	3	-	9	-	-	42	-
Seven-or-More-Axle Trucks, Tractor and Trailer	3,134	3,235	128	49	1,510	170	12	1,351	15
Total Number of Vehicles	37,366,328	38,409,473	7,368,731	1,858,892	10,156,505	6,241,440	1,321,174	10,109,649	1,353,082
Toll Revenues of Vehicles Crossing Toll Bridges, by Class									
Passenger Cars, Vans and Pickups	\$ 21,941,988	\$ 22,476,586	\$ 4,637,943	\$ 1,155,177	\$ 5,230,861	\$ 3,830,614	\$ 844,285	\$ 5,885,077	\$ 892,629
Two-Axle Trucks, Buses and Tractors	4,062,533	4,132,665	872,407	270,542	1,138,510	803,340	147,005	783,019	117,842
Three-Axle Trucks, Buses, Tractor and Trailer	2,942,929	3,061,914	611,420	240,899	831,594	504,377	80,112	752,231	41,281
Four-Axle Trucks, Tractor and Trailer	3,042,728	3,293,901	597,900	69,791	1,322,308	533,135	92,684	657,315	20,768
Five-Axle Trucks, Tractor and Trailer	46,726,090	46,698,496	2,515,344	356,459	25,285,683	3,215,935	444,415	14,758,307	122,353
Six-Axle Trucks, Tractor and Trailer	1,065,045	1,115,387	27,708	12,380	648,966	98,458	8,946	317,846	1,083
Vehicles Requiring Special Permits	4,013	2,725	23	-	333	-	-	2,369	-
Seven-or-More-Axle Trucks, Tractor and Trailer	65,553	67,727	2,524	927	31,271	3,637	253	28,826	289
Total Toll Revenues from Vehicles	79,850,879	80,849,401	9,265,269	2,106,175	34,489,526	8,989,496	1,617,700	23,184,990	1,196,245
E-ZPass discounts and allowances and other adjustments	(429,473)	(695,441)	(172,736)	(58,637)	(185,746)	(134,373)	(30,452)	(83,114)	(30,383)
Total Toll Revenues	\$ 79,421,406	\$ 80,153,960	\$ 9,092,533	\$ 2,047,538	\$ 34,303,780	\$ 8,855,123	\$ 1,587,248	\$ 23,101,876	\$ 1,165,862

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN
ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Board of Commissioners of
Delaware River Joint Toll Bridge Commission - Bridge System

We have audited the financial statements of Delaware River Joint Toll Bridge Commission - Bridge System (the "Commission") as of and for the year ended December 31, 2006, and have issued our report thereon dated June 13, 2007. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Internal Control over Financial Reporting

In planning and performing our audit, we considered Delaware River Joint Toll Bridge Commission - Bridge System's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Commission's internal control over financial reporting.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to initiate, authorize, record, process, or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the entity's financial statements that is more than inconsequential will not be prevented or detected by the entity's internal control.

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INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT
OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH
GOVERNMENT AUDITING STANDARDS (CONTINUED)

Internal Control over Financial Reporting (Continued)

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal control.

Our consideration of internal control over financial reporting was for the limited purpose described in the first paragraph of this section and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Delaware River Joint Toll Bridge Commission - Bridge System's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, bond resolutions, and compact, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

This report is intended solely for the information and use of the finance committee, the Board of Commissioners, management, the Trustee, and others within the Commission and is not intended to be and should not be used by anyone other than these specified parties.

Mercaderin, P.C.
Certified Public Accountant

June 13, 2007



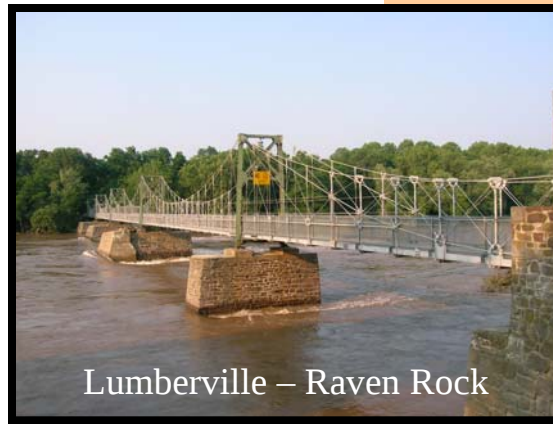
Delaware River
Joint Toll Bridge
Commission

TOLL BRIDGES

Trenton-Morrisville
New Hope-Lambertville
Interstate 78
Easton-Phillipsburg
Portland-Columbia
Delaware Water Gap
Milford-Montague



Riegelsville



Lumberville - Raven Rock



Lower Trenton



Centre Bridge - Stockton

Excerpt From the

SIXTY-NINTH ANNUAL INSPECTION REPORT 2006

Prepared by



SCHOOR DEPALMA
Engineers and Consultants

TOLL SUPPORTED BRIDGES

Lower Trenton
Calhoun Street
Scudder Falls
Washington Crossing
New Hope-Lambertville
Centre Bridge-Stockton
Lumberville-Raven Rock
Uhlerstown-Frenchtown
Upper Black Eddy-Milford
Riegelsville
Northampton Street
Riverton-Belvidere
Portland-Columbia

SCHOOR DEPALMA
Engineers and Consultants

January 29, 2007

Honorable Frank G. McCartney
Executive Director
Delaware River Joint Toll Bridge Commission
110 Wood Street
Morrisville, PA 19067

RE: Consulting Engineer's Sixty-Ninth Annual Inspection Report-2006
DRJTBC Contract No. C-06-02
Our Project Number 060093101

Dear Mr. McCartney:

It is with great pleasure that we are submitting the Consulting Engineer's Sixty-Ninth Annual Inspection Report (2006) for the Commission's following facilities:

- A. The seven (7) Toll Bridges
- B. The thirteen (13) Toll Supported (Non-Toll) Bridges
- C. The thirty-two (32) approach bridges and roadways serving the above bridges
- D. The Commission's buildings and grounds
- E. The Commission's vehicles and equipment

This Annual Inspection Report summarizes our findings and recommendations based upon the 2006 inspection of the Toll Supported Facilities and the 2005 inspection of the Toll Facilities updated to indicate any material changes in conclusions and recommendations since the 2005 inspection. All facilities are in operating condition.

The Tenth Annual Maintenance Report which defines activities to be undertaken by the Commission's maintenance staff is published separately.

The report identifies certain ongoing capital projects amounting to an estimated cost of **\$410,571,000**. In addition, an estimated expenditure of **\$931,000** is recommended for new vehicle and equipment purchases in 2007. Therefore the total amount of ongoing capital projects and vehicle and equipment expenditures in 2007 is estimated to be **\$411,502,000**. The report also identifies future capital projects estimated at **\$417,438,000** which are programmed to be undertaken through the end of 2016.

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060093101

Honorable Frank G. McCartney

January 29, 2007

Page 2

We express our sincere appreciation to all of the Commission's personnel who were very helpful in assisting Schoor DePalma during all phases of our report preparation, as well as during the inspections.

It has been a pleasure to serve the Commission. Please contact us if you require any additional information.

Very truly yours,

SCHOOR DEPALMA INC.

Ronald F. Mieszkowski, P.E.
Senior Vice President

RFM/MR/nac

Encls.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION
MORRISVILLE, PENNSYLVANIA



SIXTY-NINTH ANNUAL INSPECTION REPORT

Toll Bridges

**Trenton-Morrisville
New Hope-Lambertville
Interstate Route 78
Easton-Phillipsburg
Portland-Columbia
Delaware Water Gap
Milford-Montague**

Toll Supported Bridges

**Lower Trenton
Calhoun Street
Scudder Falls
Washington Crossing
New Hope-Lambertville
Centre Bridge-Stockton
Lumberville-Raven Rock
(Pedestrian)**

**Uhlerstown-Frenchtown
Upper Black Eddy-Milford
Riegelsville
Northampton Street
Riverton-Belvidere
Portland-Columbia (Pedestrian)**

**SCHOOR DEPALMA
Engineers and Consultants**

MANALAPAN, NEW JERSEY

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INTRODUCTION

In accordance with Federal Highway Administration (FHWA) regulations, all bridges must be inspected at least once every two (2) years, more often, if warranted, due to condition. Under the Commission's 2003 Bond Resolution, all bridges and toll facilities are to be inspected once every two (2) years. The Commission will inspect its Toll Supported Bridges in even years (2006, 2008, etc.) and the Toll Bridges in odd years (2007, 2009, etc.). The associated facilities and grounds will be inspected in the year the bridge is inspected.

This Sixty-Ninth Annual Inspection Report of bridges and facilities owned and operated by the Delaware River Joint Toll Bridge Commission contains the findings of the 2006 inspections of the Toll Supported Bridges. The conclusions and recommendations concerning the Toll Bridges are based on the 2005 inspections. Any changes from the 2005 conclusions or recommendations for the Toll Supported Bridges are indicated by text that is ***bold and italicized***. This year's inspections consisted of all thirteen (13) Toll Supported Bridges and any accompanying facilities and approach structures.

Commission District foremen and maintenance personnel provided our inspection crew with the support services and access equipment necessary for performing the inspections. Several maintenance personnel also assisted in providing a valuable 'walk down' of the bridges, prior to beginning the inspections, highlighting the major areas of concern and any previous work accomplished.

The equipment used to access the majority of the bridges (under deck) consisted of various commission owned ladders, single and dual lift trucks as well as an under-bridge unit called The Bridgemaster.

The following report highlights the significant findings observed during inspections, including recommended measures of repairing or improving noted deficiencies, either by Commission Maintenance forces or by a future contract. This report, however, does not discuss routine preventive maintenance items regularly performed by Maintenance forces. Any maintenance force level deficiencies which have been identified during the annual inspection can be found in the *Tenth Annual Maintenance Report*, published under a separate cover, which has been prepared to expedite communication of repair work to the maintenance staff. In general these routine maintenance tasks include, but are not limited to, the following:

- Removal of accumulated debris from the deck, deck joints, inlets, catch basins, and drainage pipes.
- Annual cleaning of structures (bridge flushing).
- Monitoring and repair of lighting and other electrical work
- Removal of vegetation from substructures.
- Removal of tree from below or along side of the bridges.
- Removal of graffiti from the bridges and retaining walls.
- Patching concrete and bituminous concrete spalls.
- Sealing roadway and bridge deck cracks.

- Localized cleaning and painting of rusted steel/bearings.
- Deck joint rehabilitation.
- Guide rail repair.
- Miscellaneous steel repairs.

A consistent numbering system was used to identify the bridge spans. Span numbering generally begins at the westernmost location of the bridge and increases to the east. However, a specific numbering system was not utilized for the individual structural members. The locations for individual members (stringers, floorbeams, etc.) are referenced by their relationship to known fixed points such as the bridge fascias and the piers.

Several capital improvement projects were completed within the last two years. Among these are the following:

Project	Program Cost
Substructure and Scour Remediation	\$ 4,570,688
2005 Underwater Inspection of the Toll and Toll Supported Bridges	\$ 252,186
Washington Crossing TSB Deck Joint Repairs	\$ 407,885
Northerly Crossings Corridor Congestion Mitigation Study	\$ 574,815
Scudder Falls TSB Deck Joint Replacement	\$ 1,492,701
Centre Bridge – Stockton TSB Priority Repairs	\$ 109,270
Scudder Falls Bridge Lighting Upgrade	\$ 125,292
Easton - Phillipsburg TB Sidewalk Replacement	\$ 1,681,064
Lower Trenton TSB Above Deck Painting + Sign Rehabilitation	\$ 4,567,204
Riegelsville TSB End Floorbeam Bearing Repairs	\$ 542,979
Easton - Phillipsburg TB Sign Structure Replacement	\$ 81,678
I-80 NJ Service Road Emergency Repairs	\$ 279,737
High Priority Structural Steel Repairs at the Scudder Falls TSB	\$ 839,368
I-78 Toll Plaza Roadway Approach Restriping	\$ 150,928
District 3 Toll Bridge Facilities Roof Replacement	\$ 798,889
New Hope – Lambertville TB Administration Building Terne Roof Replacement	\$ 658,281
Total	\$ 17,132,964

Many capital improvement projects are either still under review, study, design or construction. Most noteworthy are the following:

Project	Program Cost
I-78 Open Road Tolling (ORT) Lanes	\$ 43,308,000
Centre Bridge-Stockton TSB Rehabilitation	\$ 10,308,000
Milford - Montague TB Rehabilitation	\$ 18,526,000
New Hope - Lambertville TB Administration Building Addition & Renovation	\$ 4,145,000
Riverton - Belvidere TSB Rehabilitation	\$ 8,775,000
Trenton - Morrisville (Route 1) TB Rehabilitation + One Auxiliary NB Lane	\$ 102,500,000
Scudder Falls (I-95) TSB Improvements	\$ 27,400,000
Electronic Surveillance/Detection System (ESS)	\$ 26,242,000
I-78 Roadway Rehabilitation	\$ 44,570,000
NJDEP & PADEP Municipal Stormwater Compliance Program	\$ 350,000
Calhoun Street TSB Peak Hour Capacity Feasibility Study	\$ 245,000
Total	\$ 286,369,000

In 2000 the Commission adopted a “fix it right” philosophy for its Capital Program as compared to the previous “fix what’s broken” approach. The “fix it right” approach is based on the premise that whenever a project requires a bridge closure for implementation, that project must be designed so that no additional repair projects requiring a closure will be necessary for a subsequent period of at least 15 years. The estimated costs of the recommended improvements included in this report account for all costs of design, construction, construction management and inspection, and contract administration, and are consistent with the Commission’s “fix it right” approach. It is also noted that the general findings and estimated repair costs developed from the 2005 Underwater Inspection Report prepared by the Louis Berger Group, have been included in this report.

The following report will summarize significant findings, recommendations, and associated estimated costs at the end of each section for each structure. Following the main reports are the recommendations from equipment and vehicle inspections and their associated repair/replacement costs. Finally, the Schedule of Insurance is provided towards the end of this report.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

TRENTON-MORRISVILLE TOLL BRIDGE

The Trenton-Morrisville Toll Bridge (Structure No. 20) carries U.S. Route 1 over the Delaware River between Trenton, New Jersey and Morrisville, Pennsylvania.

The main bridge is a twelve-span, simply-supported composite steel girder and concrete deck bridge with an overall length of 1,324 feet. The piers (granite-faced) and abutments are reinforced concrete. Originally constructed by the Commission in 1952 as a four-lane bridge, the bridge was widened to six lanes in 1965 for a total curb-to-curb width of 62 feet. In 1983 an aluminum median barrier was erected across the bridge, creating three southbound and two northbound lanes. The posted speed limit in the northbound direction is forty miles per hour and fifty miles per hour in the southbound lanes until midspan where the speed limit is reduced to twenty miles per hour approaching the toll plaza.

TRENTON-MORRISVILLE APPROACH BRIDGES

The New Jersey approach includes eight additional bridge structures: Route 29 Overpass, Ramp 'N' Overpass, Ramp 'IY' Overpass, Ramp 'Y' Overpass, Union Street Overpass, Center Street Underpass, Broad Street Underpass, and Ramp 'N' Over Union Street. The Pennsylvania approach includes two separate overpass structures at Washington Street and South Pennsylvania Avenue. All ten approach bridges are owned and maintained by the Commission.

The Design Phase is completed (Contract C-380A) for the addition of the northbound auxiliary lane across the main river crossing to reduce congestion problems along the US Route 1 corridor as well as to address the rehabilitation of the main river crossing and approach structures. The limits of work will also include the flanking interchanges at Pennsylvania Avenue and NJ Route 29, in Pennsylvania and New Jersey, respectively.

TRENTON-MORRISVILLE TOLL BRIDGE FACILITY AND GROUNDS

The one-way toll plaza, located at the Pennsylvania approach, has six toll lanes. The tollbooths are erected on concrete islands and are protected by an overhead canopy. Each lane is equipped for EZ-Pass.

The 2005 inspection included the main river bridge, all approach bridges, and the facility and grounds.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

SIGNIFICANT FINDINGS

TRENTON-MORRISVILLE TOLL BRIDGE

The bridge was last painted in 1972. Generally, the condition of the painted surfaces is fair to poor, with the majority of paint deterioration occurring at localized areas exposed to the elements such as the fascia girders, steel girder ends, and bearings directly beneath the deck joints and longitudinal median joints. Typically, water infiltration from the deck joints has taken its toll on the underlying steel and bearings.

The existing deck has an LMC overlay (overlaid in 1986 with expansion dams installed). The LMC overlay exhibits significant delamination, widespread cracking and failed patches. The underside of deck exhibits signs of water infiltration with light spalling adjacent to steel girder top flanges, which also have light to moderate rust. The most significant deterioration appears to stem from the underlying construction joints, a result of the widening construction, which causes a medium longitudinal reflection crack in the overlay. The crack appears to have formed directly above the fascia stringers. Portions of the overlay along the longitudinal crack as well as in the widened portions were found to be unsound and large spalls have formed in the northbound lanes. These cracks should continue to be sealed to extend the usefulness of the existing overlay and the spalls repaired to prevent premature deterioration of the superstructure.

The deck joints consist of steel extrusions welded to the top of the original tooth dam (finger joints). The extrusions have 'Z' type anchorage embedded in the adjacent header material. Cracks and impact damage were noticed on numerous headers. Maintenance forces have experimented with various repair materials, but they appear to have failed, especially in the southbound lanes. Deck joint expansion/filler material failures were also typically found.

Several areas of the inner and outer faces of the concrete parapets, especially on the north side, were noted to exhibit patches and cracks, and some spalled areas. A horizontal crack and unsound concrete were also noted throughout most of the length of the north and south curb. Maintenance forces have begun and should continue to implement repairs to affected areas until a rehabilitation contract gets underway.

Most of the substructure bridge seats were noted to exhibit medium vertical cracks. These cracks appear stable and need only be sealed with a flexible caulk material. Epoxy coating, which generally is not present, should be applied to the bridge seats to prevent future water infiltration.

The bridge mounted cantilever sign structure is not in plumb and level. The members of the structure, including the bridge attachments have heavy rust. The sign structure should be analyzed for the recently added sign panels and a recommendation made for modifications or replacement of the sign structure.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract C-412A, has found the substructures to be in satisfactory condition. Although no undermining was observed, several areas of the pier footings were found to be partially exposed. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

WASHINGTON STREET OVERPASS

The paint system is in fair condition with deterioration occurring at the girder ends and at random locations throughout. The bearings exhibit moderate to heavy rust with a number of bearings exhibiting missing anchor nuts, sheared bolts and cracked welds at the sole plate/bottom flange interface. The expansion bearings are fully expanded and not functioning properly. Damage to the girder ends and bearing was caused by water infiltration through the deck joint and onto the bridge seat.

The abutment backwalls and breastwalls exhibited areas of spalling and mapcracking with efflorescence. Spalling along the underside of the deck was observed along the deck joints and the longitudinal haunch supporting stringer caused by water infiltration.

The top of the deck is in overall good condition with a few areas of spalling southbound and numerous cracks near the deck joints southbound.

The approach slabs in the southbound lanes showed signs of spalling and settling at the west approach. The northbound overlay is deteriorating at the approach slab joints.

SOUTH PENNSYLVANIA AVENUE OVERPASS

The northbound roadway exhibits deteriorated pavement at the center line. The southbound roadway exhibits spalled and deteriorated concrete at the center line. The deck joints exhibit small spalls in the adjacent header, minor deterioration of joint material and reflective pavement cracking. The abutments exhibit random spalls and cracking, especially at the upper backwalls. The paint condition is fair with most corrosion at the stringer ends and bearings.

The Pennsylvania side of the Route 1 southbound roadway within the Commission's jurisdiction is showing signs of heavy deterioration and settlement to the west of the South Pennsylvania Avenue Overpass. Maintenance forces have continued to overlay the areas with asphalt to maintain safe roadway conditions.

RAMP I Y OVER BRIDGE STREET

The paint system is in poor condition with peeling paint throughout. The deck joints are in poor condition with deteriorated joint material and evidence of water leakage on the substructure. The bearings and ends of stringers exhibited corrosion due to water infiltration from the deck joints, more so at the piers. Spalling and cracking was noted in the pier cap, pier pedestals and deck joint headers. The deck is in fair condition with areas of cracked deck patches in spans one and three.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

UNION STREET OVERPASS

The abutment backwall and breastwall exhibited a number of areas of spalling concrete with exposed reinforcement, map cracking and efflorescence. The paint is in generally fair condition with localized areas of failing paint, especially at bearings and stringer ends. The bearings appeared to be non-functioning and were observed to be overexpanded. The deck joints are in poor condition, exhibiting spalling in the deck slab, deteriorated concrete headers and deteriorated joint material, especially in the southbound lanes. The deterioration along the deck joints is causing water infiltration to the bridge seats.

Excessive roadway settlements have not changed between the Union Street Overpass and the Ramp 'N' Overpass on Route 1, adjacent to the adjoining retaining wall. Commission forces maintain that this area was built on substandard fill material with improper compaction, which may have contributed to the worsening settlements. The settlement may also be affected by the lateral movement of the adjacent retaining wall, which is approximately 30 feet high. Settlements appear generally uniform except at drainage locations, another key factor for settlement. Spacing of adjacent drainage inlets also appeared excessive, with none occurring in the highest settlement areas. At least one of the drainage inlets has been paved over in the southbound lanes to maintain a smooth riding surface.

RAMP N OVERPASS

The abutments exhibit numerous areas of spalling concrete. The paint is in generally fair condition with localized areas of deterioration. The bearings appear to be non-functioning and were observed to be fully expanded at 50 degrees F. The deck joints are in poor condition with evidence of moisture infiltration, especially at the east abutment and numerous spalls/patches at headers. Approach and roadway slabs are in fair condition, exhibiting numerous cracks, deteriorated concrete and failing asphalt patches.

CENTER STREET UNDERPASS

The bearings appear to be not functioning and exhibit severe rusting with areas of section loss. The frozen bearings are causing uplift in some of the masonry plates. Additionally, the deck joints appear to be not functioning properly with spalling along the headers.

Spalling was noted on the abutment backwall and breastwalls. The spalling is caused by water infiltration through the deteriorated deck joints. Also, fine vertical cracks were noted on the abutment breastwalls. These cracks are not detrimental to the structures. Simply sealing the cracks to prevent water infiltration is sufficient.

The Route 1 southbound pavement at the Center Street Underpass has several pavement spalls.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

BROAD STREET UNDERPASS

The deck joint headers have severely deteriorated with concrete spalls and deteriorated pavement creating a rough riding surface. Deck joint armoring anchors are exposed and contain holes allowing light to be seen from below. The backwall is also in poor condition with multiple areas of spalling with exposed reinforcement and efflorescence.

The failed deck joints have caused water damage and debris build-up has consequently rusted the bearings and the ends of beams causing severe rusting and minor section loss. The bearings appear to be not functioning. The frozen bearings are causing uplift in some of the masonry plates. The paint is in poor condition with peeling paint throughout.

RAMP N OVER UNION STREET

The bearings on both piers typically exhibit loose or missing anchor bolt nuts. A deteriorated drain pipe and scupper was observed near the west abutment.

ROUTE 29 OVERPASS

Several of the prestressed concrete box beams exhibit exposed and rusted prestressed tendons at the ends of beams, mainly over the piers. This appears to be the result of leaking and deteriorated deck joints. The piers also exhibit spalls, incipient spalls and unsound concrete in the pier caps.

The top of deck exhibited spalling along the deck joints, while spalling with exposed reinforcement was observed on the underside of deck along the longitudinal joints.

RAMP Y OVER ROUTE 29

The paint system is in poor condition. There are minor spalls occurring on the east end of the south abutment and also along the backwall. The deck is in generally good condition with no spalling and only minor fine cracks. There is also a longitudinal crack running along the curb face and minor fine cracks

TRENTON-MORRISVILLE TOLL BRIDGE FACILITIES AND GROUNDS

The access tunnel underneath the toll plaza exhibited signs of moisture infiltration with water stains on the floor.

Ramps 'A', 'E', 'H' and 'J' at the US Route 1 and South Pennsylvania Ave intersection, comprised of a bituminous overlay, exhibited heavy transverse and random cracking and a moderate level of potholes. Additionally, several toll plaza concrete roadway slabs were noted to be in fair condition with spalling and cracks throughout. In general the ramps and approach roadways are in satisfactory condition, with the bituminous Pennsylvania Ramps 'A', 'E', 'H' and 'J' in overall fair to poor condition.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

The stone façade surrounding the main entrance door to the Administration Building is deteriorated. The current fire alarm system is outdated and the original elevator has been experiencing breakdowns.

Several areas of the sidewalk and curb along the entrance to the Administration Building exhibit cracking, settlement, spalling and failed patches.

A pavement condition assessment and settlement analysis of the US Route 1 approach roadways to the Trenton-Morrisville Toll Bridge was conducted by The Louis Berger Group, Inc. in December of 2004.

CONCLUSIONS

TRENTON-MORRISVILLE TOLL BRIDGE

Overall, the Trenton-Morrisville Toll Bridge is in satisfactory condition and found to be structurally adequate to carry legal highway loads at the time of the inspection. The operations and maintenance buildings, toll plaza and most approach roadways and bridges appear to have been well maintained over their existence and remain in generally satisfactory condition.

The main Toll Bridge and its approach structures are in need of rehabilitation, due to the generally fair to poor condition of the bearings, severe approach settlement, deteriorated deck joints, poor paint condition and numerous defects in the concrete parapets and wearing surfaces.

An overall Rehabilitation Contract is recommended for the entire Trenton-Morrisville Facility. An In-Depth Inspection and Rating should be performed for the bridges, roadways and ramps to determine the extent of required repairs. An approach settlement study should be combined with the inspections to determine the cause of the settlements. Design and repair plans should be developed for the entire facility, which should include the following as a minimum:

- Blast cleaning and painting main river and approach bridges.
- Rehabilitate or replace the concrete deck on the main river bridge. Replace the concrete parapets and safety walk on main river bridge.
- Replace bridge mounted cantilever sign structures.
- Replace toll booths.
- Bearing, deck, deck joint and header rehabilitation of approach structures.
- Repair ends of beams at Rt. 29 overpass.
- Pennsylvania ramp re-paving.
- Substructure Rehabilitation (Including all items noted in the 9th Annual Maintenance Report)
- Route 1 roadway rehabilitation

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

A settlement study of the New Jersey approaches, as well as at the South Pennsylvania Avenue Overpass, should include the investigation of the drainage pipes in the vicinity in addition to a subsurface exploration.

The bearing rehabilitation for the approach bridges should include bearing resetting, installation of missing anchor bolts, replacement of severely rusted bolts/nuts and cleaning and painting of bearings and ends of girders. In the interim the bearings should be cleaned and maintained regularly. Full deck joint rehabilitation should also be included.

The bridge mounted cantilever sign structure deflection calculations should be checked for current sign panel load. If sign structure is designed for this load, the sign panel and sign lighting should be reset to a level position. Otherwise a sign structure replacement is warranted.

The following outlines specific recommendations for each approach bridge.

WASHINGTON STREET OVERPASS

The Washington Street Overpass is in satisfactory condition. The deck joints should be completely replaced, with associated repairs made to the backwall and headers. Repairs to the concrete spalls on the abutments should also be included. The bearings should be rehabilitated, blast cleaned and painted along with the ends of stringers and at random deteriorated locations.

SOUTH PENNSYLVANIA AVE OVERPASS

The South Pennsylvania Ave Overpass is in satisfactory condition. The deck joints should be completely replaced, with associated repairs made to the backwall and headers. Repairs to the concrete spalls on the abutments should also be included. The bearings should be rehabilitated, blast cleaned and painted along with the ends of stringers and at random deteriorated locations.

RAMP IY OVER BRIDGE STREET

The Ramp IY Overpass is in satisfactory condition. Due to the poor paint condition of the stringers and bearings, the entire bridge should be blast cleaned and painted. The deck joints are in poor condition and should be replaced. The bearing should be replaced at the piers and cleaned and reset at the abutments. The deck exhibited large areas of cracking and failed repairs which may justify a complete deck replacement. A deck evaluation survey should be performed to determine if the deck should be rehabilitated or replaced.

UNION STREET OVERPASS

The Union Street Overpass is in satisfactory condition. The abutment backwall and breastwall spalls should be repaired. Random locations of the failing paint system should be blast cleaned and painted, along with the ends of girders and bearings. The bearings should be reset prior to painting. The deck slab and deck joints should be considered for replacement due to the poor condition of the underside of deck along the deck joints and the

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

need to replace the approach slabs. A deck evaluation survey should be performed to determine if the deck should be rehabilitated or replaced.

The excessive roadway settlements between the Union Street Overpass and the Ramp 'N' Overpass on Route 1, adjacent to the adjoining retaining wall should be investigated and repaired under the overall Trenton-Morrisville Rehabilitation. A settlement analysis should be performed to determine the cause and method of remediation.

RAMP N OVERPASS

The Ramp N Overpass is in satisfactory condition. The abutment backwall and breastwall spalls with exposed reinforcement and efflorescence should be repaired. Random locations of the failing paint system should be blast cleaned and painted, along with the ends of girders and bearings. The bearings should be reset prior to painting. The deck slab and deck joints should be considered for replacement due to the poor condition of the underside of deck along the deck joints and the need to replace the approach slabs. A deck evaluation survey should be performed to determine if the deck should be rehabilitated or replaced.

The slab settlements should be addressed as noted in the Union Street Overpass.

CENTER STREET UNDERPASS

The Center Street Underpass is in satisfactory condition. The non-functioning bearings should be cleaned, reset and painted in conjunction with painting the structural steel. Additionally, the deck joints should be replaced with repairs made to the concrete header, backwall, and breastwall.

BROAD STREET UNDERPASS

The Broad Street Underpass is in satisfactory condition. The deck joints should be replaced and the backwalls rebuilt. All substructure repairs should also be included along with the backwall repairs. The entire bridge should be blast cleaned and painted, which includes all the structural steel and bearings.

RAMP N OVER UNION STREET

The Ramp N Over Union Street Overpass is in good condition.

ROUTE 29 OVERPASS

The Route 29 Overpass is in fair condition due to the condition of the deck and deck joint deterioration and the spalls and exposed prestressing strands at the ends of beams. The extent of damage to the exposed tendons, in addition to the adjacent delaminated concrete should be observed in subsequent inspections. The beam spalls should be cleaned and patched. The spalls on the piers and abutments noted in the Ninth annual maintenance report should be repaired. The deck joints should be replaced and the deck spalls repaired.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

RAMP Y OVER ROUTE 29

The bridge is in satisfactory condition. The structural steel and bearings should be blast cleaned and painted. The substructure spalls on the south abutment breastwall and backwall should be repaired. The curb/safety walk should be repaired and the deck sealed.

TRENTON-MORRISVILLE TOLL BRIDGE FACILITY AND GROUNDS

The rehabilitation of the toll plaza should be included in the upcoming toll bridge rehabilitation project (T-380), as should be the addition of one-lane in the northbound direction. The current toll booths and canopies have peeling paint, deteriorating floors, and are in need of an upgraded HVAC system.

An evaluation of the access tunnel should be performed to determine the cause and remediation of the water infiltration.

The deteriorated exterior facade near the entrance should be repaired, and at the same time the main entrance door to the Administration Building should be replaced. In addition, a study should be performed to determine if the building is ADA compliant.

The HVAC system should be upgraded due to the age of the system. A study should be performed to determine the best method of upgrading. The fire alarm system should also be evaluated to determine if upgrades are needed.

It has been documented that the administration building has had problems with the roof leaking. Due to the age of the roof it is recommended that the roof be replaced on all the buildings at the facility.

The areas of sidewalk and curbing along the entrance to the Administration Building should be repaired (Maintenance).

The Administration Building elevator has experienced multiple breakdowns, and should be upgraded or replaced.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

TRENTON-MORRISVILLE TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$17,400)	
380	Trenton-Morrisville Toll Bridge Rehabilitation + One Auxiliary NB Lane (Design, CMCI, Construction)	\$102,500,000
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$237,000
<u>Facilities and Grounds</u>		
468	Buildings Roof Replacement	\$735,000
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$1,694,000
N/A	Miscellaneous Projects * (2007-2008)	\$110,000
425	Storm Water Compliance *	\$50,000
TBD	Study Administration Building for ADA Compliance and Repair Main Entrance Façade and Door	\$50,000
TBD	HVAC Study and Upgrade (Design, Construction, CMCI)	\$389,000
TBD	Elevator Upgrade	\$200,000
480	Fire Protection System in Computer/IT Rooms *	\$52,000

TRENTON-MORRISVILLE TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
TBD	Update General Information Documents *	\$40,000
TOTAL COST		\$106,213,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
479	ITS Improvements *	\$955,000
446	Elec. Toll Collection - Video Enforcement *	\$866,000
TOTAL: Future Repair Contracts		\$1,821,000

* Commission Initiative

NEW HOPE - LAMBERTVILLE TOLL BRIDGE FACILITY

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

NEW HOPE LAMBERTVILLE TOLL BRIDGE

The New Hope-Lambertville Bridge (Structure No. 140) was opened to traffic on July 22, 1971 and carries U.S. Route 202 over the Delaware River between Lambertville, New Jersey and New Hope, Pennsylvania. The bridge is a ten-span steel girder and concrete deck bridge with a total length of 1,682 feet measured from center to center of bearings. The substructure units are composed of reinforced concrete; the piers are stone faced.

NEW HOPE LAMBERTVILLE APPROACH BRIDGES

The Commission's jurisdiction also includes loop-ramp interchanges with overpasses provided at Route 29 in New Jersey and Route 32 in Pennsylvania. The posted speed limit on the approach roadways is fifty-five miles per hour.

NEW HOPE LAMBERTVILLE FACILITY AND GROUNDS

Under Contract No. T-370B-2 the toll plaza and toll booths were replaced on the Pennsylvania approach. The new toll plaza has one-way toll collection replacing the two-way collection prior to the reconstruction. All lanes are equipped for EZ-Pass. The new toll plaza was erected on concrete islands and is protected with an overhead canopy the matches the Operations building roof. This contract also upgraded the power, telecommunications and data systems infrastructure of the toll facility as well as the reconstruction of the facilities parking lot.

The 2005 inspection included the main river bridge, two (2) approach structures, and the facility and grounds.

SIGNIFICANT FINDINGS

NEW HOPE-LAMBERTVILLE TOLL BRIDGE

The New Hope-Lambertville Toll Bridge was rehabilitated under Contract No. TS-370B-3. The rehabilitation was completed and the bridge was reopened on June 7, 2004. The reconstruction effort involved concrete deck and spall repairs, reconstruction of deck expansion joints, replacement of the Latex Modified Concrete deck overlay, painting of the steel fascia girders, bearing replacements and miscellaneous steel repairs and painting.

Damage was observed to the north floorbeam tie plate near pier 5. Also, section losses and perforations were noted at a few locations at the ends of several stringers in the webs and

NEW HOPE - LAMBERTVILLE TOLL BRIDGE FACILITY

flanges, but do not affect the structural capacity of the structure. The area of the holes have been blast cleaned and painted under Contract 370A. The defects to the floorbeam tie plate and the noted perforations do not appear to affect the structural integrity of the bridge at this time. A fatigue crack has been arrested by a hole drilled in the web of the south fascia stringer at Pier 4.

Transverse cracks with efflorescence were noted throughout the underside of deck. A few random locations of spalling were also observed on the underside of deck and concrete parapets, however these deficiencies do not affect the structural integrity of the deck slab. These conditions existed prior to the rehabilitation and any further deterioration should be prevented due to the addition of the LMC overlay.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract C-412A, has found the overall condition of the underwater elements to be in overall satisfactory condition with the moderate to heavy cracking of the concrete aprons around the piers, moderate areas of collapsed concrete aprons, undermining of portions of the aprons and minor mortar loss in masonry joints of the substructure units.

ROUTE 29 OVERPASS

The substructure exhibits spalling, cracking and unsound concrete at several locations, however, this does not affect the structural integrity of the bridge. Peeling paint and corrosion were noted on the fascia bearings and at several stringers, mostly adjacent to the median joint and along the fascias.

ROUTE 32 OVERPASS

The concrete rigid frame exhibited areas of mapcracking and efflorescence at the center of the intrados at the north and south ends. At the present time the defects noted do not affect the structural integrity of the structure. The roadway over the bridge is in good condition with no apparent defects. Several of the approach slabs exhibit spalling, asphalt patches and deteriorated joint material at joint locations.

NEW HOPE-LAMBERTVILLE TOLL BRIDGE FACILITY AND GROUNDS

A space utilization study conducted at Trenton-Morrisville determined that there is a need for additional space to accommodate an increased capital program. The study identified the New Hope Lambertville facility as a potential location to accommodate this need.

Several cracks and spalls were noted at the roadway slabs and approach toll plaza slabs.

The roof of the Operations building is showing signs of wear and distress due to age. Additionally, the heating, ventilation, and air-conditioning system has been identified to be not performing acceptably.

The parking lot lighting appears to be deficient.

NEW HOPE - LAMBERTVILLE TOLL BRIDGE FACILITY

CONCLUSIONS

NEW HOPE-LAMBERTVILLE TOLL BRIDGE

The New Hope-Lambertville Toll Bridge is in good condition. An interim inspection should be performed on the floorbeam tie plate damage to determine if any stress cracks develop in the tension member. Maintenance should continue to maintain the bridge and make necessary repairs outlined in the annual maintenance reports.

ROUTE 29 OVERPASS

The Route 29 overpass is in good condition. However, substructure spalls should be repaired and the corroded bearings and ends of stringers should be spot cleaned and painted. Maintenance should continue to perform routine maintenance as needed.

ROUTE 32 OVERPASS

The Route 32 overpass is in overall good condition. Maintenance should continue to perform routine maintenance as needed.

NEW HOPE-LAMBERTVILLE TOLL BRIDGE FACILITY AND GROUNDS

The roof of the operations building was replaced under Contract C413A-2 in 2006.

A HVAC study should be included in the Operations building renovation that is scheduled to be performed in the near future. The parking lot lighting should also be upgraded to a better performing standard.

A Substructure and Scour Remediation Contract (below the waterline) should be performed to repair the substructure deterioration noted in the 2005 Underwater Inspection Report.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

NEW HOPE-LAMBERTVILLE TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$14,000)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$341,000
<u>Facilities and Grounds</u>		
397	Executive Addition to NHL Toll Facility (Design, CMCI, Construction)	\$4,145,000
435	Replace Operations Building Roof (Completed in 2006, \$688,000)	
469	NHLTB Parking Lot Lighting Improvements	\$150,000
N/A	Miscellaneous Projects * (2007-2008)	\$64,000
425	Storm Water Compliance *	\$50,000
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$2,060,000
480	Fire Protection System in Computer/IT Rooms *	\$52,000
TOTAL COST		\$7,018,500

NEW HOPE-LAMBERTVILLE TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS
FUNDED BY THE GENERAL RESERVE FUND

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
446	Elec. Toll Collection - Video Enforcement *	\$693,000
TOTAL: Future Repair Contracts		<u>\$693,000</u>
* Commission Initiative		

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

INTERSTATE 78 TOLL BRIDGE

The main river bridge (Structure Nos. 270 and 275) is a twin, 1,222-foot long, four girder, 7-span continuous girder bridge supported on reinforced concrete hammerhead piers and reinforced concrete stub abutments. The posted speed limit on the bridge is 55 mph.

The Interstate 78 Toll Bridge carries traffic over the Delaware River between Northampton County, Pennsylvania and Warren County, New Jersey. The facility was opened to traffic on November 21, 1989.

INTERSTATE 78 TOLL BRIDGE APPROACH STRUCTURES (AND ROADWAYS)

The Commission's jurisdiction extends approximately 2.2 miles to the west at the Pennsylvania approach, including an interchange at Morgan Hill Road, grade separation bridges at Routes 206 (Cedarville Road) and 611, and a Welcome Center. The New Jersey approach extends approximately 4.7 miles to the east (not including Conrail over I-78 or the Route 173 structures) from the main river bridge, including grade separation bridges at Carpentersville Road, County Route 519, and Edge Road, and an additional bridge at the Still Valley Interchange. In total there are eleven (11) approach structures owned and maintained by the Commission that are part of the Interstate 78 Toll Bridge Facility.

INTERSTATE 78 TOLL FACILITY AND GROUNDS

The one-way toll plaza, located at the Pennsylvania approach of the westbound lanes, has seven toll lanes. All tollbooths are erected on concrete islands and are protected by an overhead canopy. All lanes are equipped for EZ-Pass. Lane 7 is still operating as a coin only lane.

The 2005 inspection included the main river bridge, eleven (11) approach structures, and the facility and grounds.

SIGNIFICANT FINDINGS

INTERSTATE 78 TOLL BRIDGE

The condition of the main river bridge is good. However, the deck slab is in satisfactory condition. Although no spalls are present, the deck slab exhibits numerous transverse cracks that are more prevalent on the eastbound bridge. Leakage is indicated by the rusted stay-in-place (SIP) forms, rusted underlying steel, and deicing salt staining below the deck.

The transverse cracks in the main river bridge are numerous and appear to be increasing in number as reported in previous inspection reports. Maintenance forces have been treating the deck cracks with water sealer as they appear. Although the structural capacity of the deck slab is unaffected, a methacrylate crack healer/sealer should be utilized until a future contract to waterproof and overlay the bridge is awarded.

Fine cracks were noticed throughout the fascia concrete overhang of both eastbound and westbound structures, with light efflorescence.

In addition to the numerous transverse cracks in the concrete deck, several transverse construction joints of the deck appear to be allowing water to infiltrate below the deck, causing rusted SIP forms. This has also caused light rusting and paint peeling to underlying steel, including main girders and their field splices.

The inside webs of fascia girders typically exhibit moderate to heavy pigeon debris, which can be detrimental to the paint system. In addition the bottom flanges of several girders typically exhibit light to medium paint peeling.

The bridge deck's expansion dams have been reconstructed under Contract T-420 in 2004. These new deck joints have improved the roadway driving surface and appear to have eliminated the previous noise issues.

The substructures are in good condition. Some areas of the epoxy coating on the bridge seats at both abutments and Pier 6 westbound are chipped and peeling off. The westbound bridge pier 6 footing (land based pier) is exposed at the south end, but rock stabilizers are in place around the foundation and no threat of instability is apparent.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract C-412A, has found the substructures of both the eastbound and westbound bridges to be in good condition, with only minor deficiencies reported.

I-78 EASTBOUND OVER ROUTE 519

Minor substructure cracking and spalls were noted. The approach slabs exhibited numerous medium to wide transverse cracks that are routinely sealed by maintenance forces.

I-78 WESTBOUND OVER ROUTE 519

The approach slabs exhibited transverse cracking and spalling which are routinely repaired by maintenance forces. In addition, there is an open channel waterway that runs along Route 519 and under both the eastbound and westbound structures that is severely eroded, but has not compromised the pier foundation.

I-78 WESTBOUND OVER ROUTE 611

The deck joint material exhibits deterioration and is in need of replacement at several locations. The approach slabs exhibited transverse cracking and spalling which are routinely repaired by maintenance forces.

I-78 EASTBOUND OVER ROUTE 611

The approach slabs exhibited transverse cracking and spalling which are routinely repaired by maintenance forces. Minor spalls, some repaired, were also noted at several end diaphragms.

SERVICE ROAD OVERPASS

No significant defects were noted at the time of this inspection.

EDGE ROAD OVERPASS

The north and south abutment slope protection exhibited minor settlement and cracking. A few stringer bottom flanges were noted to be slightly distorted, but they do not affect the structural integrity of the bridge.

I-78 WESTBOUND OVER RAMP C

The ends of several stringers exhibited minor surface rust. The approach slabs and Ramp C roadway slabs exhibited transverse cracking and spalling which are routinely repaired by maintenance forces.

I-78 EASTBOUND OVER RAMP C

A portion of the east abutment deck joint steel armoring is missing with spalling occurring at the header. The approach slabs exhibited transverse cracking and spalling which are routinely repaired by maintenance forces. The pavement along the shoulder lines of the approach roadways exhibited deterioration and cracking with potholes occurring.

CARPENTERSVILLE ROAD OVERPASS

Mapcracking was observed at the ends of the abutment backwalls. Light rust was also noted on the diaphragms. Deck joint header joint material exhibits deterioration. Bearings were noted to be slightly over expanded at both abutments.

MORGAN HILL ROAD OVERPASS

The slope protection has settled in some areas which can be repaired by maintenance forces.

CEDARVILLE ROAD OVERPASS

Some minor deterioration to the ends of the prestressed concrete beams was observed. The concrete beams show signs of the prestressing strands rusting through the ends of the beams. The bridge also exhibits some fully expanded and fully contracted deck joints due to the steep slope of the superstructure and subsequent damage to the strip seals

INTERSTATE 78 FACILITIES AND GROUNDS

The I-78 roadway in New Jersey, comprised of concrete slabs, exhibits severe transverse cracking and subsequent settlements throughout the slabs. Condition surveys were performed in 1993 and 1997 by Commission engineering, indicating a significant increase in the number of cracks over the four-year period. Pavement evaluations were performed in 1997. The evaluations depict the worst locations of the cracks. In addition the shoulders along the I-78 roadway are deteriorating and in poor condition. ***A slab stabilization and pavement design study was recently performed by Parsons Brinkerhoff under Contract C-424, which included in-depth testing and analysis of the roadway slabs. Results of this study can be found under separate cover..***

Maintenance has repaired the previously deflected CMU walls of the storage garage. A new salt storage facility was constructed in 2003 under contract T-392R.

When the toll plaza is reconstructed or reconfigured under Contract 427, the permanent attenuators (protective crash cushions) should be considered to be installed at the islands for increased protection of the traveling public and Commission employees.

The Toll Plaza Roadway approach restriping was completed in 2004 under contract T-422AR.

The pavement of the Administration building and the service road leading into the maintenance yard is in poor condition with multiple areas of cracking and distressed pavement. Additionally, the Exit 3 (Route 173) Ramp off Route I-78 is in poor condition exhibiting distressed pavement and numerous cracks.

Unlike the other DRJTBC Maintenance Facilities, some of the I-78 vehicles and equipment are unprotected from rain, snow, etc. and are stored along the parking lots due to lack of storage capacity within the buildings.

CONCLUSIONS

INTERSTATE 78 TOLL BRIDGE

The Interstate 78 Toll Bridge is in good condition. Although not as severe, the main river bridge deck slab condition resembles the Delaware Water Gap Toll Bridge regarding the numerous transverse cracks. In order to prevent corrosion of the deck steel from deicing chemicals, it is recommended that a waterproofing membrane and asphalt overlay be

installed. An overall Bridge Rehabilitation Contract should be performed. This contract should address the rehabilitation of the deck joints and/or bearings for the Cedarville Road and Carpentersville Road, as well as deck joint rehabilitation to several other approach bridges. All work pertaining to inspection, design, repair plans, and construction should also be included in the overall Bridge Rehabilitation Contract.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2005 Underwater Inspection Report.

I-78 EASTBOUND OVER ROUTE 519

The structure is in good condition with no major defects.

I-78 WESTBOUND OVER ROUTE 519

The structure is in generally good condition with no major defects. A drainage study should be performed for the channel at the Route 519 bridges to address the ongoing erosion and determine if any countermeasures are necessary.

I-78 WESTBOUND OVER ROUTE 611

The structure is in good condition. The deck joint seals should be repaired or replaced to prevent advanced deterioration of the underlying steel and pier cap.

I-78 EASTBOUND OVER ROUTE 611

The structure is in good condition with no major defects.

SERVICE ROAD OVERPASS

The structure is in very good condition. Maintenance should continue to maintain the structure as needed.

EDGE ROAD OVERPASS

The structure is in good condition with no major defects.

I-78 WESTBOUND OVER RAMP C

The structure is in good condition with no major defects.

I-78 EASTBOUND OVER RAMP C

The structure is in good condition with no major defects. The east abutment deck joint should be repaired.

CARPENTERSVILLE ROAD OVERPASS

The structure is in good condition. A bearing rehabilitation contract should be performed to address the deck joints and/or bearings at the west abutment in particular, to prevent further deterioration to the underlying steel and bridge seats.

MORGAN HILL ROAD OVERPASS

The structure is in good condition with no major defects.

CEDARVILLE ROAD OVERPASS

The structure is in good condition. A bearing rehabilitation contract should be performed to address the over expanded or over contracted deck joints due to the steep slope of the superstructure. Also, to prevent water infiltration that is causing the prestressing strands at the ends of the beams to rust.

INTERSTATE 78 TOLL FACILITY AND GROUNDS

Due to the excessive roadway slab cracking and settlement noted in the majority of the Commission-owned portion of Interstate 78 (especially the NJ portions), an Interstate 78 Roadway Rehabilitation is underway. The contract has begun with an investigation of the roadway slab condition under Contract C-424.

Permanent impact attenuators should be considered to be installed during the design of the Open Road Toll Project outlined in the Commission Initiatives.

Maintenance has indicated that the thermostat controls are obsolete and not working properly in the Operations and Maintenance Building/Welcome center. An HVAC study should be performed. ***Additionally, a study should be conducted to investigate additional vehicle and equipment storage needs.***

The administration building parking lot, maintenance lot and service road should be milled and repaved.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

INTERSTATE 78 TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
424	Interstate 78 Roadway Rehabilitation (Design, Construction, CMCI)	\$44,570,000
427	I-78 Open Road Tolling (ORT) Lanes * (Includes Impact Attenuator & ETC Video Enforcement)	\$43,308,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$4,450)	
477	District II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$98,500
<u>Facilities and Grounds</u>		
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$2,594,000
N/A	Miscellaneous Projects * (2007-2008) Gude Rail Improvements/Solar Lights Along Entrance Roadway	\$105,000
425	Storm Water Compliance *	\$50,000
480	Fire Protection System in Computer/IT Rooms *	\$52,000
TBD	Mill and Pave Facility Parking Lots and Service Roads	\$100,000

INTERSTATE 78 TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
TBD	HVAC Study and Upgrade (Design, Construction, CMCI)	\$454,000
TBD	Vehicle Storage Building	\$2,622,000
TOTAL COST		\$94,110,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
479	ITS Improvements *	\$955,000
TOTAL: Future Repair Contracts		\$955,000

* Commission Initiative

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

EASTON-PHILLIPSBURG TOLL BRIDGE

The Easton-Phillipsburg Toll Bridge (Structure No. 300) carries U.S. Route 22 traffic over the Delaware River. The bridge was opened on January 14, 1938. Westbound only toll collection commenced on June 4, 1989. The main river bridge consists of a 540 foot Petit thru-truss span over the river. The overall length, including the approaches on either end of the structure, is 1,010 feet. This four-lane bridge has a roadway width of 40 feet with 8 ft. concrete sidewalks located outside of the trusses on each side. The posted speed limit through the toll bridge facility is 25 mph.

EASTON-PHILLIPSBURG TOLL BRIDGE APPROACH STRUCTURES

The Commission's jurisdiction includes a total of five (5) approach structures. A 430-foot, five-span plate girder viaduct at the New Jersey approach (Broad Street) and a 40-foot prestressed concrete box beam span over relocated Pennsylvania Route 611 on the Pennsylvania approach. In addition, the Commission's jurisdiction also includes two bridges on the Pennsylvania side; Bank Street Overpass, Third Street Overpass, and one pedestrian tunnel.

Approximately 2,000 feet of the Pennsylvania approach was reconstructed in 1982, including new superstructures for the overpasses at Bank Street, Third Street and Pennsylvania Route 611. The center bearing truss of the Broad Street Viaduct was reconstructed in 2001.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY AND GROUNDS

The one-way toll plaza, located at the New Jersey approach, has five toll lanes. All tollbooths are erected on concrete islands and are protected by an overhead canopy. All lanes are equipped for EZ-Pass.

The 2005 inspection included the main river bridge, five (5) approach bridges and the facilities and grounds.

SIGNIFICANT FINDINGS

EASTON-PHILLIPSBURG TOLL BRIDGE

The underside of the Easton-Phillipsburg Bridge, which includes the roadway stringers, floorbeams, and the bottom chords of the trusses, has not received an in-depth inspection due

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

to the limited access to those members without the installation of scaffolding or rigging, and because of the large amount of bird debris on these members. Since bird debris is known to be caustic in nature and cause deterioration of the steel, it is recommended that the underside of bridge be cleaned of all such material and then receive a hands on in-depth inspection.

The general condition of the paint system of the above-deck truss system is fair. The bridge was last painted by contract in 1984. Localized rusting was noted on the truss with numerous areas exhibited paint peeling. Impacted rust was present on a couple of the vertical chord members as well as on the lower chord gusset plate connections. Discoloration was also noted, mostly at the steel above and adjacent to the two right lanes, due to the exhaust fumes from diesel trucks. The floor system paint condition also appeared satisfactory, but with heavy bird debris throughout. Impacted rust was noted between several bridge members and the gusset plate connections.

Transverse cracks were exhibited on the main span's fiber-modified wearing course (with Rosphalt asphalt base course), mainly over floorbeam locations where underlying steel deck repairs were performed by maintenance forces. The patched areas are showing signs of deterioration with cracking and spalling. Sealed longitudinal cracks were also noted in the asphalt in the left lanes of both directions.

The sidewalk reconstruction contract was performed under Contract T-420 and was completed in 2004.

Cover plates over the openings of vertical box members at the sidewalk level were noted to exhibit heavy impacted rust, section loss, and perforations. Several cover plates were missing. Maintenance forces should repair and/or replace the plates.

Bird nesting and debris under the bridge deck of the main span continues to be a problem. Extremely heavy pigeon and starling debris and random nests were noted below deck on all floorbeams, lower chords, bracing, and on the insides of all upper box truss members. High acid levels in the droppings are detrimental to the paint system.

Three cracked welds were discovered in the sign supports attached to the bridge in the westbound lanes. Since the support structure is welded in numerous locations these cracked welds are not significant and no immediate repairs are recommended at this time.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract C-412A, has found the substructures to be in good condition. No major problems were noted at either abutment in the underwater inspection report.

BROAD STREET VIADUCT

Several structural steel members exhibited areas of corrosion beneath the deck joints along curb openings and those exposed directly to the elements. Bearings exhibit light to moderate rusting, especially the base of masonry plates.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

The deck overlay exhibits areas of transverse cracking and various areas of bituminous patches. Deterioration was also exhibited near the deck joints. Subsequently, several areas of the underside SIP forms exhibit corrosion, including the sidewalk.

Also at the Broad Street Viaduct, the vertical cracks, noted during the 1998 inspections at Piers 2, 3 and 4 on the vertical connection angles and repaired in 1999, appear to be in satisfactory condition. The repaired crack at Pier 3 crack was observed at the inside face of the south fascia girder. At Pier 2 and 4 the repaired cracks were observed at the floorbeam-kneebrace vertical connection angle at the north girder. Cracks begin at the base of the vertical connection angle adjacent to the floorbeam bottom flange and extended along the fillet of the angle. All repairs appear to be holding and no increase in crack sizes was noted.

Cracks were also noted in the base plates of the bridge railing posts at the north and south side of the Broad Street Viaduct. This condition was more prominent at the north side and in the center spans where the bridge curvature is the greatest.

The bird netting in span 1 has been removed and should be replaced (Maintenance).

THIRD STREET OVERPASS

The deck joints are in poor condition. These joints, not included in the Rt. 22 repaving project in 2000, exhibit deteriorated strip seals, spalled/cracked header concrete and overall unevenness. The joints are also noted to be actively leaking with minor rusting to the ends of the fascia stringers. In addition, most of the pavement relief joints are also deteriorated.

PEDESTRIAN TUNNEL

There were no significant defects at the time of the inspection.

BANK STREET OVERPASS

The deck joints are in poor condition. These joints, not included in the Rt. 22 repaving project in 2000, exhibit deteriorated strip seals, spalling header concrete and settled/missing joint material. Most joints are also noted to be actively leaking. In addition, most of the pavement relief joints are also deteriorated.

The underside of deck overhang exhibited areas of spalling with exposed reinforcement and efflorescence. A number of the bearing anchor bolts on the abutments and piers have sheared off or are missing anchor bolts and exhibit light exfoliated rust. The upper portions (barrier) at the northwest and northeast retaining walls exhibit areas of spalling and delaminated concrete throughout.

The inlet at the northwest corner of the bridge has settled with erosion of the roadway slab subbase material adjacent to the inlet. The concrete sidewalls of the inlet have also spalled with several areas of missing and broken concrete. A possible cause of the deficiency is due to the clogging of the drain pipes, allowing runoff to fill the inlet and erode the roadway

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

slab subbase material adjacent to the inlet and deteriorating the concrete inlet walls. In addition, a cracked inlet grate was observed along Third Street just north of the Bank Street Overpass.

ROUTE 611 OVERPASS

The concrete deck and deck joints are deteriorated throughout and have numerous patches, spalls and deteriorated joint material. Maintenance has routinely patched spalls and sealed cracks in the deck and deck joints. The west approach slabs exhibited cracking, spalling and areas of deteriorated bituminous patching.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY AND GROUNDS

Several existing slabs adjacent to the Toll Plaza exhibit medium to wide cracking, spalling and locations of settlement. There are also areas of spalling and cracking along the exit ramp curb east of the toll plaza. In general, the slab replacements and overall toll plaza area are in satisfactory condition with the exception of a few slabs, curbs and pavement relief joints in poor condition.

The steep embankments located at the east and south sides of the maintenance yard, adjacent to the Broad Street ramp, were previously noted to exhibit signs of localized slope failure. Eroded embankment was noted at the base of the slope. These areas appeared stable at the time of this most recent inspection.

The current diesel fuel storage tank, used by Maintenance forces for Commission owned vehicles should be studied to determine if it needs to be upgraded. The current diesel fuel tank has a capacity of 250 gallons and the fuel is dispensed with a hand operated pump. The fuel storage facility at Easton-Phillipsburg is not the same capacity and operation as the other toll facilities.

The roof on the administration building and maintenance garage have exhibited numerous leaks in the past at several locations. Water has previously leaked through the garage roof directly above high-voltage lines, staining walls in the garage. Several other leaking areas have caused staining of the ceiling tiles. The vents in the garage roof are also severely deteriorated. Maintenance forces have covered them with plywood to prevent further water leakage. Maintenance forces are addressing the leaks as they occur with remedial repairs. The roof and vents on the maintenance facility should be analyzed to estimate the costs of replacement.

CONCLUSIONS

EASTON-PHILLIPSBURG TOLL BRIDGE

The main river bridge is in satisfactory condition and is structurally adequate to carry legal highway loading at the time of this most recent inspection. ***This is based upon the areas of the bridge that are accessible.***

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

Access for inspection purposes to the main river span is limited. No underbridge inspection platform exists, and the configuration of pedestrian walkways on the structure effectively preclude the use of underbridge inspection units. Additionally, Commission owned lift trucks are unable to reach the top chords of the main trusses. For these reasons, annual inspection and maintenance operations (i.e. cleaning) have been limited.

It is recommended that a design contract be awarded, which will include but not be limited to, preparing plans and specifications for the cleaning of the underside of the bridge. Following cleaning operations, while the rigging is in place, an in-depth inspection can be performed.

A rehabilitation contract should be performed for the bridges in this facility. An In-Depth Inspection and Rating should be performed to determine the extent of required repairs. Design and repair plans should also be developed to include, at a minimum, the following items:

- Blast cleaning and painting operations
- Mill and repave the main river bridge with an appropriate polymer modified asphalt
- Bird netting installation
- Installation of under bridge inspection access system
- Approach roadway rehabilitation (Rt. 22)

BROAD STREET VIADUCT

The Broad Street Viaduct is in satisfactory condition. The following is a list of recommended repairs:

- Blast cleaning and painting
- Mill and repave with an appropriate polymer modified asphalt and deck/deck joint repairs
- Longitudinal trough drainage improvements to Broad Street Viaduct at curbs
- Substructure repairs and waterproofing
- Sidewalk and railing repairs

ROUTE 611 OVERPASS

The Route 611 Overpass is in satisfactory condition. Deck joint and/or deck reconstruction is recommended and should be included with any approach roadway work.

BANK STREET OVERPASS

The Bank Street Overpass is in satisfactory condition. Deck joint reconstruction and bearing repairs and cleaning/coating the ends of beams and bearings are recommended for this structure.

The inlet at the northwest corner of the bridge and the inlet along Third Street should be repaired (Maintenance).

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

THIRD STREET OVERPASS

The Third Street Overpass is in satisfactory condition. Deck joint reconstruction and cleaning/coating the ends of beams and bearings is recommended.

PEDESTRIAN TUNNEL

The Pedestrian tunnel is in very good condition. Maintenance should continue to perform routine maintenance, as necessary.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY AND GROUNDS

The overhead sign support structure attached to the south fascia of the Broad Street Viaduct, exhibits corrosion, a deteriorating base and peeling paint. The sign support structures on the Pennsylvania approach are in a similar condition. Cracked welds have been found on the bridge mounted sign structures over the westbound lanes near midspan of the main river bridge. Complete replacement of the three sign structures is recommended. A sign structure study has been completed under Contract C-367-B, and construction will take place at the end of 2006.

The deteriorated and cracked concrete slabs on the west side of the Toll Plaza should continue to be replaced. Several of the easterly concrete slabs, especially the westbound lanes, should also be replaced.

A study should be performed to determine the need to replace the diesel fuel storage tanks.

A study should be performed to determine the future salt storage requirements for this facility.

The roof on the administration building and garage should be replaced.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS **FUNDED BY THE GENERAL RESERVE FUND**

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
436	Sign Structure Replacements, Repairs & Signage Upgrades (Completed in 2006, \$2,711,000)	
437A	E/P Toll Bridge Facility Rehabilitation (Design, Construction, CMCI)	\$10,296,000
477	District II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$9,600
464A	Clean and Inspect Main Truss	\$1,517,000
TBD	Underbridge Access Platform (Design, Construction, CMCI)	\$500,000
<u>Facilities and Grounds</u>		
475	AST Diesel Fuel Storage Tank Replacement	\$83,000
470	Replace Roof System on Admin. Building and Garage	\$514,000
480	Fire Protection System in Computer/IT Rooms *	\$52,000
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$2,334,000
N/A	Miscellaneous Projects * (2007-2008)	\$85,000
425	Storm Water Compliance *	\$50,000

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
TBD	HVAC Study and Upgrade (Design,Construction, CMCI)	\$560,000
TOTAL COST		\$16,157,100

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
479	ITS Improvements *	\$955,000
446	Elec. Toll Collection - Video Enforcement *	\$866,000
TOTAL: Future Repair Contracts		\$1,821,000

* Commission Initiative

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

PORTLAND COLUMBIA TOLL BRIDGE

The Portland-Columbia Toll Bridge Facility (Structure No. 400) opened to traffic on December 1, 1953 and converted to westbound only toll collection on May 25, 1989, connects Pennsylvania Route 611 at Portland, Pennsylvania with U.S. Route 46 at Columbia, New Jersey. US Route 46 merges with Interstate 80 located just north of the bridge on the New Jersey approach.

The main river bridge consists of a ten-span steel girder system with an approximate total length of 1,309 feet, a 32-foot curb-to-curb-width and a posted speed limit of thirty five miles per hour. A rehabilitation contract performed in 1992 included replacement of the existing concrete deck with a cast-in-place deck and concrete safety parapets. The combination sidewalk and maintenance-walk were removed and a new lighting system on the downstream side of the main bridge installed. Approach roadway improvements (NJ and PA) and new drainage systems were also implemented. More recently in 1998, the main river bridge, the pedestrian bridge 1,000 feet north of the toll bridge, and approach structures were cleaned and painted by contract.

The substructures consist of reinforced concrete piers and concrete bin abutments. All substructures are founded on spread footings, except for pier 8, which is founded on piles. The piers are partially granite faced.

PORTLAND COLUMBIA APPROACH BRIDGES

The Commission's jurisdiction on the New Jersey approach includes two additional bridges: the US Route 46 and Locust Street Overpasses. Deck and barrier replacements were made on these two bridges in conjunction with the main river bridge's 1992 rehabilitation contract.

PORTLAND COLUMBIA TOLL BRIDGE FACILITY AND GROUNDS

The one-way toll plaza, located at the Pennsylvania approach, has three toll lanes. All tollbooths are erected on concrete islands and are protected by an overhead canopy. All lanes are equipped for EZ-Pass.

The 2005 inspection included the main river bridge, two (2) approach structures, and the facility and grounds.

SIGNIFICANT FINDINGS

PORTLAND COLUMBIA TOLL BRIDGE

The bridge was repainted in 1998. The paint is in good condition.

Fine to medium transverse cracks were observed throughout the main river bridge concrete deck. Above-deck transverse cracks, more prevalent in the middle bay, were also noted below-deck with efflorescence and indicates water infiltration.

The side bracket on the Pier 6 north bearing of span 7, which allows rotation of the bearing during expansion, was repaired subsequent to the 2003 inspection.

Several locations of steel, although cleaned and painted in 1998, exhibit small perforations or noticeable section losses, pitting and pack rust especially at support locations and the exposed fascias.

The two cantilever sign structures attached to the bridge are not plumb and level. The sign panels were recently replaced along with the EZ-Pass upgrades.

ROUTE 46 OVERPASS

No significant defects were observed at the time of this year's inspection. The paint system is in overall good condition. Maintenance forces should continue to perform routine maintenance as needed.

LOCUST STREET OVERPASS

The paint system is in overall good condition. The deck joints are leaking at the piers due to deteriorated joint material and gaps at the headers. The leaking is causing rust to the underlying steel and staining on the pier caps. In addition, concrete repairs made to the piers have begun to crack and spall.

PORTLAND COLUMBIA TOLL BRIDGE FACILITY AND GROUNDS

The maintenance parking lot is in fair to poor condition with overall unevenness and cracking of the asphalt pavement. In addition, the additional storage yard and the driveway are in poor condition with numerous areas of deteriorated pavement.

The roof on the maintenance garage and administration building has been replaced in 2006 under Contract 470.

The HVAC controls are original to when the facility was built approximately 20 years ago. Maintenance has indicated that the controls are not working properly and that repair parts are difficult to find.

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

Permanent impact attenuators (protective crash cushions) should be installed at the islands for increased protection of the traveling public and Commission employees.

The paint system on the overhead sign structure over the eastbound roadway located at the west approach is in poor condition with areas of rust.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc under Contract C-412A was found to be in good condition. However, the report recommended spill repairs, crack repairs, and riprap channel protection around Pier 5 through 8 .

Maintenance has indicated that the salt storage capacity is insufficient for the entire district. Additionally, the current facility is constructed of CMU walls and exhibits signs of deterioration in areas of direct contact with salt; additionally, the roof exhibited impact damage.

CONCLUSIONS

PORTLAND COLUMBIA TOLL BRIDGE

The main river bridge is in good condition and is considered to be structurally adequate to carry legal highway loads at the time of this year's inspection. The locations of steel that exhibited small perforations or noticeable section losses, pitting and pack rust at the exposed fascias have been evaluated and due to the location and extent of the deficiencies it does not affect the load carrying capacity of the bridge.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2005 Underwater Inspection Report.

ROUTE 46 OVERPASS

The US Route 46 Overpass is in very good condition. Maintenance should continue to make repairs as needed.

LOCUST STREET OVERPASS

The Locust Street Overpass is in satisfactory condition. The bridge deck joints should be reconstructed (or at minimum new strip seals) to prevent advanced deterioration of the bearings and pier caps. Also, drainage troughs should be considered beneath the pier deck joints. Interim substructure repairs have been made by maintenance forces. A Rehabilitation Contract should be performed that would include the in-depth inspection, design and repair plan development for the bridge.

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

PORTLAND COLUMBIA TOLL BRIDGE FACILITY AND GROUNDS

The maintenance (rear) parking lot and areas of the storage yard access should be reconstructed.

The facility's sanitary system should be upgraded and connected to the municipal system to avoid any potential problems with the current septic system.

A study of the sign structures at the Portland-Columbia Facility should be conducted to determine conformance with MUTCD requirements and the need for strengthening/replacing the structures.

A study should be performed on the HVAC controls to determine what components need upgrading, or if the entire system should be upgraded.

Permanent impact attenuators should be installed at the toll plaza.

A study is recommended to be performed to determine the District's deicing requirement. The study should include but, not limited to determining salt storage capacity, storage location, type of storage and any additional deicing capabilities.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
441	Locust Street Bridge Rehabilitation (Design, Construction, CMCI) Includes Impact Attenuators @ Toll Plaza	\$676,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$5,000)	
477	District II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$109,000
<u>Facilities and Grounds</u>		
439	Replace Roof System on Administration Building and Garage (Completed in 2006, \$307,300)	
480	Fire Protection System in Computer/IT Rooms *	\$52,000
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$1,500,000
N/A	Miscellaneous Projects * (2007-2008)	\$43,000
425	Storm Water Compliance *	\$50,000
TBD	Rear Parking lot, Storage Yard and Driveway Paving	\$268,000
TBD	Maintenance Deicing Study and Implementation	\$1,152,000

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
TBD	HVAC Study and Upgrade (Design, Construction, CMCI)	\$560,000
TBD	Municipal Sanitary Upgrade	\$650,000
471	PC Signage Study	\$78,000
TOTAL COST		\$5,294,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
446	Elec. Toll Collection - Video Enforcement *	\$519,000
TOTAL: Future Repair Contracts		\$519,000

* Commission Initiative

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

DELAWARE WATER GAP TOLL BRIDGE

The Delaware Water Gap Toll Bridge (Structure Nos. 380 & 390) carries Interstate 80 across the Delaware River near Stroudsburg, Pennsylvania, providing a 'gateway' from eastern metropolitan districts to the Pocono recreational areas. Through Pennsylvania, the four-lane limited access highway crosses the width of Pennsylvania to the Ohio border and directly connects to the Ohio Turnpike. On the New Jersey side, Interstate 80 connects the Delaware Water Gap Bridge to the George Washington Bridge.

The toll bridge, built by the Commission and opened on December 16, 1953, is a twin, multi-span, steel plate girder bridge 2,465 feet in length. The dual roadways are each 28 feet wide (curb to curb), separated by an aluminum median barrier. A 5-foot wide sidewalk is located on the south side of the eastbound roadway, separated from the travel lanes by a concrete barrier. The speed limit on the approach roadways is fifty miles per hour.

Major rehabilitation work was completed in 1989, which included reconstruction of the toll plaza for one-way toll collection (8 total, westbound), deck replacement, the construction of a New Jersey approach pedestrian walkway, toll plaza access tunnel, and miscellaneous pavement replacements. Other work included in this contract consisted of the installation of the aluminum median barrier, lighting and signing. All toll lanes are equipped for EZ-Pass.

DELAWARE WATER GAP TOLL BRIDGE FACILITY AND GROUNDS

The one-way toll plaza, located at the Pennsylvania approach, has seven (7) toll lanes. All tollbooths are erected on concrete islands and are protected by an overhead canopy. All lanes are equipped for EZ-Pass.

The 2005 inspection included the eastbound and westbound main river bridges and the facility and grounds.

SIGNIFICANT FINDINGS

DELAWARE WATER GAP TOLL BRIDGE FACILITY

The cast-in-place microsilica concrete (bridge deck slab) roadway and sidewalk deck, installed in 1989, exhibits numerous fine to medium transverse cracks. These cracks were formed during initial pouring procedures. Cores taken in 1989 and again in 1996 showed cracks to have grown to a maximum width of 1/16" at some locations, and also showed no signs of corrosion to reinforcement. The most recent inspection revealed little to no rust on

DELAWARE WATER GAP TOLL BRIDGE FACILITY

the stay-in-place forms below and no significant changes in the cracks on the deck slab surface. The transverse cracking throughout the bridge deck (including the sidewalk overhang) does not pose a structural concern at this point. Although the visible portions of the deck appear unaffected, remedial action should be taken to prevent water infiltration through the cracks and the creation of future structural problems.

Longitudinal cracks were also exhibited throughout the bridge deck. Cracks appear to be located over stringer locations. Water laden with deicing chemicals penetrating the combination of transverse and longitudinal cracks may eventually cause spalling in the deck.

The paint condition of the bridge is in generally fair condition (last painted in 1978), with the exception of interior (median) and exterior fascia girders on both roadways, which exhibit moderate rusting and exfoliated rust. The median girders and fascia girders often exhibit moderate to severe impacted rust between the bottom flange plates as well as a build-up of debris. Fascia girders also exhibit rusting at the former sidewalk bracket locations. Most steel exhibits random paint peeling and areas of concrete staining occurring from the 1989 deck replacement.

Bearings also exhibit moderate to heavy rusting, with minor section loss to nuts and bolts; exposed fascia bearings exhibit the worst condition. Rocker bearings have begun to wear depressions into the masonry plates at several bearing locations. Numerous keeper angles (providing restraint against transverse movement) at the expansion bearings exhibit severe wear and rust at the retainage bolt locations. Some retainage bolts were noted to be missing.

The deck joints on the bridge are an additional concern. Deck joints, rebuilt during the deck replacement of 1989, are comprised of steel plates welded to the original finger joints, combined with steel angle armoring and strip seals. The "Seva" patch material, used as the joint header material, is showing signs of separation from the steel armoring as well as the adjacent concrete deck, allowing water to infiltrate to underlying steel and the bearings. The header material has also settled slightly and has formed medium to large spalls at some locations. Vehicular impact is escalating the deterioration. Maintenance has been repairing spalls as they develop.

It has been noted that an elevation difference is apparent at the deck joints between adjacent spans. This is most notable at Piers 3W and 4W. The differences appear to be unchanged from the last inspection. Measurements were also taken of the bearings and adjacent masonry. See the monitoring program for specific measurements.

An upper substructure partial rehabilitation was performed by Maintenance forces. Unsound concrete was removed at numerous locations on the upper portion of piers, which exposed reinforcing steel at several locations. This reinforcing steel was cleaned and epoxy coated. Due to the work effort involved, all such areas should be patched by an outside contractor to provide concrete cover over the currently exposed reinforcement bars.

DELAWARE WATER GAP TOLL BRIDGE FACILITY

Additional areas of unsound concrete and incipient spalling were also noted. Most of the damage was noted on the east face of substructures.

The bridge mounted cantilever sign structure is not plumb and level. All members of the structure, including the bridge attachments, exhibit heavy rust. Maintenance forces noted a deflection of the sign structure when the current sign panel was installed. It was observed that the sign structure is deflected, however this deflection does not appear to affect the structural capacity of the sign structure.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract C-412A, has found the substructures to be in satisfactory condition for both the eastbound and westbound bridges, due to the spalls with exposed and rusted rebar on the concrete pier caps and stems and exposure of footings with no undermining.

DELAWARE WATER GAP TOLL APPROACH ROADWAYS

Reconstruction of the Service Road in New Jersey, which included milling and re-paving from the concrete pavement portion of the roadway east to the Commissions jurisdiction limit with the National Park Service was underway at the time of this years inspection.

The storm water outfalls and embankment slope improvements along the New Jersey Service Road have been reconstructed.

The concrete retaining wall adjacent to the Delaware River, just south of the eastbound bridge and New Jersey Service Road, exhibits moderate to heavy spalling and scaling throughout the upper portions of the wall and barriers.

DELAWARE WATER GAP TOLL BRIDGE FACILITY AND GROUNDS

The District III Superintendent has requested that the existing Maintenance Facility be expanded. The maintenance garage currently does not have bathroom facilities, locker room facilities and lunch room facilities as are present in the other Commission toll facilities. Several of the Commission vehicles are parked outside in the elements and away from the other equipment at this toll facility. A training/meeting room for the District is requested to allow for uninterrupted meetings that normally take place in the garage area. It is anticipated that this building expansion would be a two-story addition.

The roof on the maintenance garage and administration building has been replaced in 2006 under Contract 439.

Permanent attenuators (protective crash cushions) should be considered for installation at the islands for increased protection to the traveling public and Commission employees.

Maintenance has indicated that the salt storage capacity is insufficient for the entire district. In the event of a major snowstorm, a shortage of salt may occur.

CONCLUSIONS

DELAWARE WATER GAP TOLL BRIDGE

The bridge is in overall satisfactory condition and is structurally adequate to carry legal highway loading at the time of this year's inspection. The main river bridge and other Commission owned facilities appear to have been well maintained over the years.

A substructure and bearing rehabilitation contract is recommended for this facility. Repair plans should then be developed (including design) for bearing keeper plates, substructure repairs and any other required repairs. A deck condition survey should be performed due to the fine cracks observed throughout the deck.

In addition, a future rehabilitation contract is recommended for this facility. An In-Depth Inspection and Rating should be performed to determine areas requiring rehabilitation. A bridge deck condition study should also be included to determine if any deterioration has occurred. Blast cleaning and painting should also be included. Under this contract, it is recommended that a membrane waterproofing, capable of stopping reflective cracking, and an asphalt overlay be placed on the deck to prevent water seepage into the cracks. New deck joints should be included. Additionally, permanent impact attenuators should be considered to be installed at the toll plaza.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2005 Underwater Inspection Report.

DELAWARE WATER GAP TOLL BRIDGE APPROACH ROADWAYS

Repairs to the concrete retaining wall adjacent to the Delaware River, just south of the eastbound bridge and New Jersey Service Road should be included in the bridge rehabilitation contract.

DELAWARE WATER GAP TOLL BRIDGE FACILITY

DELAWARE WATER GAP TOLL BRIDGE FACILITY AND GROUNDS

A study for the expansion and modifications of the Maintenance Garage is recommended.

A study should be performed on the HVAC controls to determine what components need upgrading, or if the entire system should be upgraded.

A study is recommended to be performed to determine the District's deicing requirement. The study should include but, not limited to determining salt storage capacity, storage location, type of storage and any additional deicing capabilities.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

DELAWARE WATER GAP TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
395	Northerly Corridor Congestion Mitigation Study * (Completed in 2006, \$562,500)	
440	DWG Open Road Tolling (ORT) Lanes & One Additional WB Lane * (Includes Impact Attenuators and ETC Video Enforcement)	\$4,486,000
472	Substructure and Bearing Remediation Contract	\$1,189,000
473	Deck Condition Survey	\$104,000
366	Substructure & Scour Remediation Contract, (Inspection) (2005 Underwater Inspection - Completed in 2006, \$10,300)	
477	District II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$252,000
<u>Facilities and Grounds</u>		
439	Replace Roof System on Admin. Building and Garage (Completed in 2006, \$397,000)	
474	Maintenance Garage Expansion	\$2,610,000
480	Fire Protection System in Computer/IT Rooms *	\$52,000
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$2,419,000
N/A	Miscellaneous Projects * (2007-2008)	\$106,000
425	Storm Water Compliance *	\$50,000

DELAWARE WATER GAP TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
TBD	HVAC Study and Upgrade (Design,Construction, CMCI)	\$560,000
TOTAL COST		\$11,984,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
479	ITS Improvements *	\$955,000
440	DWG Open Road Tolling (ORT) Lanes & One Additional WB Lane *	\$187,600,000
TOTAL: Future Repair Contracts		\$188,555,000

* Commission Initiative

GENERAL

In accordance with the Commission's Bridge Inspection Policy, this Toll bridge Facility was last inspected in 2005. The following is therefore taken from the 2005 Annual Inspection Report. Modifications to this report have been identified in bold and italic text.

MILFORD MONTAGUE TOLL BRIDGE

The Milford-Montague Toll Bridge (Structure No. 400) is the northern-most toll bridge across the Delaware River under the Commission's jurisdiction. Located seven miles south of the New Jersey/New York state line, the bridge connects U.S. Route 206 at Montague, New Jersey to U.S. Routes 6 and 209 at Milford, Pennsylvania.

The toll bridge, built by the Commission and opened to traffic on December 30, 1953, is a four-span continuous steel deck truss bridge approximately 1,150 feet in total length. The two-lane bridge has a roadway width of 27 feet 6 inches, with a 4 foot sidewalk located on the outside of the north truss. At the Pennsylvania approach, there are three westbound toll collection lanes that are protected by a canopy and founded on concrete islands. The three toll lanes are equipped for EZ-Pass. The posted speed limit on the New Jersey Approach is forty miles per hour.

MILFORD MONTAGUE TOLL BRIDGE FACILITIES AND GROUNDS

In 1982 the original deck was replaced with precast concrete deck panels and stringers were relocated (and a fifth stringer added) for the addition of the cantilevered sidewalk. Also included in this 1982 rehabilitation project were modifications to the substructures and bridge lighting, and the addition of the aluminum safety barriers. Maintenance forces finished the reconstruction of the Pennsylvania toll plaza in 1999, converting it to one-way tolls. This project included removing two toll booths and their respective lanes, canopy and reconstructing slabs and installing median barrier and impact attenuators on the ends of the median barrier. In 1998 the New Jersey approach was milled and repaved by contract.

The 2005 inspection included the main river bridge and maintenance facility and grounds.

SIGNIFICANT FINDINGS

MILFORD MONTAGUE TOLL BRIDGE

The overall paint condition of the superstructure is fair, with many areas of localized poor conditions. The bridge was last sand blast cleaned and painted by contract in 1971.

The deck is composed of precast concrete deck panels, which were installed in 1982. Overall the panels are in structurally good condition with localized areas of spalling and exposed reinforcement. However, the transverse joints between precast panels, as well as

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

the full-length longitudinal joint, have a history of leaking. Heavy rusting with localized losses was noted below the deck at the median stringer, locally on adjacent stringers, and at floorbeams beneath panel and deck joints. Transverse cracks with efflorescence were also exhibited on the underside of the concrete deck panels directly beneath transverse joints, as well as other random locations. Maintenance forces have performed remedial repairs by sealing the transverse joints as a regular maintenance item, but evidence of water infiltration noted in localized areas during the inspection. In addition, loose concrete has been removed and any exposed reinforcement has been sealed with epoxy to prevent rusting.

No deck joint drainage trough is present beneath the west abutment finger joint. Water drains directly onto the bridge seat and down the abutment walls. This water leakage is most likely the cause of the past deterioration of the slope protection and swales in front of the west abutment. Maintenance forces have repaired the slope protection and swales. Underlying steel, including the bearings, also exhibit moderate rusting.

There is a slight difference in elevation (approximately $\frac{1}{4}$ "') at the east abutment deck joint that has the potential to snag a snow plow.

At several locations, the bridge scupper pipes are located directly above structural steel, causing water to drop onto underlying steel such as gusset plates and crossbracing. Rust is developing at these locations, especially the bottom chord.

The top and bottom truss chord inverted I-beam was noted to exhibit light rust with water staining in the horizontal web.

The deck slab expansion joints, located at pier and abutment locations, showed severe signs of leakage, signified by the moderately to severely rusted floorbeams, stringers, and diaphragms at these locations. Stringer support to floorbeams exhibited moderate to severe section loss to bolts, nuts and seat brackets.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract C-412A, has found the substructures to be in good condition. Although no undermining was observed during the underwater inspection, the Pier 2 footing was found to be partially exposed.

MILFORD MONTAGUE TOLL BRIDGE FACILITIES AND GROUNDS

At the Pennsylvania approach, just east of the toll plaza, the concrete slabs exhibit severe slab deterioration. Numerous wide cracks and medium to large spalls throughout the slabs and inlet areas were present. The pavement relief joint has also deteriorated. The westbound toll plaza concrete slabs, west of the toll plaza, were recently rehabilitated by Maintenance forces in 1999 and 2000 and appear to be in generally good condition with minor patched areas.

The roof on the maintenance garage and administration building has been replaced in 2006 under Contract 439.

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

The water storage system for the facilities is showing signs of distress. The pressure vessel, original to the 1953 construction, utilizes mercury controllers and is in need of relining. Water pressure has been an issue and on occasions, the toilets will not flush. Due to the distance to the nearest fire hydrant, fire protection at the facility is below that of other toll bridge facilities. ***This work would include upgrades to the water supply system and connection to the public water supply.***

Permanent attenuators (protective crash cushions) should be considered to be installed at the islands for increased protection to the traveling public and Commission employees.

The paint system is failing on the steel cantilever sign structures with multiple areas of light rust. According to Maintenance, the sign panels also appear to have lost their reflectivity.

Maintenance has indicated that the salt storage capacity is insufficient for the entire district. In the event of a major snowstorm, a shortage of salt may occur.

CONCLUSIONS

MILFORD MONTAGUE TOLL BRIDGE

The toll bridge is in overall fair condition and is structurally adequate to carry legal highway loading at the time of this year's inspection.

A design contract for the Rehabilitation of the Milford-Montague Toll Bridge (Contract C430-A) is underway. Some of the proposed improvements are as follows:

- Structure Rehabilitation (Including Substructure and Superstructure, above the Waterline);
- Approach Roadway Rehabilitation/Reconstruction (including NJ/PA intersections)
- Drainage Improvements
- Slope Reconstruction and Stabilization of areas immediately surrounding scupper outfalls
- Roadway Signing and Sign Structures
- Blast Cleaning and Painting (Bridge Superstructure)
- Bridge Deck Rehabilitation
- Toll Plaza Rehabilitation
- Parking Lot Reconstruction

The finger deck joint at the west abutment should be given a trough system beneath the dam opening (similar to the east abutment) to collect water and debris. Prior to the rehabilitation above, Maintenance forces should maintain awareness of the east abutment finger joint snag potential when plowing.

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

Bridge scuppers should be re-directed so the water does not fall onto structural steel. This could be accomplished by the extending the drain pipes below the structural steel. Small drainage “weep” holes should also be considered in the truss' bottom chord I-beams. This work should be included in the Rehabilitation contract.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed under a separate contract and should include repair of any substructure deterioration and scour countermeasures noted in the 2005 Underwater Inspection Report.

MILFORD MONTAGUE TOLL BRIDGE FACILITIES AND GROUNDS

The sign panels on the sign structures should be replaced with reflective panels and should be analyzed for MUTCD conformance. The deteriorated cantilever sign structure on the west approach should be replaced. All work will be included in the bridge rehabilitation contract.

The need for permanent impact attenuators should be investigated under the rehabilitation design Contract C430-A.

It is recommended that the water supply be upgraded. Upgrades to the water supply system and connection to the public water supply is underway under Contract T-432A.

A study is recommended to be performed to determine the District's deicing requirement. The study should include but, not limited to determining salt storage capacity, storage location, type of storage and any additional deicing capabilities.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
430	Rehabilitation Contract (Design, Construction, CMCI)	\$18,526,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$4,000)	
477	District II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$78,000
<u>Facilities and Grounds</u>		
439	Replace Roof System on Admin. Building and Garage (Completed in 2006, \$279,000)	
432	Municipal Water Supply Upgrade	\$657,000
480	Fire Protection System in Computer/IT Rooms *	\$52,000
N/A	Asset Management Program *	\$156,500
396	Electronic Surveillance Detection System *	\$1,650,000
N/A	Miscellaneous Projects * (2007-2008)	\$74,000
425	Storm Water Compliance *	\$50,000

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
TBD	HVAC Study and Upgrade (Design, Construction, CMCI)	\$397,000
TOTAL COST		\$21,640,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
446	Elec. Toll Collection - Video Enforcement *	\$519,000
TOTAL: Future Repair Contracts		\$519,000

* Commission Initiative

ANNUAL INSPECTION REPORTS

TOLL SUPPORTED BRIDGES

LOWER TRENTON BRIDGE

GENERAL

The Lower Trenton Bridge (Structure No. 40), also known as the ‘Trenton Makes’ Bridge, carries Bridge Street traffic from Trenton, New Jersey to Morrisville, Pennsylvania; one of three bridges connecting these two towns.

The superstructure is a five-span subdivided Warren Truss built in 1928, with a total length of approximately 1,022 feet. The roadway consists of two lanes, one lane in each direction separated by the center truss. The substructure, originally built in 1804, widened and raised in 1874, consists of stone masonry.

The downriver truss displays the “Trenton Makes The World Takes” sign which is mounted to the truss members; hence, the nickname ‘The Trenton Makes Bridge’. The original sign was erected in 1935 and replaced in 1981.

The bridge is currently posted for a five-ton weight limit restriction and a twenty-five mile per hour speed limit. The bridge is also posted for a ten-foot vertical clearance.

In accordance with Commission’s bridge inspection policy, this structure was inspected in 2006. This inspection included all five (5) spans, the substructure units and the west approach roadway. The east approach bridge is NJDOT owned and was not part of the inspection.

SIGNIFICANT FINDINGS

The bridge appears to be in good condition.

The structure has undergone extensive cleaning and painting of the above deck structural steel and sidewalk railings. As part of this renovation project, a new “Trenton Makes” sign has been installed addressing the lighting and maintenance problems associated with the old sign technology.

The sway frame between the center and outer trusses exhibits old impact damage at a few locations. Missing rivets (2 of 35 rivets) were found at the center truss top chord connection in span 4. The missing rivets and impact damage do not affect the structural capacity of the connections.

Rust stains were observed throughout the metalized superstructure, as a result of light rusting of the open grate steel decking. The steel members that were inaccessible during cleaning and metalizing in 1997, in particular portions of the truss bottom chord, are rust staining the adjacent steel since they do not have a protective coating. The bearings exhibited minor corrosion and deterioration of the anchor bolts, none of which are of major concern at this time.

LOWER TRENTON BRIDGE

The substructures are in generally good condition above the waterline. The lower portions of the west abutment exhibited loose or missing mortar joints. In general mortar joints of the substructures below high water line are deteriorating.

The officer's shelter located on the Pennsylvania side of the bridge has been replaced in 2006.

An upgrade of the traffic signals at the intersection of Warren and Bridge Streets, and Warren Street and the Route 1 Ramp was performed in 2006 by the New Jersey Department of Transportation (NJDOT) via a purchase order issued to NJDOT by the Commission.

The east abutment deck joint sealer in the westbound lanes has become dislodged allowing water to infiltrate on to the bridge seat.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., has found the substructures to be in fair condition. The underwater inspection noted that the upstream portion of the substructures exhibited undermining of the concrete aprons and the PA abutment's upstream retaining wall also exhibited scour along the full length. The upstream end of pier 3 exhibited split and missing stone masonry and deteriorated mortar joints. Estimated repair costs have been included in this report.

CONCLUSIONS

The bridge is in overall good condition and is structurally adequate to carry the posted weight limit at the time of the inspection.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2005 Underwater Inspection Report. Pointing of deteriorated mortar joints should also be addressed.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

LOWER TRENTON BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
398	Rehabilitation Contract (Design, Construction, CMCI) Above Deck Painting, Sign Rehabilitation (Completed in 2006, \$4,576,000)	
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$22,400)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$419,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$1,050,000
N/A	Traffic Signal Upgrade At Warren/Bridge Streets (Completed in 2006, \$11,600)	
N/A	Traffic Signal Upgrade at Route 1 Ramp/Warren Street (Completed in 2006, \$9,000)	
TOTAL COST		<u>\$1,491,000</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	
TOTAL: Future Repair Contracts		<u>\$0</u>

* Commission Initiative

CALHOUN STREET BRIDGE

GENERAL

The Calhoun Street Bridge (Structure No. 60) is one of three bridges constructed to connect Trenton, New Jersey and Morrisville, Pennsylvania. Toll collection was discontinued at the time of the Commission's purchase on November 14, 1928. The truss was built in 1884 and the stone masonry substructure was built in 1859.

The bridge is a seven-span, wrought iron, pin-connected Phoenix Pratt truss with a total length of 1,274 feet. The open steel-grate roadway provides a clear width of eighteen feet, four inches between the three-beam guide rails. A timber plank sidewalk is supported by the upriver truss on steel cantilever brackets. The bridge is currently posted for a three-ton weight limit and a fifteen-mile per hour speed limit.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all seven (7) spans, the substructure units and both approach roadways.

SIGNIFICANT FINDINGS

Since the previous inspection, no major work has been performed. There has been an additional fiber optic conduit installed across the structure with several timber planks replaced.

Interim strengthening of steel stringers and floor beams was performed under Contract No. TS-390 in 2003. The interim repairs were necessary to maintain the current bridge rating of three tons. Also, the intersection on the Pennsylvania approach was milled and repaved.

It has been determined previously that the bridge can safely support the posted vehicular loading of 3 tons when every other stringer is in satisfactory condition according to the 1998 repair contract (Contract No. 345) prepared by the DRJTBC Engineering Department in conjunction with Michael Baker Jr., Inc. The work was performed by an outside contractor, and consisted of removing and replacing of alternate (odd numbered) lines of stringers which were determined to be in unsatisfactory condition. Stringers located in the even numbered lines which were determined to be beyond repair were flame cut and removed during this contract.

Approach sidewalks exhibited wide cracks, spalling and scaling due to age and wear and tear.

The upper truss members were last painted in 1985. The paint system above the deck is in generally satisfactory to fair condition, with localized areas of peeling paint. The floor system was last painted in 1982 and the paint system is in poor condition.

The steel open-grate deck appears to be in fair condition, with signs of wear. Small sections of decking have been broken off or removed in span 1. Cracks in the span 7 deck plate have developed from vehicular wear and tear.

CALHOUN STREET BRIDGE

The below-deck superstructure not included in the recent interim repairs is in poor condition. Stringers exhibited severe section loss at numerous locations, mostly in even lines. A number of stringers, mainly in even lines, had the bottom flange and lower web completely removed. Perforations of the lower webs of stringers were also noted. Floor beams typically exhibited light to moderate rust with several end floor beams exhibiting severe exfoliated rust, especially at bottom flanges and lower webs, with locations of web perforations. Minor section loss (necking) was observed at the floorbeam U-bolt supports.

Many localized areas of the transverse struts and upper chords were repaired with bolted splice plates and appear to be in fair condition with some areas in poor condition with corrosion developing in the member. Other localized areas were noted to require similar repairs, which exhibited impacted rust, causing rivets to push out and flanges of the Phoenix members to separate. Lateral Phoenix members were noted to exhibit moderate rust adjacent to weep holes in the webs. Several holes were found in the Phoenix members. The holes are occurring on the north end of the top chord of the sway frames in all spans. In addition, several areas of the Phoenix members showed signs of corrosion and impacted rust.

Several truss diagonals and counters comprised of steel bars or rods are in contact with one another. Several of these locations exhibit signs of moderate wear and corrosion. This condition was noted randomly at both upstream and downstream sides. These areas have no protective paint system and are susceptible to further rust.

Several locations of the existing intermediate post eyebar/cable tension members, as well as new reinforced tension cables, were observed to be loose.

Sidewalk timber planks (untreated) are generally in fair condition. Several have deflected both upward and downward slightly, with light to moderate deterioration. The sidewalk railing posts, adjacent to the roadway, were noted to be loose at the support base in some locations.

The upper concrete portions of the substructure units were noted to be in poor condition requiring concrete repairs and an epoxy waterproof coating. The upper pier caps exhibited stone pop-out, large spalling, incipient spalls, scaling, cracking and exposed rebar.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., has found the substructures to be in satisfactory condition. Minor to moderate scour with missing rock protection was observed during the underwater inspection at most of the substructure units, but did not affect the structural integrity at the time of the underwater inspection. Estimated repair costs have been included in this report.

CALHOUN STREET BRIDGE

CONCLUSIONS

The bridge is in overall poor condition due to severely deteriorated superstructure stringers and deterioration to the piers. It is recommended that a bridge Rehabilitation Contract be performed in the future. Overall rehabilitation should include truss member repairs as well as substructure and scour remediation, and should include reconstruction of the pier tops as well as substructure deterioration noted in the 2005 Underwater Inspection Report. Due to continued deterioration, it is also recommended that the entire floor system (stringers, floor beams, sidewalk, etc.) be replaced to improve the current rating of three-tons and to extend the useful life of the bridge. These improvements, in conjunction with blast cleaning and painting of the trusses, will also remove the lead-based paint from the bridge. Approach roadway sidewalk improvements should be included.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

CALHOUN STREET BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
394	Calhoun Street TSB Additional Capacity Alternatives Analysis *	\$245,000
447	Rehabilitation Contract (Design, Construction, CMCI)	\$14,534,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$33,000)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$542,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$1,000,000
TOTAL COST		<u>\$16,343,000</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		<u>\$0</u>

* Commission Initiative

SCUDDER FALLS BRIDGE

GENERAL

SCUDDER FALLS BRIDGE

The Scudder Falls Toll Supported Bridge (Structure No. 80) carries Interstate 95 over the Delaware River from Lower Makefield Township in Pennsylvania to Ewing Township in New Jersey.

The main river bridge is a ten-span, riveted plate girder bridge consisting of two-span continuous deck girders and alternating cantilever spans. Built by the Commission in 1959 and opened to traffic on June 22, 1961, the bridge carries two dual roadways each 27 feet wide with a concrete median barrier, and flanked by an upstream and downstream safety walk. The total length of the bridge is 1,740 feet. The substructure units are reinforced concrete, with stone facing on the piers. The posted speed limit on the bridge approach roadways is fifty-five miles per hour. The Commission's jurisdiction at this crossing also includes two Pennsylvania approach overpasses at Taylorsville Road and the Pennsylvania Canal.

SCUDDER FALLS PENNSYLVANIA CANAL OVERPASS

The Scudder Falls Pennsylvania Canal Overpass (Structure No. 81) carries Interstate Route 95 over the Pennsylvania Canal in Lower Makefield Township, Pennsylvania. The structure is an approach bridge to the main Scudder Falls Bridge that crosses the Delaware River.

The Pennsylvania Canal Overpass is a simple span, concrete deck, multi-stringer structure founded on reinforced concrete abutments on footings, which are supported by steel bearing piles. Opened to traffic on June 22, 1961, the bridge carries two dual roadways each 27 feet wide with a concrete median barrier, and flanked by an upriver and downriver safety walk. The total span length of the bridge is 61'-4".

SCUDDER FALLS TAYLORSVILLE ROAD OVERPASS

Taylorsville Road Overpass (Structure No. 82) carries Interstate 95 over Taylorsville Road in Lower Makefield Township, Pennsylvania and provides access to the main Scudder Falls Bridge over the Delaware River. The bridge was built in 1959 and opened to traffic on June 22, 1961.

The superstructure is a three-span, concrete deck, multi-stringer structure founded on reinforced concrete abutments and piers on footings that are supported by cast in place concrete piles. The bridge carries two dual roadways each 27 feet wide with a concrete median barrier. The bridge is flanked by a north and south safety walk. The total span length of the bridge is 134'-0".

SCUDDER FALLS BRIDGE

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. That inspection included all ten (10) spans, the substructure units and both approach roadways. Also included were the two approach bridges, approach roadways, and roadway ramps.

SIGNIFICANT FINDINGS

SCUDDER FALLS BRIDGE

The Commission is moving forward with plans to improve the I-95/Scudder Falls Bridge based on conclusions contained in its Southerly Crossings Corridor Study. That study found that congestion and safety problems on the bridge were a result of its narrow configuration, the proximity of adjoining interchanges, and ramps merging onto I-95.

The bridge carries more than 57,500 vehicles per day and operates at the worst level of service (LOS F) during peak rush hours. Over the next 25 years, traffic volumes are expected to increase an additional 35 percent.

In cooperation with the New Jersey and Pennsylvania Departments of Transportation, the Commission is preparing a preliminary engineering plan and an environmental assessment to select a preferred alternative that will improve safety and relieve anticipated congestion on the bridge and an approximate 4 mile stretch of I-95, from Route 332 in Bucks County, PA to Bear Tavern Road in Mercer County, NJ.

The assessment will include environmental studies, developing alternatives to improve safety and congestion, and preliminary engineering. The Commission will communicate with the public about this project through public meetings, newsletters, and a website.

The main river bridge was last painted in 1981. The paint condition is poor on the girders, which exhibit moderate to heavy paint peeling. Locations under deck joints at piers 2, 5 and 8, and pin/hangers typically exhibit the worst paint condition, with top and bottom flanges of floorbeams, ends of stringers, stiffeners, and lateral connections exhibiting moderate to heavy corrosion, obviously due to defective deck joints. Barn swallow nests and debris were observed throughout the main river bridge on stringer flanges and webs. This presents a concern as to its impact to the bridge's paint system.

The pin and hanger assemblies exhibit light to moderate rusting throughout, more so on the outside face exposed to the weather. Several areas of hangers exhibited light to moderate pitting and section loss. Ultrasonic testing was performed on the pin and hanger assemblies during the 2000 Inspections and no significant findings were found. A backup catch system is in place at all pin-hanger assemblies.

High priority structural repairs were performed in 2004 under Contract TS-421 to repair cracks in the fascia stringers as well as some of the first interior stringers at Piers 2, 5 and 8 due to advanced deterioration of the web. The work performed included the installation of

SCUDDER FALLS BRIDGE

stringer-support brackets; the replacement of diaphragm members; high-strength steel bolts and rivets at various locations; and the cleaning and painting of all structural steel within three feet of the stress-relief joints.

Fine transverse cracks were noted in the concrete deck above and below. Fascia soffits typically exhibit cracks with efflorescence and incipient spalling at intermittent joint locations. Throughout the underside of deck, random areas exhibited spalling, some of which had exposed rebar. The deck also shows signs of wear with aggregate pop-out and random locations of concrete and asphalt patches in the LMC overlay.

Hot-poured sealer deck joints at piers 2, 5 and 8 are worn, cracking and spalled. There are multiple temporary asphalt patches that need to be permanently repaired. The median barrier at all the deck joints is not sealed causing debris to build up on the shear locks below. Safetywalk deck joints also exhibit heavy deterioration and perforations/separations of strip seals at several locations. These openings are allowing water to infiltrate to underlying structural steel and the pin and hanger assemblies.

The substructure units are in generally good condition, with minor rust stains on pier caps. Spalling on the north end and the seat of pier 2 was noted.

Many of the railing brackets on both sides of the bridge exhibited cracks in the support brackets. There were also a few locations where the railing and brackets were dislodged.

Due to ongoing maintenance issues with the bridge lighting, a repair contract has been issued and was completed in 2006 under Contract 393F.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., has found the substructures (Piers 2 through 8) to be in good condition. Estimated repair costs from the underwater inspection report have been included in this report.

SCUDDER FALLS PENNSYLVANIA CANAL OVERPASS

The paint condition is typically fair on all girders and poor at the girder ends. The bearings exhibit moderate to heavy corrosion with debris on the bridge seats. The backwall of the east abutment contains some spalls. The joint material in the vertical expansion joints throughout the substructure is missing or dislodged.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. under Contract (412A), has found the substructures to be in good condition. Estimated repair costs from the underwater inspection report have been included in this report.

SCUDDER FALLS BRIDGE

SCUDDER FALLS TAYLORSVILLE ROAD OVERPASS

The bridge is in fair condition due to the condition of the underside of deck at the deck joint locations and the non-functioning bearings.

The paint condition is typically fair to poor throughout.

Impact damage to the three northern stringers (bottom flanges and cover plates) in the northbound lanes of Taylorsville Road was observed with the 2nd stringer from the north being the worst. This collision damage does not affect the structural capacity of the bridge.

Several bearings are misaligned and exhibiting moderate to heavy corrosion with debris on the bridge seats. The backwall of the west abutment contains several spalls and vertical cracks. The joint material in the vertical expansion joints throughout the substructure is missing or dislodged.

The concrete deck below the joints is in poor condition. The underside of the deck at concrete header and deck joints is spalled in several locations above the piers.

The Commission-maintained portion of Interstate 95, including the Pennsylvania ramps and shoulders, is in good condition, having been rehabilitated in 1999 under the Taylorsville Road Interchange Rehabilitation contract (Capital Project No. 9904A). Both approach structures have been overlaid with bituminous concrete under this contract. The pavement is beginning to show signs of normal distress such as cracking due to age and usage.

CONCLUSIONS

A Rehabilitation Contract is recommended and will be included as part of the Commission Initiative's I-95 Improvement Project which is outlined in the "Commission Initiatives" section of this report. An In-Depth Inspection and Rating Contract should be performed to determine the extent of required repairs. Combined with the In-Depth Inspection should be the development of repair plans for the main river bridge, which should include cleaning and painting, structural steel repairs, deck joint reconstruction, concrete deck rehabilitation, new parapets, safety walks and railings.

Although the main river bridge is in satisfactory condition, the paint system is poor. At piers 2, 5 and 8 the deterioration caused by water infiltration begins at the deck joints and works downward corroding the structural steel and will eventually deteriorate the concrete piers, which is evident by the spalls beginning to form at pier 2. In addition, above deck slab deterioration with numerous cracks have resulted in below deck deterioration. As a result, Contract TS-393C has been issued and completed in 2006 to preserve the useful life of the structure.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2005 Underwater Inspection Report.

SCUDDER FALLS BRIDGE

A Preliminary Engineering and Environmental Documentation contract (C-393A) has been awarded for improvements to the Scudder Falls Toll Supported Bridge Facility. Also due to the current traffic congestion, it is recommended that an interim capacity improvement study be undertaken to determine if anything can be done to relieve congestion and if so implement those improvements within the next two years.

SCUDDER FALLS PENNSYLVANIA CANAL OVERPASS

The Pennsylvania Canal Overpass is generally in satisfactory condition. Although the canal bridge is in satisfactory condition, the paint system is poor.

The Pennsylvania Canal Bridge is in fair condition, however the structure should be maintained and necessary repairs be performed in order prevent further deterioration. Repairs should include cleaning and painting the girder ends and end diaphragms, and also cleaning and epoxy coating the bridge seats.

SCUDDER FALLS TAYLORSVILLE ROAD OVERPASS

The Taylorsville Road Bridge is in fair condition, however the structure should be maintained and necessary repairs be performed in order prevent further deterioration.

A rehabilitation contract should be performed to repair the non-functioning bearings, deck joints and underside of deck spalling. This contract should be included in the Main River Bridge Rehabilitation Contract.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

SCUDDER FALLS BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
393C	Deck Joint Replacement (Completed in 2006, \$2,530,000)	
393A	I95/Scudder Falls Improvement Project *	\$27,400,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$8,200)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$123,000
<u>Facilities and Grounds</u>		
393F	Lighting Upgrade (Completed in 2006, \$92,000)	
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$1,974,000
TOTAL COST		\$29,519,000

SCUDDER FALLS BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS **FUNDED BY THE GENERAL RESERVE FUND**

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
393A	I95/Scudder Falls Improvement Project (Construction, CMCI) *	\$221,600,000
479	ITS Improvements *	\$955,000
TOTAL: Future Repair Contracts		<u>\$222,555,000</u>

* Commission Initiative

WASHINGTON CROSSING BRIDGE

GENERAL

The Washington Crossing Bridge (Structure No. 100) connects Mercer County Route 546 in Hopewell Township, New Jersey with PA Route 532 (George Washington Memorial Boulevard) in the Township of Taylorsville in Upper Makefield, Pennsylvania.

The bridge consists of a six-span double Warren truss structure, with a total length of 877 feet. The steel superstructure was built in 1904. The substructures, composed of rubble stone-faced masonry, are from the original construction in 1831. The open steel grid deck provides a clear roadway width of 15 feet between the steel channel rub-rails. The downstream side of the truss supports a cantilevered, wood-planked sidewalk. The bridge was closed from August 15, 1994 to January 13, 1995 for extensive structural rehabilitation.

The bridge is currently restricted to a 15-mile per hour speed limit and a 3-ton weight limit.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all six (6) spans, the substructure units and both approach roadways

SIGNIFICANT FINDINGS

The deck joint support system was repaired under Contract TS-428A in 2005. This Contract consisted of repairing and replacing riser beams.

Several floorbeam stringers at multiple locations were noted to have a minor twist (buckling) to their web, mainly at the supports over the floorbeams. According to the previous reports and the current findings, the twist has not increased in severity since 1998 and the bridge appears to be handling the current loads. Several areas of pitting of the steel were also noted throughout the top flanges of floorbeams, especially near stringer bottom flanges.

Due to the Flood of June 2006, the post tensioning rods in spans 1, 4, 5 and 6 were elongated to the point where there is excessive sagging. There is also minor sagging in the post tensioning rods in spans 1, 2 and 3. As previously documented, the tie rod on the south side of span 2 was removed during the Flood of 2005. From previous analysis, performed by Lichtenstein Engineers, the rods do not affect the posted load carrying capacity.

The steel roadway railings at the north side of span 2 at floorbeam 3, span 3 at floorbeam 2 and at span 4 were damaged by debris.

Impact damage from previous floods was observed to the bottom chord in span 5, bay 3, span 4, bay 9 and span 2, floorbeam 4 diagonal. Damage resulting from the Flood of June 2006 was limited to span 5, bay 2 and span 6, bay 2 on the upstream side of the structure. At the present time, no action is required regarding the damage. The deficiencies should continue to be monitored during the regularly scheduled biennial inspections.

WASHINGTON CROSSING BRIDGE

Although the west abutment was rehabilitated under the 1994 rehabilitation contract, it has begun to show deterioration. Wide diagonal cracks were observed at the north and south ends of the west abutment backwall. Both the north and south roadway barriers adjacent to the bridge appear to have deflected outward from backwall movement and rotation. No signs are present depicting impact damage to either barrier. In addition, the tooth dam at the west abutment was fully closed at the time of inspection. The temperature at the time was approximately 60°, indicating that the closure was not temperature related. Maintenance forces have provided a small pavement relief joint in the west approach adjacent to the west abutment and have made remedial concrete repairs. This joint has begun to exhibit signs of deterioration.

During the post flood inspection performed in early April 2005, the substructure sustained damage that warranted the closing of the bridge. A section of the Pier 5 stone facing had washed away, exposing the stacked stone core. In addition, the superstructure sustained impact damage from debris that washed downriver. The superstructure damage was incidental and does not require repair. High priority repairs to the substructure were completed by contract.

The concrete aprons at the piers exhibit wide cracks. These cracks can lead to spalling of the aprons and deterioration of the pier protection. The substructure units appear to be in fair condition, with areas of loose and missing mortar on the northern ends of the piers. A 50 SF area of damaged apron was observed at the upstream end of pier 2.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition. Although pier footings were not visible during the underwater inspection due to the concrete aprons, several mortar bags of the pier footings were found to be loose, created by scour of the channel around the piers. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The bridge is in satisfactory condition due to the problems with the west abutment and scour at the piers.

An In-Depth Inspection and Rating leading to a rehabilitation contract is recommended. The last In-Depth Inspection and Rating Contract (C-326) was performed in 1992, prior to the rehabilitation done in 1994. The long term needs of the tie rods should also be investigated to determine their future use as a secondary strengthening system.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to re-point areas of missing and loosed mortar and repair any substructure deterioration found below the water line noted in the 2005 Underwater Inspection Report.

WASHINGTON CROSSING BRIDGE

Slight web twisting is apparent on the older bridge stringers, but when exactly the twisting occurred is unknown (possibly before the weight limit restriction). Although no repair is recommended at this time, this situation should be monitored during annual inspections.

The rehabilitation contract should include the deficiencies noted above.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

WASHINGTON CROSSING BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
442	Rehabilitation Contract (Design, Construction, CMCI)	\$13,300,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$66,000)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$297,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$960,000
TOTAL COST		\$14,579,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

NEW HOPE - LAMBERTVILLE TOLL SUPPORTED BRIDGE

GENERAL

The New Hope-Lambertville Toll Supported Bridge (Structure No. 120) connects Bridge Street in New Hope, Pennsylvania to Lambertville, New Jersey.

The bridge superstructure, constructed in 1904, is a six-span pin connected Pratt truss with a total length of 1,046 feet. The open steel grate deck provides a clear roadway width of 20 feet 7 inches between steel rub rails. A timber-plank sidewalk, installed in 1982, is supported on the downstream side by steel cantilever brackets. Abutments, wingwalls, and piers are ashlar-faced masonry; the piers are stone-filled. All substructure units are from original construction in 1814.

The current posting consists of a 4-ton loading restriction and a fifteen mile per hour speed limit. The lower chord has been strengthened with a post-tensioning rod system by contract in 1984. A three-beam guide rail system was added by Maintenance forces to both sides of the roadway.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all six (6) spans, the substructure units and both approach roadways.

SIGNIFICANT FINDINGS

The bridge was recently rehabilitated by J. D. Eckman under Contract No. TS-370A. The rehabilitation was completed and the bridge was reopened on June 7, 2004.

During the post flood inspection performed in early April 2005, the superstructure and portions of the sidewalk sustained impact damage caused by debris floating downstream. The damage did not appear to affect the structural integrity of the bridge and the sidewalk was repaired by maintenance.

During the Flood of June 2006, multiple areas of minor damage to several members of the upstream bottom chord were observed throughout the bridge. The damage sustained does not pose a threat to the structural integrity of the bridge.

However, in span 5 at the 2nd bay from the east, the bottom chord exhibited more damage than the other areas noted above. This built up lower chord member is comprised of two (2) steel channels connected together with lacing bars in a diagonal pattern for the full length of the member. Impact damage to this member has caused it to deflect horizontally approximately 8". The upstream channel apparently absorbed more of the impact (causing it to twist) than the adjacent downstream channel. Also, multiple lacing bars, which tie the two channels together, were observed to be distorted and buckled from the impact.

It was also observed that the top flange of the upstream channel exhibited cracks in at least 5 locations. The cracks occur directly adjacent to the rivet holes and do not appear to have propagated beyond the holes.

NEW HOPE - LAMBERTVILLE TOLL SUPPORTED BRIDGE

Several post tensioning rods that run along the upstream and downstream bottom chords sustained damage where floating debris became entangled, causing them to detach from their supports. In span 3, the north post tensioning rod became completely detached from the hangers and ultimately sheared off. The failure occurred at the base of the double nut connection at the north bearing at pier 3. In span 3 at the south side, the tie rod became detached from the hangers, and elongated at pier 3, causing it to sag. A similar condition to the south post tensioning rod of span 3 occurred at the north side of span 2 and span 4. There were heavy vibrations in span 2 caused by debris entangled in the post tensioning rod. The post tensioning rods at all other locations appear to have sustained no damage.

At the north side of pier 4, the steel bracket attached to the bearing for the inspection rigging cable was disconnected. Maintenance forces should realign the cable bracket. This deficiency does not affect the structural integrity of the bridge.

Damage to the sidewalk planks was observed at one location in span 2 and two locations in span 3. It appeared that debris struck the underside of the planks causing them to lift up and become detached from the stringer supports. In span 2, in addition to the sidewalk damage, the empty utility conduit sustained damage.

Heavy debris was observed at the upstream end of pier 2 and minor to moderate debris accumulation at all of the other pier locations. A damaged section of guide rail in bay 8 of span 2 (caused by floating debris) was observed.

Multiple areas of debris were observed to be wedged throughout the upstream lower chord of the north truss.

There is a Commission owned building (formerly a firehouse) located on the Pennsylvania side that is currently being used for storage by Maintenance. There do not appear to be any major defects, with the building, however a code use and occupancy study should be conducted.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition with some moderate to heavy cracking of the concrete aprons around the piers, moderate areas of collapsed concrete aprons, undermining of portions of the aprons, and minor mortar loss in masonry joints.

CONCLUSIONS

The bridge has been downgraded from good to satisfactory condition due to damage sustained during the flood of 2006. Subsequent to the inspections and under the direction of the Commission, Parsons Brinkerhoff performed the rating calculations during the in-depth inspection and determined that the damage sustained by the flood did not warrant a continued bridge closure. Non-destructive testing was also performed to areas of the severely damaged bottom chord in span 5 and no evidence of cracking was found.

NEW HOPE - LAMBERTVILLE TOLL SUPPORTED BRIDGE

Maintenance forces repaired the damaged sidewalk planks. The DRJTBC opened the bridge to vehicular and pedestrian traffic on July 2, 2006.

Emergency repairs to the severely damaged bottom chord in span 5 were in progress at the time this report was written.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to re-point areas of missing and loosed mortar and repair any substructure deterioration found below the water line noted in the 2005 Underwater Inspection Report.

A code use and occupancy study should be conducted for the Commission owned building (formerly a firehouse) currently being used for storage by Maintenance.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

NEW HOPE-LAMBERTVILLE TOLL SUPPORTED BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$24,500)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$369,000
467B	Emergency Bottom Chord Repairs (Due to Flood of June 2006) (Completed in 2006, \$600,000)	
<u>Facilities and Grounds</u>		
478	Fire House Code Use and Occupancy Study	\$31,000
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$952,000
TOTAL COST		\$1,374,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

CENTRE BRIDGE-STOCKTON BRIDGE

GENERAL

CENTRE BRIDGE-STOCKTON BRIDGE

The Centre Bridge-Stockton Bridge (Structure No. 160) connects PA Route 32 in Solebury Township, Pennsylvania to NJ Route 29 in Stockton, New Jersey. The bridge, opened to traffic in 1927, is a six-span, riveted steel Warren truss structure, with a total length of 825 feet. The steel open-grate deck, added to the bridge in 1990, provides a clear roadway width of 20 feet between thrie-beam railings. In addition, a six-foot timber-plank sidewalk, replaced in 1990, is supported on the downriver truss on steel cantilever brackets.

The piers and abutments were originally constructed in 1814 from random ashlar masonry, are stone-filled and rest upon timber crib foundations. In 1926 portions of the piers were encased with reinforced concrete.

The bridge is currently posted for a twenty-five mile per hour speed limit and a twenty-ton weight limit restriction (6 tons maximum per axle).

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection involved a one-day cursory visual walk through of the main bridge. The Pennsylvania Canal Overpass (Structure No.161) was also inspected in 2006.

CENTRE BRIDGE-STOCKTON PENNSYLVANIA CANAL OVERPASS

The Centre Bridge-Stockton Pennsylvania Canal Overpass (Structure No. 161) carries traffic over the Pennsylvania Canal in Solebury Township, PA. The structure is an approach bridge to the main Centre Bridge-Stockton Bridge that crosses the Delaware River.

The Pennsylvania Canal Overpass is a simple span, prestressed adjacent concrete box beam bridge. The roadway width is 20'-0" and the span length is 63'-0".

SIGNIFICANT FINDINGS

CENTRE BRIDGE-STOCKTON BRIDGE

The Centre Bridge-Stockton Bridge is currently in the design phase of a complete rehabilitation project under Contract TS-429A.

During an in-depth inspection in the Fall of 2005, it was determined that the lower chord members of the south truss exhibited advanced section loss that would require emergency interim repairs until the rehabilitation project was underway. The interim repairs were performed under Contract TS-429B in late 2006.

Due to the upcoming rehabilitation and recent in-depth inspection, this structure was the subject of a cursory visual inspection.

CENTRE BRIDGE-STOCKTON BRIDGE

The following significant findings have been transposed from the previous inspection reports for a general overview of the bridge's condition. For the most in-depth evaluation of this bridge, refer to Contract TS-429A's in-depth inspection report.

Repairs to the bottom chords were completed in 1998 (under Contract No. 344). The repairs included portions of the members of lower truss connections in spans one, two, four and five. Previous repairs under a separate contract include fascia portions of floorbeam bottom flanges, lower wind bracing, fascia stringer replacements, and a new guide rail system. Rust staining on the new galvanized members was typically noted.

The bridge was last painted in 1990 under Contract No. 304. The overall paint system, however, is fair above the roadway deck and poor below the roadway with peeling and blistering paint throughout.

Although the structural repairs done in 1998 have improved the overall condition of the bridge, the remaining bottom chord members, more so on the downstream side, still exhibit severe rust with significant section loss. Floorbeam steel adjacent to previous repairs to the floorbeams or horizontal gusset plates also exhibit severe section loss, up to 60% at some locations (some with perforations) of the bottom flanges and rivets to the bottom flange. The locations with the greatest section loss adjacent to a previous repair were noted at the west floorbeam of pier three and the east floorbeam over pier four. Section losses were noted to be up to 60% in the bottom flanges.

Upper horizontal tie plates of floorbeam and post connections (below the edge of the sidewalk) at the ends exhibit rivet head losses up to 80% as well as impacted rust and steel section losses up to 30%.

Increased structural losses were located in the first bay adjacent to the west abutment (Span one), all bays of Span 3, and near the east abutment (Span six as noted in previous inspection). The end floorbeams and their stringer seat connections exhibit moderate to severe rust with section losses up to 20%. East abutment bearings and horizontal gusset plates were also noted to be full of debris.

Sidewalk overhang brackets exhibit up to 40% section loss to the top flanges at intermittent locations. Channel sidewalk stringers exhibit moderate rust at localized areas with moderate to severe rust to seat angles/plates over floorbeam brackets. The worst condition of this was noted over pier four. Sidewalk stringers are also showing signs of bowing. Tie back bracket straps, as well as rivets heads, exhibited moderate to severe rust and necking with section losses up to 80%. Timber deck planks appeared to be in satisfactory condition. The substructures typically exhibit incipient spalling at upper portions of the pier caps, including efflorescence, scaling and rust stains. Loose, deteriorated and missing mortar joints were also observed. Pier three and four appeared to be in the worst condition. The water level was too high to view the aprons at the time of the inspection.

CENTRE BRIDGE-STOCKTON BRIDGE

A staircase exists at the southwest corner of the main bridge, which provides access from the sidewalk above to the Pennsylvania Canal towpath below. In general the steel frame of the sidewalk exhibits moderate heavy rust and moderate exfoliated rust throughout. The staircase is not in compliance with building codes as related to, rise to run ratio, tread depth, and hand railing dimensions. Maintenance forces have performed some repairs to damaged areas of the staircase.

In addition to the general description of the significant findings above, additional inspections have been performed due to the Flood of June 2006. Such inspections noted debris buildup and damaged pier-mounted conduits.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., has found the substructures to be in fair condition. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CENTRE BRIDGE-STOCKTON PENNSYLVANIA CANAL BRIDGE

No significant findings were observed at the time of the walk through inspection.

The north ends of the east and west abutments exhibit minor spalling and mapcracking with efflorescence. Maintenance should continue to patch spalls as needed. The concrete deck is in good condition with fine cracking on the deck.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc. and submitted to the Commission in 2006, has found the substructures to be in good condition. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

CENTRE BRIDGE-STOCKTON BRIDGE

The bridge is in overall fair condition. Bottom chords, although partially rehabilitated, require additional repair work to be in satisfactory condition, such as the lacing bars and localized portions of angle members. Floorbeams, bottom flanges especially, also require strengthening or replacement, including high-strength bolts at areas adjacent to previous repairs. Areas mentioned in Significant Findings with severe deterioration and section loss should also be blast cleaned and painted. Rivets with greater than 50% section loss should be replaced with high-strength bolts. Additionally, the southwest staircase is in fair condition and should be replaced to meet current building codes.

An in-depth inspection and Rehabilitation Contract is recommended for this bridge. Since the floor system (stringers, floorbeams, etc.) of the bridge is in overall fair condition and several repairs have already been made in the 1998 Repair Contract, a complete replacement of the superstructure should not be required. This contract should include an In-Depth Inspection and Rating to determine the extent of repairs and verify the current and

CENTRE BRIDGE-STOCKTON BRIDGE

proposed available rating. Repair plans should be developed, and should include structural steel repairs, the southwest staircase replacement, and substructure repairs. Blast cleaning and painting of the bridge should be included.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of the substructure deterioration noted in the 2005 Underwater Inspection Report.

CENTRE BRIDGE-STOCKTON PENNSYLVANIA CANAL OVERPASS

The bridge is in overall good condition, with minor spalling and map cracking at the northern end of the east and west abutments.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

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CENTRE BRIDGE-STOCKTON BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS
FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
429	Rehabilitation Contract (Design, Construction, CMCI)	\$10,308,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$80,000)	
476	District I Substructure and Scour Remediation (Design, Construction, CMCI)	\$631,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$10,000
396	Electronic Surveillance Detection System *	\$1,060,000
TOTAL COST		\$12,009,000

FUTURE REPAIR CONTRACTS
 (Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

LUMBERVILLE - RAVEN ROCK BRIDGE

GENERAL

The Lumberville-Raven Rock Pedestrian Bridge (Structure No.180) connects Solebury Township (Lumberville) in Pennsylvania with Delaware Township (Raven Rock) in New Jersey.

This pedestrian bridge is a five-span suspension bridge with straight backstays and a precast waffle-style concrete slab held together by longitudinal post-tensioning web cables. The floor system is strengthened by cable trusses along each suspension cable.

The bridge was closed to vehicular traffic in February of 1944. In 1947, the superstructure was re-built on the original 1856 masonry substructure. A major rehabilitation contract was completed in 1993 that included the new deck slab, pier and abutment repointing, approach sidewalks, and bridge lighting. The entire bridge was last painted in 1980 by Maintenance forces and the towers were again painted in 1990.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all five (5) spans, the substructure units and both approach roadways

SIGNIFICANT FINDINGS

The deck is in good condition with some locations of water ponding, despite several drainage openings at the deck's edge.

The general condition of the paint system at the towers is poor. Upper structural steel, such as cables, suspension hangers and fencing exhibit moderate paint peeling. Upper and lower portions of suspension towers (including bearings) typically exhibit light rust and debris accumulation at the upper portions. Moderate rust was also noted at the tower base steel at the east abutment. Below deck (fascia) steel exhibits moderate random flange and bolted splice rust of transverse tee sections due to water infiltration at the ends of the deck and exposure.

Pitting with light to moderate section loss was exhibited on the lower horizontal wind bracing rods (below deck), several appearing to be caused by direct contact with the wood spacers or previous damage. Water infiltration through the construction joints at these locations seems to contribute to this problem. A sealant has been applied to these locations. Although appearing intact, the seal seems to be leaking as evidenced by moisture on the formwork and concrete.

The end sockets for the post tensioning at pier locations are heavily corroded as observed from below the deck. This condition appears to occur at all of the socket locations. Considering no evident damage to the deck panels, it does not appear to affect the structural integrity of the structure.

LUMBERVILLE - RAVEN ROCK BRIDGE

Gusset plates of the lower towers at the piers (below deck) typically exhibit moderate corrosion of the steel and rivets.

Pier concrete aprons, though underwater at the time of our inspection, were noted to be in fair to poor condition with sections washed away, spalled or cracked.

In addition to the routine inspection findings, a post Flood of June 2006 inspection was performed and some minor damage was observed. Debris accumulation was observed at the piers and on the deck. The bridge fencing was damaged due to debris impacting the bridge.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in poor condition. The underwater inspection report indicated that scour with subsequent undermining was noted at Piers 1, 2 and 3. Most locations of rock protection have been washed away and some timber cribbing has been exposed. The Pier 3 condition of undermining appears to be the most critical. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

At the southwest corner of the bridge, the Commission-owned stone retaining wall appears to be distorted. However, at the time of the routine inspection and again after the Flood of June 2006 Inspection, the wall appeared to be intact and stable.

CONCLUSIONS

The bridge is in good condition and is structurally capable of carrying legal pedestrian loading. The bridge is in generally good structural condition.

Necking or corrosive section loss to the ends of lower horizontal wind bracing or fascia T's was observed at several locations. No increase in deterioration was noted from previous inspections.

The paint system is in poor condition. A cleaning and painting contract is recommended, especially for the towers and bearings. At minimum the upper and lower portions of the towers and bearings should be blast cleaned and painted. Recoating of the cables, hangers and fencing should also be included.

The southwest retaining wall along the Pennsylvania Canal and adjacent to Commission owned property should be reconstructed. A study should be undertaken to consider alternate solutions of repair. In addition, a cursory visual inspection of the exterior of the Commission owned house located on the Pennsylvania side, indicated that the above ground oil tank foundation is not level. However, it appeared to be stable at the time of inspection. A study should be undertaken to determine if any routine and/or necessary repairs need to be made.

LUMBERVILLE - RAVEN ROCK BRIDGE

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2006 Underwater Inspection Report.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

LUMBERVILLE-RAVEN ROCK BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS
FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
443	Rehabilitation Contract (Design, Construction, CMCI)	\$2,034,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$39,000)	
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
TBD	Retaining Wall Reconstruction (Design, Construction, CMCI)	\$251,000
TBD	House Inspection/Repair Study	\$3,100
396	Electronic Surveillance Detection System *	\$135,000
TOTAL COST		\$2,445,100

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

GENERAL

The Uhlerstown-Frenchtown Bridge (Structure No. 220) carries Bridge Street traffic from Uhlerstown, Tinicum Township in Pennsylvania to Frenchtown, New Jersey.

The bridge, which rests on the original masonry substructure built in 1843, consists of a six-span riveted steel Warren truss structure, built in 1931. The steel open-grate deck, added in 1949, provides a clear roadway width of 16 feet 6 inches curb to curb. A concrete-filled steel grating sidewalk is supported by the upstream truss on steel cantilever brackets.

The bridge was rehabilitated in 2001 under Contract No. TS-363. The bridge is currently posted at a 15-ton weight limit and a 15 mile per hour speed limit.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all six (6) spans, the substructure units and both approach roadways

SIGNIFICANT FINDINGS

When performing post Flood of June 2006 Inspections, only minor damage was observed. In the 2nd bay from pier 1 in span 2 at the 2nd stringer from the north, a small area of impact damage was observed near the midspan of the stringer with damaged galvanized coating and adjacent wood debris. No indentations or other significant damage were noted. Maintenance forces can coat the damaged area of steel with a cold applied zinc compound.

During the post flood inspections performed in early April 2005, flood damage was observed to the upstream side of the railing and sidewalk. The damage was caused by debris that drifted downstream at high velocity. At the time of the 2006 routine inspection, the damaged sidewalk railing was under repair.

Bird debris and nests were observed on many of the truss verticals and diagonals, as well as under the sidewalk. The east approach pavement is showing signs of wear.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition. The underwater inspection report noted that the concrete aprons exhibited medium to wide cracks with undermining of the aprons and various locations due to washing away of the rock protection. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The bridge is in good condition.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2005 Underwater Inspection Report.

UHLERSTOWN - FRENCHTOWN BRIDGE

Repairs to the damage to the sidewalk and railing caused by the 2004 Flood should be completed.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

UHLERSTOWN-FRENCHTOWN BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$8,500)	
477	Districts II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$209,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$64,000
396	Electronic Surveillance Detection System *	\$1,030,000
TOTAL COST		\$1,303,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

GENERAL

The Upper Black Eddy-Milford Bridge (Structure No. 240) extends over the Delaware River and connects PA Route 32 and Hunterdon County Route 619 via Bridge Street from Upper Black Eddy, Bridgeton Township, Pennsylvania to Milford Borough, New Jersey.

The bridge, constructed in 1933, is a three-span Warren truss structure, with a total length of 700 feet. The deck consists of concrete-filled steel inverted “T’s” and provides a clear roadway width of 20 feet between steel channel rubrails. In 1996 a new galvanized plate sidewalk was added to the bridge and is supported on the upriver truss on steel cantilever brackets.

Both abutments, recapped with reinforced concrete following flood damage, were originally built in 1842 with rubble-faced masonry. The piers, built in 1842, are stone-filled having also been recapped with reinforced concrete.

The bridge is currently posted for a fifteen mile per hour speed limit with no weight limit restriction.

In accordance with Commission’s bridge inspection policy, this structure was inspected in 2006. This inspection included all three (3) spans, the substructure units and both approaches.

SIGNIFICANT FINDINGS

Impact damage to the north bottom chord of the north truss was observed during the routine inspection and was most likely caused by the flooding that occurred in 2005. The damage is not critical and does not threaten the structural integrity of the bridge.

Severe rusting was found at the bays adjacent to both abutments. The north and south fascia stringers and their steel shims, the steel formwork for the deck and the adjacent ends of floorbeams and horizontal gusset plates (and rivet heads) were heavily corroded and delaminating. The westernmost bay in span one (1) exhibited the worst case of rust.

Light to moderate rusting was exhibited at most of the fascia stringers (and shim plates) and in localized areas throughout the remaining structural steel. More severe rusting was observed at adjacent and underlying steel beneath openings at the rubrails (edge of roadway) and at the exposed fascia steel of the bottom chord and adjacent vertical post. Lower horizontal gusset plate connections to the floorbeams were observed to exhibit light to moderate rust with debris accumulation. Batten/tie plates of bottom chord exhibit impacted rust

Several bays of the below-deck superstructure were noted to contain bird nests and associated debris.

The stub stringers over pier one at the expansion (west) side rest on support brackets. The support bracket is in direct contact with the bottom flange of the floorbeam and is causing it to bend downward slightly.

Some locations of the galvanized steel sidewalk plates exhibited loss of galvanizing with minor section losses.

The concrete-filled steel deck is showing signs of wear, especially along the wheel lines. Edges of deck also exhibit minor concrete scaling with debris allowing water to infiltrate below deck. Steel deck joint sliding plates also show signs of wear specifically at the west abutment.

Substructure units were re-pointed in 1998 (Contract No. 347) and appear to be in satisfactory condition, except for pier one which exhibits signs of 'bulging' at the west side, no signs of distress were noticed in the pier cap. This bulging has been present since approximately 1970. This area should be visually monitored in future inspections. The west abutment, east side of pier one and west side of pier two, showed some minor mortar loss.

The east and west abutment backwalls exhibit heavy map cracking and spalling, especially on the south side. Two vertical cracks in the west abutment backwall and three vertical cracks in the east abutment backwall were also noted with efflorescence. The west face of pier 2 exhibited spalling at the north end. Similar conditions were noted at the upper portions of piers.

During the post flood inspection performed in early April 2005, minor damage was noted to the upstream railing caused by debris floating downstream. Again, following the post Flood of June 2006 Inspections, minor debris buildup on the piers was observed.

The officer's shelter septic sewer system has been reported to be malfunctioning.

The post Flood of June 2006 Inspection did not identify any deficiencies. The condition of the mortar loss of the stone facing and random loosening at the substructure units do not appear to have worsened due to the flood.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition. It was recommended that scour countermeasures be put into place to prevent degradation up and downstream of the bridge. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The bridge is in overall good condition, having been well maintained throughout the years. The steel paint condition of the truss and floor system is overall satisfactory to good, having

been painted in 1992. Several areas of localized rusted and corroded steel should be spot cleaned and painted, especially in the first bays adjacent to both abutments.

It is recommended that an in-depth inspection and rating be performed for this bridge. Although this bridge is not currently posted for a weight restriction, heavy truck traffic is typical and ratings should determine if posting is necessary.

A rehabilitation contract should be considered for a complete bridge deck replacement. The new deck should provide increased protection to underlying steel. The in-depth inspection and rating should be included to study the possible alternatives (if any) for the superstructure. Based upon the current condition of the bridge, its superstructure and the current load posting, a complete superstructure replacement is not anticipated. In the interim, maintenance should repair the damaged railing caused by the 2005 flood.

The officer's shelter septic system should be properly abandoned and a new sewer line should be installed to connect into the municipal sewer system.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2005 Underwater Inspection Report.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

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UPPER BLACK EDDY-MILFORD BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS
FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
444	Rehabilitation Contract (Design, Construction, CMCI)	\$6,476,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$50,300)	
477	Districts II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$695,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$960,000
TBD	Officer's Shelter Sewer Upgrade (Design/Construction)	\$13,500
TOTAL COST		<u>\$8,166,500</u>

FUTURE REPAIR CONTRACTS
 (Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		<u>\$0</u>

* Commission Initiative

RIEGELSVILLE BRIDGE

GENERAL

The Riegelsville Toll Supported Bridge (Structure No. 260) connects Durham Township in Pennsylvania with Pohatcong Township in New Jersey.

The bridge, constructed in 1904, is a three-span cable suspension bridge with straight backstays and a total length of 577 feet. The open-grid steel deck, supported by a king post floorbeam system, provides a roadway width of 16 feet between steel rubrails. A timber plank sidewalk rests on floorbeam cantilevers on both fascias. The sidewalk railing is actually a double-warren truss, assisting in strengthening the bridge roadway. The substructure, originally built in 1835, was raised and built-up in 1904.

The bridge is currently posted for a two and one-half ton weight limit and a fifteen mile per hour speed limit.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all three (3) spans, the substructure units and the approach roadways.

SIGNIFICANT FINDINGS

Under Contract TS-391, the Riegelsville Bridge has undergone the first step in a full rehabilitation, as part of the Commission's 10-year capital program addressing improvements to many of the bridges. Work consisted of strengthening towers on the river piers, replacement of hanger blocks connecting vertical hangers to the floor beams, repair of floor beam bearings at each end of the floor beams of the three spans, concrete repair on pier two, and concrete crack repairs at the anchorages.

The bridge was last painted by contract in 1985. The structural steel paint condition is fair above the bridge deck and poor below the bridge deck. The cable and upper suspension rods coating is in satisfactory condition.

Under vehicular impact, excessive vibrations were previously noted in spans 1 and 2, especially at pier 1 and pier 2, however the addition of the elastomeric floorbeam bearings has lessened the effect. Two (2) vertical suspension rod hangers adjacent to the towers in each span were noted to be loose. The tension in the rod hangers was reduced due to the addition of the elastomeric bearings, therefore no repair is required.

Both the north and south ends of several channel floorbeams have previously had web plates and/or replacement channels welded to the existing beams. Several floorbeams exhibit rusting and a failed zinc-coated paint system.

The majority of the perforations in the lower web of the floorbeam channels, mainly above king posts, have been repaired. However, there are a few locations where perforations exist, above the king posts and near the south suspenders anchor points. The lower wind bracing angles exhibit peeling and blistering paint and exhibit moderate to locally severe

RIEGELSVILLE BRIDGE

rusting with subsequent section loss throughout. These conditions occur mostly beneath the sidewalks. These losses to the wind bracing do not impact the structural rigidity of the bridge at this time.

Medium transverse cracks were observed in the upriver tower horizontal saddle plates at piers 1 and 2. These cracks have been present for at least the past 9 years and have not increased in size, and therefore do not affect the structural integrity of the bridge.

At the southern lower diagonal brace at the north tower of the east abutment, as well as the northern lower diagonal brace at the south tower of pier two, signs of bending or possibly vehicular impact were noted.

Several U-shaped hangers connecting cables, more prevalent at the midspan locations, exhibited rusting and minor necking. With the present posting, repairs are not required at this time.

The following locations exhibited areas of deterioration and corrosion:

- Several floorbeam channels above the king post in span 3 exhibited perforations through the web.
- Bottom flanges and webs of floorbeams, especially near horizontal gusset plates and suspension hanger lower connections to floorbeams with poor weld conditions.
- Horizontal bracing angles at tower upper lateral struts.
- Top of sidewalk floorbeams and shim plates beneath timber nailers.
- Several lower wind bracings (also pitting and perforations)
- Lower hanger rod blocks.

A cleaning and pointing contract was completed for the substructure in 1998 and mortar joints are typically in good condition. However the tops of piers and abutments still exhibit severe scaling and spalling throughout bridge seats and backwalls in the area directly below the end floor beams. The spalling varies in depth from 2 inches to over 6 inches. The spalling does not occur near the tower supports. Concrete apron slabs above the water line at the base of piers were noted in the past to also exhibit undermining, scaling and cracking that do not effect the structural integrity of the bridge at this time.

A portion of the pier apron was washed away during the rains of Hurricane Ivan in the early fall of 2004. Further damage was sustained during the Flood of June 2006, which washed away an additional section of concrete apron.

Construction Contract TS-461A is currently in progress to repair the damaged concrete aprons and address the additional damage due to the Flood of June 2006. Construction is scheduled to commence in late 2006.

RIEGELSVILLE BRIDGE

During the post Flood of June 2006 Inspection, only minor damage was observed. The lower rail of the upstream sidewalk railing exhibited minor impact damage and did not require immediate repair. Additionally, debris accumulation had occurred and should be addressed by Maintenance.

Both approach roadways exhibit cracking, unevenness and general deterioration, more so at the New Jersey approach and adjacent sidewalk/parking area.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in fair condition. A section of the concrete apron at pier 2 has been washed away. The east abutment exhibited moderate erosion and loss of concrete slope protection. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The bridge is in fair condition, with an overall fair to poor paint condition.

It is recommended that a complete bridge rehabilitation contract be performed. The purpose of the rehabilitation contract should not only address the deficiencies of the bridge, but also investigate the possibility of increasing the current load rating of 2-1/2 tons.

The design for the Rehabilitation Project should begin with an In-Depth Inspection and Rating to determine the extent of required repairs. A study should be included with this inspection contract to determine the feasibility of a floor system rehabilitation. It is assumed that the suspension cable system will not be modified. A contract to develop rehabilitation plans and specifications should then be completed, which is assumed to include as a minimum, floorbeam replacement along with the associated hanger rod attachment blocks, blast cleaning and painting steel of the suspension cable and hangers, substructure repairs and milling and repaving the approaches and NJ Officers' shelter parking area.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2005 Underwater Inspection Report. In the interim, the washout of the pier apron that occurred during the rains of Hurricane Ivan in the early fall of 2004, and again in June 2006, should be repaired.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

RIEGELSVILLE BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
445	Rehabilitation Contract (Design, Construction, CMCI)	\$6,102,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$39,400)	
461	Concrete Pier Apron Repair (Design, Construction, CMCI)	\$211,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$960,000
TOTAL COST		<u>\$7,295,000</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		<u>\$0</u>

* Commission Initiative

NORTHAMPTON STREET BRIDGE

GENERAL

The Northampton Street Toll Supported Bridge (Structure No. 280), just south of the Easton-Phillipsburg Toll Bridge, connects Easton, Pennsylvania to Phillipsburg, New Jersey.

The bridge, although aesthetically resembling a suspension bridge, is a double cantilever truss structure, adjoined by a center (main) suspended span. The three-lane open-grid steel grate deck provides a clear roadway width of 32 feet and a total bridge length of 550 feet. The current bridge was constructed in 1895, with major rehabilitation and repairs done due to flood damages.

The bridge is currently posted for a three-ton weight limit and a twenty-five mile per hour speed limit.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all three (3) spans, the substructure units and the approach roadways.

SIGNIFICANT FINDINGS

The bridge is in satisfactory condition due to the recent damage caused by the Flood of June 2006, which resulted in several damaged stringers with the most severely damaged stringer in span 2, which is approximately 5" out of plane. Due to the redundancy of the floor system, the stringers remain functional in this current state.

A new safety line was recently installed along both the upstream and downstream lower chords. These new safety lines allow maintenance and inspection access to the underside of the bridge.

An eyebar on the north truss is slightly bowed in the direction of the roadway, however not directly in the path of traffic. The deficiency does not affect the structural integrity of the structure.

Following the Flood of June 2006, inspections were performed to evaluate the flood damage. The initial investigation from the roadway and sidewalks revealed several areas of damaged sidewalk planks located on the north side of all 2 spans.

Upon visual inspection of the bottom chords and surrounding areas, no evidence was found of any significant structural damage caused by the flood which would warrant bridge closure. General impact scrapes, scratched paint and minor localized dents/bends to the steel members were noted. There were several missing navigational lights and damaged/missing architectural lights beneath the bridge, including several broken electrical conduits and exposed wires. The electrical panel near the upstream side of Pier 1 was also damaged. Most of the damage noted, including the navigational lights and abrasions/paint scrapes, appears to have been caused by the Flood of 2005.

NORTHAMPTON STREET BRIDGE

The most significant damage appears to be damaged/twisted fascia roadway stringer in span 2 at the north side in bay L9-L10. The stringer was impacted approximately 5 feet from L9 and was noted to be approximately 5" out of plane. Although no apparent damage was noted to the connections, one (1) of the riser beams sustained a 4" long broken weld.

Subsequent to the inspections, an additional walk-through inspection was performed to determine the extent of damage to the bridge lighting and whether the current Construction Contract TS-393F needed to be modified as a result of the flooding damage. This visual inspection was limited to the roadway and two (2) access roads beneath the bridge. Additional damage was noted to the downstream fluorescent lighting fixtures. However, since the decorative lighting was not de-energized or re-lamped since the flood, it is difficult to determine if the lighting fixtures which do not show physical damage are not operating.

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition. No additional damage was found following a subsequent inspection due to the Flood of June 2006.

CONCLUSIONS

The bridge is in satisfactory condition. Damage caused by the flood to the main superstructure (bottom chord) does not require repairs at this time. However, the damage to the northern sidewalk railing, sidewalk planks and stringers should be repaired by heat straightening or other acceptable method.

It is recommended that the fluorescent fixtures on the downstream side of the bridge be re-lamped and tested. Any fixture or wiring found to be defective should be replaced for a complete operating system.

For a list of required maintenance repair items, see the Tenth Annual Maintenance Report.

NORTHAMPTON STREET BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
TBD	Repair Floor System Stringers (Design, Construction, CMCI) Due to the Flood of June 2006	\$200,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$400)	
477	Districts II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$48,000
N/A	Inspection/Access Cable/Lifeline (Completed in 2006, \$124,000)	
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$106,000
396	Electronic Surveillance Detection System *	\$960,000
TOTAL COST		\$1,314,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

RIVERTON-BELVIDERE BRIDGE

GENERAL

The Riverton-Belvidere Toll Supported Bridge (Structure No. 320.0) carries Water Street across the Delaware River and connects Riverton, Lower Mount Bethel Township, Pennsylvania with the Town of Belvidere, New Jersey.

The bridge, constructed in 1904, is a four-span, riveted steel, double Warren truss structure, with a total length of 653 feet. The steel open-grate deck provides a clear roadway width of 16 feet between thrie-beam railings. In addition, a concrete-filled steel-grating sidewalk is supported on the upriver truss with steel cantilever brackets.

The piers and the Pennsylvania abutment are rough ashlar-faced masonry and stone-filled. The piers are supported on timber cribs and lower portions are concrete-filled steel sheet piling (1929-32). The New Jersey abutment, including its wingwalls, is constructed of concrete on timber piles.

The bridge is currently posted for a fifteen-mile per hour speed limit and an eight-ton weight limit restriction.

Due to the upcoming rehabilitation project under Contract C-371A and the in-depth inspection involved with that contract, a one-day cursory visual walk-through inspection of the bridge was performed during the 2006 Annual Inspections.

SIGNIFICANT FINDINGS

The following significant findings have been transposed from the previous inspection report to give a general description of the condition of the bridge. The in-depth inspection performed under Contract C-371A would be the most current re-evaluation of this bridge. The bridge will be rehabilitated under Contract TS-371A.

The paint condition has localized areas of poor conditions at supports and intermittent locations. Paint peeling was noted at upper and lower steel locations exposed to the elements. The bridge was last cleaned and painted in 1981. The upper superstructure paint system is satisfactory to fair.

Moderate to heavy impacted rust and deterioration was noticed in the lower chord batten plates and angle members. Debris accumulation has clogged drain (weep) holes in the bottom chords. Connections of the bottom chord and vertical truss members are severely deteriorated with rivet head losses and moderate to severe impacted rust.

Localized rust was exhibited throughout stringers, floorbeams and lower wind bracing. Typically little or no losses were observed but there are random areas with moderate losses to the stringer webs. Increased deterioration was observed in the first bay adjacent to the west abutment (span one), on the flanges and lower webs of stringers and floorbeams, as well as the end of deck bearing bars exhibited heavy rust. Perforations were also noted in the webs of several sidewalk brackets and at the north end of the east abutment floorbeam. In the first bay of span one, maintenance forces have performed remedial repairs to several steel

RIVERTON-BELVIDERE BRIDGE

members. Some areas, however, still require repair, especially perforations in stringers (and their riser beams) and the end floorbeam.

The underside of the sidewalk generally exhibits severe corrosion to the metal forms, especially at the outer edges. The top surface of the sidewalk exhibits heavy concrete scaling throughout with locations of exposed steel grating (rusted) and overall unevenness. The edge of the sidewalk steel grate and fascia plate exhibit heavy rusting and section losses due to water infiltration from the concrete deck. The approach sidewalk is in poor condition exhibiting deterioration and cracking throughout.

The upper lateral wind bracing is in fair condition, exhibiting corrosion and necking at end connections.

Several finger joint teeth of the pier 2 tooth dam, especially at the north side, have broken off due to corrosion and the area filled in with bituminous patch material. The tooth dam and some additional teeth remain lifted/buckled at some locations from impacted rust. The east support riser beam for the deck joint also exhibits severe section loss and corrosion, which may have contributed to the problem. The bituminous patch material may prevent proper thermal expansion of the bridge.

The thermal relief joint at Pier 2 is comprised of stub stringers seated on brackets attached to the floorbeam. The stub stringers are loosely bolted to the brackets through slotted holes with the shim plates also becoming loose.

The vertical diagonal truss members at the sidewalk level have connection tie plates in which several exhibit impacted rust, corrosion and subsequent bending.

The bridge railing behind the newly installed three-beam guide rail on the south side of the bridge is rusted throughout and is staining the guide rail with rust.

The officer's shelter at the New Jersey approach is not protected from traffic impact by means of guide rail or other device. Moreover, the New Jersey approach pavement is in fair to poor condition with cracking, rutting and spalling. The interface of the east abutment deck joint with the approach pavement is worn and discontinuous. The Pennsylvania approach pavement is in fair to poor condition.

Adjacent to the southeast retaining wall at the rear of the officer's shelter, the embankment and neighboring sidewalk have settled. Additional riprap has been added to the embankment by Maintenance forces and appears to have stabilized the slope. The concrete sidewalk has settled and cracked and appeared to have stabilized during at the time of inspection. The base of the outer concrete foundation appears to be at an inadequate depth and too close to the edge of the embankment. The shelter's foundation appears satisfactory.

Commission owned property also includes a storage garage located on the New Jersey side of the bridge. The roof of the structure is comprised of a corrugated material. Heavy moss growth was observed throughout the roof. Maintenance has indicated that repairs have been performed to prevent leaks in the roof and additional repairs are required.

RIVERTON-BELVIDERE BRIDGE

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The bridge is in overall fair condition due to the condition of the superstructure and deck joints. It is recommended that a bridge rehabilitation contract be performed.

The overall rehabilitation should begin with an in-depth inspection and rating to determine the extent of the required repairs. Based on the current condition of the bridge, it is assumed that the entire floor system will be replaced to improve the current condition and rating of the bridge. This method will also remove the lead based paint on the bridge combined with blast cleaning. Repair plans should be developed for replacement of the stringers, floorbeams, and the sidewalk, blast cleaning and painting of the truss, expansion tooth dam replacement, substructure repairs, approach milling and repaving, and guide rail at the officer's shelter.

A separate contract should be issued to replace the roof of the storage garage in order to protect equipment being stored in the structure.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2005 Underwater Inspection Report.

The embankment behind the Officer's shelter should continue to be monitored by Maintenance forces as well as during annual inspections.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

RIVERTON-BELVIDERE BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
371	Rehabilitation Contract (Design, Construction, CMCI)	\$8,775,000
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$9,100)	
477	Districts II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$193,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$11,000
396	Electronic Surveillance Detection System *	\$830,000
TBD	Replace Storage Garage Roof	\$253,000
TOTAL COST		\$10,062,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		\$0

* Commission Initiative

PORTLAND-COLUMBIA PEDESTRIAN BRIDGE

GENERAL

The Portland-Columbia Pedestrian Bridge (Structure No. 360) connects Portland Borough (Upper Mount Bethel Township), Pennsylvania with Columbia (Knowlton Township), New Jersey, just north of the Portland-Columbia Toll Bridge.

The Pedestrian Bridge is a four-span continuous, thru-deck steel girder system, with a concrete deck and built-up girders with a total length of 770 feet. The width of the walkway is 9'-6" between girder centers. The present bridge was reconstructed in 1958, following the flood of 1955, and original vehicular traffic was diverted to the main river bridge.

The former bridge lighting was removed and replaced, under contract in 1990, with high-mast lighting at each approach. In 1996, new approach guide rails and an ADA access ramp were added to the New Jersey side. More recently in 1998, this bridge, as well as the main river bridge and its approaches, were blast cleaned and painted under Contract No. 346

In 2003, Contract TS-388 was completed for the construction of a handicap accessible ramp at the west approach and bridge deck modifications.

In accordance with Commission's bridge inspection policy, this structure was inspected in 2006. This inspection included all four (4) spans, substructure units, and both approaches.

SIGNIFICANT FINDINGS

The bridge paint system is currently in good condition, having been painted recently. Light rust was exhibited below the bridge deck on the cross frames and adjacent to open steel grate drains from water flow through the drains and collecting on steel members.

The concrete deck remains in satisfactory condition, with moderate scaling, unevenness and random transverse cracks and spalls. Minor areas of under-deck spalling were noticed at random locations, some with slightly exposed rebar. Random transverse joints were noticed to allow water to infiltrate resulting in incipient spalling and moist concrete below. The concrete adjacent to open steel grates exhibits light to moderate scaling and deterioration resulting from deteriorated seals. No trough system is present beneath the open steel grates.

The substructures are in generally satisfactory condition. Mortar joints on the upstream side of the piers have deteriorated.

The northwest wingwall exhibited signs of movement (approx. 2" outward). The wall appears stable and no threat is apparent. No change in movement was noted.

No apparent damage from the Flood of June 2006 was observed. Minor accumulation of debris was noted at the north sides of the piers. No significant changes were noted to the erosion at the southeast and southwest corners of the bridge.

PORTLAND-COLUMBIA PEDESTRIAN BRIDGE

The 2005 Underwater Inspection Report prepared by The Louis Berger Group, Inc., found the substructures to be in satisfactory condition. The underwater inspection report indicated that all piers were noted to have broken, missing or undermined sections of concrete aprons, with marine growth and debris. Estimated repair costs from the 2005 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The overall condition of the bridge is good. The bridge has been well maintained and is structurally capable of carrying legal pedestrian loading at the time of this year's inspection.

Drainage troughs should be considered beneath the open steel grates to protect underlying steel. Deck remediation should also be included to extend its useful life.

An overall deck and deck drainage enhancement project should be considered, which should include repair plans, drainage system options and feasibility, deck waterproofing alternatives and construction.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2005 Underwater Inspection Report.

For a list of the required maintenance repair items, see the Tenth Annual Maintenance Report.

PORTLAND-COLUMBIA PEDESTRIAN BRIDGE

ESTIMATED COST OF RECOMMENDED IMPROVEMENTS FUNDED BY THE GENERAL RESERVE FUND

Contract No.	Bridge and Roadway Recommended Improvements	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
366	Substructure & Scour Remediation Contract (Inspection) (2005 Underwater Inspection - Completed in 2006, \$58,000)	
477	Districts II & III Substructure and Scour Remediation (Design, Construction, CMCI)	\$109,000
<u>Facilities and Grounds</u>		
N/A	Miscellaneous Projects * (2007-2008)	\$22,000
396	Electronic Surveillance Detection System *	\$120,000
TOTAL COST		<u>\$251,000</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>CONTRACT No.</u>	<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
N/A	N/A	\$0
TOTAL: Future Repair Contracts		<u>\$0</u>

* Commission Initiative

2006 TRAFFIC ENGINEERING REPORT

Year 2007 Toll Bridge Traffic Volume And Revenue Projections



Submitted to:

Delaware River Joint Toll Bridge Commission

Administration Building, 110 Wood Street
Morrisville, PA 19067

January 17, 2007

COPY

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DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION

EXECUTIVE SUMMARY

Pennoni Associates Inc. (Pennoni) has been retained by the Delaware River Joint Toll Bridge Commission (Commission) to determine if the projected year 2007 revenues will be enough to satisfy the conditions of the Bridge System Revenue Bonds, Series 2003. Specifically, Section 703 (b), paragraph 2 of the Bridge System Revenue Bonds, Series 2003 states that the Commission will not issue any Additional Bonds constituting Long-Term Indebtedness unless (along with other things) the following is delivered to the Trustee:

A report of a Consultant to the effect that (i) the Net Revenues of the Commission during the preceding Fiscal Year were at least 130% of the Maximum Annual Debt Service on all Applicable Long-Term Indebtedness then Outstanding and on any Applicable Long-Term Indebtedness proposed to be issued (which report may assume any revisions of the Tolls which have been approved by the Commission subsequent to the beginning of such Fiscal Year were in effect for the entire Fiscal Year), and (ii) the Projected Debt Service Coverage Ratio is not less than 1.30.

The Commission has made several changes to the toll structure and operations at the toll bridges. On November 30, 2002, an electronic toll collection (ETC) system utilizing E-ZPass technology was introduced, with tolls being increased for all vehicle classes on all toll bridges, with discounts given to E-ZPass vehicles. In addition, toll collection at the New Hope – Lambertville Toll Bridge was converted to one-way westbound, the same as the other Commission toll bridges. On October 31, 2003, tolls for passenger cars were reduced, and on January 1, 2004, tolls for trucks were increased.

Revenues for 2007 were projected by applying the current toll structure to the 2007 projected volumes for each vehicle type on the seven toll bridges under the jurisdiction of the Commission.

The sum of year 2007 projected toll bridge revenues (\$81,076,101) under the current toll structure is high enough to satisfy Section 703 (b), paragraph 2 of the Bridge System Revenue Bonds, Series 2003. Table 16 lists the projected revenues and expenditures for the year 2007. Since there is a projected Debt Service Coverage Ratio of 3.28, the requirements of the Bridge System Revenue Bonds, Series 2003 are projected to be met.



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INTRODUCTION

Pennoni Associates Inc. (Pennoni) has been retained by the Delaware River Joint Toll Bridge Commission (Commission) to project traffic volumes by vehicle type on the seven toll bridges for the year 2007. The seven toll bridges and 13 toll-supported bridges under the jurisdiction of the Commission are listed below from south to north.

TOLL BRIDGES	TOLL-SUPPORTED BRIDGES
DISTRICT ONE	
Trenton–Morrisville (U.S. Route 1)	Lower Trenton
New Hope–Lambertville (U.S. Route 202)	Calhoun Street
	Scudder Falls (Interstate 95)
	Washington Crossing
	New Hope–Lambertville (Route 179)
	Centre Bridge–Stockton
	Lumberville–Raven Rock (Pedestrian Only)
DISTRICT TWO	
Interstate 78	Uhlerstown–Frenchtown
Easton–Phillipsburg (U.S. Route 22)	Upper Black Eddy–Milford
	Riegelsville
	Northampton Street
	Riverton–Belvidere
DISTRICT THREE	
Portland–Columbia	Portland Columbia (Pedestrian Only)
Delaware Water Gap (Interstate 80)	
Milford–Montague	

The purpose of the study is to determine if year 2007 projected toll revenues (under the current toll structure) will satisfy the requirements of the Bridge System Revenue Bonds, Series 2003. Specifically, Section 703 (b), paragraph 2 of the Bridge System Revenue Bonds, Series 2003 states that the Commission will not issue any Additional Bonds constituting Long-Term Indebtedness unless (along with other things) the following is delivered to the Trustee:

A report of a Consultant to the effect that (i) the Net Revenues of the Commission during the preceding Fiscal Year were at least 130% of the Maximum Annual Debt Service on all Applicable Long-Term Indebtedness then Outstanding and on any Applicable Long-Term Indebtedness proposed to be issued (which report may assume any revisions of the Tolls which have been approved by the Commission subsequent to the beginning of such Fiscal Year were in effect for the entire Fiscal Year), and (ii) the Projected Debt Service Coverage Ratio is not less than 1.30.



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METHODOLOGY

To project traffic volumes on the toll bridges for the year 2007, we considered new development projects which could add traffic to the toll bridges, roadway construction projects which could divert motorists from their regular routes, and general background growth, based on historic traffic volume data crossing the bridges.

YEAR 2007 DEVELOPMENT PROJECTS

County planning/engineering offices for the eight counties along the Delaware River within the study area (Bucks, Northampton, Monroe, Pike, Mercer, Hunterdon, Warren, and Sussex) as well as staff from PENNDOT and NJDOT were contacted to learn of large developments which could have a major affect on toll bridge volumes during the year 2007. While several development projects are underway, only a few major projects are expected to open/expand/contract during the 2007 calendar year. For informational purposes, we have discussed major projects which may reach full buildout in the distant future but will likely not contribute any traffic during the year 2007.

District 1

In Mercer County, Ashley Park which is owned by Bristol-Myers Squibb is located at I-95 and Princeton Pike in Lawrence Township. The property is currently under construction for a one million square foot office building, to be occupied by mid to late 2007.

The Merrill Lynch facility located off the Scotch Road exit of I-95 in Hopewell Township is in the preliminary design stages for a three million square foot addition. This addition is not expected to be completed by the end 2007.

We note that the Bristol-Myers Squibb and Merrill Lynch properties are off I-95, and motorists to / from Pennsylvania would likely use the Scudder Falls (I-95) toll supported bridge, which will not affect the toll revenue income for 2007 year.

The Quakerbridge Mall, located next to the Mercer Mall in Lawrence Township approximately seven miles from the Trenton-Morrisville Toll Bridge is considering an expansion, but is in the preliminary design stages at this point. The expansion is expected to be completed by 2008 at the earliest. Nonetheless, no additional traffic from Pennsylvania is anticipated to cross the Trenton-Morrisville Toll Bridge to use the Quakerbridge Mall when it is expanded, since the Oxford Valley Mall located on Route 1 in Middletown, Bucks County is less than seven miles from the Trenton-Morrisville Toll Bridge.

There are several other medium sized developments in Mercer County at various stages of the approval process, but many are not near the Delaware River or Route 1. No specific increase in traffic at the Trenton-Morrisville Toll Bridge was assumed from Mercer County developments.

In Bucks County, several small age-qualified residential developments totaling almost 1,300 units have been proposed in Bensalem, Lower Makefield, Middletown and Newtown during 2006. Also several small industrial land developments totaling almost 1,200,000 square feet have been proposed in Bristol and Falls during 2006. Motorists destined to these facilities from New Jersey



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could use the turnpike bridge, the Scudder Falls Toll Supported Bridge, or the Trenton Morrisville Toll Bridge to cross into New Jersey. Nonetheless, we have not assumed any additional traffic crossing the Trenton-Morrisville Toll Bridge from these buildings in 2007, in part due to the early development stage of most projects.

The Matrix development in Lower Makefield and Middletown Townships went under major redesign in 2006. The project will now be broken into two phases with the first phase consisting of 600 age qualified units of single family homes, condominiums and town homes which is projected to be completed in 2008. The second phase will consist of 55,000 square feet of both office space and retail. Nothing will be occupied in 2007.

Philadelphia Park located near PA Turnpike and Route 1 in Bensalem is part of the first phase of casino expansion into Pennsylvania. The race track originally opened in November of 1974 and was one of six race tracks in Pennsylvania to be awarded with a gaming license to install up to 5,000 slot machines. On December 19, 2006, the facility opened with 1,996 slot machines, and will eventually have 3,000 slot machines. The other five tracks are located outside of the study area, with the closest park at Pocono Downs in Plains Township, more than 50 miles from The Delaware Water Gap or Milford Montague Toll Bridges.

As the Trenton Morrisville Toll Bridge would be the most direct route for NJ residents to reach Philadelphia Park, we have conservatively not assigned any additional growth to this bridge from a revenue standpoint. Trip Generation estimates for full casinos vary widely, and we do not have before and after data of trip generation at a thoroughbred racetrack with slot machines.

In Hunterdon County, the final phases of an age restricted residential development are expected to be occupied by 2007. While the development is located close to the New Hope Lambertville Toll Bridge, it is only 129 units and can also use the New Hope Lambertville Toll Supported Bridge.

Another small residential development is to be located in Sergeantsville, just off of Hunterdon County Route 523. We note that Route 523 is the New Jersey approach to the Centre Bridge-Stockton Toll Supported Bridge. No additional traffic is expected at the toll bridges from this development.

District 2

The Sands Bethworks Casino is one of the five new stand alone casinos in Pennsylvania, and one of two outside of Philadelphia and Pittsburgh. The casino will be located at the former Bethlehem Steel plant in the City of Bethlehem and is expected to open in July 2008 with 5,000 slot machines. The project is also considering a 300,000 square foot casino with 5,000 slot machines, a 500 to 1,000 room hotel, a convention center, and 800,000 square feet of retail space, up to 1,200 apartments, a festival hall, a 3,000 seat arena, and a spa.

An upscale retail lifestyle center of approximately 1.0 million square feet is being considered in Bethlehem on Route 33 and Freemansburg Road, but plans are in the preliminary design phase. The project will not be completed in 2007.

Greenfield Industrial Park is a proposed 1,300,000 square foot warehouse located in Bethlehem which is currently under construction and is scheduled to open sometime in 2007.



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Martin Tower in Bethlehem is proposed to consist of a 22-story condominium building with 800 units and 15 acres of additional residential and retail. Currently the site is in the process of rezoning, and is not expected to be completed by the end of 2007.

The Scranton Wilkes-Barre Red Barons, the Philadelphia Phillies AAA minor league team will be relocating from Scranton/Wilkes-Barre to Allentown, and a new stadium will be built beside the location for the Aztar Corporation Casino. The new stadium will seat 5,000 people and is scheduled to open up in the spring of 2008. The Phillies minor league team will play home games in Ottawa during 2007. In concert with the Phillies AAA team leaving Scranton Wilkes-Barre, the New York Yankees have relocated their AAA team from Columbus Ohio to Scranton Wilkes-Barre. While the Yankees AAA team may draw more northern NJ Yankees fans than the Phillies AAA team, no major changes to travel patterns across the toll bridges are expected to occur in 2007.

An upscale retail lifestyle center consisting of 443,000 square feet of retail is under construction at Route 309 and I-78 in Saucon Valley. It is scheduled to open up to the public in October of 2007. As this facility is located over 15 miles from NJ, we do not anticipate any additional traffic crossing the I-78 or Easton-Phillipsburg bridges.

Several smaller developments are underway, but these are not expected to alter traffic volumes on the toll bridges.

In Warren County, a mixed development of approximately 120 units of residential and 1,400,000 square feet of retail are proposed in Franklin, but it is not anticipated to be occupied in 2007.

District 3

During 2005 and 2006 the Mountain Laurel Center for the Performing Arts in Bushkill, Pike County, PA was under negotiations to be sold, and ownership changed in March of 2006. With ownership in question for the better part of 2005 there was approximately 10 events scheduled for the 2006 season. While the 2007 schedule is not complete, we have assumed that the number of scheduled events will increase with new ownership during the summer of 2007, but will not have enough impact on traffic to increase traffic on the toll bridges.

Surrounding the Performing Arts Center, up to 5,300 housing units are being considered in Lehman Township. At this point, the development is in the early approval process and the project is not scheduled to be completed in 2007.

In Monroe County, a slot machine casino license has been awarded to the Mount Airy resort in Paradise Township. Preliminary timetables indicate that the Mount Airy resort casino will open in November 2007. To be conservative, we have not assumed any additional toll revenues from this casino.

The Shawnee Valley residential development located just north of the Delaware Water Gap Toll Bridge received approvals for approximately 1,500 homes in 1988, and is starting to move forward. The first stage of approximately 200 homes will be built soon, but no specific increase was assumed for 2007.

No major developments are proposed in Sussex County for 2007.



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RECENT ROADWAY CONSTRUCTION PROJECTS

County planning/engineering offices and the departments of transportation were also asked about significant roadway construction projects near the bridges. In addition, the Delaware Valley Regional Planning Commission (DVRPC) Transportation Improvement Program (TIP) was also reviewed. Our findings are as follows:

Bucks County, Pennsylvania

- ☑ The Pennsylvania Turnpike will have an interchange with I-95 in Bristol. The project is in the first phase of construction and is expected to continue until 2010. Phase I will not affect any traffic patterns in 2007.
- ☑ In Doylestown and Buckingham Townships, modifications will be made to US Route 202 from Route 313 to Mechanicville Road. However it is not anticipated that the traffic volumes at the New Hope Lambertville Toll Bridge will be altered from this project in 2007.
- ☑ In Doylestown and Warrington Townships, US Route 202 from Welsh Road to SR 611 will be widened. The construction schedule will be broken up into four phases from 2007-2010. However the distance of the project to the New Hope Lambertville Toll Bridge will not impact the toll bridge volumes.

Mercer County, New Jersey

- ☑ Resurfacing of Interstate 95 from Route 29 to Route 1 will begin in early 2007. The installation of signing, top soil and seeding of exposed areas, guiderail upgrades and restriping will also occur along segments of the project area. The resurfacing will take place during the overnight off peak periods and is not anticipated to alter traffic volumes in 2007.
- ☑ Interstate 195 in Hamilton Township will have a two mile section resurfaced, along with the ramps at the Interstate 195/295 interchange and the ramp to Route 206 southbound. This project is not anticipated to alter traffic volumes on any toll bridges in 2007.

In reviewing the Lehigh Valley Transportation Improvement Program (TIP) as well as the DVRPC TIP for Pennsylvania and New Jersey, there are no major construction projects planned in other areas that are projected to have significant effects on volumes or patterns near the bridges.



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HISTORICAL TRAFFIC VOLUMES

The Commission provided historical traffic volume information for the eleven vehicular toll-supported bridges and the seven toll bridges. For the purpose of this study, volumes and toll revenue data from the years 2001 to 2006 were used.

Monthly traffic volume data for the toll-supported bridges is summarized on a yearly basis from 2001 to 2006, as listed in Tables 1 through 6. Where volume data was not available, traffic volumes were estimated and are shown in italics. No vehicle classification was provided, but most toll-supported bridges (with the exception on the Scudder Falls Bridge and the Upper Black Eddy-Milford Bridge) have weight restrictions prohibiting large trucks.

The Scudder Falls Toll Supported Bridge carries approximately 19-20 million vehicles per year, which converts to an average annual daily traffic volume (AADT) of approximately 55,000 vehicles. Since traffic is higher on weekdays, the average weekday traffic volume (AWDT) is approximately 58,000 vehicles. Volumes on the Scudder Falls Bridge have remained constant for several years. The Northampton Street and Calhoun Street Toll Supported Bridges carry approximately 6.7-8.5 million vehicles per year, and the Lower Trenton and New Hope-Lambertville Toll Supported Bridges carry approximately 4.5 – 6.5 million vehicles per year. While the Calhoun Street Toll Supported Bridge has always carried more traffic than the Lower Trenton Bridge, the gap is narrowing, with a difference of approximately 700,000 vehicles over the past few years, down from over two (2) million cars in 2001. We note that construction on the New Hope-Lambertville Toll Supported Bridge closed this bridge for weekdays in the early part of 2004, reducing the yearly volume to approximately 3.7 million vehicles. The remaining toll-supported bridges carry from 1.1 to 2.7 million vehicles per year.

At the toll supported bridges, there were minor fluctuations in volumes year to year on most bridges, with the five-year trend generally less than three percent per year. Of exception are the Uhlerstown-Frenchtown, Riegelsville, and New Hope-Lambertville Toll Supported Bridges. We note that volumes at Uhlerstown-Frenchtown have remained consistent for the past three years, while volumes at Riegelsville during 2004 are similar to those from 2003. The Lower Trenton Bridge realized the greatest yearly changes from 2002 to 2003 due to the toll increase, and again saw a large change from 2003 to 2004 due to the toll decrease. More vehicles gradually returned to the Route 1 Bridge from the Lower Trenton Bridge during 2005 and 2006.

During 2001, The Uhlerstown-Frenchtown Bridge was closed for repairs during weekdays from March through July, with most traffic diverting to the Upper Black Eddy-Milford Bridge and some diverting to the Centre Bridge-Stockton Bridge. Year 2002 to 2006 volumes indicate that traffic has returned to Uhlerstown-Frenchtown, but not back to the levels prior to construction. The Riegelsville Bridge has remained essentially unchanged from 2000 to 2002, and then had approximately 300,000 - 400,000 fewer vehicles in 2003 through 2006. Conversely, the Lower Trenton Bridge had modest growth from 2000 to 2001, and then a spike of 500,000 vehicles in traffic during 2002 and a higher spike of 1,000,000 in 2003. Volumes have reduced by approximately 500,000 from 2003 to 2006. We assume that vehicles diverting from the Trenton-Morrisville Toll Bridge after the toll increase account for the 2003 increase. Floods during April 2005 closed several smaller toll supported bridges for a period of just four days, but the Washington Crossing Toll Supported Bridge



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was closed for almost the entire month. Floods at the end of June 2006 closed several toll supported bridges for two days.

Reviewing information from the seven toll bridges under the jurisdiction of the Commission during 2006, we found the Trenton-Morrisville (US Route 1), I-78, Easton-Phillipsburg (US Route 22), and Delaware Water Gap (Interstate 80) bridges carry between 6.2 million and 10.0 million toll paying (westbound) vehicles per year. The remaining three toll bridges carry between 1.29 million and 1.84 million toll paying (westbound) vehicles per year. These figures have remained consistent over the past few years, with the exception of the New Hope Lambertville Toll Bridge, which saw a spike in passenger cars during 2004 from the construction on the New Hope Lambertville Toll Supported Bridge.

The five-axle tractor-trailer continues to be the most common truck type, representing approximately 9.4 percent of vehicles crossing the seven toll bridges during 2006, and estimated to comprise approximately 9.3 percent of vehicles during 2007 but generating approximately 58 percent of the 2007 toll revenue. Conversely, passenger cars represented approximately 86 percent of the vehicles on the seven toll bridges during 2006, and are projected to generate approximately 27 percent of the toll revenue during 2007. The volume figures have remained consistent for the past several years.

YEAR 2007 TRAFFIC VOLUME AND TOLL REVENUE PROJECTIONS

Based on the findings listed above, a growth or reduction factor was applied to 2006 data for each vehicle type on each toll bridge to project year 2007 volumes. Generally, recent one-year to three-year growth trends are considered, but the 2003 and 2004 calendar year volumes were mildly different. The November 30, 2002 toll increase caused passenger cars to divert from toll bridges to toll supported bridges that were nearby and convenient, and also caused some outright reductions in vehicles crossing the bridges. The October 31, 2003 rollback for passenger car tolls caused some vehicles to return to toll bridges, but generally not back to year 2002 volumes. In January 2004, the second phase of the truck toll increase was implemented. The August 2004 toll increase on the Pennsylvania Turnpike may have shifted some vehicles back to Commission Bridges, as an increase in five axle trucks was observed on the Trenton-Morrisville Toll Bridge. This was the first appreciable increase in this truck class, after a decline of several years. Flooding caused many smaller toll supported bridges to close for approximately 2-4 days in September 2004 and June/July 2006 but it is doubtful that this had any major impact on toll revenues.

There were generally no abnormalities during 2006. The floods during June 30 to July 1 closed several small toll supported bridges for two days. Gasoline prices were steadily rising during the summer months to approximately \$2.60 per gallon in New Jersey. The effects of Hurricane Katrina caused gasoline prices to spike from approximately \$2.60 per gallon to \$3.30 per gallon from late August to late September 2005, but by late November 2005, gasoline was observed at \$1.85 per gallon in New Jersey. Throughout 2006 gasoline prices rose steadily peaking in the summer, and began falling after Labor Day to \$1.89 per gallon. No long term effect was experienced from the September 2005 spike in prices.

Tables 7 through 13 illustrate actual traffic volumes for the seven toll bridges for the years 2001 through 2006, as well as the projected year 2007 volumes. The current toll structure was applied to the projected 2007 volumes to determine the projected year 2007 revenue for each toll bridge.



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The E-ZPass electronic toll collection system provides a discount over cash paying customers. For passenger cars, casual E-ZPass customers will pay \$0.60, a 20% discount over the cash rate of \$0.75. Frequent or commuter E-ZPass users that have 20 or more crossings in a 35-calendar day period will pay \$0.45, a 40% discount over the cash fare. The sum of commuter E-ZPass transactions was provided for the seven (7) toll bridges. Based on E-ZPass penetration rates at each toll bridge and the number of total commuter E-ZPass transactions, we were able to estimate the number of cash paying passenger cars, casual E-ZPass passenger cars, and commuting E-ZPass passenger cars at each of the seven (7) toll bridges.

For trucks, there are different E-ZPass fares for peak (6 AM – 9 PM) and off peak traffic. Review of hourly traffic during a typical week in 2006 (April 28 – May 4) provided the percentage of peak traffic as a percentage of daily traffic for each truck class on every toll bridge. Data provided by the Commission indicated the percentage of trucks that are using E-ZPass. From the week of hourly data, we were able to determine the peak/off-peak split of the E-ZPass users.

We combined the data of cash users and E-ZPass users, with specific percentages of peak/off peak activity for each vehicle class at each bridge to reach a weighted average toll. For example, the 2-axle trucks at the Trenton-Morrisville Bridge will have 28% cash users at \$5.00, 66.5% peak E-ZPass users at \$4.75, and 6.5% off peak E-ZPass users at \$4.25, for a weighted average toll of \$4.79. Special permit vehicles will maintain the same toll structure of \$0.40 per ton plus \$2.00 permit fee. For example, a truck weighing 80,000 pounds (40 tons) will pay \$18.00.

Table 14 compares the 2006 volumes and revenues for each bridge and maintenance district with the projected 2007 volumes. As indicated, overall toll traffic volumes are projected to increase by approximately 455,000 vehicles (1.20%) while revenues are projected to increase by approximately \$695,000 (0.87%). The growth is projected based on the following factors:

- A small increase (0.4% - 0.6%) in vehicles on four toll bridges, a modest increase of 1.6% and 2.5% at Trenton Morrisville and I-78, respectively, and virtually no growth on the New Hope Lambertville Toll Bridge.
- A stabilizing of diverted passenger cars returning to the New Hope-Lambertville Toll Supported bridge from the New Hope-Lambertville Toll Bridge.

Table 15 is provided in response to (i) of Section 703 (b) paragraph 2 and provides 2007 Total Revenue, 2007 Operating Expenses, Net Revenue, Maximum Annual Debt Service, and 130% of the Maximum Annual Debt Service. All values were provided by the Commission. The requirement that the Net Revenue for the preceding fiscal year be at least 130% of the Maximum Annual Debt Service was met, as indicated in the Table.

Table 16 lists the 2007 projected toll revenues, and subtracts the projected operating expenses. The Net Revenue is then divided by Maximum Annual Debt Service to calculate a Projected Debt Service Coverage Ratio that is not less than 1.30. The Commission provided all the figures in Table 16, with the exception of the projected 2007 toll revenue. With a Projected Debt Service Coverage Ratio of 3.28, the requirements of the Bridge System Revenue Bonds, Series 2003 are projected to be met.



Table 1- 2001 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Uniersdown-Frenchtown	Upper Black Eddy-Milford	Piegelsville	Northampton Street	Riverton-Baldyore	Total
January	384,765	565,225	1,542,037	180,772	<i>420,000</i>	<i>120,000</i>	111,850	107,812	112,214	639,299	131,187	4,315,161
February	362,983	536,053	1,452,342	165,324	375,707	117,831	109,361	99,143	103,747	587,134	119,243	4,028,868
March	404,806	610,836	1,680,865	190,276	433,212	149,743	62,384	161,457	121,620	673,576	141,122	4,629,897
April	420,647	596,302	1,728,375	205,862	448,242	174,344	46,567	188,291	132,380	687,195	151,778	4,779,983
May	444,715	648,001	1,807,165	219,838	474,201	190,047	48,657	202,234	141,965	705,070	161,012	5,042,905
June	435,276	637,268	1,788,324	213,296	464,735	189,874	11,579	197,288	138,031	688,357	157,618	4,921,646
July	441,550	642,315	1,763,262	215,568	481,900	197,377	82,032	186,479	133,650	686,872	161,092	4,992,097
August	443,992	637,627	1,804,596	210,511	475,032	181,842	148,935	140,826	134,384	596,153	163,246	4,937,144
September	424,868	600,629	1,660,935	208,194	443,877	172,766	141,789	130,430	<i>115,000</i>	519,383	156,282	4,574,153
October	453,607	629,170	1,763,790	<i>227,273</i>	479,347	180,683	146,865	137,916	131,110	550,054	165,831	4,865,646
November	425,718	<i>624,395</i>	1,727,379	222,734	474,795	162,230	130,867	123,899	119,832	526,887	147,807	4,686,543
December	432,553	<i>615,000</i>	1,683,506	218,213	453,421	161,604	126,579	124,824	130,914	560,880	148,246	4,655,740
Total	5,075,480	7,342,821	20,402,576	2,477,861	5,424,469	1,998,341	1,167,465	1,800,599	1,514,847	7,420,860	1,804,464	56,429,783

estimated figures due to adjustments shown in *italics*
adjusted figures due to counter malfunction rounded



Table 2 - 2002 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Uniersdown-Frenchtown	Upper Black Eddy-Milford	Piegelsville	Northampton Street	Riverton-Belvidere	Total
January	422,632	<i>570,000</i>	1,634,452	210,867	<i>407,964</i>	<i>138,820</i>	109,044	114,577	<i>98,000</i>	521,534	138,185	4,366,075
February	403,337	550,118	<i>1,600,000</i>	202,382	390,721	136,917	110,329	111,759	114,524	492,374	133,792	4,246,253
March	446,647	627,666	1,728,297	229,953	450,134	157,828	125,882	125,501	128,852	587,766	152,078	4,760,604
April	452,673	644,922	1,771,019	221,147	461,011	172,334	131,898	134,870	133,794	606,097	158,947	4,888,712
May	479,282	680,667	1,843,132	229,836	<i>475,000</i>	189,728	144,873	142,265	146,304	592,278	167,489	5,090,854
June	464,348	667,952	1,773,441	219,264	582,326	190,475	144,825	143,387	142,702	644,126	163,345	5,136,191
July	480,658	577,995	1,808,070	219,531	520,047	198,011	154,365	146,093	139,251	675,027	167,113	5,086,161
August	478,503	612,892	1,832,166	209,626	471,821	196,508	150,228	142,675	132,691	685,509	165,992	5,078,611
September	445,405	631,593	1,890,000	207,791	439,880	180,385	136,675	133,009	126,207	632,404	157,203	4,980,552
October	474,414	592,290	1,832,669	216,606	457,922	182,021	139,073	132,591	130,454	658,191	163,677	4,979,908
November	437,558	557,654	1,970,312	<i>205,000</i>	478,915	166,275	127,521	125,452	119,243	633,977	147,772	4,969,679
December	530,991	632,131	<i>2,150,000</i>	<i>215,000</i>	470,157	<i>158,000</i>	114,477	120,815	<i>118,000</i>	732,026	150,492	5,392,089
Total	5,516,448	7,345,880	21,833,558	2,587,003	5,605,898	2,067,302	1,589,190	1,572,994	1,530,022	7,461,309	1,866,085	58,975,689

estimated figures due to adjustments shown in *italics*
adjusted figures due to counter malfunction rounded



Table 3 - 2003 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Uniontown-Frenchtown	Upper Black Eddy-Milford	Piegelsville	Northampton Street	Riverton-Belvidere	Total
January	564,310	<i>550,000</i>	1,599,968	196,664	429,548	157,104	<i>117,000</i>	<i>100,000</i>	<i>79,000</i>	974,041	143,833	4,911,468
February	443,845	521,260	1,356,222	164,661	377,167	122,798	95,028	101,033	78,494	555,358	128,562	3,944,428
March	548,534	640,157	1,693,978	207,462	482,877	159,330	123,253	128,069	96,178	685,567	161,045	4,926,450
April	538,237	636,833	1,731,919	214,795	488,760	178,486	127,826	132,334	100,623	689,978	167,730	5,007,521
May	<i>564,018</i>	<i>650,000</i>	1,803,229	221,906	514,736	189,238	138,952	144,159	105,264	722,607	179,714	5,233,823
June	551,801	<i>611,738</i>	1,774,949	220,403	509,340	188,205	138,492	140,910	100,064	700,702	176,310	5,112,914
July	579,269	639,029	1,825,107	234,055	535,268	<i>203,903</i>	152,565	<i>148,691</i>	105,971	721,007	185,300	5,330,165
August	<i>569,290</i>	626,182	1,797,945	223,958	527,067	195,991	147,191	145,387	103,158	<i>720,548</i>	<i>176,188</i>	5,232,905
September	547,070	596,817	1,725,191	219,640	482,969	178,125	133,080	136,146	94,722	<i>691,376</i>	168,274	4,973,410
October	573,398	621,353	1,849,644	236,089	522,009	188,364	136,929	141,315	100,340	724,195	177,738	5,271,374
November	515,313	568,435	1,689,946	205,939	478,800	173,185	124,837	128,857	94,727	673,099	157,195	4,810,333
December	527,089	572,532	1,633,976	199,306	458,381	153,321	110,861	120,553	94,378	669,187	149,241	4,688,825
Total	6,522,174	7,234,336	20,482,074	2,544,878	5,806,922	2,088,050	1,546,014	1,567,454	1,152,919	8,527,665	1,971,130	59,443,616

estimated figures due to adjustments shown in *italics*
adjusted figures due to counter malfunction rounded



Table 4 - 2004 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Uniontown-Frenchtown	Upper Black Eddy-Milford	Piegelsville	Northampton Street	Riverton-Belvidere	Total
January	495,049	545,773	1,558,639	215,643	131,272	158,320	104,599	112,951	89,299	647,096	139,963	4,198,604
February	491,631	541,831	1,584,203	220,054	157,576	162,945	108,568	114,563	86,645	646,150	141,661	4,255,827
March	543,079	599,213	1,773,426	244,549	137,807	181,410	122,478	128,366	97,390	718,412	160,225	4,706,355
April	532,424	594,358	1,802,794	250,560	154,061	193,391	130,759	141,162	97,980	724,557	164,864	4,786,910
May	548,806	619,033	1,841,026	270,327	143,402	214,181	143,818	149,292	100,696	750,157	174,202	4,954,940
June	537,692	609,804	1,831,365	250,175	301,416	196,765	139,959	146,241	97,578	708,925	171,847	4,991,767
July	533,218	584,653	1,758,351	231,474	426,710	188,715	146,966	149,039	98,234	716,311	174,983	5,008,654
August	536,367	555,972	1,811,783	221,746	436,722	185,161	144,138	144,543	97,182	720,922	170,090	5,024,626
September	<i>547,070</i>	534,777	1,789,294	199,741	390,205	166,567	125,187	133,017	89,810	634,981	160,925	4,771,574
October	<i>573,398</i>	587,641	1,459,900	216,130	443,149	177,050	133,368	142,999	98,574	714,031	170,631	4,716,871
November	<i>515,313</i>	556,841	1,740,078	190,649	409,346	159,500	116,295	127,600	92,094	675,077	153,783	4,736,576
December	<i>480,000</i>	577,632	1,736,170	190,638	420,771	155,204	112,075	127,686	97,425	692,831	155,831	4,746,263
Total	6,334,047	6,907,528	20,687,029	2,701,686	3,552,437	2,139,209	1,528,210	1,617,459	1,142,907	8,349,450	1,939,005	56,898,967

estimated figures due to adjustments shown in *italics*
adjusted figures due to counter malfunction rounded



Table 5 - 2005 Toll Supported Bridge Volumes

Month	Lower Trenton	Cahoon Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Uniersdown-Frenchtown	Upper Black Eddy-Milford	Piegelsville	Northampton Street	Riverton-Belvidere	Total
January	453,991	520,094	1,566,950	175,523	369,422	130,496	98,147	115,312	85,589	615,480	136,364	4,267,368
February	436,839	506,071	1,521,736	167,777	359,028	126,870	95,552	109,768	82,146	599,385	135,497	4,140,669
March	543,079	580,142	1,766,709	192,763	405,788	148,274	113,344	126,969	94,544	692,465	155,279	4,819,356
April	532,424	527,249	1,131,518	21,035	385,277	145,725	103,752	116,299	99,691	591,668	147,988	3,802,626
May	548,806	604,119	1,877,850	183,915	441,442	182,304	128,463	137,669	114,644	716,255	167,351	5,102,818
June	537,692	601,724	1,858,574	198,817	436,210	182,171	127,998	132,171	116,004	710,299	165,285	5,066,945
July	533,218	599,309	1,786,565	202,953	427,856	188,107	138,408	135,112	114,466	700,001	170,799	4,996,794
August	510,000	598,063	1,858,505	201,975	437,261	180,094	134,231	131,779	110,654	741,908	162,021	5,066,491
September	482,514	558,116	1,662,649	202,075	417,298	160,857	125,248	125,340	103,239	690,890	160,440	4,688,666
October	504,022	560,559	1,745,874	200,667	439,579	172,000	125,108	124,343	104,940	710,506	166,786	4,854,384
November	472,857	541,370	1,654,746	186,307	417,122	145,307	116,073	116,732	99,694	678,235	159,536	4,587,979
December	480,984	558,001	1,673,429	177,476	414,259	128,022	106,302	112,082	101,868	697,971	155,725	4,606,119
Total	6,036,426	6,754,817	20,105,105	2,111,283	4,950,542	1,890,227	1,412,626	1,483,576	1,227,479	8,145,063	1,883,071	56,000,215

estimated figures due to adjustments shown in *italics*
adjusted figures due to counter malfunction rounded



Table 6 - 2006 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Uniersdown-Frenchtown	Upper Black Eddy-Milford	Piegelsville	Northampton Street	Riverton-Belvidere	Total
January	481,349	542,134	1,647,638	180,403	392,376	113,462	106,700	109,085	97,553	692,038	156,259	4,518,997
February	460,026	506,035	1,512,963	162,729	329,479	114,662	96,112	101,386	90,141	657,336	144,571	4,175,440
March	523,914	581,075	1,776,740	191,241	429,947	145,430	116,468	118,054	105,674	743,968	167,761	4,900,272
April	504,442	559,811	1,734,750	195,203	444,336	154,511	120,327	121,299	107,097	739,970	164,243	4,845,989
May	527,000	581,547	1,826,526	212,848	464,451	169,518	130,353	135,000	111,162	753,909	173,749	5,086,063
June	512,623	600,000	1,788,813	205,000	450,000	165,000	128,000	111,000	106,000	691,000	173,000	4,930,436
July	506,000	558,000	1,700,000	200,000	445,000	159,000	115,000	141,000	104,618	670,000	163,480	4,762,098
August	522,121	570,908	1,826,859	212,444	458,066	159,240	115,004	145,038	105,974	703,761	162,924	4,982,339
September	507,037	539,572	1,687,969	208,244	432,513	149,144	119,096	116,836	101,082	676,601	156,138	4,694,232
October	522,611	562,501	1,511,747	224,156	445,294	156,057	123,489	120,092	104,976	713,693	122,807	4,607,423
November	472,857	541,370	1,654,746	186,307	417,122	145,307	116,073	116,732	99,694	678,235	159,536	4,587,979
December	480,984	558,001	1,673,429	177,476	414,259	128,022	106,302	112,082	101,868	697,971	155,725	4,606,119
Total	6,020,964	6,700,954	20,342,180	2,356,051	5,122,843	1,759,353	1,392,924	1,447,604	1,235,839	8,418,482	1,900,193	56,697,387

estimated figures due to adjustments shown in *italics*

adjusted figures due to counter malfunction rounded

November - December data from 2005, and not adjusted

June July figures represent adjusted volumes without closures due to flooding



Table 7: Trenton-Morrisville Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	4,198,434	4,545,539						
1b - passenger car - token	2,511,277	2,034,702						
1c - E-Zpass passenger cars (December 2002)		141,903						
1 - passenger car			5,771,654	6,281,830	6,588,111	6,805,085	6,907,161	1.015
2 - 2-axle truck	164,115	168,564	145,020	159,655	172,109	181,550	188,812	1.040
3 - 3-axle truck	79,227	66,800	60,411	71,473	74,247	78,038	78,038	1.000
4 - 4-axle truck	66,293	63,157	47,223	50,275	55,136	58,329	60,079	1.030
5 - 5-axle truck	332,546	279,071	165,579	169,038	185,618	194,518	201,326	1.035
6 - 6-axle truck	3,329	2,350	1,404	1,594	1,876	1,769	1,751	0.990
8 - special permit *	223	277	61	-	-	-	-	
7 - 7-axle truck	176	119	122	146	132	136	136	1.000
total toll	7,355,620	7,302,482	6,191,474	6,734,011	7,077,229	7,319,425	7,437,303	

* Special Permit vehicles were classified differently after 2003

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.67	6,907,161	\$ 4,598,387.02
2 - 2-axle truck	\$ 4.79	188,812	\$ 904,839.97
3 - 3-axle truck	\$ 7.81	78,038	\$ 609,501.47
4 - 4-axle truck	\$ 10.49	60,079	\$ 630,519.25
5 - 5-axle truck	\$ 12.98	201,326	\$ 2,612,369.57
6 - 6-axle truck	\$ 15.69	1,751	\$ 27,474.45
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.30	136	\$ 2,489.17
Totals		7,437,303	\$ 9,385,580.91



Table 8: New Hope-Lambertville Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 ** volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	2,322,881	2,305,906						
1b - passenger car - token	1,075,953	926,094						
1c - E-Zpass passenger cars (December 2002)		44,048						
1 - passenger car			1,298,859	2,026,746	1,700,215	1,720,641	1,720,641	1.000
2 - 2-axle truck	111,676	106,192	35,788	52,056	50,979	56,265	56,265	1.000
3 - 3-axle truck	52,953	63,141	20,198	24,171	26,248	31,139	31,762	1.020
4 - 4-axle truck	27,066	29,167	6,470	7,797	7,052	6,938	6,799	0.980
5 - 5-axle truck	78,516	72,739	24,372	27,141	26,682	26,910	26,910	1.000
6 - 6-axle truck	1,906	1,466	745	804	718	757	757	1.000
8 - special permit *	226	292	1	-	4	1	1	1.000
7 - 7-axle truck	19	32	34	67	48	52	52	1.000
total toll - two directional - 2002 and earlier one directional tolls - 2003 and later	3,671,196	3,549,077	1,386,467	2,138,782	1,811,946	1,842,703	1,843,187	
* Special Permit vehicles were classified differently after 2003								
** 2004 auto volumes higher than normal due to New Hope Lambertville Toll Supported Bridge Closures								

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.65	1,720,641	\$ 1,126,995.14
2 - 2-axle truck	\$ 4.85	56,265	\$ 272,915.63
3 - 3-axle truck	\$ 7.87	31,762	\$ 249,875.45
4 - 4-axle truck	\$ 10.47	6,799	\$ 71,158.44
5 - 5-axle truck	\$ 13.12	26,910	\$ 353,183.27
6 - 6-axle truck	\$ 15.80	757	\$ 11,960.93
8 - special permit	varies	1	\$ 42.00
7 - 7-axle truck	\$ 18.43	52	\$ 958.42
Totals		1,843,187	\$ 2,087,089.28



Table 9: Interstate 78 Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	3,485,261	4,490,818						
1b - passenger car - token	1,447,607	1,687,182						
1c - E-Zpass passenger cars (December 2002)		149,910						
1 - passenger car			6,518,607	6,974,743	7,226,070	7,605,954	7,834,133	1.030
2 - 2-axle truck	180,536	215,748	199,840	222,516	231,076	236,629	241,362	1.020
3 - 3-axle truck	80,874	98,022	102,434	93,683	99,176	104,217	108,386	1.040
4 - 4-axle truck	94,499	111,582	115,586	111,525	119,102	127,958	131,797	1.030
5 - 5-axle truck	1,625,638	1,883,403	1,891,300	1,946,024	1,922,988	1,943,206	1,952,922	1.005
6 - 6-axle truck	15,676	18,236	30,728	35,967	38,604	41,381	43,036	1.040
8 - special permit *	27,325	30,238	797	8	12	8	8	1.000
7 - 7-axle truck	617	794	1,113	1,379	1,420	1,485	1,485	1.000
total toll	6,958,033	8,685,933	8,860,405	9,385,845	9,638,448	10,060,838	10,313,129	
* Special Permit vehicles were classified differently after 2003								

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.67	7,834,133	\$ 5,215,511.20
2 - 2-axle truck	\$ 4.80	241,362	\$ 1,158,987.74
3 - 3-axle truck	\$ 7.76	108,386	\$ 840,659.92
4 - 4-axle truck	\$ 10.30	131,797	\$ 1,356,996.41
5 - 5-axle truck	\$ 13.08	1,952,922	\$ 25,550,324.79
6 - 6-axle truck	\$ 15.63	43,036	\$ 672,602.96
8 - special permit	varies	8	\$ 422.90
7 - 7-axle truck	\$ 18.23	1,485	\$ 27,072.13
Totals		10,313,129	\$ 34,822,578.05



Table 10: Easton-Phillipsburg Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	2,776,237	2,891,347						
1b - passenger car - token	3,795,821	2,925,012						
1c - E-Zpass passenger cars (December 2002)		126,125						
1 - passenger car			5,004,027	5,551,047	5,690,754	5,702,051	5,730,561	1.005
2 - 2-axle truck	183,098	159,128	154,235	168,748	173,094	168,505	169,348	1.005
3 - 3-axle truck	78,914	75,508	62,981	60,320	64,105	64,531	64,854	1.005
4 - 4-axle truck	51,215	36,343	41,555	45,422	42,727	48,881	49,859	1.020
5 - 5-axle truck	545,467	323,098	259,050	263,362	263,496	250,482	250,482	1.000
6 - 6-axle truck	7,613	4,454	3,841	4,853	5,826	6,699	6,833	1.020
8 - special permit *	6,643	3,115	72	-	-	-	-	
10 - local bus	3,293							
11 - 7-axle truck	185	142	208	211	252	177	177	1.000
total toll vehicles	7,448,486	6,544,272	5,525,969	6,093,963	6,240,254	6,241,326	6,272,114	
* Special Permit vehicles were classified differently after 2003								

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.66	5,730,561	\$ 3,784,255.07
2 - 2-axle truck	\$ 4.82	169,348	\$ 816,120.19
3 - 3-axle truck	\$ 7.84	64,854	\$ 508,595.03
4 - 4-axle truck	\$ 10.43	49,859	\$ 520,069.51
5 - 5-axle truck	\$ 13.16	250,482	\$ 3,295,578.10
6 - 6-axle truck	\$ 15.76	6,833	\$ 107,678.62
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.38	177	\$ 3,253.65
Totals		6,272,114	\$ 9,035,550.17



Table 11: Portland Columbia Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	196,401	283,695						
1b - passenger car - token	849,251	761,168						
1c - E-Zpass passenger cars (December 2002)		32,380						
1 - passenger car			1,083,030	1,162,560	1,217,782	1,221,400	1,227,507	1.005
2 - 2-axle truck	24,818	25,287	27,528	28,720	29,958	30,743	31,204	1.015
3 - 3-axle truck	8,859	8,326	9,413	11,677	10,874	10,287	9,978	0.970
4 - 4-axle truck	6,532	5,839	5,795	6,149	6,780	8,645	9,164	1.060
5 - 5-axle truck	29,241	28,203	28,508	31,778	34,076	34,464	34,981	1.015
6 - 6-axle truck	263	191	226	453	705	589	589	1.000
8 - special permit *	65	74	9	-	-	-	-	
7 - 7-axle truck	5	4	6	14	12	13	13	1.000
total toll vehicles	1,115,435	1,145,167	1,154,515	1,241,351	1,300,187	1,306,141	1,313,436	
* Special Permit vehicles were classified differently after 2003								

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.66	1,227,507	\$ 810,601.19
2 - 2-axle truck	\$ 4.83	31,204	\$ 150,701.90
3 - 3-axle truck	\$ 7.98	9,978	\$ 79,616.30
4 - 4-axle truck	\$ 10.44	9,164	\$ 95,650.09
5 - 5-axle truck	\$ 13.16	34,981	\$ 460,333.12
6 - 6-axle truck	\$ 15.84	589	\$ 9,329.15
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.48	13	\$ 240.19
Totals		1,313,436	\$ 1,606,471.95



Table 12: Delaware Water Gap (Interstate 80) Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	4,031,337	4,533,423						
1b - passenger car - token	3,683,760	3,359,933						
1c - E-Zpass passenger cars (December 2002)		222,494						
1 - passenger car			8,066,666	8,488,847	8,493,107	8,590,643	8,633,596	1.005
2 - 2-axle truck	162,370	160,361	143,521	161,134	161,724	162,397	162,397	1.000
3 - 3-axle truck	87,635	87,938	87,427	93,075	95,818	95,676	96,154	1.005
4 - 4-axle truck	53,788	52,109	52,233	57,861	63,106	63,265	63,265	1.000
5 - 5-axle truck	1,187,027	1,166,886	1,108,058	1,128,514	1,120,941	1,124,054	1,124,054	1.000
6 - 6-axle truck	14,393	14,797	19,127	20,887	20,884	19,712	19,318	0.980
8 - special permit *	19,898	18,068	780	69	64	42	42	1.000
7 - 7-axle truck	494	353	992	1,346	1,246	1,376	1,376	1.000
total toll vehicles	9,240,702	9,616,362	9,478,804	9,951,733	9,956,890	10,057,165	10,100,202	
* Special Permit vehicles were classified differently after 2003								

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.66	8,633,596	\$ 5,716,791.97
2 - 2-axle truck	\$ 4.81	162,397	\$ 781,438.12
3 - 3-axle truck	\$ 7.73	96,154	\$ 743,495.92
4 - 4-axle truck	\$ 10.27	63,265	\$ 649,861.43
5 - 5-axle truck	\$ 13.12	1,124,054	\$ 14,749,191.16
6 - 6-axle truck	\$ 15.63	19,318	\$ 301,895.12
8 - special permit	varies	42	\$ 2,419.85
7 - 7-axle truck	\$ 18.23	1,376	\$ 25,083.15
Totals		10,100,202	\$ 22,970,176.72



Table 13: Milford-Montague Toll Bridge Volume and Revenue Projections

class	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume	2006 volume	2007 volume (projected)	factor from 2006 to 2007
1a - passenger car - cash	427,388	522,139						
1b - passenger car - token	859,922	777,299						
1c - E-Zpass passenger cars (December 2002)		33,314						
1 - passenger car			1,231,491	1,311,848	1,300,872	1,303,872	1,310,391	1.005
2 - 2-axle truck	21,155	23,330	21,418	22,786	23,234	24,278	24,885	1.025
3 - 3-axle truck	5,198	5,583	5,139	5,328	5,244	5,228	5,254	1.005
4 - 4-axle truck	1,641	1,670	2,145	1,929	1,887	1,946	1,946	1.000
5 - 5-axle truck	12,641	12,737	10,626	10,495	10,014	9,380	9,192	0.980
6 - 6-axle truck	153	228	119	107	99	78	74	0.950
8 - special permit *	69	95	7	3	-	-	-	
7 - 7-axle truck	24	18	41	38	24	18	18	1.000
total toll	1,328,191	1,376,413	1,270,986	1,352,534	1,341,374	1,344,800	1,351,760	
* Special Permit vehicles were classified differently after 2003								

class	toll	2007 volume (projected)	2007 revenue
1 - passenger car	\$ 0.66	1,310,391	\$ 862,985.62
2 - 2-axle truck	\$ 4.84	24,885	\$ 120,346.35
3 - 3-axle truck	\$ 7.99	5,254	\$ 41,956.21
4 - 4-axle truck	\$ 10.70	1,946	\$ 20,819.48
5 - 5-axle truck	\$ 13.17	9,192	\$ 121,031.38
6 - 6-axle truck	\$ 15.95	74	\$ 1,180.09
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.60	18	\$ 334.85
Totals		1,351,760	\$ 1,168,653.97



Table 14: Volume and Revenue Comparison -- 2006 to 2007

Revenue Summary by Bridge/District			2006 Volumes *	2006 Revenues **	2007 Volume (Projected)	2007 Revenue (Projected)	Change in Actual vs. Projected Volume from 2006 to 2007		Change in Actual vs. Projected Revenue from 2006 to 2007	
							vehicles	percent	dollars	percent
District										
1	Trenton-Morrisville	7,319,425	\$ 9,098,033.69	7,437,303	\$ 9,385,580.91	117,878	1.61%	\$ 287,547.22	3.16%	
1	New Hope-Lambertville	1,842,703	\$ 2,067,690.17	1,843,187	\$ 2,087,089.28	484	0.03%	\$ 19,399.11	0.94%	
2	Interstate 78	10,060,838	\$ 34,280,685.75	10,313,129	\$ 34,822,578.05	252,291	2.51%	\$ 541,892.30	1.58%	
2	Easton-Phillipsburg	6,241,326	\$ 8,967,339.32	6,272,114	\$ 9,035,550.17	30,788	0.49%	\$ 68,210.85	0.76%	
3	Portland-Columbia	1,306,141	\$ 1,579,917.08	1,313,436	\$ 1,606,471.95	7,295	0.56%	\$ 26,554.87	1.68%	
3	Delaware Water Gap	10,057,165	\$ 22,916,767.19	10,100,202	\$ 22,970,176.72	43,037	0.43%	\$ 53,409.53	0.23%	
3	Milford-Montague	1,344,800	\$ 1,164,480.82	1,351,760	\$ 1,168,653.97	6,960	0.52%	\$ 4,173.15	0.36%	
	Total	38,172,398	\$ 80,074,914.02	38,631,131	\$ 81,076,101.05	458,733	1.20%	\$ 1,001,187.03	1.25%	

* 2006 volumes from November 2005 to October 2006

** 2006 revenues from November 2005 to October 2006



Table 15: Actual Revenue and Expenditures for 2006

District	Bridge	2006 Volume *	2006 Revenue **
1	Trenton-Morrisville	7,319,425	\$ 9,098,033.69
1	New Hope-Lambertville	1,842,703	\$ 2,067,690.17
2	Interstate 78	10,060,838	\$ 34,280,685.75
2	Easton-Phillipsburg	6,241,326	\$ 8,967,339.32
3	Portland-Columbia	1,306,141	\$ 1,579,917.08
3	Delaware Water Gap	10,057,165	\$ 22,916,767.19
3	Milford-Montague	<u>1,344,800</u>	<u>\$ 1,164,480.82</u>
	Total	38,172,398	\$ 80,074,914.02
	Total Toll Revenue	(From above)	\$ 80,074,914.02
	Interest Income	(Provided by Commission)	\$ 10,600,000.00
	Other Income	(Provided by Commission)	<u>\$ 260,671.00</u>
1.	Total Revenue - 2006		\$ 90,935,585.02
2.	Operating Expenses - 2006	(Provided by Commission)	<u>\$ 40,700,000.00</u>
3.	Net Revenue	(Line 1 - Line 2)	<u>\$ 50,235,585.02</u>
4.	Maximum Annual Debt Service	(Provided by Commission)	\$ 15,074,863.00
5.	130% of Maximum Annual Debt Service		\$ 19,597,321.90
Therefore, the requirement that the Net Revenue for the preceding fiscal year be greater than 130% of the Maximum Annual Debt Service has been met, satisfying the requirements of the Bridge System Revenue Bonds, Series 2003 Section 703(b), paragraph 2 (i).			
*	Volumes from November 2005 to October 2006		
**	Revenues from November 2005 to October 2006		



Table 16: Projected Revenue and Expenditures for 2007

Projected Revenue by Bridge/District		2007 Volume	2007 Revenue
1	Trenton-Morrisville	7,437,303	\$ 9,385,580.91
1	New Hope-Lambertville	1,843,187	\$ 2,087,089.28
2	Interstate 78	10,313,129	\$ 34,822,578.05
2	Easton-Phillipsburg	6,272,114	\$ 9,035,550.17
3	Portland-Columbia	1,313,436	\$ 1,606,471.95
3	Delaware Water Gap	10,100,202	\$ 22,970,176.72
3	Milford-Montague	<u>1,351,760</u>	<u>\$ 1,168,653.97</u>
Total		38,631,131	\$ 81,076,101.05
Total Toll Revenue		(From above)	\$ 81,076,101.05
Interest Income		(Provided by Commission)	\$ 12,150,000.00
Other Income		(Provided by Commission)	<u>\$ 182,000.00</u>
1. Total Projected Revenue - 2007			\$ 93,408,101.05
2. Operating Expenses - 2007		(Provided by Commission)	<u>\$ 44,000,000.00</u>
3. Net Revenue		(Line 1 - Line 2)	\$ 49,408,101.05
4. Maximum Annual Debt Service		(Provided by Commission)	<u>\$ 15,072,313.00</u>
5. Projected Debt Service Coverage Ratio		(Line 3 / Line 4)	3.28
Therefore, the requirement that the Projected Debt Service Coverage Ratio be greater than 1.30 is met, satisfying the requirements of the Bridge System Revenue Bonds, Series 2003 Section 703(b), paragraph 2 (ii).			

2006 TRAFFIC ENGINEERING REPORT ADDENDUM

Year 2007 Toll Bridge Traffic Volume And Revenue Projections



Submitted to:

Delaware River Joint Toll Bridge Commission

Administration Building, 110 Wood Street
Morrisville, PA 19067

July 16, 2007

COPY

Gregory K. Farnum, P.E.

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2006 TRAFFIC ENGINEERING REPORT ADDENDUM
YEAR 2007 TOLL BRIDGE TRAFFIC VOLUME AND REVENUE PROJECTIONS
DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION

As required to offset rising capital improvement costs, the Delaware River Joint Toll Bridge Commission (Commission) has increased tolls for trucks with three (3) or more axles. While the toll increase has been under consideration for some time, the specific timing of the increase was not certain when our 2006 Traffic Engineering Report was completed in January 2007. This addendum provides updated revenue projections for the year 2007.

The toll increase took effect on the evening of May 19, 2007. Tolls were increased by \$0.50 per axle, and the E-ZPass discount of 5% for peak period tolls (6:00 AM – 9 PM) and 15% for off peak period tolls is still in effect. We note that tolls for passenger cars, 2-axle trucks, and special permit vehicles remain unchanged. The former and current toll rates are indicated in **TABLE 1**.

TABLE 1 - TOLL RATES FOR DRJTBC BRIDGES

VEHICLE TYPE	DRJTBC Toll Rates Early 2007	DRJTBC Toll Rates Effective 5/19/2007 11:00 PM
Automobile	\$0.75	\$0.75
EZ Pass	20% Discount 40% Discount -	20% Discount 40% Discount -
EZ Pass(Commuter)	20 or More Trips in 35 Days	20 or More Trips in 35 Days
2 Axle Truck	\$5.00	\$5.00
EZ Pass - Peak	\$4.75	\$4.75
EZ Pass - Off-Peak	\$4.25	\$4.25
3 Axle Truck	\$8.25	\$9.75
EZ Pass - Peak	\$7.84	\$9.26
EZ Pass - Off-Peak	\$7.01	\$8.29
4 Axle Truck	\$11.00	\$13.00
EZ Pass - Peak	\$10.45	\$12.35
EZ Pass - Off-Peak	\$9.35	\$11.05
5 Axle Truck	\$13.75	\$16.25
EZ Pass - Peak	\$13.06	\$15.44
EZ Pass - Off-Peak	\$11.69	\$13.81
6 Axle Truck	\$16.50	\$19.50
EZ Pass - Peak	\$15.68	\$18.53
EZ Pass - Off-Peak	\$14.03	\$16.58
7 Axle Truck	\$19.25	\$22.75
EZ Pass - Peak	\$18.29	\$21.61
EZ Pass - Off-Peak	\$16.36	\$19.34

In determining the volumes for 2007, we multiplied the 2006 volumes for each vehicle class at each toll bridge by a growth factor. This is the same methodology used in the 2006 Traffic Engineering Report. Based on the temporary reductions/diversions of automobiles from some toll bridges following the November 2003 toll increase, we considered the possibility of truck reductions/diversions as a result of the toll increase. We evaluated the number of trucks at six (6) toll bridges (Trenton –Morrisville Toll Bridge is currently under construction) during a typical week in June 2006 and June 2007 (data included in the Appendix). We noted a difference of 40 trucks out of more than 94,000, indicating no reduction or diversion factors were necessary. The only other free facilities that trucks may use are the Scudder Falls Toll Supported Bridge (I-95) and the Upper Black Eddy-Milford Toll Supported Bridge, therefore we believe the comparison from a typical week in



2006 TRAFFIC ENGINEERING REPORT ADDENDUM
YEAR 2007 TOLL BRIDGE TRAFFIC VOLUME AND REVENUE PROJECTIONS
DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION

June to be valid and the methodology included within this report to be acceptable.

The 2006 volumes and 2007 volume projections for the five-axle trucks at the Trenton-Morrisville Toll Bridge are illustrated in **TABLE 2**. Throughout this addendum, we will illustrate the five-axle trucks at the Trenton-Morrisville Toll Bridge as an example.

TABLE 2
FIVE-AXLE TRUCK VOLUMES AT TRENTON-MORRISVILLE

	2006 Volume	Growth Rate	2007 Projection
January	14,807	1.035	15,325
February	12,626	1.035	13,068
March	16,552	1.035	17,131
April	15,995	1.035	16,555
May	18,513	1.035	19,161
June	18,048	1.035	18,680
July	16,592	1.035	17,173
August	16,693	1.035	17,277
September	15,756	1.035	16,307
October	17,141	1.035	17,741
November	16,448	1.035	17,024
December	15,347	1.035	15,884
TOTAL	194,518		201,326

As done in our 2006 Traffic Engineering Report, we determined the weighted average tolls by applying the percentages of cash, peak E-ZPass and off peak E-ZPass trucks to the respective tolls. We note that the E-ZPass penetration rates are different for every truck type at each bridge. The weighted tolls for the five-axle trucks at Trenton Morrisville Toll Bridge before and after the toll increase are indicated in **TABLE 3**.

TABLE 3
FIVE-AXLE TRUCK TOLL BREAKDOWN AT TRENTON-MORRISVILLE
DURING A TYPICAL WEEK (APRIL 28, 2006 - MAY 4, 2006)

	Volume	Percentage	Percentage of E-ZPass	Old Toll	Weighted Toll (Old)	New Toll	Weighted Toll (New)
Cash	115	19.2%		\$13.75	\$ 2.64	\$16.25	\$ 3.13
E-ZPass Peak (6 AM - 9 PM)	389	65.1%	80.5%	\$13.06	\$ 8.50	\$15.44	\$ 10.04
E-ZPass Off Peak (9 PM - 6 AM)	94	15.7%	19.5%	\$11.69	\$ 1.84	\$13.81	\$ 2.17
TOTAL	598				\$ 12.98		\$ 15.34
DIFFERENCE (New Weighted Toll – Old Weighted Toll)							\$ 2.36





2006 TRAFFIC ENGINEERING REPORT ADDENDUM
YEAR 2007 TOLL BRIDGE TRAFFIC VOLUME AND REVENUE PROJECTIONS
DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION

The additional revenue from the truck toll increase was determined by multiplying the affected traffic volumes by the difference in the weighted toll. The affected traffic volumes are trucks with three (3) or more axles, excluding special permit trucks from May 20, 2007 to December 31, 2007. **TABLE 4** describes the additional revenue generated by five-axle trucks at Trenton –Morrisville due to the toll increase.

TABLE 4
ADDITIONAL FIVE-AXLE TRUCK REVENUE
AT TRENTON-MORRISVILLE

Month	2007 Projection
May 20 through May 31	7,417
June	18,680
July	17,173
August	17,277
September	16,307
October	17,741
November	17,024
December	15,884
TOTAL AFFECTED BY TOLL INCREASE	127,503
WEIGHTED TOLL INCREASE	\$2.36
ADDITIONAL REVENUE DUE TO TOLL INCREASE	\$301,154.89

This same methodology was applied at the seven (7) toll bridges for 3-axle, 4-axle, 5-axle, 6-axle, and 7-axle trucks. Tables 5 -11 describe the additional revenues at the seven (7) toll bridges due to the toll increase. Table 12 lists the 2007 projected toll revenues, and subtracts the projected operating expenses. The Net Revenue is then divided by Maximum Annual Debt Service to calculate a Projected Debt Service Coverage Ratio that is not less than 1.30. The Commission provided all the figures in Table 12, with the exception of the projected 2007 toll revenue. With a Projected Debt Service Coverage Ratio of 3.69, the requirements of the Bridge System Revenue Bonds, Series 2003 are projected to be met.

The estimated 2007 revenue from our 2006 Traffic Engineering Report of \$81,076,101.05 is projected to be increased by \$6,242,753.86 (7.7%) to \$87,318,854.91, based on the mid year truck toll increase.





Table 5: Trenton-Morrisville Toll Bridge Additional Revenue Projections

class	weighted toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.42	49,913	\$ 70,702.32
4 - 4-axle truck	\$ 1.91	40,392	\$ 77,074.08
5 - 5-axle truck	\$ 2.36	127,503	\$ 301,154.89
6 - 6-axle truck	\$ 2.85	1,107	\$ 3,157.30
7 - 7-axle truck	\$ 3.32	80	\$ 265.94
	Totals	218,995	\$ 452,354.53



Table 6: New Hope-Lambertville Toll Bridge Additional Revenue Projections

class	toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.43	19,889	\$ 28,385.12
4 - 4-axle truck	\$ 1.90	4,416	\$ 8,403.26
5 - 5-axle truck	\$ 2.39	17,130	\$ 40,915.68
6 - 6-axle truck	\$ 2.87	501	\$ 1,438.96
7 - 7-axle truck	\$ 3.35	32	\$ 107.14
	Totals	41,968	\$ 79,250.16



Table 7: Interstate 78 Toll Bridge Additional Revenue Projections

class	toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.41	68,157	\$ 95,930.02
4 - 4-axle truck	\$ 1.87	82,704	\$ 154,823.54
5 - 5-axle truck	\$ 2.38	1,211,948	\$ 2,884,845.64
6 - 6-axle truck	\$ 2.84	26,799	\$ 76,134.47
7 - 7-axle truck	\$ 3.31	931	\$ 3,083.88
Totals		1,390,539	\$ 3,214,817.55



Table 8: Easton-Phillipsburg Toll Bridge Additional Revenue Projections

class	toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.42	41,111	\$ 58,490.63
4 - 4-axle truck	\$ 1.90	32,765	\$ 62,139.15
5 - 5-axle truck	\$ 2.39	157,471	\$ 377,005.79
6 - 6-axle truck	\$ 2.86	4,275	\$ 12,246.01
7 - 7-axle truck	\$ 3.34	105	\$ 350.65
Totals		235,727	\$ 510,232.23



Table 9: Portland Columbia Toll Bridge Additional Revenue Projections

class	toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.45	6,459	\$ 9,347.93
4 - 4-axle truck	\$ 1.90	6,144	\$ 11,659.74
5 - 5-axle truck	\$ 2.40	22,352	\$ 53,544.05
6 - 6-axle truck	\$ 2.88	387	\$ 1,114.25
7 - 7-axle truck	\$ 3.36	3	\$ 10.07
Totals		35,345	\$ 75,676.03



**Table 10:
Delaware Water Gap (Interstate 80) Toll Bridge Additional Revenue Projections**

class	toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.40	60,852	\$ 85,430.22
4 - 4-axle truck	\$ 1.87	40,262	\$ 75,195.16
5 - 5-axle truck	\$ 2.39	707,661	\$ 1,689,305.98
6 - 6-axle truck	\$ 2.84	12,433	\$ 35,319.18
7 - 7-axle truck	\$ 3.31	903	\$ 2,991.26
Totals		822,111	\$ 1,888,241.80



Table 11: Milford-Montague Toll Bridge Additional Revenue Projections

class	toll increase	5/20/07 -12/31/07 volume (projected)	2007 revenue increase
3 - 3-axle truck	\$ 1.45	3,649	\$ 5,287.01
4 - 4-axle truck	\$ 1.95	1,302	\$ 2,532.65
5 - 5-axle truck	\$ 2.40	5,902	\$ 14,144.03
6 - 6-axle truck	\$ 2.90	60	\$ 173.94
7 - 7-axle truck	\$ 3.38	13	\$ 43.94
Totals		10,926	\$ 22,181.56



Table 12: Updated Projected Revenue and Expenditures for 2007

Projected Revenue by Bridge/District		2007 Volume	2007 Revenue
1	Trenton-Morrisville	7,437,303	\$ 9,837,935.44
1	New Hope-Lambertville	1,843,187	\$ 2,166,339.43
2	Interstate 78	10,313,129	\$ 38,037,395.60
2	Easton-Phillipsburg	6,272,114	\$ 9,545,782.39
3	Portland-Columbia	1,313,436	\$ 1,682,147.98
3	Delaware Water Gap	10,100,202	\$ 24,858,418.52
3	Milford-Montague	<u>1,351,760</u>	<u>\$ 1,190,835.54</u>
Total		38,631,131	\$ 87,318,854.91
Total Toll Revenue		(From above)	\$ 87,318,854.91
Interest Income		(Provided by Commission)	\$ 12,150,000.00
Other Income		(Provided by Commission)	<u>\$ 182,000.00</u>
1. Total Projected Revenue - 2007			\$ 99,650,854.91
2. Operating Expenses - 2007		(Provided by Commission)	<u>\$ 44,000,000.00</u>
3. Net Revenue		(Line 1 - Line 2)	\$ 55,650,854.91
4. Maximum Annual Debt Service		(Provided by Commission)	<u>\$ 15,072,313.00</u>
5. Projected Debt Service Coverage Ratio		(Line 3 / Line 4)	3.69
Therefore, the requirement that the Projected Debt Service Coverage Ratio be greater than 1.30 is met, satisfying the requirements of the Bridge System Revenue Bonds, Series 2003 Section 703(b), paragraph 2 (ii).			

Truck Volume Comparison for One Week – June 2006 to June 2007

Truck Volume Comparison for One Week - June 2006 to June 2007

Trenton - Morrisville 06																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	52	13,522	89	27	7	49	-	-	-	-	-	12	11	-	-	1	13,770	13,546	172	52
6/5/2006	78	20,138	632	226	236	725	10	1	-	-	-	10	17	-	-	-	22,073	20,165	1,830	78
6/6/2006	99	21,176	623	268	216	878	16	1	-	-	-	19	19	2	-	1	23,318	21,217	2,002	99
6/7/2006	87	20,628	664	221	189	779	13	-	-	-	-	9	17	3	-	3	22,613	20,660	1,866	87
6/8/2006	106	21,643	657	231	216	793	9	2	-	-	-	19	20	3	-	4	23,703	21,689	1,908	106
6/9/2006	103	22,463	682	256	178	715	10	2	-	-	-	16	33	-	-	1	24,459	22,513	1,843	103
6/10/2006	57	16,778	232	75	244	211	8	-	-	-	-	15	23	1	-	-	17,644	16,817	770	57
Total	582	136,348	3,579	1,304	1,286	4,150	66	6	-	-	-	100	140	9	-	10	147,580	136,607	10,391	582
Trenton - Morrisville 07																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/3/2007	72	13,081	107	16	8	44	-	-	-	-	-	17	8	-	-	1	13,354	13,107	175	72
6/4/2007	178	18,123	570	223	207	548	24	-	-	-	-	12	20	-	-	1	19,906	18,156	1,572	178
6/5/2007	200	18,991	657	262	201	729	16	-	-	-	-	14	18	2	-	-	21,090	19,025	1,865	200
6/6/2007	155	18,790	643	256	265	733	28	-	-	-	-	20	22	-	-	3	20,915	18,835	1,925	155
6/7/2007	189	19,997	679	317	317	718	26	2	-	-	-	16	23	1	-	1	22,286	20,038	2,059	189
6/8/2007	214	20,616	632	302	269	624	20	-	-	-	-	24	22	-	-	-	22,723	20,662	1,847	214
6/9/2007	125	16,139	268	76	74	169	14	-	-	-	-	24	18	-	-	2	16,909	16,183	601	125
Total	1,133	125,737	3,556	1,452	1,341	3,565	128	2	-	-	-	127	131	3	-	8	137,183	126,006	10,044	1,133
New Hope - Lambertville 06																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	41	4,485	36	9	-	17	-	-	-	-	-	2	13	-	-	-	4,603	4,500	62	41
6/5/2006	37	4,320	194	76	41	101	1	-	-	-	-	5	14	1	-	-	4,790	4,340	413	37
6/6/2006	56	4,762	241	101	48	97	3	2	-	-	-	4	8	-	-	1	5,323	4,775	492	56
6/7/2006	35	4,312	197	88	40	119	3	-	-	-	-	3	14	-	-	2	4,813	4,331	447	35
6/8/2006	37	4,725	215	105	53	100	5	-	-	-	-	4	10	-	-	1	5,255	4,740	478	37
6/9/2006	42	5,074	202	100	26	111	3	-	-	-	-	11	14	-	-	1	5,584	5,100	442	42
6/10/2006	61	4,987	77	21	13	23	1	-	-	-	-	11	17	-	-	-	5,211	5,015	135	61
Total	309	32,665	1,162	500	221	568	16	2	-	-	-	40	90	1	-	5	35,579	32,801	2,469	309
New Hope - Lambertville 07																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/3/2007	42	4,434	37	7	1	14	-	-	-	-	-	3	18	-	-	1	4,557	4,456	59	42
6/4/2007	39	4,751	169	101	44	88	5	-	-	-	-	3	13	1	-	1	5,215	4,769	407	39
6/5/2007	46	5,139	241	123	38	117	1	1	-	-	-	3	16	-	-	1	5,726	5,159	521	46
6/6/2007	48	5,053	232	82	37	111	2	1	-	-	-	4	18	-	-	-	5,588	5,075	465	48
6/7/2007	45	5,258	227	105	40	115	5	-	-	-	-	4	11	-	-	1	5,811	5,274	492	45
6/8/2007	54	5,511	238	121	76	108	2	-	-	-	-	6	25	1	-	1	6,143	5,544	545	54
6/9/2007	61	5,920	85	50	13	25	-	-	-	-	-	3	24	1	-	1	6,183	5,949	173	61
Total	335	36,066	1,229	589	249	578	15	2	-	-	-	26	125	3	-	6	39,223	36,226	2,662	335
I-78 06																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	315	19,838	228	148	53	1,390	15	-	-	-	-	79	91	2	-	1	22,160	20,011	1,834	315
6/5/2006	217	18,701	782	555	337	6,254	80	10	-	-	-	48	97	7	-	7	27,095	18,860	8,018	217
6/6/2006	224	18,443	814	585	394	6,736	121	10	-	-	-	37	80	7	-	3	27,454	18,570	8,660	224
6/7/2006	227	18,522	843	601	402	6,713	120	13	-	-	-	46	97	8	-	5	27,597	18,678	8,692	227
6/8/2006	238	20,413	886	591	428	6,520	123	13	1	-	-	47	107	5	-	4	29,376	20,576	8,562	238
6/9/2006	302	24,712	910	642	412	6,628	101	22	-	-	-	87	130	8	-	13	33,967	24,950	8,715	302
6/10/2006	372	22,748	388	298	208	2,733	69	4	-	-	-	102	100	8	-	2	27,032	22,960	3,700	372
Total	1,895	143,377	4,851	3,420	2,234	36,974	629	72	1	-	-	446	702	45	-	35	194,681	144,605	48,181	1,895
I-78 07																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/3/2007	230	19,335	194	145	49	1,170	12	-	-	-	-	58	91	3	-	-	21,287	19,487	1,570	230
6/4/2007	210	18,813	774	621	317	5,906	67	16	-	-	-	33	72	3	-	13	26,845	18,934	7,701	210
6/5/2007	188	18,278	867	561	362	6,513	93	16	-	-	-	25	77	8	-	8	26,996	18,396	8,412	188
6/6/2007	231	19,305	825	606	369	6,405	110	11	-	-	-	47	87	6	-	14	28,016	19,459	8,326	231
6/7/2007	200	20,711	901	642	384	6,605	111	12	-	-	-	62	111	14	-	8	29,761	20,906	8,655	200
6/8/2007	327	24,648	925	665	374	6,372	89	9	-	-	-	82	116	5	-	8	33,620	24,859	8,434	327
6/9/2007	338	24,854	401	296	192	2,912	62	6	-	-	-	105	105	5	-	3	29,279	25,072	3,869	338
Total	1,724	145,944	4,887	3,536	2,047	35,883	544	70	-	-	-	412	659	44	-	54	195,804	147,113	46,967	1,724

Truck Volume Comparison for One Week - June 2006 to June 2007

Easton - Phillipsburg 06																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	181	11,252	112	44	24	122	-	-	-	-	-	30	21	1	-	-	11,787	11,304	302	181
6/5/2006	118	16,042	551	238	148	1,003	20	2	-	-	-	17	24	3	-	2	18,168	16,088	1,962	118
6/6/2006	130	16,417	603	265	184	1,236	27	3	-	-	-	26	27	3	-	2	18,923	16,475	2,318	130
6/7/2006	112	16,293	581	249	170	1,164	17	3	-	-	-	16	26	1	-	3	18,635	16,339	2,184	112
6/8/2006	125	16,828	641	243	214	1,205	29	3	-	-	-	23	30	1	-	2	19,344	16,884	2,335	125
6/9/2006	141	18,291	656	271	189	910	22	4	-	-	-	41	51	1	-	4	20,581	18,388	2,052	141
6/10/2006	191	14,716	220	117	42	265	3	-	-	-	-	39	32	3	-	-	15,628	14,790	647	191
Total	998	109,839	3,364	1,427	971	5,905	118	15	-	-	-	192	211	13	-	13	123,066	110,268	11,800	998
Easton - Phillipsburg 07																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/3/2007	155	11,907	118	57	22	162	4	-	-	-	-	27	23	3	-	-	12,478	11,960	363	155
6/4/2007	102	16,797	530	236	182	775	19	-	-	-	-	17	20	-	-	1	18,679	16,835	1,742	102
6/5/2007	124	16,848	620	275	199	1,023	16	1	-	-	-	17	35	-	-	1	19,159	16,901	2,134	124
6/6/2007	111	16,815	593	282	207	1,056	14	3	-	-	-	20	33	1	-	2	19,137	16,871	2,155	111
6/7/2007	138	17,180	616	274	205	1,010	18	1	-	-	-	28	27	-	-	3	19,500	17,238	2,124	138
6/8/2007	179	18,394	624	263	232	924	14	2	-	-	-	32	53	1	-	4	20,722	18,484	2,059	179
6/9/2007	188	15,072	263	92	36	272	6	-	-	-	-	39	41	3	-	1	16,013	15,156	669	188
Totals	997	113,013	3,364	1,479	1,083	5,222	91	7	-	-	-	180	232	8	-	12	125,688	113,445	11,246	997
Portland - Columbia 06																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	12	2,553	31	6	2	13	1	-	-	-	-	19	8	-	-	-	2,645	2,580	53	12
6/5/2006	14	3,189	91	34	55	128	3	-	-	-	-	3	8	-	-	-	3,525	3,200	311	14
6/6/2006	14	3,465	115	35	43	141	2	-	-	-	-	5	13	-	-	-	3,833	3,483	336	14
6/7/2006	17	3,183	103	27	53	134	3	-	-	-	-	5	9	-	-	1	3,535	3,198	320	17
6/8/2006	25	3,542	115	36	62	130	4	-	-	-	-	6	4	1	-	1	3,926	3,554	347	25
6/9/2006	18	4,350	109	28	46	131	3	-	-	-	-	14	13	-	-	-	4,712	4,377	317	18
6/10/2006	10	3,319	43	13	11	26	2	-	-	-	-	14	13	-	-	-	3,451	3,346	95	10
Totals	110	23,601	607	179	272	703	18	-	-	-	-	66	68	1	-	2	25,627	23,738	1,779	110
Portland - Columbia 07																				
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/3/2007	22	3,397	26	4	1	12	-	-	-	-	-	23	12	-	-	1	3,498	3,433	43	22
6/4/2007	13	4,587	107	29	38	126	1	-	-	-	-	8	6	-	-	1	4,916	4,602	301	13
6/5/2007	14	3,664	98	34	41	134	2	-	-	-	-	13	13	-	-	-	4,013	3,690	309	14
6/6/2007	15	3,669	130	49	39	157	3	-	-	-	-	11	8	-	-	-	4,081	3,688	378	15
6/7/2007	18	3,981	110	42	46	156	4	-	-	-	-	4	7	-	-	1	4,369	3,993	358	18
6/8/2007	30	5,486	112	67	48	144	1	-	-	-	-	7	16	1	-	-	5,912	5,510	372	30
6/9/2007	23	3,857	52	13	17	42	-	-	-	-	-	21	14	1	-	-	4,040	3,893	124	23
Totals	135	28,641	635	238	230	771	11	-	-	-	-	87	76	2	-	3	30,829	28,809	1,885	135

Truck Volume Comparison for One Week - June 2006 to June 2007

	Delaware Water Gap 06																			
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	176	21,173	190	155	67	754	2	3	-	-	-	78	68	4	-	3	22,673	21,326	1,171	176
6/5/2006	144	20,505	463	386	163	3,576	47	29	-	-	-	39	59	3	-	8	25,422	20,614	4,664	144
6/6/2006	150	20,064	573	407	259	4,041	37	6	-	-	-	42	50	6	-	13	25,648	20,175	5,323	150
6/7/2006	166	19,884	568	414	242	3,953	53	6	-	-	-	31	39	2	-	17	25,375	19,973	5,236	166
6/8/2006	152	21,944	622	408	248	4,096	41	12	1	-	-	42	80	2	-	9	27,657	22,077	5,428	152
6/9/2006	241	30,058	639	403	215	3,766	38	14	-	-	-	96	104	5	-	13	35,592	30,276	5,075	241
6/10/2006	227	27,929	374	243	91	1,591	17	1	-	-	-	102	84	5	-	6	30,670	28,126	2,317	227
Total	1,256	161,557	3,429	2,416	1,285	21,777	235	71	1	-	-	430	484	27	-	69	193,037	162,567	29,214	1,256
	Delaware Water Gap 07																			
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/3/2007	189	20,692	195	161	43	724	9	2	-	-	-	85	60	1	-	2	22,163	20,840	1,134	189
6/4/2007	142	19,223	507	423	185	3,780	26	19	-	-	-	26	36	3	-	9	24,379	19,297	4,940	142
6/5/2007	156	19,409	619	424	206	4,271	58	15	-	-	-	23	61	3	-	11	25,256	19,507	5,593	156
6/6/2007	147	20,006	575	480	201	4,134	55	14	-	-	-	45	58	5	-	16	25,736	20,130	5,459	147
6/7/2007	163	21,909	657	481	217	4,152	62	24	-	-	-	57	74	3	-	15	27,814	22,058	5,593	163
6/8/2007	248	29,334	687	431	196	3,995	70	15	-	-	-	81	108	6	-	11	35,182	29,540	5,394	248
6/9/2007	255	29,911	352	265	81	1,747	20	3	-	-	-	86	93	4	-	9	32,826	30,103	2,468	255
Total	1,300	160,484	3,592	2,665	1,129	22,803	300	92	-	-	-	403	490	25	-	73	193,356	161,475	30,581	1,300
	Milford - Montague 06																			
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	28	2,731	27	21	1	3	-	-	-	-	-	6	11	-	-	-	2,828	2,748	52	28
6/5/2006	17	3,131	71	21	6	34	-	-	-	-	-	10	6	-	-	-	3,296	3,147	132	17
6/6/2006	27	3,118	86	19	7	34	1	-	-	-	-	11	7	-	-	-	3,310	3,136	147	27
6/7/2006	18	3,251	92	18	9	41	1	-	-	-	-	5	5	-	-	-	3,440	3,261	161	18
6/8/2006	19	3,481	91	17	5	35	-	-	-	-	-	11	12	1	-	-	3,672	3,505	148	19
6/9/2006	32	5,012	77	15	6	40	1	-	-	-	-	27	19	-	-	-	5,229	5,058	139	32
6/10/2006	30	4,824	63	4	-	17	-	-	-	-	-	22	15	-	-	-	4,975	4,861	84	30
Total	171	25,548	507	115	34	204	3	-	-	-	-	92	75	1	-	-	26,750	25,716	863	171
	Milford - Montague 07																			
	Class 00	Class 01	Class 02	Class 03	Class 04	Class 05	Class 06	Class 07	Class 08	Class 09	Class 10	Class 11	Class 12	Class 13	Class 14	Class 15	TOTAL	Cars	Trucks	Other
6/4/2006	21	2,760	30	13	2	5	-	-	-	-	-	23	12	2	-	-	2,868	2,797	50	21
6/5/2006	13	3,075	93	18	10	31	1	-	-	-	-	4	5	-	-	-	3,250	3,084	153	13
6/6/2006	18	3,188	79	20	7	36	-	-	-	-	-	12	8	-	-	-	3,368	3,208	142	18
6/7/2006	14	3,459	93	18	7	40	-	-	-	-	-	11	7	-	-	-	3,649	3,477	158	14
6/8/2006	21	3,529	93	21	4	35	-	-	-	-	-	12	7	-	-	-	3,722	3,548	153	21
6/9/2006	36	5,247	100	31	10	36	-	-	-	-	-	19	15	-	-	-	5,494	5,281	177	36
6/10/2006	28	4,946	60	3	4	24	1	-	-	-	-	23	11	-	-	-	5,100	4,980	92	28
Total	151	26,204	548	124	44	207	2	-	-	-	-	104	65	2	-	-	27,451	26,375	925	151

Summary

	T-M	NH-L	I-78	E-P	P-C	DWG	M-M	Total	Difference		
2006	10,391	2,469	48,181	11,800	1,779	29,214	863	104,697			
2007	10,044	2,662	46,967	11,246	1,885	30,581	925	104,310	387	0.37%	
	T-M	NH-L	I-78	E-P	P-C	DWG	M-M	Total			
2006		2,469	48,181	11,800	1,779	29,214	863	94,306			
2007		2,662	46,967	11,246	1,885	30,581	925	94,266	40	0.04%	