

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

Financial Statements
and
Supplementary Information

Year Ended December 31, 2003

**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 balance sheet of **DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM** ("the Commission") as of December 31, 2003, and the related statements of revenues, expenses and changes in net assets and cash flows for the year then ended. 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 audit.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether 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 audit provides 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, 2003, and the results of its operations and its cash flows for the year 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 March 17, 2004 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, and compact. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

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- PRIVATE COMPANIES PRACTICE SECTION
- SEC PRACTICE SECTION



INDEPENDENT AUDITORS' REPORT (CONTINUED)

Our audit was conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary schedules on pages 20 to 26 are presented for the 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 audit 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.

As discussed in Note B to the accompanying financial statements, in 2003 the Commission adopted Governmental Accounting Standards Board Statement No. 34, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments, as amended by Statement No. 37, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments: Omnibus, and Statement No. 38, Certain Financial Statement Note Disclosures. Management's discussion and analysis 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 inquires of management regarding the presentation of management's discussion and analysis. However, we did not audit the information and express no opinion on it.

Mercadino, P.C.

March 17, 2004

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 for the year ended December 31, 2003. We encourage readers to consider the information presented here in conjunction with the audited financial statements and supplemental information as a whole.

Year 2003 is the first year of the Commission’s implementation of the new financial reporting model (GASB Statement No. 34) and, thus, prior year information for comparison purposes is not available. In future years, when prior year information is available, a comparative analysis of the financial statements data will be presented. However, a comparative analysis of key elements of financial statements is provided in this overview.

Financial Highlights

- Toll revenue for the Commission totaled \$72,963,402 for the year ended December 31, 2003, an increase of 104% over the previous year. The significant change in toll revenue is the result of the toll increase, which took place December 1, 2002.
- Outstanding Bond Indebtedness totaled \$155,520,000, an increase of 107% as a result of the issuance of the Bridge System Revenue Bonds, Series 2003.
- Net Operating Revenues totaled \$33,613,025 and Change in Net Assets totaled \$29,118,205.

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 and the notes to the financial statements. This report also contains other supplementary information that includes schedules of:

- Cash and cash equivalent balances
- Investments
- Operating, administrative and toll supported bridge expenses
- Toll bridge 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 private-sector business.

The balance sheet presents information on the Commission's assets and liabilities at December 31, 2003, with the difference of the two reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Commission is improving or deteriorating. At December 31, 2003 the Commission's net assets equaled \$259,228,491, an increase of approximately 13% over the prior year. Net assets increase when revenues exceed expenses. Increases to assets, without a corresponding increase to liabilities results in increased net assets, which indicates an improved financial position.

The statement of revenues, expenses and changes in net assets presents 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 this statement for some items that will not result in cash flows until future fiscal periods or have resulted in cash flows in prior periods.

Notes to financial statements

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

Other Information

In addition to the basic financial statements and accompanying notes, this report also presents certain supplementary information listed above (see "Overview of the Financial Statements").

Financial Analysis

Cash and equivalent balances of approximately \$13.8 million comprise the largest portion of the Commission's current assets, and consist primarily of debt service funds held by the Commission in accordance with the bond resolution. Cash and equivalents and investment balances of approximately \$157.9 million included in non-current assets are also held in accordance with requirements of the bond resolution. The Commission's non-current assets also include capital assets of approximately \$251.0 million that consist of land, infrastructure and equipment with an original value of approximately \$389.0 million less accumulated depreciation of approximately \$138.0 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.

The Commission has current and non-current liabilities of approximately \$164.3 million related to its series 2003 bond issue. 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 costs.

The following table contains condensed financial information derived from the December 31, 2003 financial statements of the Commission:

Net Assets

Current and other assets	\$178,927,513
Capital assets	<u>251,019,428</u>
Total assets	<u>429,946,941</u>
Current liabilities	13,721,369
Non-current liabilities	<u>156,997,081</u>
Total liabilities	<u>170,718,450</u>
Net assets:	
Invested in capital assets, net of related debt	126,942,953
Restricted	128,270,198
Unrestricted	<u>4,015,340</u>
Total net assets	<u>\$259,228,491</u>

Changes in Net Assets

Operating revenues	\$72,963,402
Operating expenses	<u>(30,821,610)</u>
Net operating revenues, before depreciation	42,141,792
Depreciation	<u>(8,528,767)</u>
Net operating revenues	33,613,025
Non-operating revenues	2,995,713
Non-operating expenses	<u>(7,490,533)</u>
Net income	29,118,205
Net assets, beginning of year, restricted	<u>230,110,286</u>
Net assets, end of year	<u>\$259,228,491</u>

Significant Events

In December 2001, the Commission approved a plan that provides major bridge rehabilitation, bridge enhancement, installation of EZ Pass and other traffic management systems as well as state of the art bridge security and surveillance. A toll rate structure was approved by the Commissioners to fund a 10-year, \$526 million Capital Improvement Program for protection, preservation, management and enhancement of the twenty bridges DRJTBC maintains and operates.

Through December 31, 2003, the Commission had approved more than \$66 million in contracts to study and improve various facilities and systems. As of December 31, 2003, the Commission had spent nearly \$48 million on the Capital Program.

The new rates were approved to take effect in conjunction with the availability of EZ Pass on December 1, 2002. Passenger vehicle toll rates increased between \$.25 and \$.50, depending on the bridge location. Commuters receive a 20% discount for using EZ Pass, and frequent commuters receive a 40% discount. Truck toll rates increased to \$2.25 per axle.

On November 1, 2003, the Commission reduced passenger tolls rates to \$.75 per vehicle on all toll bridges. Commuters continue to receive a 20% discount for using EZ Pass, and frequent commuters continue to receive a 40% discount.

On January 21, 2003, the Commission issued Bridge System Revenue Bonds, Series 2003 for \$158,530,000 for the purposes described in "Financial Analysis" above.

Summary of Cash Flows

Cash flows from operating activities	\$41,222,736
Cash flows used in investing activities	(95,898,966)
Cash flows from financing activities	<u>79,087,754</u>
Net increase in cash	<u>\$24,411,524</u>

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

December 31, 2003

ASSETS

Current Assets	
Unrestricted:	
Cash and equivalents	\$ 1,729,246
Other assets	2,197,287
EZ Pass clearing account	2,947,252
Total unrestricted	<u>6,873,785</u>
Restricted:	
Cash and equivalents	12,092,850
Accrued interest on investments	634,935
Bond issuance costs - current portion	57,477
Total Restricted	<u>12,785,262</u>
Total Current Assets	<u>19,659,047</u>
Non-Current Assets	
Unrestricted:	
Capital Assets	<u>1,574,623</u>
Restricted:	
Cash and equivalents	20,067,643
Investments	137,878,861
Bond issuance costs - long term portion	1,321,962
Capital Assets	<u>249,444,805</u>
Total Non-Current Restricted Assets	<u>408,713,271</u>
Total Non-Current Assets	<u>410,287,894</u>
Total Assets	<u>\$ 429,946,941</u>

LIABILITIES AND NET ASSETS

Current Liabilities	
Accounts Payable and Accrued expenses	\$ 2,674,968
EZ Pass customer accounts	1,758,100
Accrued interest on bond indebtedness	3,913,900
Compensated Absences-current portion	120,000
Bridge system revenue bonds, series 2003 - current portion	4,330,000
Premium on bond - current portion	924,401
Total Current Liabilities	<u>13,721,369</u>
Non-Current Liabilities	
Compensated Absences	1,842,165
Bridge system revenue bonds, series 2003	151,190,000
Premium on bond - long term portion	3,964,916
Total Noncurrent liabilities	<u>156,997,081</u>
Total Liabilities	<u>170,718,450</u>
Net Assets	
Invested in Capital Assets, net of related debt	126,942,953
Restricted	128,270,198
Unrestricted	4,015,340
Total Net Assets	<u>259,228,491</u>
Total Liabilities and Net Assets	<u>\$ 429,946,941</u>

See accompanying notes to financial statements.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

Year Ended December 31, 2003

Operating Revenues	
Toll bridge operations:	
Toll revenues, net	\$ 40,571,660
EZ Pass revenues, net	32,127,229
Miscellaneous revenues	264,513
Total toll revenues	<u>72,963,402</u>
Operating Expenses	
Toll bridges operating expenses:	
Operating and maintenance expenses	15,640,339
Administrative expenses	10,156,527
Toll supported bridges' expenses	5,024,744
Depreciation	8,528,767
Total operating expenses	<u>39,350,377</u>
Net operating revenues	<u>33,613,025</u>
Non-Operating Revenues (Expenses)	
Investment return	2,071,312
Interest on bond indebtedness	(7,433,056)
Amortization of bond premium	924,401
Amortization of bond issuance costs	(57,477)
Total non-operating expenses	<u>(4,494,820)</u>
Change in net assets	<u>29,118,205</u>
Net assets, beginning of year, as originally stated	100,452,918
Prior period adjustment	129,657,368
Net assets, beginning of year, restated	<u>230,110,286</u>
Net assets, end of year	<u><u>\$ 259,228,491</u></u>

See accompanying notes to financial statements.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM**STATEMENT OF CASH FLOWS**

Year Ended December 31, 2003

Cash Flows from Operating Activities	
Receipts from toll bridges	\$ 40,267,665
Receipts from EZ Pass	32,000,465
Payments to suppliers, employees, and others	(31,309,907)
Other receipts	264,513
Net cash provided by operating activities	<u>41,222,736</u>
Cash Flows from Investing Activities	
Purchases of investments, net	(76,563,392)
Investment return	2,617,707
Purchases of capital assets	(21,953,281)
Net cash used in investing activities	<u>(95,898,966)</u>
Cash Flows from Financing Activities	
Bond proceeds	160,409,317
Principal paid on bond and notes indebtedness	(74,960,000)
Interest paid on bond indebtedness	(4,982,124)
Bond issuance costs	(1,379,439)
Net cash provided by financing activities	<u>79,087,754</u>
Net increase in cash	24,411,524
Cash, beginning of year	9,478,215
Cash, end of year	<u>\$ 33,889,739</u>
Reconciliation of net operating revenues to net cash provided by operating activities	
Net operating revenues	\$ 33,613,025
Adjustment to reconcile net operating revenues to net cash provided by operating activities-depreciation	8,528,767
Changes in net assets and liabilities:	
Prepaid expenses and other assets	(1,685,748)
EZ Pass clearing account	(1,119,105)
Accounts payable and accrued expenses	(764,714)
Accrued refunds	(303,995)
EZ Pass customer accounts	992,341
Compensated absences	1,962,165
Net cash provided by operating activities	<u>\$ 41,222,736</u>
Non-cash financing activities	
Amortization of bond premium	\$ 924,401
Amortization of bond issuance costs	(57,477)
Total non-cash financing activities	<u>\$ 866,924</u>

See accompanying notes to financial statements.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

A. AUTHORIZING 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 and the State of New Jersey with the approval of the Congress of the United States. The Commission is authorized and empowered, in certain cases with Federal Government approval required, 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 which 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 operations 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 north of the Delaware Water Gap.

Effective with the issuance of the 1988 Bridge System and 1-78 Revenue Bonds, and pursuant to the respective bond resolutions, the financial activity of the 1-78 Bridge was previously reported separately from the Bridge System. Due to the insubstance defeasance of the 1988 Bridge System and 1-78 Revenue Bonds, effective with 1992 financial statements, the financial activity of the 1-78 Bridge is included with 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 and on the accrual basis of accounting and in accordance with accounting principles generally accepted in the United States of America, 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)

Governmental Accounting Standards Board (GASB) issued its Statement No. 34, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments, as amended by Statements No. 37, Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments: Omnibus - an amendment of GASB Statements No. 21 and 34, and Statement No. 38, Certain Financial Statement Note Disclosures. These Statements establish new accounting and financial reporting requirements for state and local governments throughout the United States. The Statements provide guidance established for special purpose governments and require management to include a discussion and analysis of the financial activities of the organization in addition to the basic financial statements and other required supplementary information. The Commission implemented this new financial reporting model effective January 1, 2003. The changes are reflected in the accompanying financial statements, including notes to financial statements.

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.

The Commission elected to report year 2003 (the first year of the new financial reporting model implementation) as a single year.

Revenues

Revenues consist primarily of toll and EZ Pass revenues. Toll revenues are recognized as received. EZ Pass revenues are recognized when cars with EZ Pass utilize the Commission's toll bridges. Proceeds received from the Commission's EZ Pass transactions 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.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Groups

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

Construction Fund – Bonds proceeds for project costs.

Revenue Fund – All revenues received by the Commission are deposited in the Revenue Fund. Not 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 such 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.

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 and 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 moneys held for the credit of the Debt Service Fund shall be insufficient for such purpose.

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

General Reserve Fund – The Commission shall transfer from the Revenue Fund on or before the last business day of each month (or more frequently if desired) 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.

Moneys 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:

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fund Groups (Continued)

- (a) To purchase or redeem Bonds;
- (b) To secure and pay the principal or redemption price of and any interest on any Subordinated Indebtness;
- (c) To make payments into the Construction Fund;
- (d) To fund improvements, extensions and replacements of the 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 such purposes.

Rebate Fund - is a trust fund, but the amounts therein do not constitute part of the Trust Estate. 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.

Net 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 are 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	3-7 years
Office furniture and equipment	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.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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.

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 at December 31, 2003 are summarized as follows:

Cash and equivalents	\$ 33,889,739
Investments	137,878,861
Total	<u>\$ 171,768,600</u>

Deposits

At December 31, 2003, the bank balance of the Commission's deposits with financial institutions is categorized as follows:

	<u>Carrying Amount</u>	<u>Bank Balance</u>
Amount insured by the FDIC or collateralized with securities held by the Commission in its name.	\$ 1,531,034	\$ 2,838,987
Amount collateralized with securities held by the pledging financial institution's trust department in the Commission's name.	32,289,355	32,289,355
Uncategorized:		
Petty cash and collectors' change funds	69,350	-
	<u>\$33,889,739</u>	<u>\$35,128,342</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

C. CASH AND EQUIVALENTS AND INVESTMENTS (CONTINUED)

Investments

Pursuant to the 2003 bond resolution, investments made by the Commission are summarized below. These investments, which are represented by specific identifiable investment securities, are classified as to credit risk by the three categories described below:

Category 1 - Insured or registered, or security held by the Commission or its agent in the Commission's name.

Category 2 - Uninsured and unregistered, with securities held by the counterparty's trust department or agent in the Commission's name.

Category 3 - Uninsured and unregistered, with securities held by the counterparty, or by its trust department or agent but not in the Commission's name. These items are covered by pledged assets which are pooled to secure deposits of public funds.

Description	1	2	3	Cost	Market Value
FHDN	\$ 17,787,417	\$ -	\$ -	\$ 17,787,417	\$ 17,833,900
FMCDN	16,827,384	-	-	16,827,384	16,866,000
FNDN	20,914,005	-	-	20,914,005	20,940,000
FNMA	29,201,098	-	-	29,201,098	29,254,520
FHLB	22,219,206	-	-	22,219,206	22,374,880
FHLMC	24,158,817	-	-	24,158,817	24,083,150
FFCB	5,483,750	-	-	5,483,750	5,505,330
PA INVEST	1,000,000	-	-	1,000,000	1,021,081
	<u>\$ 137,591,677</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 137,591,677</u>	<u>\$ 137,878,861</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

D. CAPITAL ASSETS

Capital assets activities for the year ended December 31, 2003 were as follows:

	December 31, 2002	Additions	Reductions	December 31, 2003
Non-Depreciable Assets:				
Land	\$ 129,035,535	\$ 568,839	\$ -	\$ 129,604,374
Infrastructure in Progress	26,287,592	21,641,899	(14,243,928)	33,685,563
Depreciable Assets:				
Bridges/road network	206,065,566	13,675,089	-	219,740,655
Equipment	5,451,803	1,167,629	(611,844)	6,007,589
Total at historical cost	<u>366,840,497</u>	<u>37,053,456</u>	<u>(14,855,772)</u>	<u>389,038,181</u>
Less accumulated depreciation for:				
Bridges/road network	125,592,679	7,993,108	-	133,585,787
Equipment	4,509,151	535,659	(611,844)	4,432,966
Total accumulated depreciation	<u>130,101,830</u>	<u>8,528,767</u>	<u>(611,844)</u>	<u>138,018,753</u>
Total Capital Assets	<u>\$ 236,738,667</u>	<u>\$ 28,524,689</u>	<u>\$ (14,243,928)</u>	<u>\$ 251,019,428</u>

Depreciation expense was as follows:

Bridge/road networks	\$ 7,993,108
Equipment	535,659
Total depreciation expense	<u>\$ 8,528,767</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

E. BONDS PAYABLE

The following is a summary of bonds payable:

Bonds	Maturity Dates	Interest Rate	Bonds Outstanding (in thousands)		Reductions	Bonds Outstanding (in thousands) December 31, 2003	Amounts due within one year
			December 31, 2002	Additions			
1992 Serial Revenue Bonds	2003	Various	\$ 45,335	\$ -	\$ 45,335	\$ -	\$ -
2003 Serial Revenue Bonds	2003 - 2024	3.00%-5.25%	-	129,140	3,010	126,130	4,330
2003 Term Revenue Bonds	2025 - 2028	5.00%	-	29,390	-	29,390	-
Total Bonds Payable			\$ 45,335	\$ 158,530	\$ 48,345	\$ 155,520	\$ 4,330

Debt service requirements on bonds outstanding at December 31, 2003, are as follows (in thousands):

	Principal	Interest	Total
2004	\$ 4,330	\$ 7,763	\$ 12,093
2005	4,455	7,608	12,063
2006	4,635	7,403	12,038
2007	4,865	7,166	12,031
2008	5,115	6,917	12,032
2009-2013	29,760	30,258	60,018
2014-2018	38,400	21,367	59,767
2019-2023	28,075	12,647	40,722
2024-2028	35,885	6,777	42,662
	\$ 155,520	\$ 107,906	\$ 263,426

Bond Anticipation Notes, Series 2002 issued to pay the principal on the Bond Anticipation Notes, Series 2001 of total principal amount of \$29,625,000 matured on April 30, 2003.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

F. PENSION PLAN

Plan Description

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 of Pennsylvania (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 salary 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 four employees of the Bridge System who participate in the State of New Jersey Public Employees' Retirement System. Public Employees' Retirement System of New Jersey (the "PERS") is a part of the Division of Pensions in the Department of the Treasury, State of New Jersey. The plan is funded annually based on the projected benefit method with aggregate level normal cost and frozen initial unfunded accrued liability. The plan, 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 the plan is not available.

The Commission's pension contribution for the year ended December 31, 2003 was \$41,710, equal to the required contribution.

G. SELF INSURANCE

The Commission self insures the risk for health insurance claims. Coverage for claims in excess of \$125,000 per person is carried with an insurance company.

H. POSTEMPLOYMENT BENEFITS

The Commission provides certain postemployment 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 Postemployment Benefits Other Than Pension Benefits by State and Local Governmental Employers," expenditures for postemployment life and health insurance benefits are recognized on a pay-as-you-go basis and were approximately \$1,074,681 in 2003. Effective April 1, 1995 the Commission has suspended postemployment life and health insurance benefits for all new hires.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

H. POSTEMPLOYMENT BENEFITS (CONTINUED)

As of December 31, 2003, ninety-six retired employees were eligible for both life and health insurance benefits. An additional sixty-two retired employees were eligible for life insurance benefit only, in a range \$2,000 - \$4,000 per person.

I. COMMITMENTS AND CONTINGENCIES

After the implementation of the toll rates increase on November 30, 2003 the Trucker Toll Increase case has been filed in the United States District Court for the Eastern District of Pennsylvania by the American Trucking Associations, Inc., PA Motor Truck Association, NJ Motor Truck Association and Roadway Express. A disposition of this matter adverse to the Commission might materially adversely affect future toll revenues. In the opinion of management, the Commission should prevail in this litigation.

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.

In 2001 the Commission approved a 10 year, \$526 million dollar Capital Improvement Program for protection, preservation, management and enhancement of the 20 bridges it maintains and operates. As part of this program, the Commission has entered into various contracts for the initial portion of this program. At December 31, 2003, the Commission had approved contracts that had not yet been completed or paid totaling approximately \$18 million.

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 nonpurpose investments at least once every five years. At December 31, 2003 there were no material arbitrage profits subject to rebate.

K. PRIOR PERIOD ADJUSTMENT

The cumulative effect of applying GASB No. 34 has been reported as a restatement of beginning net assets. A prior period adjustment of \$129,657,368 related to capitalization and depreciation of the capital assets has been recorded resulting in an increase in net assets.

SUPPLEMENTARY INFORMATION

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF CASH AND EQUIVALENT BALANCES

December 31, 2003

	Total	Revenue Fund	Operating Fund	Clearing Fund	Construction Fund	Debt Service Fund	Debt Service Reserve Fund	General Reserve Fund
Commerce Bank	\$ 32,289,355	\$ -	\$ 87,591	\$ 41,271	\$ 6,679,631	\$ 4,034,456	\$ 12,244,195	\$ 9,202,211
Fleet Bank	246,198	-	246,198	-	-	-	-	-
Wachovia Bank	1,284,836	1,234,751	50,085	-	-	-	-	-
Petty cash and collectors' change funds	69,350	-	69,350	-	-	-	-	-
Total Cash and Equivalent Balances	\$ 33,889,739	\$ 1,234,751	\$ 453,224	\$ 41,271	\$ 6,679,631	\$ 4,034,456	\$ 12,244,195	\$ 9,202,211

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF INVESTMENTS

December 31, 2003

Construction Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity Date</u>	<u>Cost</u>	<u>Market Value</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>			
FHDN	9,000,000	0.000%	1.33%	08-30-04	\$ 8,912,250	\$ 8,933,400
FHDN	4,000,000	0.000%	1.44%	11-24-04	3,944,778	3,956,000
FHDN	5,000,000	0.000%	1.44%	11-26-04	4,930,389	4,944,500
FMCDN	6,000,000	0.000%	1.08%	01-27-04	5,990,283	5,995,800
FMCDN	5,000,000	0.000%	1.52%	12-02-04	4,925,431	4,940,506
FMCDN	6,000,000	0.000%	1.50%	12-02-04	5,911,670	5,929,694
FNDN	12,000,000	0.000%	1.10%	03-03-04	11,967,240	11,979,600
FNDN	9,000,000	0.000%	1.20%	06-02-04	8,946,765	8,960,400
FNMA	5,000,000	1.630%	1.63%	12-15-04	5,000,000	5,001,550
TOTAL CONSTRUCTION FUND					\$ 60,528,806	\$ 60,641,450

Operating Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity Date</u>	<u>Cost</u>	<u>Market Value</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>			
FHLB	2,000,000	5.250%	5.10%	02-13-04	\$ 2,076,280	\$ 2,009,380
FHLMC	1,000,000	3.500%	2.01%	04-19-04	999,063	1,007,190
TOTAL OPERATING FUND					\$ 3,075,343	\$ 3,016,570

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF INVESTMENTS (CONTINUED)

December 31, 2003

<u>Security Description</u>	<u>General Reserve Fund</u>			<u>Maturity Date</u>	<u>Cost</u>	<u>Market Value</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>			
PA INVEST	1,000,000.00	1.630%	1.24%	01-15-04	\$ 1,000,000	\$ 1,021,081
FFCB	1,500,000.00	2.100%	2.10%	08-25-05	1,500,000	1,506,570
FFCB	4,000,000.00	2.100%	2.27%	02-06-06	3,983,750	3,998,760
FHLB	3,000,000.00	4.000%	3.83%	02-15-05	3,006,600	3,085,320
FHLB	2,100,000.00	5.375%	4.95%	02-15-06	2,171,326	2,241,750
FHLB	2,000,000.00	2.540%	2.54%	02-27-06	2,000,000	2,014,380
FHLB	4,000,000.00	2.070%	2.59%	07-28-06	3,965,000	3,986,240
FHLB	4,000,000.00	2.285%	3.10%	08-18-06	4,000,000	4,008,760
FHLB	2,000,000.00	3.100%	2.80%	10-16-06	2,000,000	2,005,620
FHLB	3,000,000.00	2.800%	3.22%	12-29-06	3,000,000	3,023,430
FHLMC	4,000,000.00	3.215%	4.83%	01-15-04	4,116,240	4,005,000
FHLMC	1,000,000.00	5.000%	5.85%	07-15-04	1,043,514	1,027,190
FHLMC	2,000,000.00	6.250%	2.07%	08-26-05	2,000,000	2,009,380
FHLMC	2,000,000.00	2.050%	2.05%	10-14-05	2,000,000	2,004,380
FHLMC	2,000,000.00	2.000%	2.00%	10-21-05	2,000,000	2,005,000
FHLMC	3,000,000.00	2.070%	2.07%	10-28-05	3,000,000	3,006,570
FHLMC	2,000,000.00	2.250%	2.25%	12-15-05	2,000,000	2,000,620
FHLMC	3,000,000.00	2.500%	2.05%	12-15-05	3,000,000	2,989,680
FHLMC	2,000,000.00	3.100%	3.10%	08-25-06	2,000,000	2,021,260
FHLMC	2,000,000.00	2.650%	2.65%	10-12-06	2,000,000	2,006,880
FNMA	4,500,000.00	1.530%	1.53%	05-26-05	4,500,191	4,497,210
FNMA	2,000,000.00	2.040%	2.04%	10-20-05	2,000,000	2,004,380
FNMA	3,000,000.00	2.600%	2.60%	12-29-05	3,000,000	3,007,500
FNMA	2,000,000.00	2.520%	2.52%	02-27-06	2,000,000	2,004,380
FNMA	2,000,000.00	2.400%	2.50%	02-27-06	1,995,000	2,013,760
FNMA	4,500,000.00	2.560%	2.56%	03-24-06	4,500,000	4,514,085
FNMA	4,500,000.00	2.250%	1.99%	05-26-06	4,505,906	4,508,460
FNMA	1,700,000.00	2.550%	2.55%	06-01-06	1,700,000	1,703,195
TOTAL GENERAL RESERVE FUND					\$ 73,987,527	\$ 74,220,841
TOTAL INVESTMENTS					\$ 137,591,676	\$ 137,878,861

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF OPERATIONS

Year Ended December 31, 2003

	Trenton- Morrisville Bridge	New Hope- Lambertville Bridge	I-78 Bridge	Easton- Phillipsburg Bridge	Portland- Columbia Bridge	Delaware Water Gap Bridge	Milford- Montague Bridge
Total	\$ 40,720,725	\$ 974,442	\$ 15,893,642	\$ 4,752,368	\$ 921,436	\$ 13,042,069	\$ 865,074
Toll revenues	(189,242)	(189,242)	-	(1,900)	-	-	-
Tickets, tokens refund	40,177	(3,199)	14,884	(1,900)	1,511	16,439	969
Toll (shortage) overage	32,942,153	928,922	13,060,813	3,931,046	780,499	9,487,916	696,760
EZ Pass revenues	(814,924)	(70,304)	(152,131)	(129,208)	(41,721)	(206,939)	(43,913)
EZ Pass discounts and allowances	264,513	182	261,157	64	-	-	3,110
Miscellaneous revenues	72,963,402	1,829,861	29,078,365	8,532,370	1,661,725	22,339,485	1,522,000
Total Toll Revenues	72,963,402	1,829,861	29,078,365	8,532,370	1,661,725	22,339,485	1,522,000
Operating and Maintenance Expenses							
Salaries and wages	3,559,483	288,576	768,675	483,799	190,512	1,008,484	256,427
Toll	2,717,707	279,546	665,041	448,633	185,514	594,672	179,488
Maintenance	861,574	104,789	166,059	114,828	76,369	195,605	79,334
Clerical	2,480,002	200,765	541,548	471,480	132,666	520,764	195,574
Supervision	9,618,766	873,676	2,141,323	1,518,740	585,061	2,319,525	710,823
Social security taxes	730,327	65,949	162,363	113,926	44,460	174,442	58,521
Pension contribution	34,452	1,571	4,795	6,370	615	17,311	2,870
Group insurance	2,225,795	206,944	491,262	348,539	151,702	500,430	162,694
Heat, light and power	446,396	62,435	83,981	84,292	31,648	45,726	26,538
Office expense	77,018	14,573	11,479	14,579	6,852	12,324	12,931
Operating supplies and expense	166,079	15,070	24,026	32,246	17,815	30,523	17,399
Education, conference and communication expense	111,117	11,024	10,807	12,393	10,050	12,679	9,129
Uniforms	29,467	4,462	4,109	3,407	2,093	3,479	1,177
Maintenance supplies and expense	122,818	11,829	33,979	10,241	10,651	25,625	4,765
Automotive	219,942	21,706	40,710	33,638	7,660	15,480	10,721
Buildings and grounds	98,621	7,430	25,256	12,891	9,808	19,557	10,319
Toll collecting equipment	149,527	16,861	83,501	6,627	(53,393)	66,493	(10,356)
Roadways, sidewalks and approaches	1,610,014	199,963	467,164	193,108	116,094	303,653	83,052
Insurance	15,640,339	2,562,767	3,584,755	2,391,029	941,116	3,547,247	1,100,583
Total Operating and Maintenance Expenses	57,323,063	5,416,829	25,493,610	6,161,341	720,609	18,792,238	421,417
Net revenues from Toll Bridges - Before Administrative expenses and toll supported bridges expenses	10,156,527	5,024,744	15,181,271	42,141,792	8,528,767	33,613,025	
Administrative expenses							
Toll supported bridges' expenses							
Net operating revenues before depreciation							
Depreciation							
Net operating revenues							

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF ADMINISTRATIVE EXPENSES

Year Ended December 31, 2003

Salaries and wages	\$ 3,180,845
Social security taxes	219,731
Trustee and paying agents' fees	18,246
Pension contribution	3,352
Group insurance	499,610
Retirees' cost	1,096,106
Unemployment compensation	15,503
Heat, light and power	2,279
Office expenses	285,835
EZ Pass operating expenses	561,036
Operating supplies and expenses	126,752
Travel and meeting expenses	19,198
Educational and conference expenses	104,242
Automotive repairs and expenses	157
Professional services and legal expenses	3,509,648
Advertising	225,707
Insurance	288,280
	<u>\$10,156,527</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF TOLL SUPPORTED BRIDGE EXPENSES

Year Ended December 31, 2003

	<u>Total</u>	<u>Southern Division Bridges</u>	<u>Northern Division Bridges</u>
Salaries and wages	\$ 2,985,453	\$ 1,605,002	\$ 1,380,451
Social security taxes	224,285	120,805	103,480
Pension contribution	3,906	1,699	2,207
Group insurance	729,046	392,668	336,378
Heat, light and power	73,438	49,893	23,545
Office expense	18,024	10,587	7,437
Operating supplies and expense	78,678	38,600	40,078
Education and conference expenses	498	468	30
Uniforms	7,173	7,997	(824)
Maintenance supplies and expenses			
Automotive	7,479	3,471	4,008
Buildings and grounds	5,523	4,200	1,323
Roadways, sidewalks and approaches	48,169	25,138	23,031
Insurance	828,072	541,410	286,662
Civil claim	15,000	15,000	-
	<u>\$ 5,024,744</u>	<u>\$ 2,816,938</u>	<u>\$ 2,207,806</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF TOLL BRIDGE TRAFFIC AND REVENUES

Year Ended December 31, 2003

VEHICLE CLASSIFICATION	Trenton- Morrisville Bridge	New Hope- Lambertville Bridge	I-78 Bridge	Easton- Phillipsburg Bridge	Portland- Columbia Bridge	Delaware Water Gap Bridge	Miford- Montague Bridge
Number of Vehicles Crossing Toll Bridges:							
Class							
Passenger Cars, Vans and Pickups	29,096,940	1,418,465	6,518,607	5,004,027	1,083,030	8,066,666	1,231,491
Two Axle Trucks, Buses and Tractors	730,939	39,377	199,840	154,235	27,528	143,521	21,418
Three Axle Trucks, Buses, Tractor and Trailer	349,741	21,936	102,434	62,981	9,413	87,427	5,139
Four Axle Trucks, Tractor and Trailer	271,634	7,097	115,586	41,555	5,795	52,233	2,145
Five Axle Trucks, Tractor and Trailer	3,489,618	26,497	1,891,300	259,050	28,508	1,108,058	10,626
Six Axle Trucks, Tractor and Trailer	56,244	799	30,728	3,841	226	19,127	119
Vehicles Requiring Special Permit	1,727	1	797	72	9	780	7
Local Buses	113	-	12	100	1	-	-
Seven or More Axle Trucks, Tractor and Trailer	2,411	42	1,101	108	5	992	41
	<u>33,999,367</u>	<u>1,514,214</u>	<u>8,860,405</u>	<u>5,525,969</u>	<u>1,154,515</u>	<u>9,478,804</u>	<u>1,270,986</u>
Toll Revenues of Vehicles Crossing Toll Bridges:							
Class							
Passenger Cars, Vans and Pickups	\$ 27,628,732	\$ 1,232,909	\$ 5,789,847	\$ 4,377,320	\$ 1,154,204	\$ 8,669,465	\$ 1,315,250
Two Axle Trucks, Buses and Tractors	3,185,251	171,544	873,224	671,591	119,588	626,943	93,435
Three Axle Trucks, Buses, Tractor and Trailer	2,250,602	141,861	657,797	406,506	61,743	558,943	33,405
Four Axle Trucks, Tractor and Trailer	2,294,596	60,215	968,231	353,256	50,233	439,246	18,626
Five Axle Trucks, Tractor and Trailer	37,684,226	285,667	20,416,120	2,805,406	308,871	11,987,396	114,599
Six Axle Trucks, Tractor and Trailer	716,764	10,269	387,561	48,961	3,004	247,292	1,561
Vehicles Requiring Special Permit	35,734	18	14,383	1,452	133	18,525	103
Local Buses	2,711	-	715	1,775	220	-	-
Seven or More Axle Trucks, Tractor and Trailer	48,544	671	23,134	2,393	117	19,131	709
Total Toll Revenue Vehicles	<u>73,847,160</u>	<u>1,903,154</u>	<u>29,131,013</u>	<u>8,668,659</u>	<u>1,698,114</u>	<u>22,566,942</u>	<u>1,577,687</u>
EZ Pass discounts and allowances and other adjustments	(883,758)	(73,293)	(52,648)	(116,289)	(36,389)	(227,457)	(55,687)
Total Toll Revenues	<u>\$ 72,963,402</u>	<u>\$ 1,829,861</u>	<u>\$ 29,078,365</u>	<u>\$ 8,552,370</u>	<u>\$ 1,661,725</u>	<u>\$ 22,339,485</u>	<u>\$ 1,522,000</u>

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE AND ON INTERNAL
CONTROL OVER FINANCIAL REPORTING 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** as of and for the year ended December 31, 2003, and have issued our report thereon dated March 17, 2004. 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.

Compliance

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 that are required to be reported under *Government Auditing Standards*.

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 in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses. However, we provided certain recommendations regarding internal control strengthening in a separate letter addressed to Delaware River Joint Toll Bridge Commission-Bridge System Commissioners dated March 17, 2004.

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



March 17, 2004

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

Financial Statements
and
Supplementary Information

Years Ended December 31, 2004 and 2003

**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 statements of net assets of **DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM** (the "Commission") as of December 31, 2004 and 2003, and the related statements of revenues, expenses and changes in net assets and cash flows for the years then ended. 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.

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◊ SEC PRACTICE SECTION
◊ REGISTERED WITH THE PCAOB

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the 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, 2004 and 2003, and the results of its operations 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 March 31, 2005, 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, and compact. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audit.

INDEPENDENT AUDITORS' REPORT (CONTINUED)

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary schedules on pages 22 to 30 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 audit 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.

Management's discussion and analysis, as shown on pages 3 through 7, 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 presentation of management's discussion and analysis. However, we did not audit the information, and we express no opinion on it.

Mercadino, P.C.

March 31, 2005

MANAGEMENT'S DISCUSSION AND ANALYSIS

As management of the Delaware River Joint Toll Bridge Commission (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, 2003 and 2004. We encourage readers to consider the information presented here in conjunction with the audited financial statements and supplementary information as a whole.

Year 2004 is the first year that the Commission is presenting comparative financial statements in conformity with GASB Statement No. 34. In 2003, the Commission implemented GASB Statement No. 34 for the year ended December 31, 2003, only.

Financial Highlights

- Total toll revenues for the Commission totaled \$78,856,292 for the year ended December 31, 2004, which represents an increase of 8.29% over the previous year. The increase in 2004 is the result of an 8.53% increase in total toll traffic, along with an increase in truck toll rates ranging between 11% and 22% offset by a decrease in automobile toll rates ranging from 25% to 40%.
- Net operating revenues totaled \$42,480,899, and change in net assets totaled \$28,822,386 in 2004, as compared to \$42,000,676 and \$30,259,250 respectively for 2003.

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 financial information. The supplementary information includes schedules of expenses, investments and schedules of traffic and revenue.

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 private-sector business.

The statements of net assets present information on the Commission's assets and liabilities at December 31, 2004 and 2003, with the difference between the two reported as net assets. Over time, increases or decreases in net assets may serve as a useful indicator of whether the financial position of the Commission is improving or deteriorating. At December 31, 2004 the Commission's net assets equaled \$287,385,319, as compared to \$258,562,933 in 2003 - an increase of 11.15%. Net assets increase because revenues exceed expenses.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Basic Financial Statements (Continued)

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.

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 supplemental information concerning expenses, investments and traffic.

Financial Analysis

Commission assets consisting of restricted and unrestricted assets totaled approximately \$455 million. Unrestricted current assets totaling approximately \$8.7 million (an increase of \$1.8 million, or 26.2%) represent cash in the operating accounts, cash equivalent investments and EZ Pass 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 approximately \$427.7 million are broken into two categories. Restricted current assets of approximately \$31.2 million decreased 5.18% from the previous year end as a result of changes in investment security maturity terms. Restricted non-current assets totaled approximately \$396.6, which represents an increase of approximately \$8.60 million, or 2.2%, over the 2003 year end balance. Restricted cash and investment totaling approximately \$180.5 million, an increase of approximately \$10.4 million, or 5.7%, are restricted under the Trust Indenture to be used only for purposes listed on pages 12-13 of this report. Capital assets totaling approximately \$245.4 million consist of land, infrastructure and equipment with an original value of approximately \$412.8 million less accumulated depreciation of \$148.8 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.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Financial Analysis (Continued)

The Commission has current and non-current liabilities of approximately \$155.2 million related to its series 2003 bond issue, at December 31, 2004, which represents a decrease of approximately \$5.2 million from 2003. 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 following table contains condensed financial information derived from the December 31, 2004 and 2003 financial statements of the Commission:

	2004	2003
Net Assets		
Current and other assets	\$ 190,975,536	\$ 178,927,513
Capital assets	264,056,709	250,353,870
Total assets	455,032,245	429,281,383
Bond indebtedness	155,231,379	160,409,317
Other liabilities	12,415,547	10,309,133
Total liabilities	167,646,926	170,718,450
Net assets:		
Investment in capital assets, net of related debt	108,825,330	89,944,553
Restricted	178,450,964	168,139,828
Unrestricted	109,025	478,552
Total net assets	\$ 287,385,319	\$ 258,562,933
Changes in Net Assets		
Operating revenues	\$ 78,856,292	\$ 72,822,286
Operating expenses	(36,375,393)	(30,821,610)
Net operating revenues	42,480,899	42,000,676
Depreciation	(9,581,937)	(8,528,767)
Non-operating revenues	3,105,362	3,136,829
Non-operating expenses	(7,181,938)	(6,349,488)
Change in net assets	28,822,386	30,259,250
Net assets, beginning of year	258,562,933	228,303,683
Net assets, end of year	\$ 287,385,319	\$ 258,562,933

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Significant Events

In December 2001, the Commission approved a plan that provides major bridge rehabilitation, bridge enhancement, and installation of EZPass 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 a 10 year \$526 million Capital Improvement Program for system protection, preservation, management and enhancement of the twenty bridges DRJTBC owns, maintains and operates, as well as operating expenses for the System.

Additional projects and changes in the Program, along with the addition of a Compact Authorization Investment ("COI") program have increased the estimated cost of the ten year Capital Improvement Program to \$640 million.

The COI program is a \$40 million fund to pay the cost of capital improvements related to the Bridge System including without limitations to certain transportation infrastructure projects in host communities.

On January 4, 2004, the final phase of the toll increase was enacted. Tolls for commercial vehicles were increased \$.50 per axle to \$2.75 per rolling axle (increase of \$.25 to \$2.50 per axle for 2 axle vehicles only).

On January 21, 2003, the Commission issued Bridge System Revenue Bonds, Series 2003 for \$158,530,000. The purpose of the issuance was to provide funds to pay for (1) the current refunding of the outstanding Bridge System Revenue Bonds, Series 1992 in the amount of \$45,335,000; (2) the current refunding of the Commission's outstanding Bond Anticipation Note in the amount of \$29,625,000; (3) the funding of the interest due on the Commission's outstanding debt being refunded; (4) System capital improvements; (5) the funding of the Debt Service Reserve Requirement for the Bonds; and (6) the costs of issuance associated with the Bonds.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

	<u>2004</u>	<u>2003</u>
Summary of Cash Flows		
Cash from operating activities	\$ 43,838,267	\$ 41,081,620
Cash flow used in investing activities	(31,526,627)	(95,757,850)
Cash Flow (used in) provided by financing activities	<u>(13,072,612)</u>	<u>79,087,754</u>
Net (decrease) increase in cash and cash equivalents	(760,972)	24,411,524
Cash and equivalents, beginning of the year	<u>33,889,739</u>	<u>9,478,215</u>
Cash and equivalents, end of the year	<u><u>\$ 33,128,767</u></u>	<u><u>\$ 33,889,739</u></u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENTS OF NET ASSETS

		December 31,	
		2004	2003
ASSETS			
Current Assets			
Unrestricted:			
Cash and equivalents	\$	2,717,087	\$ 1,729,246
Other assets		2,006,142	2,197,287
EZ Pass clearing account		3,952,393	2,947,252
Total unrestricted		<u>8,675,622</u>	<u>6,873,785</u>
Restricted:			
Cash and equivalents		30,411,680	32,160,493
Accrued interest on investments		593,283	634,935
Bond issuance costs - current portion		145,545	57,477
Total Restricted		<u>31,150,508</u>	<u>32,852,905</u>
Total Current Assets		<u>39,826,130</u>	<u>39,726,690</u>
Non-Current Assets			
Restricted:			
Investments		150,048,429	137,878,861
Bond issuance costs - long term portion		1,100,977	1,321,962
Capital Assets		264,056,709	250,353,870
Total Non-Current Restricted Assets		<u>415,206,115</u>	<u>389,554,693</u>
Total Non-Current Assets		<u>415,206,115</u>	<u>389,554,693</u>
Total Assets	\$	<u>455,032,245</u>	\$ <u>429,281,383</u>
LIABILITIES AND NET ASSETS			
Current Liabilities			
Accounts payable and accrued expenses	\$	4,307,625	\$ 2,674,968
EZ Pass customer accounts		2,318,944	1,758,100
Accrued interest on bond indebtedness		3,848,950	3,913,900
Compensated Absences-current portion		120,000	120,000
Bridge system revenue bonds, series 2003 - current portion		4,455,000	4,330,000
Premium on bonds - current portion		914,812	924,401
Total Current Liabilities		<u>15,965,331</u>	<u>13,721,369</u>
Non-Current Liabilities			
Compensated Absences		1,820,028	1,842,165
Bridge system revenue bonds, series 2003		146,735,000	151,190,000
Premium on bonds - long-term portion		3,126,567	3,964,916
Total Noncurrent Liabilities		<u>151,681,595</u>	<u>156,997,081</u>
Total Liabilities		<u>167,646,926</u>	<u>170,718,450</u>
Net Assets			
Invested in Capital Assets, net of related debt		108,825,330	89,944,553
Restricted		178,450,964	168,139,828
Unrestricted		109,025	478,552
Total Net Assets		<u>287,385,319</u>	<u>258,562,933</u>
Total Liabilities and Net Assets	\$	<u>455,032,245</u>	\$ <u>429,281,383</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

	Year Ended	
	December 31,	
	2004	2003
Operating Revenues		
Toll bridge operations:		
Cash toll revenues, net	\$ 38,802,332	\$ 40,571,660
EZ Pass revenues, net	39,929,331	32,127,229
Miscellaneous revenues	124,629	123,397
Total toll revenues	<u>78,856,292</u>	<u>72,822,286</u>
Operating Expenses		
Toll bridge operating expenses:		
Operating and maintenance expenses	17,284,965	15,640,339
State police bridge security	2,065,135	-
Administrative expenses	11,561,266	10,156,527
Toll-supported bridge expenses	5,464,027	5,024,744
Total operating expenses	<u>36,375,393</u>	<u>30,821,610</u>
Net operating revenues	<u>42,480,899</u>	<u>42,000,676</u>
Non-Operating Revenues (Expenses)		
Investment return	2,024,032	2,071,312
Interest on bond indebtedness	(7,036,393)	(6,292,011)
Amortization of bond premium	914,812	924,401
Amortization of bond issuance costs	(145,545)	(57,477)
Depreciation	(9,581,937)	(8,528,767)
Gain on sale of fixed assets	166,518	141,116
Total Non-Operating Expenses	<u>(13,658,513)</u>	<u>(11,741,426)</u>
Change in net assets	<u>28,822,386</u>	<u>30,259,250</u>
Net assets, beginning of year, restated	<u>258,562,933</u>	<u>228,303,683</u>
Net assets, end of year	<u>\$ 287,385,319</u>	<u>\$ 258,562,933</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

STATEMENTS OF CASH FLOWS

	Year Ended	
	December 31,	
	2004	2003
Cash Flows from Operating Activities		
Receipts from toll bridges	\$ 38,802,332	\$ 40,267,665
Receipts from EZ Pass	39,485,034	32,000,465
Payments to suppliers, employees, and others	(34,573,728)	(31,451,023)
Other receipts	124,629	264,513
Net cash provided by operating activities	<u>43,838,267</u>	<u>41,081,620</u>
Cash Flows from Investing Activities		
Purchases of investments, net	(13,311,442)	(76,563,392)
Investment return	1,141,874	2,617,707
Purchases of capital assets	(19,357,059)	(21,812,165)
Net cash used in investing activities	<u>(31,526,627)</u>	<u>(95,757,850)</u>
Cash Flows from Financing Activities		
Bond proceeds	-	160,409,317
Principal paid on bond and notes indebtedness	(5,244,811)	(74,960,000)
Interest paid on bond indebtedness	(7,827,801)	(4,982,124)
Bond issuance costs	-	(1,379,439)
Net cash (used in) provided by financing activities	<u>(13,072,612)</u>	<u>79,087,754</u>
Net (decrease) increase in cash	(760,972)	24,411,524
Cash and equivalents, beginning of year	33,889,739	9,478,215
Cash and equivalents, end of year	<u>\$ 33,128,767</u>	<u>\$ 33,889,739</u>
Reconciliation of net operating revenues to net cash provided by operating activities		
Net operating revenues	\$ 42,480,899	\$ 42,000,676
Changes in net assets and liabilities:		
Prepaid expenses and other assets	191,145	(1,685,748)
EZ Pass clearing account	(1,005,141)	(1,119,105)
Accounts payable and accrued expenses	1,632,657	(764,714)
Accrued refunds	-	(303,995)
EZ Pass customer accounts	560,844	992,341
Compensated absences	(22,137)	1,962,165
Net cash provided by operating activities	<u>\$ 43,838,267</u>	<u>\$ 41,081,620</u>
Non-cash financing activities		
Amortization of bond premium	\$ 914,812	\$ 924,401
Amortization of bond issuance costs	(145,545)	(57,477)
Total non-cash financing activities	<u>\$ 769,267</u>	<u>\$ 866,924</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

A. AUTHORIZING 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 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 operations 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 the Bridge System. Due to the in-substance defeasance of the 1988 Bridge System and I-78 Revenue Bonds, effective with 1992 financial statements, the financial activity of the I-78 Bridge is included with 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 and 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 EZ Pass revenues. Cash toll revenues are recognized as received. EZ Pass revenues are recognized when cars with EZ Pass utilize the Commission's toll bridges. Proceeds received from the Commission's EZ Pass transactions 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, the Commission has established the following funds and accounts:

Construction Fund – Bonds proceeds for project costs.

Revenue Fund – All revenues received by the Commission are deposited in the Revenue Fund. Not 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 such 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 moneys 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.

Moneys 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 Indebtness;
- (c) To make payments into the Construction Fund;
- (d) To fund improvements, extensions and replacements of the System;
- (e) As a self-insurance reserve; or
- (f) To further any corporate purpose.

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

The Rebate Fund is a trust fund, but the amounts therein do not constitute part of the Trust Estate. 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

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 are 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 all interest related to projects under construction. Capitalized interest amounted to \$793,331 and \$1,141,045 for 2004 and 2003, 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.

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.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

C. CASH AND EQUIVALENTS AND INVESTMENTS

General Information

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

	December 31,	
	2004	2003
Cash and equivalents	\$ 33,128,767	\$ 33,889,739
Investments	150,048,429	137,878,861
	<u>\$ 183,177,196</u>	<u>\$ 171,768,600</u>

Deposits

The bank balances of the Commission's deposits with financial institutions are categorized as follows:

	December 31, 2004		December 31, 2003	
	Carrying Amount	Bank Balance	Carrying Amount	Bank Balance
Amount insured by the FDIC or collateralized with securities held by the Commission in its name.	\$ 2,570,649	\$ 5,463,586	\$ 1,531,034	\$ 2,838,987
Amount collateralized with securities held by the pledging financial institution's trust department in the Commission's name.	30,479,344	30,479,344	32,289,355	32,289,355
Uncategorized:				
Petty cash and collectors' change funds	78,774	-	69,350	-
	<u>\$33,128,767</u>	<u>\$35,942,930</u>	<u>\$33,889,739</u>	<u>\$35,128,342</u>

Investments

Pursuant to the 2003 bond resolution, investments made by the Commission are summarized below. These investments, which are represented by specific identifiable investment securities, are classified as to credit risk by the three categories described below:

Category 1 - Insured or registered, or security held by the Commission or its agent in the Commission's name.

Category 2 - Uninsured and unregistered, with securities held by the counterparty's trust department or agent in the Commission's name.

Category 3 - Uninsured and unregistered, with securities held by the counterparty or by its trust department or agent but not in the Commission's name. These items are covered by pledged assets which are pooled to secure deposits of public funds.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

C. CASH AND EQUIVALENTS AND INVESTMENTS (CONTINUED)

Investments (Continued)

Investments at December 31, 2004:

Description	1	2	3	Cost	Market Value
FMCDN	\$ 8,908,690	\$ -	\$ -	\$ 8,908,690	\$ 8,987,400
FNMA	39,838,289	-	-	39,838,289	39,736,570
FHLB	49,471,016	-	-	49,471,016	49,208,405
FHLMC	49,933,382	-	-	49,933,382	49,587,687
FFCB	1,500,000	-	-	1,500,000	1,493,445
PA INVEST	1,000,000	-	-	1,000,000	1,034,922
	<u>\$ 150,651,377</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 150,651,377</u>	<u>\$ 150,048,429</u>

Investments at December 31, 2003:

Description	1	2	3	Cost	Market Value
FHDN	\$ 17,787,417	\$ -	\$ -	\$ 17,787,417	\$ 17,833,900
FMCDN	16,827,384	-	-	16,827,384	16,866,000
FNDN	20,914,005	-	-	20,914,005	20,940,000
FNMA	29,201,098	-	-	29,201,098	29,254,520
FHLB	22,219,206	-	-	22,219,206	22,374,880
FHLMC	24,158,817	-	-	24,158,817	24,083,150
FFCB	5,483,750	-	-	5,483,750	5,505,330
PA INVEST	1,000,000	-	-	1,000,000	1,021,081
	<u>\$ 137,591,677</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 137,591,677</u>	<u>\$ 137,878,861</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

D. CAPITAL ASSETS

Capital assets activities for the year ended December 31, 2004, were as follows:

	December 31, 2003	Additions	Reductions	December 31, 2004
Non-Depreciable Assets				
Land	\$ 129,604,374	\$ -	-	\$ 129,604,374
Infrastructure in Progress	34,826,608	3,049,615	11,271,610	26,604,613
Depreciable Assets				
Bridges/road network	219,740,655	12,705,738	-	232,446,393
Equipment	6,007,589	18,801,034	(619,612)	24,189,011
Total at historical cost	390,179,226	34,556,387	10,651,998	412,844,391
Less Accumulated Depreciation				
Bridges/road network	135,392,390	7,836,844	-	143,229,235
Equipment	4,432,966	1,745,093	(619,612)	5,558,447
Total Accumulated Depreciation	139,825,356	9,581,937	(619,612)	148,787,682
Total Capital Assets	\$ 250,353,870	\$ 24,974,450	\$ 11,271,610	\$ 264,056,709
Depreciation expense was as follows:				
Bridges/road networks	\$ 7,836,844			
Equipment	1,745,093			
Total Depreciation Expense	\$ 9,581,937			

Capital assets activities for the year ended December 31, 2003, were as follows:

	December 31, 2002	Additions	Reductions	December 31, 2003
Non-Depreciable Assets				
Land	\$ 129,035,535	\$ 568,839	-	\$ 129,604,374
Infrastructure in Progress	26,287,592	22,782,944	(14,243,928)	34,826,608
Depreciable Assets				
Bridges/road network	206,065,566	13,675,089	-	219,740,655
Equipment	5,451,804	1,167,629	(611,844)	6,007,589
Total at historical cost	366,840,497	38,194,501	(14,855,772)	390,179,226
Less Accumulated Depreciation				
Bridges/road network	127,399,282	7,993,108	-	135,392,390
Equipment	4,509,151	535,659	(611,844)	4,432,966
Total Accumulated Depreciation	131,908,433	8,528,767	(611,844)	139,825,356
Total Capital Assets	\$ 234,932,064	\$ 29,665,734	\$ (14,243,928)	\$ 250,353,870
Depreciation expense was as follows:				
Bridges/road networks	\$ 7,993,108			
Equipment	535,659			
Total Depreciation Expense	\$ 8,528,767			

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

E. BONDS PAYABLE

The following is a summary of bonds payable:

Bonds and notes payable	Maturity Dates	Interest Rate	Bonds Outstanding		Reductions	Bonds Outstanding (in thousands) December 31, 2004	Amounts due within one year
			December 31, 2003 (in thousands)	December 31, 2004			
2003 series revenue bonds	2003-2024	3.00%-5.25%	\$ 126,130	\$ -	\$ 4,330	\$ 121,800	\$ 4,455
2003 series revenue bonds	2025-2028	5.00%	29,390	-	-	29,390	-
			<u>\$ 155,520</u>	<u>\$ -</u>	<u>\$ 4,330</u>	<u>\$ 151,190</u>	<u>\$ 4,455</u>

Debt service requirements on bonds outstanding at December 31, 2004, are as follows (in thousands):

	Principal	Interest	Total
2005	\$ 4,455	\$ 7,609	\$ 12,064
2006	4,635	7,404	12,039
2007	4,865	7,166	12,031
2008	5,115	6,917	12,032
2009	5,370	6,655	12,025
2010-2014	31,305	28,662	59,967
2015-2019	36,545	19,399	55,944
2020-2024	29,510	11,194	40,704
2025-2028	29,390	5,143	34,533
	<u>\$ 151,190</u>	<u>\$ 100,149</u>	<u>\$ 251,339</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

F. PENSION PLAN

Plan Description

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 of Pennsylvania (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 salary 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 four employees of the Bridge System who participate in the State of New Jersey Public Employees' Retirement System. Public Employees' Retirement System of New Jersey (the "PERS") is a part of the Division of Pensions in the Department of the Treasury, State of New Jersey. The plan is funded annually based on the projected benefit method with aggregate level normal cost and frozen initial unfunded accrued liability. The plan, 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 the plan is not available.

The Commission's pension contribution for the years ended December 31, 2004 and 2003, respectively, was \$171,568 and \$41,710, equal to 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 which limits its exposure to a maximum of \$150,000 per plan year per individual and \$4,420,100 in the aggregate for all active and retired employees.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

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 \$1,550,459 and \$1,096,106 in 2004 and 2003, respectively. Effective April 1, 1995, the Commission has suspended post-employment life and health insurance benefits for all new hires.

As of December 31, 2004, one hundred-fifteen retired employees were eligible for both life and health insurance benefits. An additional fifty-two retired employees were eligible for life insurance benefit only, 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 has been filed in the United States District Court for the Eastern District of Pennsylvania by the American Trucking Associations, Inc., PA Motor Truck Association, NJ Motor Truck Association and Roadway Express. The suit was decided in favor of the Commission during 2004; however, there is an appeal pending. A disposition of this matter adverse to the Commission might materially adversely affect future toll revenues. There can be no assurance as to the outcome of the appeal.

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.

In 2001, the Commission approved a 10-year, \$526 million Capital Improvement Program for protection, preservation, management and enhancement of the 20 bridges it owns, maintains and operates. With the addition of a Compact Authorized Investment ("CAI") program, along with additions and changes in the original projects, the Capital Improvement Program currently stands at approximately \$640 million. As of December 31, 2004, the Commission has approved more than \$74 million in contracts to study and improve various facilities and systems as the initial part of that program. At December 31, 2004, the Commission had approved contracts that had not yet been completed or paid, totaling approximately \$8.3 million.

In 2002, the Commission began the installation and operation of a new toll collection system which provided EZPass (electronic) toll processing on all of its seven toll bridges. The Commission has entered into a long-term contract to maintain their EZPass system hardware. The unpaid portion of the contract amounted to \$1.6 million. The system maintenance contract runs through July 2006. The Commission holds an option to extend the maintenance contract for an additional two years.

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

NOTES TO FINANCIAL STATEMENTS

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 nonpurpose investments at least once every five years. At December 31, 2004, there were no material arbitrage profits subject to rebate.

K. PRIOR PERIOD ADJUSTMENTS

The cumulative effect of applying GASB No. 34 was reported as a restatement of beginning net assets for 2003. A prior period adjustment of \$129,657,368, related to capitalization and depreciation of the capital assets, had been recorded at January 1, 2003, resulting in an increase in net assets. An additional adjustment of \$1,806,603 was made relating to accumulated depreciation. Accordingly, the restatement of net assets at January 1, 2003 amounted to \$127,850,765.

The Commission also restated 2003 interest expense of \$1,141,045, increasing capital assets and net assets by the same amount. This was the result of capitalizing interest incurred in relation to infrastructure in progress.

The above adjustments resulted in a prior period adjustment, decreasing December 31, 2003 net assets by \$665,558.

Certain 2003 amounts have been reclassified to conform with current year presentation.

L. SUBSEQUENT EVENT

In March 2005, the Commission issued \$72,645,000 in Pennsylvania – New Jersey; Bridge System Revenue Bonds, Series 2005A. The proceeds will be used to provide funds to pay for \$40 million of Compact Authorized Investments, refund \$32,165,000 principal amount of the Commission's outstanding Series 2003 Bonds, and to pay the cost of issuance associated with the Series 2005A Bonds.

SUPPLEMENTARY INFORMATION

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF CASH AND EQUIVALENT BALANCES

December 31, 2004

	Revenue	Operating	Clearing	Construction	Debt	Debt Service	General
Total	Fund	Fund	Fund	Fund	Service	Reserve	Reserve
					Fund	Fund	Fund
Commerce Bank	\$ -	\$ 67,664	\$ -	\$ 4,051,771	\$ 4,102,982	\$ 12,375,329	\$ 9,881,598
Wachovia Bank	2,473,389	97,260	-	-	-	-	-
Petty cash and collectors' change funds	-	78,774	-	-	-	-	-
Total Cash and Equivalent Balances	\$ 2,473,389	\$ 243,698	\$ -	\$ 4,051,771	\$ 4,102,982	\$ 12,375,329	\$ 9,881,598

December 31, 2003

	Revenue	Operating	Clearing	Construction	Debt	Debt Service	General
Total	Fund	Fund	Fund	Fund	Service	Reserve	Reserve
					Fund	Fund	Fund
Commerce Bank	\$ -	\$ 87,591	\$ 41,271	\$ 6,679,631	\$ 4,034,456	\$ 12,244,195	\$ 9,202,211
Fleet Bank	-	246,198	-	-	-	-	-
Wachovia Bank	1,234,751	50,085	-	-	-	-	-
Petty cash and collectors' change funds	-	69,350	-	-	-	-	-
Total Cash and Equivalent Balances	\$ 1,234,751	\$ 453,224	\$ 41,271	\$ 6,679,631	\$ 4,034,456	\$ 12,244,195	\$ 9,202,211

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF INVESTMENTS

December 31, 2004

Construction Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity</u>	<u>Cost</u>	<u>Market</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>	<u>Date</u>		<u>Value</u>
FHLB	10,000,000	1.270%	1.27%	03-15-05	\$ 10,000,000	\$ 9,975,000
FHLMC	6,000,000	0.000%	2.60%	06-14-05	5,926,780	5,929,800
FMCDN	6,000,000	0.000%	1.24%	01-11-05	5,928,455	5,997,000
FMCDN	3,000,000	0.000%	2.06%	02-22-05	2,980,235	2,990,400
FNMA	8,000,000	1.560%	1.61%	04-29-05	7,996,000	7,975,040
FNMA	6,000,000	0.000%	2.50%	05-23-05	5,938,437	5,941,200
FNMA	3,000,000	0.000%	2.70%	07-22-05	2,954,165	2,955,900
TOTAL CONSTRUCTION FUND					\$ 41,724,072	\$ 41,764,340

Operating Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity</u>	<u>Cost</u>	<u>Market</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>	<u>Date</u>		<u>Value</u>
FNMA	2,125,000	2.000%	1.68%	03-15-06	\$ 2,128,320	\$ 2,098,439
FHLMC	1,000,000	2.270%	2.56%	04-28-06	994,375	989,380
TOTAL OPERATING FUND					\$ 3,122,695	\$ 3,087,819

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF INVESTMENTS (CONTINUED)

December 31, 2004

General Reserve Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity Date</u>	<u>Cost</u>	<u>Market Value</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>			
PA INVEST	1,034,921	0.000%	1.89%	01-15-05	\$ 1,000,000	\$ 1,034,922
FFCB	1,500,000	2.100%	2.10%	08-25-05	1,500,000	1,493,445
FHLB	3,000,000	4.000%	3.83%	02-15-05	3,000,000	3,005,640
FHLB	2,100,000	5.380%	4.95%	02-15-06	2,100,000	2,151,848
FHLB	3,875,000	2.240%	1.74%	06-23-06	3,884,688	3,825,361
FHLB	4,000,000	2.290%	2.59%	07-28-06	3,965,000	3,947,520
FHLB	3,000,000	2.550%	2.55%	08-23-06	3,000,000	2,970,000
FHLB	2,000,000	2.600%	2.60%	09-01-06	2,000,000	1,981,260
FHLB	2,000,000	2.800%	2.80%	10-16-06	2,000,000	1,985,620
FHLB	3,000,000	3.220%	3.22%	12-29-06	3,000,000	2,997,180
FHLMC	2,000,000	2.070%	2.07%	08-26-05	2,000,000	1,990,820
FHLMC	2,000,000	2.000%	2.00%	10-21-05	2,000,000	1,986,140
FHLMC	3,000,000	2.070%	2.07%	10-28-05	3,000,000	2,979,600
FHLMC	2,000,000	2.250%	2.25%	12-15-05	2,000,000	1,980,960
FHLMC	3,000,000	2.500%	2.05%	12-15-05	3,000,000	2,976,180
FHLMC	3,000,000	2.010%	2.04%	01-27-06	2,998,125	2,968,200
FHLMC	3,000,000	2.340%	1.99%	04-28-06	2,985,938	2,970,450
FHLMC	5,000,000	3.000%	3.11%	05-26-06	4,990,000	4,989,900
FHLMC	3,500,000	2.500%	2.52%	08-09-06	3,498,359	3,463,985
FHLMC	2,000,000	3.100%	3.10%	08-25-06	2,000,000	1,996,220
FHLMC	2,000,000	2.650%	2.65%	10-12-06	2,000,000	1,980,900
FHLMC	9,000,000	3.550%	3.80%	06-22-07	8,998,594	8,950,050
FNMA	4,500,000	1.530%	1.53%	05-26-05	4,500,000	4,483,125
FNMA	3,000,000	2.600%	2.60%	12-29-05	3,000,000	2,970,930
FNMA	2,000,000	2.400%	2.50%	02-27-06	1,995,000	1,985,620
FNMA	3,000,000	2.300%	1.99%	04-28-06	2,988,750	2,966,250
FNMA	4,500,000	2.250%	1.99%	05-26-06	4,505,625	4,447,980
FNMA	1,700,000	2.550%	2.55%	06-01-06	1,700,000	1,680,348
FNMA	5,000,000	3.130%	3.13%	06-21-06	5,000,000	4,995,300
FNMA	1,500,000	2.500%	2.51%	07-28-06	1,499,531	1,485,000
FNMA	7,700,000	2.100%	2.10%	09-22-06	7,700,000	7,560,476
FNMA	8,000,000	3.250%	3.30%	12-21-06	7,995,000	7,995,040
TOTAL GENERAL RESERVE FUND					\$ 105,804,610	\$ 105,196,270
TOTAL INVESTMENTS					\$ 150,651,377	\$ 150,048,429

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF INVESTMENTS (CONTINUED)

December 31, 2003

Construction Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity</u>	<u>Cost</u>	<u>Market Value</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>	<u>Date</u>		
FHDN	9,000,000	0.000%	1.33%	08-30-04	\$ 8,912,250	\$ 8,933,400
FHDN	4,000,000	0.000%	1.44%	11-24-04	3,944,778	3,956,000
FHDN	5,000,000	0.000%	1.44%	11-26-04	4,930,389	4,944,500
FMCDN	6,000,000	0.000%	1.08%	01-27-04	5,990,283	5,995,800
FMCDN	5,000,000	0.000%	1.52%	12-02-04	4,925,431	4,940,506
FMCDN	6,000,000	0.000%	1.50%	12-02-04	5,911,670	5,929,694
FNDN	12,000,000	0.000%	1.10%	03-03-04	11,967,240	11,979,600
FNDN	9,000,000	0.000%	1.20%	06-02-04	8,946,765	8,960,400
FNMA	5,000,000	1.630%	1.63%	12-15-04	5,000,000	5,001,550
TOTAL CONSTRUCTION FUND					\$ 60,528,806	\$ 60,641,450
Operating Fund						
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity</u>	<u>Cost</u>	<u>Market Value</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>	<u>Date</u>		
FHLB	2,000,000	5.250%	5.10%	02-13-04	\$ 2,076,280	\$ 2,009,380
FHLMC	1,000,000	3.500%	2.01%	04-19-04	999,063	1,007,190
TOTAL OPERATING FUND					\$ 3,075,343	\$ 3,016,570

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF INVESTMENTS (CONTINUED)

December 31, 2003

General Reserve Fund							
<u>Security Description</u>	<u>Investment Description</u>			<u>Maturity</u>	<u>Cost</u>		<u>Market</u>
	<u>Face Value</u>	<u>Rate</u>	<u>Yield</u>	<u>Date</u>			<u>Value</u>
PA INVEST	1,000,000	1.630%	1.24%	01-15-04	\$ 1,000,000	\$	1,021,081
FFCB	1,500,000	2.100%	2.10%	08-25-05	1,500,000		1,506,570
FFCB	4,000,000	2.100%	2.27%	02-06-06	3,983,750		3,998,760
FHLB	3,000,000	4.000%	3.83%	02-15-05	3,006,600		3,085,320
FHLB	2,100,000	5.375%	4.95%	02-15-06	2,171,326		2,241,750
FHLB	2,000,000	2.540%	2.54%	02-27-06	2,000,000		2,014,380
FHLB	4,000,000	2.070%	2.59%	07-28-06	3,965,000		3,986,240
FHLB	4,000,000	2.285%	3.10%	08-18-06	4,000,000		4,008,760
FHLB	2,000,000	3.100%	2.80%	10-16-06	2,000,000		2,005,620
FHLB	3,000,000	2.800%	3.22%	12-29-06	3,000,000		3,023,430
FHLMC	4,000,000	3.215%	4.83%	01-15-04	4,116,240		4,005,000
FHLMC	1,000,000	5.000%	5.85%	07-15-04	1,043,514		1,027,190
FHLMC	2,000,000	6.250%	2.07%	08-26-05	2,000,000		2,009,380
FHLMC	2,000,000	2.050%	2.05%	10-14-05	2,000,000		2,004,380
FHLMC	2,000,000	2.000%	2.00%	10-21-05	2,000,000		2,005,000
FHLMC	3,000,000	2.070%	2.07%	10-28-05	3,000,000		3,006,570
FHLMC	2,000,000	2.250%	2.25%	12-15-05	2,000,000		2,000,620
FHLMC	3,000,000	2.500%	2.05%	12-15-05	3,000,000		2,989,680
FHLMC	2,000,000	3.100%	3.10%	08-25-06	2,000,000		2,021,260
FHLMC	2,000,000	2.650%	2.65%	10-12-06	2,000,000		2,006,880
FNMA	4,500,000	1.530%	1.53%	05-26-05	4,500,191		4,497,210
FNMA	2,000,000	2.040%	2.04%	10-20-05	2,000,000		2,004,380
FNMA	3,000,000	2.600%	2.60%	12-29-05	3,000,000		3,007,500
FNMA	2,000,000	2.520%	2.52%	02-27-06	2,000,000		2,004,380
FNMA	2,000,000	2.400%	2.50%	02-27-06	1,995,000		2,013,760
FNMA	4,500,000	2.560%	2.56%	03-24-06	4,500,000		4,514,085
FNMA	4,500,000	2.250%	1.99%	05-26-06	4,505,906		4,508,460
FNMA	1,700,000	2.550%	2.55%	06-01-06	1,700,000		1,703,195
TOTAL GENERAL RESERVE FUND					\$ 73,987,527	\$	74,220,841
TOTAL INVESTMENTS					\$ 137,591,676	\$	137,878,861

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF OPERATIONS

Year Ended December 31, 2004
(With Comparative Totals for the Year Ended December 31, 2003)

	Total Year-Ended December 31, 2003	2004	Trenton- Morrisville Bridge	New Hope- Lambertville Bridge	I-78 Bridge	Easton- Phillipsburg Bridge	Portland- Columbia Bridge	Delaware Water Gap Bridge	Millford- Montague Bridge
Cash toll revenues	\$ 40,720,725	\$ 38,869,535	\$ 3,591,679	\$ 1,109,752	\$ 16,204,057	\$ 4,359,304	\$ 739,694	\$ 12,214,148	\$ 650,902
Tickets, tokens refund	(189,242)	(3,359)	(3,359)	-	-	-	-	-	-
Cash toll (shortage) overage	40,177	(63,851)	(19,893)	(7,793)	(15,839)	(9,460)	(2,567)	(6,355)	(1,924)
EZ Pass revenues	32,942,153	40,785,720	4,788,275	1,163,058	17,711,534	4,739,393	780,410	11,043,049	560,001
EZ Pass discounts and allowances	(814,924)	(856,382)	(145,465)	(53,604)	(225,125)	(125,589)	(36,878)	(235,463)	(34,258)
Miscellaneous revenues	123,397	124,629	191	-	123,063	875	-	500	-
Total Toll Revenues	72,822,286	78,856,292	8,211,427	2,211,413	33,797,669	8,964,524	1,480,659	23,015,878	1,174,721
Operating and Maintenance Expenses									
Salaries and wages	3,559,483	3,537,791	529,915	304,033	775,676	504,314	268,717	908,313	246,823
Toll	2,717,707	2,654,162	355,705	269,024	582,041	437,174	176,685	583,423	250,110
Maintenance	861,574	798,379	114,773	82,930	157,321	98,759	73,598	188,399	82,599
Clerical	2,480,002	2,476,611	462,104	193,322	489,192	473,175	196,836	472,898	189,084
Supervision	9,618,766	9,466,943	1,462,497	849,309	2,004,230	1,513,422	715,836	2,153,033	768,616
Social security taxes	730,327	723,857	111,567	65,450	153,854	114,965	55,078	164,465	58,478
Pension contribution	34,452	105,763	15,277	9,563	22,784	20,360	6,817	23,336	7,626
Group insurance	2,225,795	2,739,281	452,746	259,746	592,407	434,172	195,650	609,609	194,951
Heat, light and power	446,396	475,837	109,640	76,061	76,937	94,358	36,252	52,054	30,335
Office expense	77,018	50,858	525	6,742	7,850	9,530	6,354	9,465	10,392
Operating supplies and expense	166,079	992,185	166,131	104,467	176,393	144,400	75,150	193,443	132,201
Education, conference and communication expense	111,117	105,634	51,682	9,767	8,607	9,462	8,108	9,233	8,775
Uniforms	29,467	49,149	14,667	596	8,765	7,434	748	12,251	4,688
Maintenance supplies and expense									
Automotive	122,818	164,913	29,916	11,782	41,729	11,079	11,145	39,060	20,202
Buildings and grounds	219,942	224,349	67,837	39,714	33,694	35,574	15,730	12,167	19,633
Toll collecting equipment	98,621	66,684	9,343	4,099	12,154	10,609	6,382	17,690	6,407
Roadways, sidewalks and approaches	149,527	399,877	121,832	41,598	74,161	52,187	18,783	55,836	35,480
Insurance	1,610,014	1,719,635	260,558	213,491	483,002	213,756	129,560	323,579	95,689
Total Operating and Maintenance Expenses	15,640,339	17,284,965	2,874,218	1,692,385	3,696,567	2,671,308	1,281,593	3,675,221	1,393,673
Net revenues from Toll Bridges - Before state police bridge security, administrative expenses and toll-supported bridge expenses	\$ 57,181,947	\$ 61,571,327	\$ 5,337,210	\$ 519,028	\$ 30,101,102	\$ 6,293,215	\$ 199,066	\$ 19,340,657	\$ (218,952)
State Police Bridge Security	-	2,065,135							
Administrative Expenses	10,156,527	11,561,266							
Toll supported bridge expenses	5,024,744	5,464,027							
	15,181,271	19,090,428							
Net operating revenues	\$ 42,000,676	\$ 42,480,899							

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF ADMINISTRATIVE EXPENSES

Years Ended December 31, 2004 and 2003

	<u>2004</u>	<u>2003</u>
Salaries and wages	\$ 3,344,258	\$ 3,180,845
Social security taxes	239,809	219,731
Trustee and paying agents' fees	7,890	18,246
Pension contribution	33,495	3,352
Group insurance	655,487	499,610
Retirees' cost	1,550,459	1,096,106
Unemployment compensation	11,559	15,503
Heat, light and power	352	2,279
Office expenses	286,813	285,835
EZPass operating expenses	772,526	561,036
Operating supplies and expenses	151,262	126,752
Travel and meeting expenses	14,655	19,198
Education, meeting and conference expenses	131,422	104,242
Automotive repairs and expenses	110	157
Buildings and grounds maintenance	438	-
Professional services and legal expenses	3,953,016	3,509,648
Advertising	47,725	225,707
Insurance	359,990	288,280
	<u>\$ 11,561,266</u>	<u>\$ 10,156,527</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULES OF TOLL-SUPPORTED BRIDGE EXPENSES

Years Ended December 31, 2004 and 2003

	2004			2003
	Total	Southern Division Bridges	Northern Division Bridges	Total
Salaries and wages	\$ 3,011,970	\$ 1,607,806	\$ 1,404,164	\$ 2,985,453
Social security taxes	229,349	123,333	106,016	224,285
Pension contribution	32,310	16,898	15,412	3,906
Group insurance	922,211	511,249	410,962	729,046
Heat, light and power	61,122	37,433	23,689	73,438
Office expense	16,103	9,292	6,811	18,024
Operating supplies and expense	13,789	8,066	5,723	78,678
Education and conference expenses	483	253	230	498
Uniforms	7,740	743	6,997	7,173
Maintenance supplies and expenses				
Automotive	13,590	1,953	11,637	7,479
Buildings and grounds	5,576	679	4,897	5,523
Roadways, sidewalks and approaches	205,471	131,597	73,874	48,169
Insurance	929,313	597,254	332,059	828,072
Civil claim	15,000	15,000	-	15,000
	<u>\$ 5,464,027</u>	<u>\$ 3,061,556</u>	<u>\$ 2,402,471</u>	<u>\$ 5,024,744</u>

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION - BRIDGE SYSTEM

SCHEDULE OF TOLL BRIDGE TRAFFIC AND REVENUES

Year Ended December 31, 2004 and 2003

VEHICLE CLASSIFICATION

Number of Vehicles Crossing Toll Bridges:

Class	Total Year Ended December 31, 2003	Total Year Ended December 31, 2004	Trenton- Morrisville Bridge	New Hope- Lambertville Bridge	I-78 Bridge	Easton- Phillipsburg Bridge	Portland- Columbia Bridge	Delaware Water Gap Bridge	Milford- Montague Bridge
Passenger Cars, Vans and Pickups	29,096,940	31,797,621	6,281,830	2,026,746	6,974,743	5,551,047	1,162,560	8,488,847	1,311,848
Two-Axle Trucks, Buses and Tractors	730,939	815,615	139,655	52,056	222,516	168,748	28,720	161,134	22,786
Three-Axle Trucks, Buses, Tractor and Trailer	349,741	359,727	71,473	24,171	93,683	60,320	11,677	93,075	5,328
Four-Axle Trucks, Tractor and Trailer	271,634	280,938	50,275	7,797	111,525	45,422	6,149	57,861	1,929
Five-Axle Trucks, Tractor and Trailer	3,489,618	3,576,352	169,038	27,141	1,946,024	263,362	31,778	1,128,514	10,495
Six-Axle Trucks, Tractor and Trailer	56,244	64,665	1,594	804	35,967	4,853	453	20,887	107
Vehicles Requiring Special Permit	1,727	80	-	-	8	-	-	69	3
Local Buses	113	-	-	-	-	-	-	-	-
Seven-or-More-Axle Trucks, Tractor and Trailer	2,411	3,201	146	67	1,379	211	14	1,346	38
Total Number of Vehicles	<u>33,999,367</u>	<u>36,898,219</u>	<u>6,734,011</u>	<u>2,138,782</u>	<u>9,385,845</u>	<u>6,093,963</u>	<u>1,241,351</u>	<u>9,951,733</u>	<u>1,352,534</u>

Toll Revenues of Vehicles Crossing Toll Bridges:

Class	2003	2004	Trenton- Morrisville Bridge	New Hope- Lambertville Bridge	I-78 Bridge	Easton- Phillipsburg Bridge	Portland- Columbia Bridge	Delaware Water Gap Bridge	Milford- Montague Bridge
Passenger Cars, Vans and Pickups	\$ 27,628,733	\$ 21,777,668	\$ 4,294,946	\$ 1,378,578	\$ 4,802,376	\$ 3,779,973	\$ 797,033	\$ 5,828,391	\$ 896,371
Two-Axle Trucks, Buses and Tractors	3,185,251	3,943,805	769,347	251,373	1,077,198	815,617	138,835	780,660	110,775
Three-Axle Trucks, Buses, Tractor and Trailer	2,250,602	2,823,845	561,046	190,306	736,155	474,592	92,868	726,522	42,356
Four-Axle Trucks, Tractor and Trailer	2,294,595	2,898,138	527,919	80,852	1,136,474	472,972	65,230	594,276	20,415
Five-Axle Trucks, Tractor and Trailer	37,684,228	47,032,011	2,194,933	357,396	25,574,092	3,470,546	418,406	14,878,387	138,251
Six-Axle Trucks, Tractor and Trailer	716,763	1,004,939	25,280	12,712	552,979	76,131	7,271	328,846	1,720
Vehicles Requiring Special Permit	35,734	3,956	-	-	136	-	-	3,720	100
Local Buses	2,710	-	-	-	-	-	-	-	-
Seven-or-More-Axle Trucks, Tractor and Trailer	48,545	67,846	2,846	1,237	28,299	4,506	272	29,834	852
Total Toll Revenue Vehicles	<u>73,847,161</u>	<u>79,552,208</u>	<u>8,376,317</u>	<u>2,272,454</u>	<u>33,907,709</u>	<u>9,094,337</u>	<u>1,519,915</u>	<u>23,170,636</u>	<u>1,210,840</u>
EZPass discounts and allowances and other adjustments	(1,024,875)	(695,916)	(151,936)	(54,013)	(128,160)	(100,809)	(34,554)	(82,588)	(32,373)
Total Toll Revenues	<u>\$ 72,822,286</u>	<u>\$ 78,856,292</u>	<u>\$ 8,224,381</u>	<u>\$ 2,218,441</u>	<u>\$ 33,779,549</u>	<u>\$ 8,993,528</u>	<u>\$ 1,485,361</u>	<u>\$ 23,088,048</u>	<u>\$ 1,178,467</u>

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE AND ON INTERNAL CONTROL OVER FINANCIAL REPORTING 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** as of and for the year ended December 31, 2004, and have issued our report thereon, dated March 31, 2005. 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.

Compliance

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 that are required to be reported under *Government Auditing Standards*.

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 in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not in order to provide assurance on the internal control over financial reporting. Our consideration of the internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over financial reporting and its operation that we consider to be material weaknesses.

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

Mercadien, P.C.

March 31, 2005

- DONALD F. CONWAY, CPA*
- CONRAD L. DRUKER, CPA
- ESMOND S. DRUKER, CPA
- EUGENE J. ELIAS, CPA, RMA
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- ◊ PRIVATE COMPANIES PRACTICE SECTION
- ◊ SEC PRACTICE SECTION
- ◊ REGISTERED WITH THE PCAOB



Delaware River Joint Toll Bridge Commission

TOLL BRIDGES

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



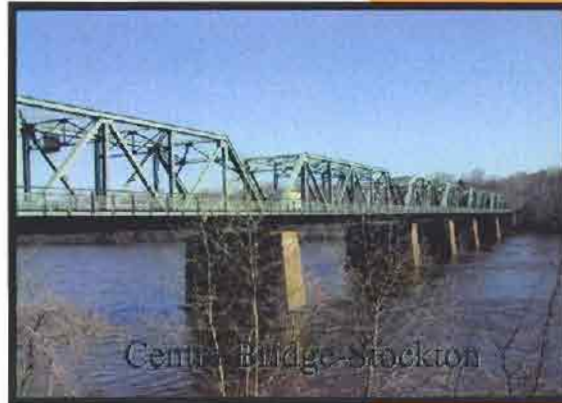
Scudder Falls



Northampton Street



New Hope-Lambertville



Centre Bridge-Stockton

EXCERPT FROM:

SIXTY-SEVENTH ANNUAL INSPECTION REPORT 2004

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

December 20, 2004

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

**RE: Consulting Engineer's Sixty-Seventh Annual Inspection Report - 2004
Our Project Number 040086401**

Dear Mr. McCartney:

It is with great pleasure that we are submitting the Consulting Engineer's Sixty-Seventh Annual Inspection Report (2004) 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 for the 2004 inspection of the Toll Supported Facilities and the 2003 inspection of the Toll Facilities. All facilities are in operating condition.

The Eighth Annual Maintenance Report has again been published separately.

The report identifies certain maintenance repairs and capital expenditures amounting to \$213,105,750 and \$40,000,000 in Compact Authorized Expenditures be performed over the next two years. In addition, an estimated expenditure of \$949,000 is recommended for new vehicular and maintenance equipment purchases. Therefore, the total amount over the next two years for the proper operation and maintenance of the Commission's facilities is estimated to be \$254,054,750. The report also identifies future maintenance repairs and capital improvements amounting to \$303,142,500, which should be programmed over the succeeding three to seven year period.

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.

Your bottom line results partner. ®

Justin Corporate Center, 200 State Highway Nine, P.O. Box 900, Manalapan, NJ 07726-0900 Tel: 732.577.9000 Fax: 732.577.9888
Manalapan ■ Brick ■ Clinton ■ Egg Harbor ■ Exton ■ Falls ■ Kulpsville ■ Parsippany
Philadelphia ■ Stafford ■ Voorhees ■ White Plains

www.schoordepalma.com

040086401
Honorable Frank G. McCartney
December 20, 2004
Page 2

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, PE
Senior Vice President
Professional Engineer
NJ License No. 26635
PA License No. PE055164 E

RFM/mr/nac
Enclosure

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION
MORRISVILLE, PENNSYLVANIA



Delaware River
Joint Toll Bridge
Commission

SIXTY-SEVENTH 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 2003, all bridges and toll facilities are to be inspected once every two (2) years. The Commission has decided to inspect its Toll Supported Bridges in even years (2004, 2006, etc.) and the Toll Bridges in odd years (2005, 2007). The associated facilities and grounds will be inspected in the year the bridge is inspected commencing in 2005.

This Sixty-Seventh Annual Inspection Report of bridges and facilities owned and operated by the Delaware River Joint Toll Bridge Commission contains the findings of the 2004 inspections of the Toll Supported Bridges and their facilities. The conclusion and recommendation concerning the Toll Bridges and Facilities are based on the 2003 inspections. Any changes from the 2003 inspection in findings or recommendations for the Toll Bridges are ***bold and italicized***. This year's inspections consisted of eleven (11) of the thirteen (13) Toll Supported Bridges and accompanying facilities and two (2) approach structures. The New Hope-Lambertville Toll Supported Bridge was given a walk through visual inspection because it was undergoing a rehabilitation construction project during this year's inspection. The Centre Bridge-Stockton Bridge was also given a walk through visual inspection.

Commission District foremen and maintenance personnel provided our inspection crew with the support services and access equipment necessary for 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 Bridgemaster was used at Scudder Falls and Lower Trenton, whereas inspections for the rest of the toll supported structures were typically accomplished utilizing rigging anchored to bridge bearings and installed by Commission forces.

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. These items can be found in the *Eighth 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 directional relation to known fixed points such as the bridge fascias and the piers.

Several capital improvement projects were completed during 2003 and 2004. Among these were the following:

- Sidewalk / Safety Fence Study (C-367A-1)
- Power, Telecommunications and Data System Infrastructure Upgrade at I-78, E-P Toll, P-C Toll, DWG & M-M Toll Facilities, (T-369B, CP No. 9927A-2)
- Reconstruction of the Toll Booths, Toll Plaza and Power, Telecommunications and Data Systems Infrastructure Upgrade at the New Hope-Lambertville Toll Plaza Facility (T-370B-2, CP No. 9901A)
- New Hope-Lambertville Toll Supported Bridge Rehabilitation (TS-370A)
- Rehabilitation of the New Hope-Lambertville Toll Bridge (T-370B-3, CP No. 9901A).
- Sidewalk Replacement at Easton - Phillipsburg Toll Bridge (C-372A-7)
- E-Z Pass Implementation (T-379)
- E-Z Pass Sign Structure Installation and Canopy Modifications at Five Toll Plazas in Pennsylvania and one in New Jersey (T-379C)
- Portland-Columbia Pedestrian Bridge – Handicap Accessible Ramp. (TS-388)
- Portland-Columbia Pedestrian Bridge – Deck Repairs and Drainage Modifications. (TS-388A)
- Safety Fence Installation at Various Bridges (T/TS-389A-1)
- I-80 NJ Service Road Emergency Repairs (T/TS-389A-3)
- Interim Structural Steel Repairs at the Calhoun Street Toll Supported Bridge (TS-390)
- Riegelsville Toll Supported Bridge Repairs (TS-391)
- Interstate 78 Toll Bridge Salt Storage Facility (T-392)

- Easton-Phillipsburg Toll Bridge Sign Structure Replacement (T-409)
- I-78 Toll Bridge Expansion Dam Replacement (T-410)
- Easton-Phillipsburg Toll Bridge Sidewalk Replacement (T-420)
- High Priority Structural Steel Repairs at the Scudder Falls Toll Supported Bridge (TS-421)
- I-78 Toll Plaza Roadway Approach Restriping (T-422AR)

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

- Substructure Repair Design Consultant - District 1 (C-366A)
- Substructure Repair Design Consultant - District 2 (C-366B)
- Riverton-Belvidere Rehabilitation Design (C-371A)
- Preliminary Engineering and Environmental Documentation for Trenton-Morrisville (US Route 1) Toll Bridge Rehabilitation and the Addition of One-lane in the Northbound Direction (C-380A)
- Preliminary Engineering and Environmental Documentation for Scudder Falls (I-95) Toll Supported Bridge Improvements (C-393A)
- Interim Capacity Improvement Study at Scudder Falls Toll Supported Bridge (C-393B)
- Alternatives Analysis Study to Provide Additional Capacity at Calhoun Street Toll Supported Bridge (C-394A)
- Northerly Crossings Corridor Congestion Mitigation Study (C-395A)
- Electronic Surveillance System (ESS) Program Manager (C-396A)
- New Hope - Lambertville Toll Bridge Facility, Executive / Administrative Addition and Renovation (C-397A)
- Engineering Services for the In-depth Inspection, Painting, and Sign Rehabilitation Design for the Lower Trenton Toll Supported Bridge (C-398A)

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 no major repairs, requiring bridge closures, will be required in the next 15 years following the repair/rehabilitation of a bridge. The estimated all inclusive (construction, engineering and CM/CI) rehabilitation costs of the recommended improvements included in this report are consistent with the Commission’s “fix it right” approach. Also it is noted that the general findings and estimated repair costs developed from the 2000 Underwater Inspection Report 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 outlined.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

GENERAL

The Trenton-Morrisville Toll Bridge 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.

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 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.

Design is underway (Contract C-380A) to add a 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.

This year's inspection included the maintenance facility and grounds. The main river bridge and approach bridges were inspected in 2003.

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) which exhibits significant delamination and widespread cracking. The underside of deck exhibits signs of water infiltration with light spalling adjacent to steel girder top flanges,

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

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 first interior 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. Various repair materials have been tried and appear to have failed. Deck joint expansion/filler material failures were also typically found. New joint types and materials should be attempted on future deck joint repair/replacement projects.

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 was also noted along the entire length of the north and south curb. Maintenance forces have begun and should continue to implement repairs to affected areas.

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.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, 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 2000 Underwater Inspection Report have been included in this report.

APPROACH ROADWAYS AND BRIDGES

Eight of the ten approach bridges have paint systems that are generally in fair condition. The paint condition directly below deck joints is generally fair to poor. The Ramp 'Y' (Long Ramp) Overpass generally exhibits poor paint condition, with heavy paint peeling throughout. Some of the approach bridges were last painted at their original construction in 1968.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

The approach bridges are generally in satisfactory condition (Ramp N over Union Street is in the best condition); most bridges exhibit failing deck joints, resulting in water damage/debris build-up and consequent rusted bearings and ends of beams. Noted bearing deficiencies range from severe rusting with section loss, frozen bearings causing uplift of masonry plates, and improper or missing anchorage resulting in migrated bearings. More severe bearing problems are at the Center and Broad Street Underpasses and at the Union Street Overpass. A bearing rehabilitation contract is recommended.

The concrete deck joint headers at the Broad Street Underpass have severely deteriorated with spalls providing for a rough riding surface. Deck joint armoring attachments are exposed and there are holes allowing light to be seen from below.

Several of the prestressed concrete box beams at the Route 29 overpass exhibit exposed prestressed tendons at the ends of beams, mainly over the piers. This appears to be the result of leaking and deteriorated deck joints. The exposed tendons, in addition to the adjacent delaminated concrete should be monitored in subsequent inspections.

Medium vertical cracks were typically noted on most of the concrete abutments, retaining walls, pier caps, parapets and sidewalks. 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.

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.

The Pennsylvania side of Route 1 within the Commission's jurisdiction is also beginning to show signs of similar 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.

A pavement evaluation was conducted by a consulting engineer on June 14, 1997 on the southbound roadway (U.S. Route 1) between Union Street Overpass and the Toll Bridge. The evaluation concluded the roadway settlement to be a geotechnical problem, which will require further investigation to determine the cause and extent of the problem.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

Several of the ramps owned by the Commission exhibited random cracking and unevenness of the roadway surface but have been well maintained by Maintenance. Several Pennsylvania 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 Pennsylvania ramps, comprised of bituminous pavement, in overall fair to poor condition.

FACILITIES AND GROUNDS

A new Electronic Toll Collection System (EZ Pass) has been installed in the six toll plaza lanes.

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

The traffic signals at the intersection of Warren and Bridge Streets, and Warren Street and the Route 1 Ramp are in need of upgrading.

The Main Entrance door to the Administration Building should be replaced ***and the exterior facade near the entrance should be repaired. In addition, a new fire alarm system should be designed and installed to meet current standards.***

CONCLUSIONS

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 this year's 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.

The covered drainage inlets along Route 1 should be uncovered and the grates set even with the roadway pavement.

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.

TRENTON - MORRISVILLE TOLL BRIDGE FACILITY

- Rehabilitate or replace the concrete deck on the main river bridge. Replace the concrete parapets on main river bridge.
- Replace bridge mounted cantilever sign structures.
- Replace toll booths.
- Bearing rehabilitation of approach structures.
- Repair ends of beams at Rt. 29 overpass.
- Pennsylvania ramp re-paving.
- Reconstruct Broad Street underpass abutment headers.
- ***Substructure Remediation***

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.

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 level. Otherwise a sign structure replacement is warranted.

Upgrade the traffic signals at the intersection of Warren and Bridge Streets, and Warren Street and the Route 1 Ramp.

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

TRENTON-MORRISVILLE TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Rehabilitation of the Trenton-Morrisville Facility - (Phase I-Design) <i>In-Depth Inspection & Rating, Seismic Susceptibility Evaluation, Settlement Study for approaches, Design/Repair and add one lane NB and new Toll Plaza</i>		\$2,900,000
Rehabilitation Contract (Phase II / Stage II - Construction) <i>Main Bridge, Approaches, and Toll Plaza Bearing Rehabilitation for Approach Structures Blast Cleaning and Painting (& approaches) Deck Rehabilitation or Replacement New Deck Joints, New Barrier Curbs, Pennsylvania Ramp Re-Paving New Northbound Lane and Toll Plaza Substructure Remediation</i>		\$54,000,000
Traffic Signal Upgrade At Warren/Bridge Streets		\$15,000
Traffic Signal Upgrade at Route 1 Ramp/Warren Street		\$12,000
Slab Overlay at Toll Plaza (Maintenance)	\$26,000	
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
*PA DEP Storm Water Compliance		\$50,000
*Electronic Surveillance System (ESS Phase 1, Part 1)		\$1,900,000
Study Administration Building for ADA Compliance		\$20,000
Main Entrance Door Replacement	\$15,000	
Elevator Modernization		\$45,000
HVAC Study & Upgrade		\$400,000
*Electronic Toll Collection - Violation Enforcement System		\$500,000
*ITS Improvements		\$800,000
TOTAL COST	\$41,000	\$60,672,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure and Scour Remediation Contract <i>(Below Water Line)</i>	\$230,000
Fire Alarm System Replacement (Design/Install)	\$100,000
TOTAL: Future Repair Contracts	<u>\$330,000</u>

* Commission Initiative

NEW HOPE - LAMBERTVILLE TOLL BRIDGE FACILITY

GENERAL

The New Hope-Lambertville Bridge 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. 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.

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 rehabilitation of the New Hope-Lambertville toll bridge was carried out in Contract T-370B-3. 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, and miscellaneous steel repairs and painting.

The bridge lighting has been upgraded by Commission maintenance forces to a vector lighting system.

This year's inspection included the maintenance facility and grounds. The main river bridge and approach structures were rehabilitated under contract TS-370B-3, which was completed in 2004.

FACILITIES 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 NH-L facility as a potential location to accommodate this need. Contract C-397A is currently underway to study an Executive/Administrative addition and renovations at this facility.

The roof of the Operations building is showing signs of wear and distress due to the effects of the elements and age.

NEW HOPE - LAMBERTVILLE TOLL BRIDGE FACILITY

The heating, ventilation, and air-conditioning system has been noted to be not performing acceptably.

The northbound and southbound approach roadways adjacent to the toll plaza exhibit numerous cracks and random spalls in several locations.

CONCLUSIONS

Since the Commission completed contract (Contract No. C-370) for the in-depth inspection and preparation of rehabilitation plans in 2002, the visual inspection of the toll bridge was not conducted *in 2003*. The toll bridge facility was undergoing rehabilitation at the time *of the 2003 inspection*. *The toll bridge is scheduled to be inspected in 2005.*

The roof of the Operations building is recommended to be replaced with a roof similar to the recently constructed toll island canopy. A lightning protection system should also be installed to protect the building against lightning strikes.

A HVAC study and upgrade should be performed for the Operations building.

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

NEW HOPE-LAMBERTVILLE TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Vector Lighting on Approaches	\$25,000	
Slab Overlay at Toll Plaza (Maintenance)	\$25,000	
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
*PA DEP Storm Water Compliance		\$50,000
HVAC Study and Upgrade		\$120,000
Lightning Protection System Expansion		\$15,000
Replace Operations Building Roof		\$230,000
NH-L Toll Bridge Facility Commission/Administration Addition and Renovation (Design and Construction)		\$3,260,000
*Electronic Toll Collection - Violation Enforcement System		\$333,000
TOTAL COST	\$50,000	\$4,038,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*Electronic Surveillance System (ESS Phase2)	\$1,460,000
Substructure and Scour Remediation Contract (Below Water Line)	\$3,000
TOTAL: Future Repair Contracts	<u>\$1,463,000</u>

* Commission Initiative

GENERAL

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.

The main river bridge 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 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 2016 (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.

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.

This year's inspection included the maintenance facility and grounds. The main river bridge and approach bridges were inspected in 2003.

SIGNIFICANT FINDINGS

INTERSTATE 78 TOLL BRIDGE

The condition of the main river bridge is generally good, except for the deck slab which is in fair condition. The deck slab exhibits numerous transverse crack 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, 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 dam at the west abutment on the eastbound and westbound roadways as well as the expansion dam at the east abutment of the eastbound roadway generate a loud noise when impacted by vehicles. Remedial repairs were attempted and proved ineffective. The tooth dams have been investigated under Contract C-367B-2 and contract plans have been prepared for the replacement of the tooth dams in 2004.

The substructures are in good condition. Some areas of the epoxy coating on the bridge seats at both abutments and Pier 6 westbound however are chipped and peeling off. All other areas have been resealed since the last inspection. 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.

APPROACH ROADWAYS AND BRIDGES

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. A slab stabilization and pavement design study should be performed.

In the spring of 2004, maintenance forces have repaired a deteriorated section of concrete slab in the eastbound roadway lanes on the New Jersey side.

The general condition of deck joints (strip seals) of the approach bridges are fair to poor. This, in turn, has caused rusted bearings, rusting of the ends of steel members, as well as spalling and cracking of the adjacent concrete. Debris accumulation is also prevalent in most bridge deck joints.

The Cedarville Road Overpass exhibits some fully expanded and fully contracted deck joints. Other approach structures, such as the Rt. 611 Overpass and the Carpentersville Road Overpass exhibit similar deck joint problems.

Several of the bearings on the west abutment at the Carpentersville Road Overpass appear to be non-functional.

The drainage channel running along the east piers of the Route 519 bridges has heavy embankment erosion.

FACILITIES AND GROUNDS

Attached to the north side of the Maintenance Building, an empty garage has been used for the storage of road salt year-round. As a result, the back (west) CMU wall has dislodged from the bearing walls due to excessive lateral pressures. The exterior facade has also moved outward. The bearing walls appear to be sound. The displacement has not increased from last year. ***Maintenance has repaired the CMU walls of the storage garage. A new salt storage facility was constructed in 2003 under contract T-392R.***

The toll plaza booths are not well protected from vehicular impacts. Permanent attenuators (protective crash cushions) should be installed at the islands for increased protection of the traveling public.

CONCLUSIONS

The Interstate 78 Toll Bridge is in good condition. The same is true for the approach bridges and Commission-owned facilities. The New Jersey roadway concrete slab approaches are in fair condition.

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 should be performed. The contract should begin with an investigation of the roadway slab condition. A consultant should utilize a Ground Penetrating Radar unit to analyze the subsurface conditions and possible causes of the ongoing problems with the roadway slabs, more so on the NJ roadway. A resurfacing study to determine the extent of repairs and the most economical method of rehabilitation and/or stabilization of the roadway should follow this investigation. ***The Exit 3 ramp off Route I-78 is in poor condition exhibiting distressed pavement and numerous cracks and should be milled and paved.***

Maintenance has indicated that the thermostat controls are obsolete and not working properly in the Operations and Maintenance Building/Welcome center. A repair contract should be developed to upgrade the thermostat controls for the building.

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, Carpentersville Road and Ramp C Overpasses. 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 2000 Underwater Inspection Report.

A drainage study should be performed for the channel at the Route 519 bridges to address the ongoing erosion.

Permanent impact attenuators should be installed at the toll plaza by contract.

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

INTERSTATE 78 TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Interstate 78 Roadway Rehabilitation <i>Roadway Slab Stabilization (Study, Design and Construction)</i> <i>Route 519 Drainage Design/Repairs</i> <i>Mill and Overlay Exit Ramp to Route 173</i>		\$42,000,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
I-78 (NJ) Re-Striping		\$31,000
Sink Hole Remediation and Exploration (Emergency)	\$50,000	
<u>Buildings and Grounds</u>		
*PA DEP Storm Water Compliance		\$50,000
*Electronic Surveillance System (ESS Phase 1, Part 1)		\$1,130,000
Upgrade Thermostat Controls		\$30,000
Toll Plaza Impact Attenuators		\$407,000
*High Speed EZ Pass Lanes		\$40,000,000
*Electronic Toll Collection - Violation Enforcement System		\$583,000
*ITS Improvements		\$800,000
TOTAL COST	\$50,000	\$85,061,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*Electronic Surveillance System (ESS Phase 1, Part 2)	\$637,000
Bridge Rehabilitation Contract <i>Deck Repairs / Resurfacing, Waterproofing, Study and Design</i> <i>Membrane/Overlay Construction</i> <i>New / Modified Deck Joints</i> <i>Seismic Susceptibility Evaluation</i> <i>Substructure Repairs</i>	\$950,000
Substructure and Scour Remediation Contract <i>(Below Water Line)</i>	\$14,000
TOTAL: Future Repair Contracts	<u>\$1,601,000</u>

* Commission Initiative

GENERAL

The Easton-Phillipsburg Toll Bridge 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, 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 for an overall length of 1,010 feet. The four-lane bridge has a roadway width of 40 feet with 8 ft. concrete sidewalks located outside the trusses on each side. The posted speed limit through the toll bridge facility is 25 mph.

The Commission's jurisdiction also includes two additional 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.

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.

This year's inspection included the maintenance facility and grounds. The main river bridge and approach bridges were inspected in 2003.

SIGNIFICANT FINDINGS

EASTON-PHILLIPSBURG TOLL BRIDGE

The general condition of the paint system of the above-deck truss system is fair. The bridge was last painted by contract in 1984. Little to no rusting was noted on the truss, with numerous areas of paint peeling. 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 system also appeared satisfactory, but with heavy bird debris throughout. Impacted rust was noted between 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.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

The sidewalks are in poor condition, especially at the southeast and southwest corners. Heavy scaling, spalls, holes, and failed patchwork were noted. Random cracking was noted throughout the top of the sidewalk as well as transverse cracking, spalling and salt staining on the underside of the sidewalk with efflorescence. The south (down river) sidewalk was recently closed to pedestrian traffic based on the findings of this year's inspection. A replacement study is being performed under Contract No. C-372A-7 that will investigate various replacement options for the sidewalk that will consider walkway usage, different walkway materials, additional access to the underdeck areas of the bridge, maintenance and protection of the roadway traffic during construction. ***The sidewalk reconstruction contract is underway and is scheduled to be completed by the end of 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. 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.

During the past few years, below deck inspections have not been performed on the main span due to the 540-foot span required for cables. Maintenance forces cannot rig cables over this distance, or achieve the required tension in the cables needed to inspect the bridge on a pick at a reasonable distance from the superstructure. Without cables/rigging similar to other toll supported bridges or a catwalk, the underside of the bridge cannot be properly inspected. The Bridgmaster, or other underbridge inspection units, is not an option due to the wide sidewalks on the upstream and downstream sides of the bridge since the inspection units cannot span this distance.

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

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition. No major problems were noted at either abutment in the underwater inspection report.

APPROACH ROADWAYS AND BRIDGES

The general condition of approach roadways and bridges is satisfactory. The Broad Street Viaduct, however, is deemed in fair condition due to the condition of several structural members and the corrosion beneath the deck joints and curb openings due to lack of a drainage system.

The Route 611 Overpass' concrete deck and deck joints are deteriorated.

Several of the deck joints at Bank Street and Third Street are also in poor condition. These joints, not included in the Rt. 22 repaving project in 2000, exhibit ripped strip seals, spalling header concrete and overall unevenness. Most joints are also noted to be actively leaking. In addition, most of the pavement relief joints are also deteriorated.

The center-bearing support truss (located at the main span east abutment) of the Broad Street Viaduct was rehabilitated under Contract No. C-365. A drainage trough and downspout have been installed under the finger deck joint to prevent water from leaking onto the truss. However, water is by-passing the trough at the north curb inlet and heavy debris is accumulating on the truss. This center-bearing truss supports the center girder of the Broad Street Viaduct and is considered a fracture-critical member for this bridge.

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 Pier 2 crack was observed at the inside face of the south fascia girder. At Pier 3 and 4 the cracks were observed at the floorbeam-kneebrace vertical connection angle at the north girder. Cracks began 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. These areas should continue to be monitored.

Cracks were also noted in the base plates for the bridge railing posts at the north and south side of the Broad Street Viaduct. This condition was noted more so at the north side and in the center spans where the curvature is the greatest. These cracks appear to be caused by this curvature.

The east side of the main river bridge abutment (Broad Street Viaduct access road) has a wooden guide rail, which does not meet current NJDOT and/or AASHTO requirements.

FACILITIES 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 and curbs in poor condition.

A truck impacted the overhead sign structure at the westbound approach to the toll plaza sometime in early 2001 causing damage to the signs panels and the horizontal steel tube chords appear to be slightly out of plane. Maintenance made repairs to the sign lighting that was damaged by the impact. The sign structure is in poor condition with peeling paint and heavy rusting throughout. The inspection, evaluation and PS&E preparation for replacement of this sign structure is being performed under Contract No. C-367B. Cracked

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

welds are noted at the connection between the sign support vertical supports and the bridge sway bracing.

The steep embankment located at the south side of the maintenance yard, adjacent to the Broad Street ramp, was previously noted to exhibit signs of localized slope failure. Eroded embankment was noted at the base of the slope. This area appeared stable at the time of this year's 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 garage bay that is being used as a salt storage bin located next to the maintenance facility exhibits signs of heavy deterioration of the concrete masonry units. The use of the salt storage facility should be studied to determine if the current capacity is adequate, the study should also determine whether repairing the current salt storage location or upgrading the storage capacity is required, by adding additional storage capacity.

The roof on the maintenance facility is leaking in several locations with areas of water ponding. Water is leaking 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 determine how much should be budgeted to replace them.

The truck lift in the maintenance garage is no longer functioning. The lift should be analyzed to determine if it can be repaired. If it cannot be repaired the lift should be replaced.

CONCLUSIONS

The main river bridge, as well as the approach bridges, are in overall satisfactory condition and are structurally adequate to carry legal highway loading at the time of this year's inspection.

Annual inspection and maintenance operations (i.e. cleaning) of the main river span are limited due to the absence of an underbridge inspection platform and the limited reach of underbridge inspection units to clear the bridge's pedestrian walkways as well as the commission owned lift trucks not being able to reach the top chord of the main trusses. It is recommended that a contract be awarded to prepare plans and specifications to thoroughly clean the entire bridge superstructure below the deck level. Within this contract, the

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

Commission should include provisions for the consultant to determine the best alternative for the required inspection/maintenance platform. At a minimum, the use of a motorized moveable platform, or permanent catwalks should be investigated. A life cycle/cost analysis should be performed to determine which alternative best serves the needs of the Commission.

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 for both the main river bridge as well as the five (5) approach bridges. Design and repair plans should also be developed to include, at minimum, the following items for the main river bridge:

- Blast cleaning and painting operations.
- Mill and repave the main river bridge and Board Street Viaduct with an appropriate polymer modified asphalt.
- Bird Netting installation.
- Installation of under bridge inspection walkways.
- Upgraded guide rail at the Service Road.

In addition, the following items should be included for the approach bridges:

- Blast cleaning and painting Broad Street Viaduct.
(other approaches either weathering steel or concrete)
- Deck repairs to Rt. 611 overpass.
- Deck joint reconstruction to Bank Street, Third Street, and Route 611 Overpass.
- Longitudinal trough drainage improvements to Broad Street Viaduct at curbs.

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.

The overhead sign support structure attached to the south fascia of the Broad Street Viaduct, is deteriorated with rusting and peeling paint. The sign support structures on the Pennsylvania approach are in a similar condition. The sign support structure on the westbound approach to the Toll Plaza has collision damage. Cracked welds have been found on the sign structure over the westbound lanes near midspan. Complete replacement of the four overhead sign support structures is recommended. This study should also include a complete signage study for the entire toll bridge facility.

The area of the repaired (welded) vertical cracks at the Broad Street Viaduct should be monitored during annual inspections and Maintenance operations to determine if the condition reappears.

Study the need to replace the diesel fuel storage facilities.

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

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

The roof and vents on the maintenance facility should be replaced.

The truck lift in the maintenance facility should be analyzed to determine if it could be repaired. If it cannot be repaired the lift should be replaced.

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

EASTON-PHILLIPSBURG TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Underbridge Cleaning		\$650,000
Replace Sign Structures (4) and Signage Study		\$525,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
Broad Street (Abandoned N. Main Street) Modifications (by Maintenance)	\$14,000	
Replace Roof System on Building & Garage		\$300,000
Above-Ground (Diesel) Fuel Storage Tank Replacement		\$50,000
*Electronic Surveillance System (ESS Phase 1, Part 1)		\$790,000
*PA DEP Storm Water Compliance		\$50,000
Salt Bin Storage Study		\$10,000
Repair/ Replace Truck Lift	\$15,000	
*Electronic Toll Collection - Violation Enforcement System		\$417,000
*ITS Improvements		\$800,000
TOTAL COST	\$29,000	\$3,622,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
E/P Toll Bridge Facility Rehabilitation (Design/Construction) <i>(Main and Approaches)</i> <i>In-Depth Inspection and Rating, Design / Repair Plans</i> <i>Blast Cleaning and Painting, Bird Netting Installation (Main)</i> <i>Seismic Susceptibility Evaluation</i> <i>Approach Bridges Improvements</i> <i>Moveable Inspection Platform</i>	\$9,000,000
*Electronic Surveillance System (ESS Phase 1, Part 2)	\$453,000
HVAC Study	\$25,000
TOTAL: Future Repair Contracts	<u>\$9,478,000</u>
* Commission Initiative	

GENERAL

The Portland-Columbia Toll Bridge Facility, 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 downriver 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.

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 done on these two bridges in conjunction with the main river bridge's 1992 rehabilitation contract.

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.

This year's inspection included the maintenance facility and grounds. The main river bridge and approach bridges were inspected in 2003.

SIGNIFICANT FINDINGS

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

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

The side bracket on the Pier 6 north bearing of span 7, which allows rotation of the bearing during expansion, is loose (misaligned) with a broken weld.

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

Several locations of steel, although cleaned and painted in 1998, exhibit small perforations or noticeable section losses, especially at support locations and the exposed fascias. Although numerous, many of these locations of steel section loss, such as transverse stiffeners and gusset plates, are not critical. Other areas such as the girder web, warrant load rating calculations be performed, taking into account these section losses in the calculations.

The two cantilever sign structures attached to the bridge are not plumb and level. The sign structures will be evaluated for replacement. A sign study should be performed for MUTCD conformance.

APPROACH ROADWAYS AND BRIDGES

The approach bridges were repainted in 1998. The paint is in good condition.

The Route US 46 Overpass is in overall good condition.

The Locust Street Overpass deck joints are leaking at the three piers. The heavy leaking is causing rust to the underlying steel and ponding of water on the pier caps.

FACILITIES AND GROUNDS

The maintenance parking lot is in fair to poor condition with overall unevenness and cracking of the asphalt pavement.

Maintenance personnel have indicated that the roof of the administration building and the maintenance garages are leaking. The leaks have been attended to by the Commissions maintenance forces as well as roofing professionals. The roof was last replaced in 1987.

The master clock system that was installed as part of the original construction of the facilities does not work properly and the clocks are not synchronized.

The current well water at the toll facility has a high lime content and requires frequent acid cleaning of the heating system as well as periodic replacement of the heating coils. The water also has high turbidity. The local water system has been upgraded in the immediate area.

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.

The toll plaza booths are not well protected from vehicular impacts. Permanent impact attenuators (protective crash cushions) should be installed at the islands for increased protection of the traveling public

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

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

Maintenance has indicated that the salt storage capacity is insufficient for the entire district. Additionally, the current facility is constructed of CMU's and exhibits signs of deterioration in areas in direct contact with salt; the back wall is also out of alignment.

CONCLUSIONS

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. Load rating calculations should be performed on the north fascia girders to determine the effects of section losses to the load carrying capacity. *Section loss at the web shall be measured during the 2005 inspection and rating calculations of the webs should be performed.*

The US Route 46 Overpass is in good condition, whereas the Locust Street Overpass is in satisfactory to fair condition.

The Locust Street Overpass requires deck joint reconstruction (or at minimum new seals). A Rehabilitation Contract should be performed that would include a field visit, design and repair plans and construction for the above items. Drainage troughs should be considered beneath the pier deck joints. Current substructure repairs by maintenance forces should be completed.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2000 Underwater Inspection Report.

The Maintenance (rear) parking lot should be reconstructed by contract.

A study for the repair or replacement of the Administration Building and Maintenance Garage roofs should be undertaken *and the master clock should be replaced.*

A study of the sign structures at the Portland-Columbia Facility should be conducted to determine conformance with MUTCD requirements.

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

The toll facility should be connected to the public water system.

Permanent impact attenuators should be installed at the toll plaza by contract for increased safety to the traveling public.

Maintenance has indicated that the salt storage capacity is insufficient. A new salt storage dome/barn should be installed to service the entire District. It is recommended

PORTLAND COLUMBIA TOLL BRIDGE FACILITY

that the new facility be installed at The Portland Columbia Facility due to space limitations at the other District III Toll Facilities.

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

PORTLAND-COLUMBIA TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Locust Street Bridge Rehabilitation		\$325,000
<u>Buildings and Grounds</u>		
Upgrade Water Supply (Maintenance)	\$6,250	
*PA DEP Storm Water Compliance		\$50,000
Toll Plaza Impact Attenuators		\$90,000
Rear Parking Lot Paving (Base Reconstruction)		\$40,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
Salt Bin Study and Construction		\$400,000
HVAC Study		\$25,000
Replace Master Clock System		\$5,000
Buildings and Canopy Roof Replacement		\$455,000
*Electronic Toll Collection - Violation Enforcement System		\$250,000
TOTAL COST	\$6,250	\$1,670,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure & Scour Remediation Contract (Below Water Line)	\$16,000
*Electronic Surveillance System (ESS Phase2)	\$1,062,000
TOTAL: Future Repair Contracts	<u>\$1,078,000</u>

* Commission Initiative

GENERAL

The Delaware Water Gap Toll Bridge 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 28 feet wide each (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.

This year's inspection included the maintenance facility and grounds. The main river bridge was inspected in 2003.

SIGNIFICANT FINDINGS

The cast-in-place microsilica concrete (bridge deck slab) roadway and sidewalk deck, installed in 1989, exhibits numerous fine to medium transverse cracks. Maintenance forces reported that 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, mostly unchanged, and also showed no signs of corrosion to reinforcement. This year's inspection revealed little to no rust on 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 appears unaffected, remedial action should be taken to prevent water infiltration through the cracks.

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 Pier 3W and 4W. The differences appear to be unchanged from last year’s inspection. During this year’s routine inspections, the deck joint armor was observed to be dropping and is in need of a header replacement. Measurements were also taken of the bearings and adjacent masonry. Minor changes were noted. Future inspections should consist of re-measuring these areas to see if the elevation difference has increased. See the monitoring program for specific measurements.

The upper substructure partial rehabilitation had been performed by Maintenance forces. Unsound concrete had been removed at numerous locations on the upper portion of piers and has exposed reinforcing steel at several locations, which have been cleaned and epoxy coated. Due to the work effort involved, this work should be completed by an outside contractor to provide concrete cover over the exposed reinforcement bars. 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 in plumb and level. All members of the structure, including the bridge attachments have heavy rust. Maintenance forces noted large deflection of the sign structure when the current sign panel was installed. ***It was noted that sign structure is deflected, however this deflection does not affect the structural capacity of the sign structure.***

The 2000 Underwater Inspection Report prepared by Pennoni Associates Inc. and submitted to the Commission in 2001, has found the substructures to be in good condition for both the eastbound and westbound bridges. Although no undermining was observed during the underwater inspection, several areas of the pier footing pedestals were found to be partially exposed. The exposed footings of Piers 7 and 8 of both the eastbound and westbound bridges were visible during this year's annual inspection. Estimated repair costs have been included in this report.

APPROACH ROADWAYS

The Service Road in New Jersey exhibits heavy deterioration throughout, mostly near the east abutment, with numerous patches and general unevenness.

Several of the drainages structures adjacent to New Jersey Service Road have been found to be deficient. The deficiencies included a concrete outfall structure with a concrete drainage trough, which have been completely undermined and have subsequently fallen away resulting in heavy soil erosion leading to the river. A similar concrete outfall structure is beginning to become undermined possibly resulting in a similar failure. The deficiencies also included a settling asphalt drainage trough leading to the river.

A large sinkhole in the New Jersey Service Road was found and repaired during this year's inspection process. Cracking and depressions in the asphalt pavement in the same area present the possibility of future sinkholes.

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. Some additional repairs to the barriers have been performed by Maintenance forces since the last inspection.

FACILITIES 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 or lunch room facilities as 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.

Maintenance personnel have indicated that the roof of the administration building and the maintenance garages are leaking. The leaks have been attended to by the Commissions maintenance forces as well as roofing professionals. The roof was last replaced in 1987.

The master clock system that was installed as part of the original construction of the facilities does not work properly and the clocks are not synchronized.

DELAWARE WATER GAP TOLL BRIDGE FACILITY

The toll plaza booths are not well protected from vehicular impacts. Permanent attenuators (protective crash cushions) should be installed at the islands for increased protection to the traveling public.

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

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.

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 protection study should also be included to determine the best membrane and overlay system to utilize. 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.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2000 Underwater Inspection Report.

The Service Road in New Jersey is recommended for milling and re-paving from the concrete pavement portion of the roadway east to the Commissions jurisdiction limit with the National Park Service.

The storm water outfalls and embankment slope along the New Jersey Service Road should be reconstructed by contract.

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.

DELAWARE WATER GAP TOLL BRIDGE FACILITY

A study for the repair or replacement of the Administration Building and Maintenance Garage roofs should be undertaken.

The master clock system should be replaced with a more modern system.

Permanent impact attenuators should be installed at the toll plaza by contract.

Maintenance has indicated that the salt storage capacity is insufficient. A new salt storage dome/barn should be installed to service the entire District. It is recommended that the new facility be installed at The Portland Columbia Facility due to space limitations at the other District III Toll Facilities.

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

DELAWARE WATER GAP TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Service Road Improvements <i>Roadway Resurfacing and Reconstruction</i>		\$180,000
*Northerly Crossing Corridor Congestion Mitigation Study		\$500,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
Substructure & Bearing Rehabilitation Contract		\$1,100,000
<u>Buildings and Grounds</u>		
*Electronic Surveillance System (ESS Phase 1, Part 1)		\$1,130,000
Replace Master Clock System		\$5,000
*PA DEP Storm Water Compliance		\$50,000
Toll Plaza Impact Attenuators		\$224,000
Buildings and Canopy Roof Replacement		\$455,000
*Electronic Toll Collection - Violation Enforcement System		\$667,000
*ITS Improvements		\$800,000
TOTAL COST		\$5,141,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*Rehabilitation Contract (Design / Construction) (Additional \$70 Million Budgeted 2012-2013)	\$54,000,000
*Electronic Surveillance System (ESS Phase 1, Part 2)	\$512,000
Substructure and Scour Remediation Contract (Below Water Line)	\$1,500
Maintenance Garage Expansion	\$800,000
HVAC Study	\$25,000
TOTAL: Future Repair Contracts	<u>\$55,338,500</u>

* Commission Initiative

GENERAL

The Milford-Montague Toll Bridge 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.

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 upriver 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 forces.

This year's inspection included the maintenance facility and grounds. The main river bridge was inspected in 2003.

SIGNIFICANT FINDINGS

The overall paint condition of the superstructure is fair, with many 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. However, the transverse joints between precast panels, as well as the full-length longitudinal joint, have a history of leaking. Heavy rusting with localized loses 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.

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

No deck joint drainage trough is present beneath the west abutment finger joint. Water is falling directly onto 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.

The east abutment deck joint has a difference in elevation that catches snow plows.

Typically the downriver (south) side of the bridge fascia slab, mainly at the keyed contraction joints in the deck panels, exhibits medium cracking with incipient spalling, similar to that of the underside of deck condition, but not as severe.

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.

The bottom truss chord inverted I-beam was noted to exhibit light rust in the horizontal web with no weep/drainage holes.

The deck slabs' 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 seats.

There is significant erosion beneath the stub abutment at the west end of the west bin abutment, which has exposed the bottom of the footing. The erosion has created a void approximately three feet tall and four feet deep along the bottom of the stub abutment. This void appears to have been caused by on going water infiltration at the approach slab header joint and eroding the fine material from beneath the stub abutment. This in turn has caused much of the larger fill material to become dislodged.

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 very good condition.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in good condition. Although no undermining was observed during the underwater inspection, several areas of the Pier 2 footing was found to be partially exposed with minor scour activity during the underwater inspection. Estimated repair costs from the 2000 Underwater Inspection Report have been included in this report.

FACILITIES AND GROUNDS

Maintenance personnel have indicated that the roof of the administration building and the maintenance garages are leaking. The leaks have been attended to by the Commissions maintenance forces as well as roofing professionals. The roof was last replaced in 1987 and due to the more severe winter climate the roof has a life expectancy of 15 to 20 years.

The master clock system that was installed as part of the original construction of the facilities does not work properly and the clocks are not synchronized.

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 the other toll bridge facilities. The toll bridge buildings should be connected to the municipal water supply.

The toll plaza booths are not well protected from vehicular impacts. Permanent attenuators (protective crash cushions) should be installed at the islands for increased protection of the traveling public.

The paint system on some of the steel cantilever sign structures is failing 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

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

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, and should be installed by contract or maintenance forces. Maintenance forces have performed repairs to the slope protection at the west abutment.

Bridge scuppers should be re-directed so the water does not fall onto structural steel. This could be accomplished by the use of elbows and extensions. Work should be performed by Maintenance forces. Small drainage holes should be considered in the truss' bottom chord I-beams.

A contract is recommended for the blast cleaning and painting of this bridge, having been almost 30 years since the last painting contract. Prior to blast cleaning and painting and in conjunction with this Rehabilitation Contract, an In-Depth Inspection and Rating should be

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

performed. Repair plans should also be developed for (possible) structural steel repairs, deck waterproofing and overlay and substructure repairs. 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 also be included.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2000 Underwater Inspection Report.

Maintenance forces should continue the west approach concrete slab replacements towards the bridge approach.

The Administration Building water supply system is nearing its life expectancy and has been experiencing some problems. The buildings should be connected to the local water supply system.

A study for the repair or replacement of the Administration Building and Maintenance Garage roofs should be undertaken.

Permanent impact attenuators should be installed at the toll plaza by contract.

The sign panels on the sign structures should be replaced with reflective panels. The deteriorated cantilever sign structure on the west approach should be replaced. All work should be performed by contract.

Maintenance has indicated that the salt storage capacity is insufficient. A new salt storage dome/barn should be installed to service the entire District. It is recommended that the new facility be installed at The Portland Columbia Facility due to space limitations at the other District III Toll Facilities.

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

MILFORD-MONTAGUE TOLL BRIDGE FACILITY

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Rehabilitation Contract (Design / Construction) <i>In-Depth Inspection and Rating, Overlay/membrane alternative study Design / Repair Plans, Main river bridge waterproof/overlay New Deck Joints, Repair deck Miscellaneous Steel Repairs Seismic Susceptibility Evaluation Toll Plaza Slabs and Paving Blast Cleaning and Painting Drainage Trough at West Abutment</i>		\$10,000,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$10,000
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
Toll Plaza Impact Attenuators		\$90,000
Upgrade Water Supply		\$600,000
Replace Master Clock System		\$5,000
*PA DEP Storm Water Compliance		\$50,000
Buildings and Canopy Roof Replacement		\$455,000
*Electronic Toll Collection - Violation Enforcement System		\$250,000
TOTAL COST		\$11,480,000

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*Electronic Surveillance System (ESS Phase2)	\$1,181,000
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$16,000
HVAC Study	\$25,000
Inspect, Repair / Replace Sign Structure and Sign Panels	\$90,000
TOTAL: Future Repair Contracts	<u>\$1,312,000</u>

* 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.

This year’s inspection included all five (5) spans, the substructure units and the west approach roadway. The east approach is an NJDOT owned bridge that was not part of the inspection.

SIGNIFICANT FINDINGS

The bridge appears to be in good condition.

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

Several upper lateral bracing connections at horizontal gusset plates exhibit minor exfoliated rust with impacted rust. The sway frame between the center and outer trusses exhibit 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 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 ‘Trenton Makes’ sign support system to the downriver truss shows signs of distress. Moderate rusting with substantial localized section losses were noticed on the connecting I-beams and sign brackets used to fasten the sign to the truss. Broken or missing horizontal U-bolts and connecting plates around vertical truss members combined with moderate impacted rust was also noticed. Water ponding in the I-beams has caused deterioration of

LOWER TRENTON BRIDGE

the I-beam web and splice plate connections. Maintenance forces performed remedial repairs to the sign structure support system in 2001.

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 removed since the previous inspection.

The traffic signals at the intersection on the Pennsylvania approach are constantly in need of repair and has become costly and time consuming to maintain.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition. The underwater inspection noted 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. 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 this year's inspection.

Due to the deterioration of the "Trenton Makes" sign support system, type of connection and high maintenance for the sign lighting, a contract for the in depth inspection, load rating, painting, and sign rehabilitation design was awarded in 2003 under Contract No.C-398A.

The officer shelter previously located on the Pennsylvania side of the bridge will be replaced with a new shelter. The shelter will be used to post a bridge officer who will enforce the posted size and weight restrictions.

The traffic signals at the intersection on the Pennsylvania approach should be upgraded to accommodate the traffic flow.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed to repair any substructure deterioration noted in the 2000 Underwater Inspection Report. Pointing of deteriorated mortar joints should also be addressed.

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

LOWER TRENTON BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Lower Trenton (Study, Design, Construction & CM) Above Deck Painting and Sign Rehabilitation		\$4,100,000
Sign Rehabilitation (Design, Constuction & CM)		\$500,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
Traffic Signal Upgrade		\$22,000
Officer Shelter	\$10,000	
TOTAL COST	\$10,000	\$4,645,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure & Scour Remediation Contract (Below Water Line)	\$158,000
*Electronic Surveillance System (ESS Phase2)	\$739,000
TOTAL: Future Repair Contracts	<u>\$897,000</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 upper truss on steel cantilever brackets. The bridge is currently posted for a three-ton weight limit and a fifteen-mile per hour speed limit.

This year's inspection included all seven (7) spans, the substructure units and both approach roadways.

SIGNIFICANT FINDINGS

Interim structural steel strengthening of stringers and floor beams was performed under contract 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.

The upper truss members were last painted in 1985. The paint system above the deck is in generally satisfactory to fair condition. The floor system was last painted in 1982 and is in poor condition. The steel open-grate deck appears to be in fair condition, with signs of wear. A small section of decking has been broken off or removed in span 1.

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.

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. The 1998 repair contract (Contract No. 345) prepared by the DRJTBC Engineering Department in conjunction with Michael Baker Jr., Inc. with the work performed by a contractor, consisted of removing and replacing the stringers, in the odd lines, that were in unsatisfactory condition. Some stringers that were beyond repair were flame cut in the even lines during Contract No. 345.

CALHOUN STREET BRIDGE

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 up and downriver 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 at several locations.

The 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, adjacent to the roadway, was noted to be loose and detached due to have unbolted post bases at several locations because the bolt hole aligned with the space between the timber planks.

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 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, 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

It is recommended that a bridge Rehabilitation Contract be performed in a future contract.

The overall rehabilitation should include truss member repairs as well as substructure and scour remediation, which should include reconstruction of the pier tops as well as substructure deterioration noted in the 2000 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.

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

CALHOUN STREET BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
*Calhoun Street TSB Additional Capacity Alternatives Analysis		\$250,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
TOTAL COST		\$273,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Rehabilitation Contract (Design / Construction) <i>In-depth Inspection and Rating, Post Tensioning Bottom Chords Design/Repair Plans (New Floor System), Blast Clean and Paint Bridge Substructure Repairs</i>	\$13,100,000
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$325,000
*Electronic Surveillance System (ESS Phase2)	\$705,000
TOTAL: Future Repair Contracts	<u>\$14,130,000</u>

* Commission Initiative

SCUDDER FALLS BRIDGE

GENERAL

SCUDDER FALLS BRIDGE

The Scudder Falls Toll Supported Bridge (Structure No. 80) provides access on 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 upriver and downriver 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

This year's 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 main river bridge was last painted in 1981. The paint condition is typically fair to 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 outside face exposed to the weather. Several areas of hangers exhibited light to moderate pitting and section loss, apparently a previous condition. Ultrasonic testing was performed on the pin and hanger assemblies during the 2000 Inspections and no significant findings were found.

Cracks in the fascia stringers as well as some of the first interior stringers were found at Piers 2, 5 and 8 due to advanced deterioration of the web. Some of the stringers have begun to sag slightly. The diaphragms in these areas typically exhibit heavy delaminations and section losses. The rivet heads in the top flanges also exhibit severe section loss.

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.

High priority structural repairs (Contract TS-421) have been slated to begin in the summer of 2004. The work to be completed involves the installation of 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.

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. Safety walk deck joints also exhibit heavy deterioration and

SCUDDER FALLS BRIDGE

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.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures (Piers 2 through 8) to be in good condition. Although no undermining was observed during the underwater inspection, several areas of minor to moderate scour were found with moderate debris accumulation. The 2000 Underwater Inspection Report included the Pennsylvania Canal overpass and no problems were noted. Estimated repair costs from the underwater inspection report have been included in this report.

It was observed that the I-95 Scudder Falls bridge experiences excessive congestion of traffic during peak hours. An interim capacity improvement study is recommended.

SCUDDER FALLS PENNSYLVANIA CANAL OVERPASS

The Pennsylvania Canal Overpass is generally in satisfactory condition. 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 overhead sign structure has graffiti on both signs above the northbound lanes.

The recently overlaid deck and deck joints are in good condition.

SCUDDER FALLS TAYLORSVILLE ROAD OVERPASS

The bridge appears to be 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.

SCUDDER FALLS 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 recently overlaid deck is in good condition, however 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

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. Maintenance should continue to repair deteriorated deck joints and seal and repair the LMC overlay of the deck until a rehabilitation contract is awarded.

A Rehabilitation Contract is recommended. 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.

A structural repair contract (Contract TS-421) has been awarded and slated to be completed in the summer of 2004. This contract included stringer repairs at piers 2, 5 and 8.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2000 Underwater Inspection Report.

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 BRIDGE

SCUDDER FALLS PENNSYLVANIA CANAL OVERPASS

Although the canal bridge is in satisfactory condition, the paint system is poor.

A Rehabilitation Contract is recommended which should include cleaning and painting the girder ends and end diaphragms, and also cleaning and epoxy coating the bridge seats.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2000 Underwater Inspection Report.

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 is recommended, and an In-Depth Inspection and Rating Contract should be performed to determine the extent of required repairs.

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

SCUDDER FALLS BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Rehabilitation Contract (Design / Construction) <i>In-depth Inspection and Rating Design/Repair Plans (concrete deck), Blast Clean and Paint Bridge Substructure Repairs (above water line)</i>		\$12,500,000
Preliminary Engineering/Environmental Documentation Capacity Improvement <i>Interim Capacity Improvement Study & Implementation</i>		\$5,250,000
Deck Joint and Deck Repairs		\$1,500,000
*Maintenance Management Tracking Program Implementation		\$3,500
*Emergency Response Study / Plan		\$20,000
Interim LMC Patching by Maintenance	\$24,000	
Paint Striping (Including MPT)		\$25,000
*Electronic Surveillance System (ESS Phase 1, Part 1)		\$850,000
*ITS Improvements		\$800,000
TOTAL COST	\$24,000	\$20,948,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*I-95 Improvement Project (Design and Construction)	\$182,500,000
*Electronic Surveillance System (ESS Phase 1, Part 2)	\$195,000
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$100,000
TOTAL: Future Repair Contracts	<u>\$182,795,000</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 downriver 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.

This year's inspection included all six (6) spans, the substructure units and both approach roadways

SIGNIFICANT FINDINGS

The deck joint support system is in poor condition. At Pier 1 the transverse supports stringer (riser beam) has failed causing the tooth dam to crack and significantly deflect. At Piers 2, 4 and 5 severely deteriorated transverse support stringers (riser beam) for the joint were also noted, with severe exfoliated rust and perforations to the webs. The stringers have rotated, causing the tooth dam to uplift at the roadway level, more so at Pier 1. In addition, the riser beams are not fully supported and therefore are deflecting downward up to 1" between stringers. A 20 in long longitudinal crack was also observed along the web of the riser beam. The plate atop the east floorbeam (directly below the riser beam) has also buckled apparently due to impacted rust. In addition small perforations were noted at the center of the east tooth dam plate. In general the east riser beams exhibit the worst case of deterioration and the west riser exhibits the worst case of deflection, at each pier.

Notification was submitted to the Commission on May 10, 2004 regarding the inspection findings at the pier 1 deck joint. Although Pier 1 was the location with the worst condition, all four (4) deck joint tooth dam locations at Piers 1, 2, 4 and 5 will be included in the structural repair contract.

WASHINGTON CROSSING BRIDGE

Several stringers 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.

The existing bottom chord post-tensioning rods exhibit light to moderate surface rust throughout. The post-tension rods are redundant structural members that were scheduled to be removed after the completion of Contract No. 326. The post-tension rods were left in place for its redundancy. At numerous locations, the ties supporting the rods are rusting.

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 cool 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 deteriorates.

At the time of the inspection the concrete apron was below the water level, however the concrete aprons at the piers exhibited large cracks when viewed through the water. These cracks can lead to spalling of the aprons and deterioration of the pier protection. The substructure units appeared to be in fair condition, with areas of loose and missing mortar on the northern ends of the piers.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has 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 in various states of either undermining or collapse, created by scour of the channel around the piers. Estimated repair costs from the 2000 Underwater Inspection Report have been included in this report.

WASHINGTON CROSSING BRIDGE

CONCLUSIONS

The bridge is in poor condition due to the condition of the deck joints, west abutment and scour.

Deck joint tooth dam and riser beams at Piers 1, 2, 4 and 5 should be replaced.

An In-Depth Inspection and Rating is recommended. The last In-Depth Inspection and Rating Contract (No. 326) was performed in 1992, prior to the rehabilitation done in 1994.

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 2000 Underwater Inspection Report.

A study should also be performed to investigate the overall condition of the west abutment and the adjacent Pennsylvania approach roadway. A determination of the cause and required repairs should be addressed. Pennsylvania abutment and approach reconstruction, if required, would follow and is assumed to be done by contract forces. For completeness, the New Jersey abutment and adjacent roadway should also be investigated to verify that a similar problem does not exist.

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.

Even though the lower chord post tensioning rods are redundant structural members, they should be cleaned and painted and the support ties replaced.

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

WASHINGTON CROSSING BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Deck Joint Replacement/Rehabilitation at Pier 1,2,4 & 5 Riser Beams / Tooth Dams		\$300,000
Abutment and Approach Rehabilitation Study		\$60,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
Rehabilitation Contract (Design) <i>In-Depth Inspection and Rating Design/Repair Plans</i>		\$1,200,000
TOTAL COST		<u>\$1,583,500</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Rehabilitation Contract (Design / Construction) <i>Blast Clean and Paint Bridge Post Tensioning Design / Evaluation Substructure Repairs</i>	\$10,800,000
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$1,569,000
*Electronic Surveillance System (ESS Phase2)	\$679,000
TOTAL: Future Repair Contracts	<u>\$13,048,000</u>

* 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.

SIGNIFICANT FINDINGS AND CONCLUSIONS

Since the bridge was under construction under Contract No. TS-370A by J.D. Eckman, at the time of our inspection, a one-day cursory visual inspection was conducted. During this inspection the areas of the bridge that were completed were in excellent condition. The rehabilitation was completed and the bridge was reopened on June 7, 2004.

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

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 2000 Underwater Inspection Report.

NEW HOPE-LAMBERTVILLE TOLL SUPPORTED BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
Code Use and Occupancy Study of Fire House		\$20,000
TOTAL COST		\$43,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure & Scour Remediation Contract (Below Water Line)	\$280,000
*Electronic Surveillance System (ESS Phase2)	\$674,000
TOTAL: Future Repair Contracts	<u>\$954,000</u>

* 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 per axle).

This year's inspection involved a one-day cursory visual walk through inspection of the main bridge, which included the entire structure. The Pennsylvania Canal Overpass (Structure No.161) was inspected and is included in the next section.

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

Repairs were completed in 1998 (under Contract No. 344) on the bottom chords. 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.

CENTRE BRIDGE-STOCKTON BRIDGE

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 losses. 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.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition. Scour was noted at piers two through five with subsequent undermining occurring at piers three, four and five during the underwater inspection. The noted undermining was not noted in the last underwater inspection, but does not affect the structural integrity of the piers. Estimated repair costs from the 2000 Underwater Inspection Report have been included in this report.

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 in particular, rise to run ratio, tread depth, and hand railing dimensions. Maintenance forces have performed some repairs to damaged areas of the staircase.

CENTRE BRIDGE-STOCKTON BRIDGE

CENTRE BRIDGE-STOCKTON PENNSYLVANIA CANAL BRIDGE

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. A new safety fence has been installed at the south side of the bridge.

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 and 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.

The southwest staircase is in fair condition and should be replaced to meet current building codes.

A Rehabilitation Contract is recommended for this bridge, including the southwest staircase and following the bottom chord rehabilitation. 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 is not required. This contract, however, should include an In-Depth Inspection and Rating to determine the extent of repairs and verify the current and proposed available rating. Repair plans should be developed, which 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 2000 Underwater Inspection Report.

CENTRE BRIDGE-STOCKTON PENNSYLVANIA CANAL OVERPASS

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

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

CENTRE BRIDGE-STOCKTON BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Rehabilitation Contract (Design / Construction) <i>In-Depth Inspection & Rating, Post-Tensioning Evaluation / Design Design/Repair Plans (floor system), Blast Cleaning and Painting Substructure Repairs (above water line)</i>		\$6,700,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
TOTAL COST		\$6,723,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$770,000
*Electronic Surveillance System (ESS Phase2)	\$749,000
TOTAL: Future Repair Contracts	<u>\$1,519,000</u>

* Commission Initiative

LUMBERVILLE-RAVEN ROCK

TOLL SUPPORTED BRIDGE

(Structure No. 180)

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.

This year's 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 sound, the seal seems to be leaking evident 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 and the function of the post tensioning, 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.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory 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 has worsened since the previous underwater inspection and appears to be the most critical. Estimated repair costs from the 2000 Underwater Inspection Report have been included in this report.

At the southwest corner of the bridge, the stone retaining wall to the east of the Commission-owned dwelling is deformed. At the time of the inspection, the wall appeared to be stable.

CONCLUSIONS

The bridge has been well maintained and is structurally capable of carrying legal pedestrian loading at the time of this year's inspection. Having been rehabilitated in 1993, the bridge is in generally good structural condition.

Any further necking or corrosive section loss to the ends of lower horizontal wind bracings or fascia T's may warrant future replacement 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.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2000 Underwater Inspection Report.

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

LUMBERVILLE-RAVEN ROCK PEDESTRIAN BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
<u>Buildings and Grounds</u>		
House Inspection/Repair Study		\$20,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
Retaining Wall Reconstruction		\$115,000
*Emergency Response Study / Plan		\$20,000
TOTAL COST		<u>\$158,500</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Blast Clean and Paint Bridge	\$1,400,000
Substructure & Scour Remediation Contract (Below Water Line)	\$530,000
*Electronic Surveillance System (ESS Phase2)	\$96,000
TOTAL: Future Repair Contracts	<u>\$2,026,000</u>

* Commission Initiative

GENERAL

The Uhlerstown-Frenchtown Bridge (Structure No. 220) carries Bridge Street traffic from Uhlerstown, Tincum 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 upriver 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.

This year's inspection included all six (6) spans, the substructure units and both approach roadways

SIGNIFICANT FINDINGS

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 normal wear.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition. The underwater inspection report noted 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 2000 Underwater Inspection Report have been included in this report.

CONCLUSIONS

The bridge is in excellent condition.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2000 Underwater Inspection Report.

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

UHLERSTOWN-FRENCHTOWN BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
TOTAL COST		\$23,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$450,000
*Electronic Surveillance System (ESS Phase2)	\$729,000
TOTAL: Future Repair Contracts	<u>\$1,179,000</u>

* 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.

This year’s inspection included all three (3) spans, the substructure units and both approaches.

SIGNIFICANT FINDINGS

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 of the two.

Light to moderate rusting was exhibited at most of the fascia stringers (and shim plates) and localized 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 subsequent 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 section losses.

The concrete-filled steel deck is showing signs of wear especially at 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 at 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.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition. The underwater inspection report noted local scour has washed away the channel bottom to bedrock at both piers. Pier 1 has minor voids under the sheet-piling jacket at two locations. Estimated repair costs from the 2000 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 in 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.

A Substructure and Scour Remediation Contract (Below Water Line) should be performed and should include repair of any substructure deterioration noted in the 2000 Underwater Inspection Report.

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

UPPER BLACK EDDY-MILFORD BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
TOTAL COST		<u>\$23,500</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Rehabilitation Contract (Design / Construction) In-Depth Inspection and Rating Design / Repair Plans Spot Clean/Painting Bridge Deck Rehabilitation	\$5,500,000
Substructure & Scour Remediation Contract (Below Water Line)	\$650,000
*Electronic Surveillance System (ESS Phase2)	\$682,000
TOTAL: Future Repair Contracts	<u>\$6,832,000</u>
* Commission Initiative	

RIEGLSVILLE 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 rest 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.

This year's inspection included all three (3) spans, the substructure units and the approach roadways.

SIGNIFICANT FINDINGS

Under Contract TS-391, the Riegelsville Bridge has undergone a first step towards the full rehabilitation of this structure as part of the Commission's 10-year capital campaign 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 rusting

RIEGELSVILLE BRIDGE

with subsequent section losses 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 7 years and have not increased in size. These plates are not considered a primary structural member.

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. Typically there is no vehicular protection to the towers (or hangers) across the length of the bridge, except for the lower rubrail.

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:

- A few of floor beam 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.

RIEGELSVILLE BRIDGE

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001 under separate cover, has found the substructures to be in good condition. The underwater inspection report noted both piers exhibited loss of rock protection, which has created an undermined condition beneath the concrete aprons at some locations. A section of the concrete apron at pier 2 has also been washed away. Estimated repair costs from the 2000 Underwater Inspection Report have been included in this report.

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

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 is not only to address the deficiencies of the bridge, but also to increase, if possible, the current load rating of the structure.

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 2000 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 should be repaired.

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

RIEGELSVILLE BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
Pier Apron Repair		\$175,000
TOTAL COST		\$198,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Rehabilitation Contract (Design / Construction) <i>In-depth Inspection and Rating</i> <i>Design/Repair Plans (new floor system)</i> <i>Blast Clean/Paint</i> <i>Thrie-beam Guide Rail</i> <i>Mill/Repave Approaches</i> <i>Substructure Repairs (above water line)</i>	\$5,000,000
*Electronic Surveillance System (ESS Phase2)	\$682,000
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$635,000
TOTAL: Future Repair Contracts	<u>\$6,317,000</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.

This year's inspection included all three (3) spans, the substructure units and the approach roadways.

SIGNIFICANT FINDINGS

The bridge is in good condition having just undergone rehabilitation in 2002 under contract TS-365.

The existing directional lights on the bridge are difficult to see during the day and should be replaced with LED directional lighting.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition.

One of the vertical posts that had previously been heat straightened during the recent rehabilitation has become distorted again. A design contract (Contract No. C-372A-6) to repair the member has been awarded.

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.

There is minor settlement of the southeast and southwest sidewalks as well as the southeast stone parapet.

NORTHAMPTON STREET BRIDGE

CONCLUSIONS

The directional lights on the bridge should be replaced with LED lighting for improved visibility.

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

NORTHAMPTON STREET BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Buckled Truss Member Repair (Design, Construction & CM)		\$45,000
Replace Directional Lights w/ LED Directional Lights	\$5,000	
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
TOTAL COST	\$5,000	\$68,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*Electronic Surveillance System (ESS Phase2)	\$682,000
TOTAL: Future Repair Contracts	<u>\$682,000</u>

* 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 three-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.

This year's inspection included all four (4) spans, substructure units and both approaches.

SIGNIFICANT FINDINGS

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 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

RIVERTON-BELVIDERE BRIDGE

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 a 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 also 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 previously settled. Additional riprap has been added to the embankment by Maintenance forces and appears to have stabilized the slope. The concrete sidewalk has previously settled and cracked and appears to have stabilized during this year's 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 a corrugated metal coated with a waterproofing material. Heavy moss growth was observed throughout the roof. Maintenance has indicated that repairs have been performed to repair leaks in the roof and additional repairs are required.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory condition. Although no undermining was observed during the underwater inspection, pier 2 was noted to exhibit signs of scour with missing or deteriorated concrete bags. All piers exhibit approximately 25-30% section loss to steel sheeting. Estimated repair costs from the 2000 Underwater Inspection Report have been included in this report.

RIVERTON-BELVIDERE BRIDGE

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 2000 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 Eighth Annual Maintenance Report.

RIVERTON-BELVIDERE BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
Steel Repairs in End Bays at Both Abutments, Sidewalk Floorbeams, Stringers (Maintenance)	\$4,000	
Rehabilitation Contract (Design)		\$350,000
Rehabilitation Contract (Construction) <i>Rehabilitate Floor System</i> <i>Sidewalk Rehabilitation</i> <i>Blast Clean and Paint Bridge</i> <i>Substructure Repairs (Above Water Line)</i> <i>Approach Re-Paving</i>		\$5,800,000
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$20,000
<u>Buildings and Grounds</u>		
Replace Storage Garage Roof		\$225,000
TOTAL COST	\$4,000	\$6,398,500

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
*Electronic Surveillance System (ESS Phase2)	\$591,000
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$37,000
TOTAL: Future Repair Contracts	<u>\$628,000</u>

* Commission Initiative

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, was 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.

This year's 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. Although no change in movement was noted from last year, the wall should be monitored during each inspection.

The 2000 Underwater Inspection Report prepared by Pennoni Associates, Inc. and submitted to the Commission in 2001, has found the substructures to be in satisfactory

PORTLAND-COLUMBIA PEDESTRIAN BRIDGE

condition. The underwater inspection report indicated all piers were noted to have broken, missing or undermined sections of concrete aprons, with marine growth and debris. Estimated repair costs from the 2000 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 2000 Underwater Inspection Report.

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

PORTLAND-COLUMBIA PEDESTRIAN BRIDGE

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

Bridge and Roadway Recommended Improvements	2005 Improvements by Commission Forces - Cost of Materials Only	General Reserve Fund
<u>Bridges, Roadways, Sidewalks, and Approaches</u>		
*Maintenance Management Tracking Program (Projects and Vehicles)		\$3,500
*Emergency Response Study / Plan		\$10,000
TOTAL COST		<u>\$13,500</u>

FUTURE REPAIR CONTRACTS

(Subject to sufficient appropriation by the Commission)

<u>DESCRIPTION</u>	<u>ESTIMATED COST</u>
Substructure & Scour Remediation Contract <i>(Below Water Line)</i>	\$1,450,000
*Electronic Surveillance System (ESS Phase2)	\$85,000
TOTAL: Future Repair Contracts	<u>\$1,535,000</u>

* Commission Initiative

2004 TRAFFIC ENGINEERING REPORT

Year 2005 Toll Bridge Traffic And Revenue Projections



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Delaware River
Joint Toll Bridge
Commission

Submitted to:

Delaware River Joint Toll Bridge Commission
Administration Building, 110 Wood Street
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December 15, 2004

COPY

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EXECUTIVE SUMMARY

Pennoni Associates Inc. (Pennoni) has been retained by the Delaware River Joint Toll Bridge Commission (Commission) to determine if the projected year 2005 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 recent 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 2005 were projected by applying the current toll structure to the 2005 projected volumes for each vehicle type on the seven toll bridges under the jurisdiction of the Commission.

The sum of year 2005 projected toll bridge revenues (\$79,592,024) 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 2005. Since there is a projected Debt Service Coverage Ratio of 3.61, the requirements of the Bridge System Revenue Bonds, Series 2003 are projected to be met.



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 2005. 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 2005 projected toll revenues (under the current January 2004 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.

If the projected revenues do not satisfy the requirements of the Bond Resolution, recommendations will be made to alter the current toll structure to increase revenues to the necessary level.



METHODOLOGY

To project traffic volumes on the toll bridges for the year 2005, 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.

We considered the minor reduction in passenger car tolls, possible diversions to toll supported bridges due to the increased truck tolls, and possible diversions from the Pennsylvania Turnpike due to increases in tolls on their facility.

YEAR 2005 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 2005. While several development projects are underway, only a few major projects are expected to open/expand/contract during the 2005 calendar year. For informational purposes, we have discussed major projects in Bethlehem which may reach full buildout in the distant future but will likely not contribute any traffic during the year 2005.

Previous conversations with staff from Monroe County indicated plans for 500,000 square foot retail and movie theater entertainment complex on Route 209 was being considered, but plans for this project have been delayed, and nothing will be done during 2005. The Mountain Laurel Center for the Performing Arts in Bushkill, Pike County, PA opened in August 2003, but all shows for the 2004 season have been cancelled, and nothing is currently scheduled for 2005. The second phase of this project is to have a 55,000 square foot Cultural Arts and Benefactors building and a theater with 1,100 seats, but it is on hold at this time. Since no shows are anticipated during 2005, no traffic has been added for this project.

Adjacent to the Performing Arts Center, up to 2400 housing units are being considered in Lehman Township. At this point, only phase 1 plans (300 units) are being considered, and the developer is yet to receive preliminary approval. No additional traffic crossing the bridge has been anticipated for the first phase, but growth may occur in future years.

In Blooming Grove Township, Pike County, development of the Pike County Industrial Park is underway and just received approval. The site has 300 acres, but no individual uses have been submitted yet. Again, the site will be a large traffic generator when completed, but the project just received final approval at the township level. In addition, it is located in the center of the county, not very close to any bridges. Therefore, we have not assumed any additional traffic crossing the bridges from this project.

The total buildout of the Bethlehem Commerce Center project on PA Route 412 off I-78 covers 1600 acres (ten square miles) and is proposed to consist of 10.5 million square feet of total development, with approximately 8.5 million square feet of heavy and light manufacturing and distribution/warehousing. The remaining 2.0 million square feet are proposed as office/retail. The BethIntermodal Center is projected to have 300,000 to 500,000 lifts per year. This development is



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expected to generate a major volume of tractor-trailers, with several destined to/from the east on I-78 to New Jersey and New York, but full construction and buildout is not anticipated for many years.

The Bethlehem Works project, also off of PA Route 412, has plans for a total of 2.2 million square feet, including office, retail, hotel, conference center, cinema, indoor pool, ice hockey arena, and a museum. With Bethlehem located approximately 10 miles from New Jersey, some patronage is expected to use the I-78 Bridge. While the ice hockey skating rink has opened, nothing else has been developed at this point.

The Bethlehem Works and Bethlehem Commerce Center projects are estimated to contain approximately 13 million square feet, but plans are highly speculative at this time and the magnitude and timing of development is uncertain. No development for either project was assumed by the year 2005.

The Lehigh Valley Industrial Park Phase 6 is located on Route 33 between William Penn Highway and Freemansburg Road. At this point, only one lot is available for sale, while recently purchased lots will soon be constructed. Obviously the project will continue to add several new trips during 2005, but no specific trips were added to the bridges.

A press release December 2002 indicates that Lucent Technologies will be reducing its worldwide workforce to about 35,000 employees in the 2003 calendar year. Employment on December 31, 2003 was about 33,000 employees worldwide. Specific figures for any reduction in jobs from the Murray Hill, NJ headquarters or the Allentown/Bethlehem area were not available. Previous projections were for the facility off Route 22 at Airport Road South to have a second phase that would add over 1600 more jobs, and up to 1100 jobs would be relocating from other Lucent offices in the Allentown area. While some relocations have occurred, staff reductions have also occurred. With the continuing worldwide reduction, we have assumed that these additional phases have been put on hold. As such, we have assumed no increases in passenger car volumes on the I-78 and Easton-Phillipsburg toll bridges due to Lucent.

In Warren County, there are recent approvals for a 226-unit subdivision in Mansfield and a 303-unit subdivision in Harmony, along with other small subdivisions. No specific increase in bridge crossings were assumed from these developments.

In Sussex County, a large retail, residential and office development is being discussed at Ross Corner (Routes 206 and 15) but nothing has been submitted, and any development is years away. No specific increase in bridge crossings were assumed from these developments.

In Mercer County, the Quakerbridge Mall, located on Route 1 approximately 7.5 miles from the Trenton-Morrisville Toll Bridge is planning an expansion of approximately 500,000 square feet, but no approvals have been received at this point. An aggressive approval process would have the expansion completed at the later part of 2005. Nonetheless, no additional traffic from Pennsylvania is anticipated to cross the Trenton-Morrisville Toll Bridge to use the Quakerbridge Mall, 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. No specific increase in traffic at the Trenton-Morrisville Toll Bridge was assumed from Mercer County developments.



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In Bucks County, several large industrial park developments have been constructed in the past few years in Bristol, near the Burlington Bristol Bridge, the Pennsylvania Turnpike Bridge, and the Trenton Morrisville Toll Bridge. One building in the Bristol Industrial Park of approximately 384,000 square feet was completed in early 2004, but remains vacant at this time. We have not assumed any additional traffic crossing the Trenton-Morrisville Toll Bridge from this building, even if the building is leased in 2005.

The Matrix development, consisting of approximately 190 acres in Lower Makefield and Middletown Townships is considering some office space and age restricted homes, but a final buildout plan has not been determined. It is doubtful that any part of this project will be opened during 2005.

No major developments are proposed in Hunterdon County for 2005.

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 early stages, and construction is estimated for 2008. No changes will occur in 2005.
- ⌋ The I-95 interchange with Newtown-Yardley Road (PA 332) in Lower Makefield will be improved in 2005. This project is not anticipated to alter traffic volumes on the Scudder Falls Bridge or the Trenton-Morrisville Toll Bridge.

Mercer County, New Jersey

- ⌋ Trenton-Camden Light Rail Train – The Riverlink began service in March 2004, and connects the Sovereign Bank Arena and Waterfront Park in Trenton and several Burlington County river towns to the New Jersey State Aquarium, Campbell's Field and the USS New Jersey in Camden. While the line will reduce vehicular traffic in Trenton and Camden from New Jersey patrons, it is not anticipated to have an impact on Commission bridge crossings.

Pennsylvania Turnpike Commission (Statewide)

- ⌋ The Pennsylvania Turnpike Commission increased tolls on their facility on August 1, 2004 by approximately 43%, the first toll increase in 13 years. It is anticipated that some long haul trucks from New York City or New England destined to the west may have diverted from the Pennsylvania Turnpike to Interstate 80. Also, short haul trucks destined to the Harrisburg area may have diverted from the New Jersey and Pennsylvania Turnpikes to I-78. While staff from the Pennsylvania Turnpike did not conduct an extensive diversion study, they anticipate approximately 7% of passenger cars and 14% of trucks system wide would seek an alternate route. However, no appreciable increase in truck traffic was observed on Commission bridges during August through October, 2004.



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 affects on volumes or patterns near the bridges.

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 1999 to 2004 were used.

Monthly traffic volume data for the toll-supported bridges is summarized on a yearly basis from 1999 to 2004, 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. The Northampton Street and Calhoun Street Toll Supported Bridges carry approximately 7-8 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. 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.

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 2004 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 1999 to 2002, and then had almost 400,000 fewer vehicles in 2003 and 2004. Conversely, the Lower Trenton Bridge had modest growth from 1999 to 2001, and then a spike in traffic during 2002 and a higher spike in 2003. Volumes during 2004 were reduced to 2001-2002 levels. Vehicles diverting from the Trenton-Morrisville Toll Bridge after the toll increase account for the 2003 increase.

Reviewing information from the seven toll bridges under the jurisdiction of the Commission, we found the Trenton-Morrisville (US Route 1), I-78, Easton-Phillipsburg (US Route 22), and Delaware Water Gap (Interstate 80) bridges carry between 5.5 million and 9.8 million toll paying (westbound) vehicles



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per year. The remaining three toll bridges carry between 1.1 million and 1.5 million toll paying (westbound) vehicles per year, except for the New Hope-Lambertville Toll Bridge, which carried 2.1 million vehicles during 2004 due to the construction at the New Hope-Lambertville Toll Supported Bridge. These figures have remained consistent over the past few years.

The five-axle tractor-trailer continues to be the most common truck type, representing approximately 10 percent of vehicles crossing the seven toll bridges during 2004, and estimated to comprise approximately 10 percent of vehicles during 2005 but generating approximately 60 percent of the 2005 toll revenue. Conversely, passenger cars represented approximately 87 percent of the vehicles on the seven toll bridges during 2004, and are projected to generate approximately 26 percent of the toll revenue during 2005. The volume figures have remained consistent for the past several years.

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Based on the findings listed above, a growth or reduction factor was applied to 2004 data for each vehicle type on each toll bridge to project year 2005 volumes. Generally, recent one-year to three-year growth trends would be considered, but the 2003 and 2004 calendar year volumes did not follow regular trends. 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, but no obvious diversion was observed in reviewing data from August to October 2004.

We generally considered the average growth rates on the toll bridges from the years 1999 to 2002, (excluding December 2002) and used these rates as a basis for projected growth. In some cases, a two year and three year growth rate was considered, if one of the years from 1999 – 2002 was atypical. The completion of the Route 33 connector from US Route 22 to I-78 caused a shift in traffic from the Easton-Phillipsburg Toll Bridge to the I-78 Toll Bridge during the 2002 calendar year, so growth rates on these bridges were based on data comparisons from 1999 to 2001. Minor adjustments were made to these average rates to account for expected traffic changes in 2005, such as the temporary closure of the New Hope Lambertville Toll Supported Bridge, and the August 2004 toll increase on the Pennsylvania Turnpike.

Tables 7 through 13 illustrate actual traffic volumes for the seven toll bridges for the years 1999 through 2004, as well as the projected year 2005 volumes. The current (January 2004) toll structure was applied to the projected 2005 volumes to determine the projected year 2005 revenue for each toll bridge.

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 2001 (April 29 – May 5) 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. With respect to the E-ZPass penetration rate for trucks, we used data from October and November 2003, and increased the percentage slightly, as it is anticipated that the number of E-ZPass trucks will continue to increase. This estimate is conservative from a revenue standpoint, as E-ZPass trucks pay less than cash trucks.

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 27% cash users at \$5.00, 65% peak E-ZPass users at \$4.75, and 8% off peak E-ZPass users at \$4.25, for a weighted average toll of \$4.78. Special permit vehicles will maintain the same toll structure of 40 cents per ton plus \$2 permit fee. For example, a truck weighing 80,000 pounds will pay \$18.00.

Table 14 compares the 2004 volumes and revenues for each bridge and maintenance district with the projected 2005 volumes. As indicated, overall toll traffic volumes are projected to increase by approximately 320,000 vehicles (0.88%), while revenues are projected to increase by approximately \$820,000 (1.04%). The growth is projected based on several factors:

- A small increase in vehicles on all bridges except at the New Hope-Lambertville Toll Bridge, with cars returning to the New Hope-Lambertville Toll Supported Bridge
- A stabilizing of diverted passenger cars returning to the toll bridges from toll supported bridges

Table 15 is provided in response to (i) of Section 703 (b) paragraph 2 and provides 2004 Total Revenue, 2004 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 2005 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 2005 toll revenue. With a Projected Debt Service Coverage Ratio of 3.61, the requirements of the Bridge System Revenue Bonds, Series 2003 are projected to be met.

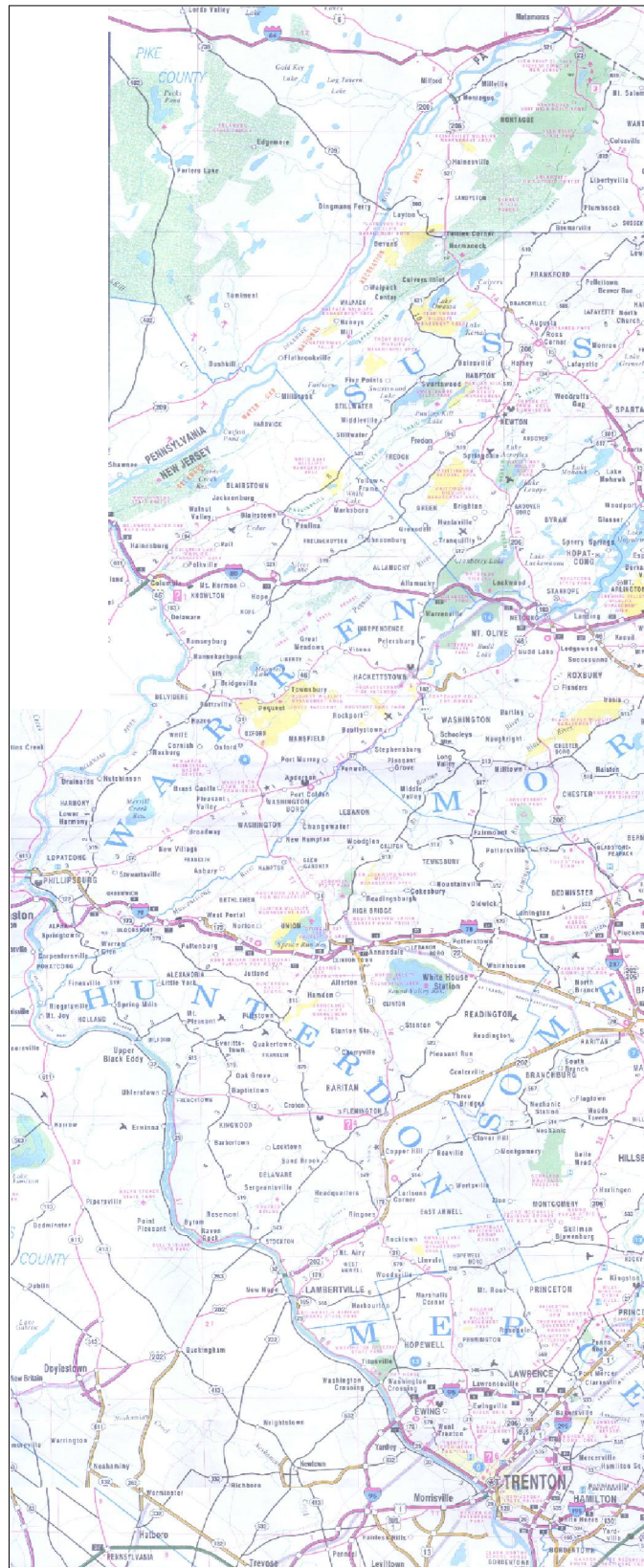


FIGURE 1

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION COMMISSION JURISDICTION



Not To Scale

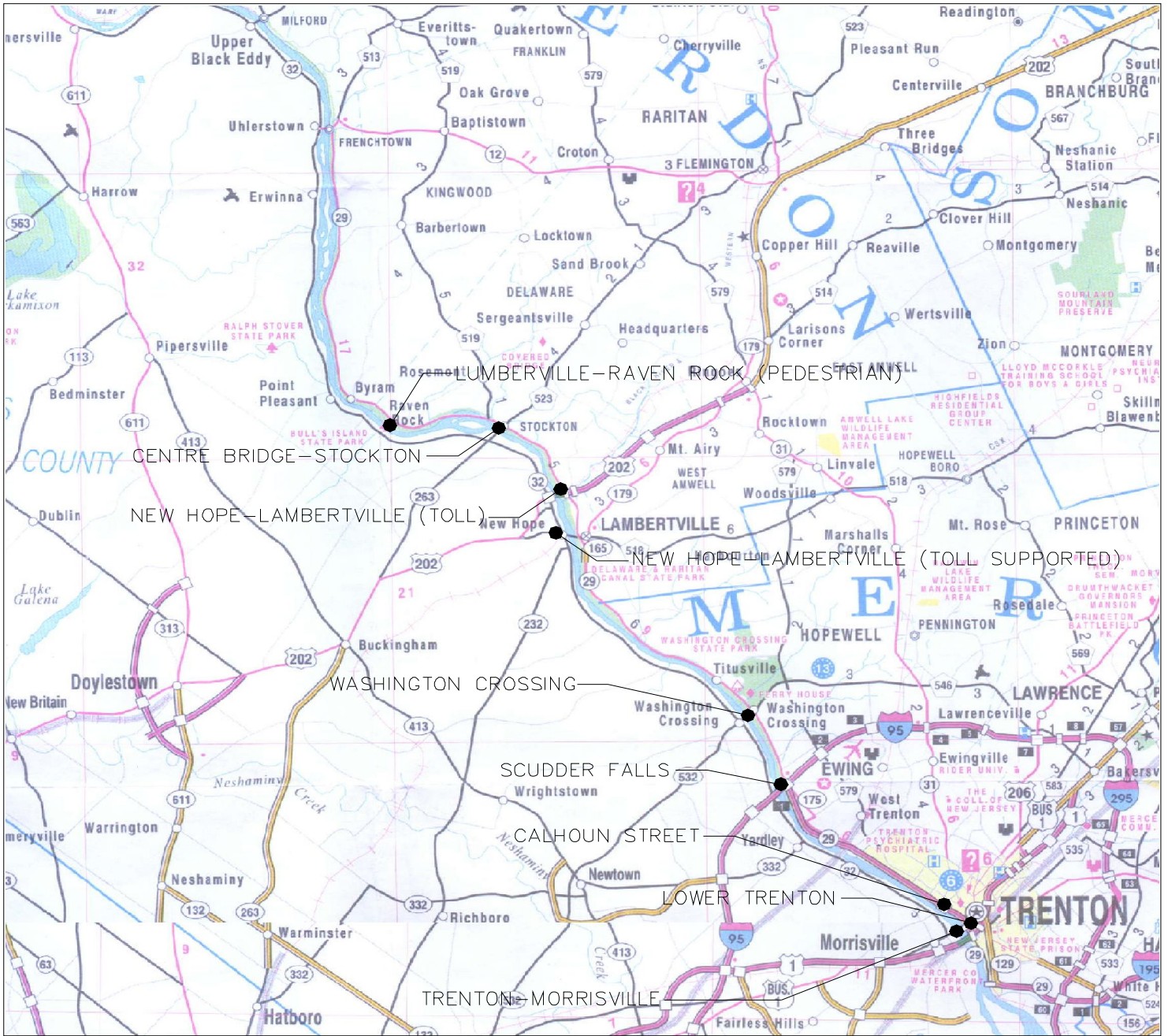
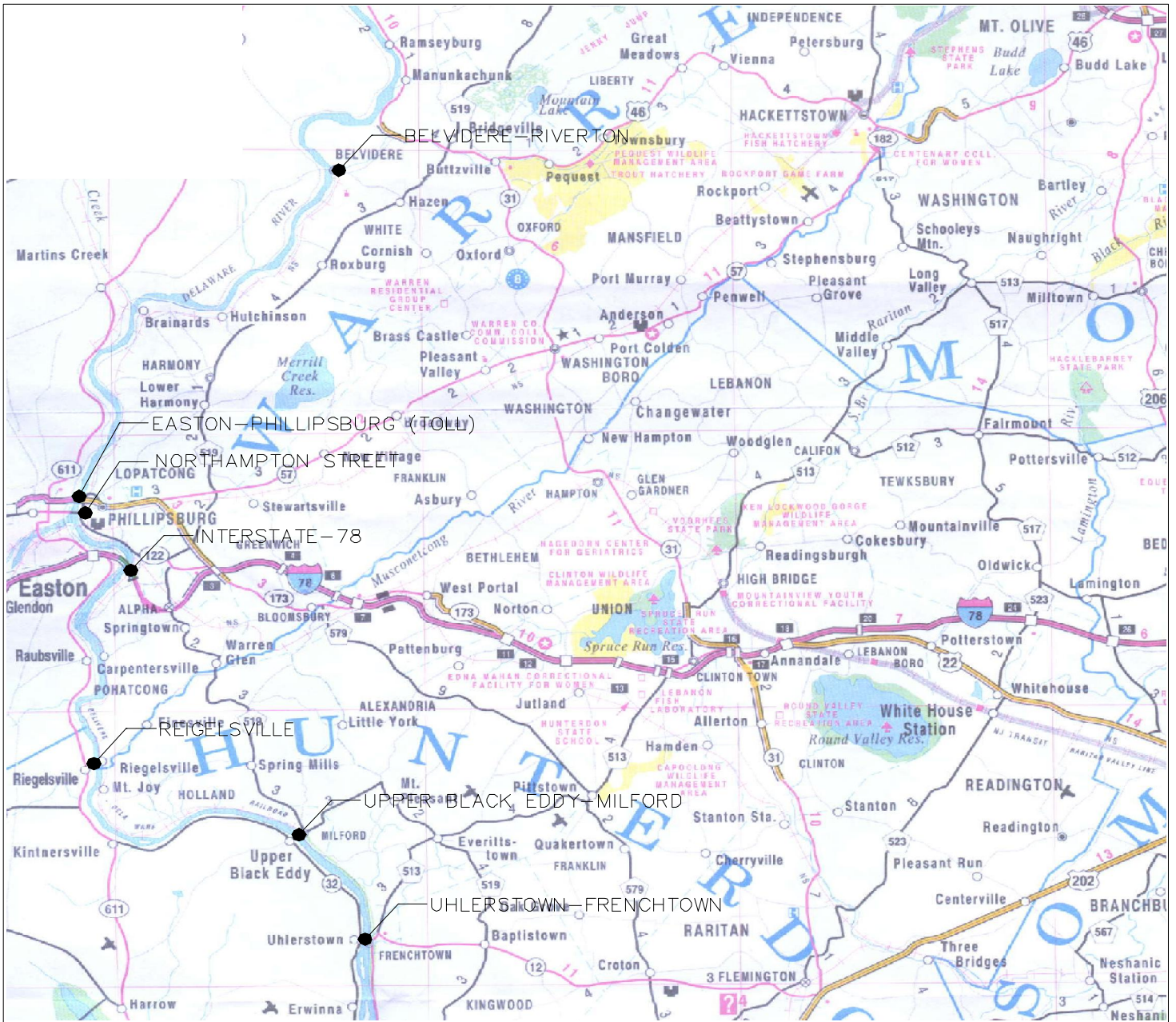


FIGURE 2

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION
DISTRICT ONE BRIDGES



Not To Scale



Not To Scale

FIGURE 3

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION
DISTRICT TWO BRIDGES



FIGURE 4

DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION
DISTRICT THREE BRIDGES



Table 1 - 1999 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Frenchtown-Uhlerstown	Milford/Upper Black Eddy	Riegelsville	Northampton Street	Belvidere-Riverton	Total
January	353,361	608,739	1,143,961	176,339	381,110	118,353	191,249	131,358	111,274	635,926	122,990	3,974,660
February	354,923	604,471	1,436,756	175,175	379,380	120,550	193,366	132,028	110,702	630,216	128,958	4,266,525
March	406,835	675,598	1,541,411	193,597	424,391	141,816	219,863	148,880	127,720	719,937	149,346	4,749,394
April	351,193	678,528	1,473,917	199,755	439,379	151,639	179,340	154,454	130,089	717,062	149,517	4,624,873
May	415,659	691,155	1,720,871	221,234	469,045	174,649	251,937	173,746	141,484	752,846	162,986	5,175,612
June	474,116	719,274	1,724,454	215,612	462,502	171,661	245,702	161,776	136,457	740,202	159,669	5,211,425
July	398,862	748,974	1,709,473	215,874	481,702	176,114	269,036	170,737	140,234	743,463	162,941	5,217,410
August	412,981	722,859	1,708,826	209,137	484,703	168,062	160,541	139,972	134,712	742,527	157,728	5,042,048
September	385,401	641,501	1,637,988	236,817	525,689	155,214	224,788	141,782	127,340	727,880	154,172	4,958,572
October	416,884	607,812	1,706,699	249,511	523,931	170,046	150,846	130,161	136,662	731,185	161,347	4,985,084
November	402,147	635,145	1,618,378	216,804	472,980	152,042	136,806	116,090	123,259	696,303	145,163	4,715,117
December	385,815	664,839	1,625,773	193,560	443,693	148,394	218,542	144,080	129,648	716,549	144,876	4,815,769
Total	4,758,177	7,998,895	19,048,507	2,503,415	5,488,505	1,848,540	2,442,016	1,745,064	1,549,581	8,554,096	1,799,693	57,736,489

estimated figures shown in italics - 1998 data used



Table 2 - 2000 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Frenchtown-Uhlerstown	Milford/Upper Black Eddy	Riegelsville	Northampton Street	Belvidere-Riverton	Total
January	354,953	522,145	1,449,918	180,150	460,159	121,126	116,689	103,768	113,577	639,984	126,929	4,189,398
February	374,163	602,660	1,524,147	186,017	428,088	123,545	117,817	103,362	112,030	631,240	127,772	4,330,841
March	393,175	670,395	1,726,252	219,450	507,242	151,650	140,811	122,656	129,597	736,211	153,087	4,950,526
April	402,010	653,334	1,661,627	211,375	490,405	157,217	140,604	123,509	130,143	709,859	146,517	4,826,600
May	432,198	667,059	1,799,786	231,512	545,164	171,705	158,492	136,697	141,155	750,832	162,747	5,197,347
June	426,805	715,613	1,784,701	219,677	531,240	174,491	150,987	135,368	126,957	713,376	158,273	5,137,488
July	414,115	729,442	1,708,197	215,597	544,956	182,191	156,645	138,305	121,596	535,657	157,508	4,904,209
August	427,226	737,377	1,778,760	212,985	536,055	173,785	154,249	138,079	122,257	703,623	160,969	5,145,365
September	411,249	702,489	1,679,540	198,498	459,193	160,935	142,706	186,125	116,830	673,240	153,455	4,884,260
October	421,079	706,943	1,773,687	227,273	476,371	173,535	150,846	140,732	122,529	688,282	160,794	5,042,071
November	394,851	624,395	1,689,408	190,503	414,140	113,980	129,646	119,905	120,873	654,722	140,849	4,593,272
December	392,317	616,301	1,613,534	183,114	428,521	144,219	135,722	115,091	122,636	668,753	148,246	4,568,454
Total	4,844,141	7,948,153	20,189,557	2,476,151	5,821,534	1,848,379	1,695,214	1,563,597	1,480,180	8,105,779	1,797,146	57,769,831

estimated figures due to adjustments shown in *italics*



Table 3- 2001 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Frenchtown-Uhlerstown	Milford-Upper Black Eddy	Riegelsville	Northampton Street	Belvidere-Riverton	Total
January	384,765	565,225	1,542,037	180,772	420,000	120,000	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	115,000	519,383	156,282	4,574,153
October	453,607	629,170	1,763,790	227,273	479,347	180,683	146,865	137,916	131,110	550,054	165,831	4,865,646
November	425,718	624,395	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	615,000	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*



Table 4 - 2002 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Frenchtown-Uhlerstown	Milford-Upper Black Eddy	Riegelsville	Northampton Street	Belvidere-Riverton	Total
January	422,632	570,000	1,634,452	210,867	407,964	138,820	109,044	114,577	98,000	521,534	138,185	4,366,075
February	403,337	550,118	1,600,000	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	475,000	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	205,000	478,915	166,275	127,521	125,452	119,243	633,977	147,772	4,969,679
December	530,991	632,131	2,150,000	215,000	470,157	158,000	114,477	120,815	118,000	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 5 - 2003 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Frenchtown-Upperstown	Milford-Upper Black Eddy	Riegelsville	Northampton Street	Belvidere-Riverton	Total
January	564,310	550,000	1,599,968	196,664	429,548	157,104	117,000	100,000	79,000	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	564,018	650,000	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	611,738	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	203,903	152,565	148,691	105,971	721,007	185,300	5,330,165
August	569,290	626,182	1,797,945	223,958	527,067	195,991	147,191	145,387	103,158	720,548	176,188	5,232,905
September	547,070	596,817	1,725,191	219,640	482,969	178,125	133,080	136,146	94,722	691,376	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 6 - 2004 Toll Supported Bridge Volumes

Month	Lower Trenton	Calhoun Street	Scudder Falls	Washington Crossing	New Hope-Lambertville	Centre Bridge-Stockton	Frenchtown-Upperstown	Milford-Upper Black Eddy	Riegelsville	Northampton Street	Belvidere-Riverton	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>	<i>534,777</i>	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>527,089</i>	<i>572,532</i>	<i>1,633,976</i>	<i>199,306</i>	<i>458,381</i>	<i>153,321</i>	<i>110,861</i>	<i>120,553</i>	<i>94,378</i>	<i>669,187</i>	<i>149,241</i>	<i>4,688,825</i>
Total	6,381,136	6,902,428	20,584,835	2,710,354	3,590,047	2,137,326	1,526,996	1,610,326	1,139,860	8,325,806	1,932,415	56,841,529

estimated figures due to adjustments shown in *italics*
 adjusted figures due to counter malfunction rounded
 December data from 2003



Table 7: Trenton-Morrisville Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	4,050,703	4,058,566	4,198,434	4,545,539				
1b - passenger car - token	2,580,618	2,535,076	2,511,277	2,034,702				
				141,903				
1 - passenger car					5,768,483	6,231,064	6,355,685	1.020
2 - 2-axle truck	180,277	169,766	164,115	168,564	145,020	158,641	160,227	1.010
3 - 3-axle truck	86,630	83,218	79,227	66,800	60,411	70,877	72,295	1.020
4 - 4-axle truck	69,992	76,610	66,293	63,157	46,618	49,192	50,668	1.030
5 - 5-axle truck	410,377	348,389	332,546	279,071	165,587	167,767	167,767	1.000
6 - 6-axle truck	3,429	2,746	3,329	2,350	1,404	1,527	1,481	0.970
8 - special permit *	227	267	223	277	69	-	-	1.000
7 - 7-axle truck	267	58	176	119	122	148	148	1.000
total toll	7,382,520	7,274,696	7,355,620	7,302,482	6,187,714	6,679,216	6,808,271	

* Special Permit vehicles were classified differently in 2004 from previous years

class	toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.67	6,355,685	\$ 4,231,246.30
2 - 2-axle truck	\$ 4.78	160,227	\$ 765,554.03
3 - 3-axle truck	\$ 7.90	72,295	\$ 571,383.56
4 - 4-axle truck	\$ 10.53	50,668	\$ 533,461.01
5 - 5-axle truck	\$ 13.05	167,767	\$ 2,189,909.74
6 - 6-axle truck	\$ 15.76	1,481	\$ 23,341.97
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.38	148	\$ 2,720.97
Totals for 2005		6,808,271	\$ 8,317,617.59



Table 8: New Hope-Lambertville Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 ** volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	2,255,355	2,277,760	2,322,881	2,305,906				
1b - passenger car - token	979,507	1,028,858	1,075,953	926,094				
				44,048				
1 - passenger car					1,414,641	2,009,380	1,667,785	0.830
2 - 2-axle truck	107,618	114,223	111,676	106,192	39,377	52,128	51,607	0.990
3 - 3-axle truck	45,262	45,469	52,953	63,141	21,936	23,897	25,809	1.080
4 - 4-axle truck	26,248	24,055	27,066	29,167	7,097	7,863	8,256	1.050
5 - 5-axle truck	79,948	76,774	78,516	72,739	26,497	27,201	27,201	1.000
6 - 6-axle truck	1,738	1,663	1,906	1,466	799	809	801	0.990
8 - special permit *	757	506	226	292	1	-	-	1.000
7 - 7-axle truck	24	19	19	32	42	75	75	1.000
total toll - two directional - 2002 and earlier one directional tolls - 2003 and later	3,569,327	3,671,196	3,671,196	3,549,077	1,510,390	2,121,353	1,781,534	

* Special Permit vehicles were classified differently in 2004 from previous years

** 2004 auto volumes higher than normal due to New Hope Lambertville Toll Supported Bridge Closures

class	toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.65	1,667,785	\$ 1,092,375.22
2 - 2-axle truck	\$ 4.82	51,607	\$ 248,860.05
3 - 3-axle truck	\$ 7.95	25,809	\$ 205,062.03
4 - 4-axle truck	\$ 10.59	8,256	\$ 87,464.67
5 - 5-axle truck	\$ 13.13	27,201	\$ 357,231.78
6 - 6-axle truck	\$ 15.87	801	\$ 12,709.02
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.51	75	\$ 1,388.13
Totals for 2005		1,781,534	\$ 2,005,090.90



Table 9: Interstate 78 Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	3,377,176	3,355,038	3,485,261	4,490,818				
1b - passenger car - token	1,390,860	1,380,023	1,447,607	1,687,182				
				149,910				
1 - passenger car					6,541,760	6,923,274	7,061,739	1.020
2 - 2-axle truck	183,579	183,885	180,536	215,748	199,840	221,240	223,452	1.010
3 - 3-axle truck	82,069	82,353	80,874	98,022	102,434	93,277	93,277	1.000
4 - 4-axle truck	105,054	101,347	94,499	111,582	115,586	110,641	109,535	0.990
5 - 5-axle truck	1,553,361	1,614,781	1,625,638	1,883,403	1,891,300	1,943,192	1,982,056	1.020
6 - 6-axle truck	20,116	15,234	15,676	18,236	30,728	35,265	36,676	1.040
8 - special permit *	23,258	27,196	27,325	30,238	809	10	10	1.000
7 - 7-axle truck	597	629	617	794	1,101	1,435	1,507	1.050
total toll	6,736,070	6,760,486	6,958,033	8,685,933	8,883,558	9,328,334		

* Special Permit vehicles were classified differently in 2004 from previous years

class	toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.67	7,061,739	\$ 4,701,296.09
2 - 2-axle truck	\$ 4.82	223,452	\$ 1,076,470.51
3 - 3-axle truck	\$ 7.91	93,277	\$ 738,107.39
4 - 4-axle truck	\$ 10.48	109,535	\$ 1,147,847.55
5 - 5-axle truck	\$ 13.14	1,982,056	\$ 26,043,132.88
6 - 6-axle truck	\$ 15.81	36,676	\$ 579,669.32
8 - special permit	varies	10	\$ 187.20
7 - 7-axle truck	\$ 18.44	1,507	\$ 27,784.17
Totals for 2005		9,508,252	\$ 34,314,495.11



Table 10: Easton-Phillipsburg Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	2,369,373	2,507,133	2,776,237	2,891,347				
1b - passenger car - token	3,534,635	3,588,162	3,795,821	2,925,012				
1 - passenger car				126,125	5,011,429	5,515,739	5,626,054	1.020
2 - 2-axle truck	171,649	179,296	183,098	159,128	154,235	167,883	171,241	1.020
3 - 3-axle truck	80,145	79,530	78,914	75,508	62,981	59,852	56,859	0.950
4 - 4-axle truck	48,032	49,045	51,215	36,343	41,555	44,619	46,850	1.050
5 - 5-axle truck	444,040	511,241	545,467	323,098	259,050	262,101	263,412	1.005
6 - 6-axle truck	6,480	9,254	7,613	4,454	3,841	4,770	4,865	1.020
8 - special permit *	2,577	3,184	6,643	3,115	75	-	-	1.000
10 - local bus	6,677	6,614	3,293					
11 - 7-axle truck	94	178	185	142	205	206	206	1.000
total toll vehicles	6,663,702	6,933,637	7,448,486	6,544,272	5,533,371	6,055,170	6,169,487	

* Special Permit vehicles were classified differently in 2004 from previous years

class	toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.66	5,626,054	\$ 3,715,242.43
2 - 2-axle truck	\$ 4.82	171,241	\$ 825,834.12
3 - 3-axle truck	\$ 7.94	56,859	\$ 451,184.37
4 - 4-axle truck	\$ 10.52	46,850	\$ 492,913.88
5 - 5-axle truck	\$ 13.13	263,412	\$ 3,457,860.66
6 - 6-axle truck	\$ 15.83	4,865	\$ 77,025.33
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.47	206	\$ 3,804.57
Totals for 2005		6,169,487	\$ 9,023,865.35



Table 11: Portland Columbia Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	181,051	190,544	196,401	283,695				
1b - passenger car - token	793,671	828,699	849,251	761,168				
				32,380				
1 - passenger car					1,082,374	1,149,834	1,195,827	1.040
2 - 2-axle truck	22,346	23,146	24,818	25,287	27,528	28,519	29,660	1.040
3 - 3-axle truck	11,309	9,362	8,859	8,326	9,415	11,717	12,654	1.080
4 - 4-axle truck	3,407	4,019	6,532	5,839	5,795	6,085	6,207	1.020
5 - 5-axle truck	30,898	31,690	29,241	28,203	28,508	31,251	32,189	1.030
6 - 6-axle truck	493	253	263	191	226	416	416	1.000
8 - special permit *	40	61	65	74	10	-	-	1.000
7 - 7-axle truck	3	2	5	4	5	13	13	1.000
total toll vehicles	1,043,218	1,087,776	1,115,435	1,145,167	1,153,861	1,227,835	1,276,966	

* Special Permit vehicles were classified differently in 2004 from previous years

class	2004 toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.66	1,195,827	\$ 789,680.87
2 - 2-axle truck	\$ 4.81	29,660	\$ 142,718.23
3 - 3-axle truck	\$ 7.97	12,654	\$ 100,898.31
4 - 4-axle truck	\$ 10.62	6,207	\$ 65,908.17
5 - 5-axle truck	\$ 13.22	32,189	\$ 425,615.38
6 - 6-axle truck	\$ 15.91	416	\$ 6,617.72
8 - special permit	varies	0	\$ 0.00
7 - 7-axle truck	\$ 18.56	13	\$ 241.24
Totals for 2005		1,276,966	\$ 1,531,679.91



Table 12: Delaware Water Gap (Interstate 80) Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	3,792,027	3,945,907	4,031,337	4,533,423				
1b - passenger car - token	3,497,875	3,584,002	3,683,760	3,359,933				
				222,494				
1 - passenger car					8,057,439	8,233,795	8,357,302	1.015
2 - 2-axle truck	161,154	164,832	162,370	160,361	143,521	160,044	168,046	1.050
3 - 3-axle truck	86,548	91,704	87,635	87,938	87,427	92,397	95,169	1.030
4 - 4-axle truck	63,808	61,728	53,788	52,109	52,233	57,374	60,243	1.050
5 - 5-axle truck	1,195,793	1,227,496	1,187,027	1,166,886	1,108,058	1,128,271	1,145,195	1.015
6 - 6-axle truck	12,146	13,392	14,393	14,797	19,127	20,943	22,200	1.060
8 - special permit *	17,982	19,803	19,898	18,068	780	68	68	1.000
7 - 7-axle truck	357	414	494	353	981	1,326	1,326	1.000
total toll vehicles	8,827,690	9,109,278	9240702	9,616,362	9,469,566	9,694,218	9,849,549	

* Special Permit vehicles were classified differently in 2004 from previous years

class	2004 toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.66	8,357,302	\$ 5,533,842.09
2 - 2-axle truck	\$ 4.82	168,046	\$ 810,210.85
3 - 3-axle truck	\$ 7.92	95,169	\$ 754,182.02
4 - 4-axle truck	\$ 10.52	60,243	\$ 633,971.57
5 - 5-axle truck	\$ 13.17	1,145,195	\$ 15,086,241.41
6 - 6-axle truck	\$ 15.84	22,200	\$ 351,666.39
8 - special permit	varies	68	\$ 3,644.35
7 - 7-axle truck	\$ 18.48	1,326	\$ 24,502.52
Totals for 2005		9,849,549	\$ 23,198,261.21



Table 13: Milford-Montague Toll Bridge Volume and Revenue Projections

class	1999 volume	2000 volume	2001 volume	2002 volume	2003 volume	2004 volume	2005 volume (projected)	factor from 2004 to 2005
1a - passenger car - cash	436,246	428,232	427,388	522,139				
1b - passenger car - token	860,571	861,372	859,922	777,299				
				33,314				
1 - passenger car					1,229,834	1,304,934	1,337,557	1.025
2 - 2-axle truck	20,670	20,189	21,155	23,330	21,418	22,944	24,091	1.050
3 - 3-axle truck	6,175	5,263	5,198	5,583	5,139	5,413	5,630	1.040
4 - 4-axle truck	2,429	2,092	1,641	1,670	2,145	1,988	1,968	0.990
5 - 5-axle truck	11,370	12,747	12,641	12,737	10,626	10,449	10,240	0.980
6 - 6-axle truck	287	236	153	228	119	113	113	1.000
8 - special permit *	88	87	69	95	7	3	3	1.000
7 - 7-axle truck	36	28	24	18	41	41	41	1.000
total toll	1,337,872	1,330,246	1,328,191	1,376,413	1,269,329	1,345,885	1,379,643	

* Special Permit vehicles were classified differently in 2004 from previous years

class	2004 toll	2005 volume (projected)	2005 revenue
1 - passenger car	\$ 0.66	1,337,557	\$ 880,876.36
2 - 2-axle truck	\$ 4.84	24,091	\$ 116,610.80
3 - 3-axle truck	\$ 7.98	5,630	\$ 44,935.23
4 - 4-axle truck	\$ 10.62	1,968	\$ 20,892.57
5 - 5-axle truck	\$ 13.19	10,240	\$ 135,037.95
6 - 6-axle truck	\$ 15.92	113	\$ 1,799.40
8 - special permit	varies	3	\$ 100.00
7 - 7-axle truck	\$ 18.58	41	\$ 761.60
Totals for 2005		1,379,643	\$ 1,201,013.92



Table 14: Volume and Revenue Comparison -- 2004 to 2005

Revenue Summary by Bridge/District		2004 Volumes *	2004 Revenues **	2005 Volume (Projected)	2005 Revenue (Projected)	Change in Actual vs. Projected Volume from 2004 to 2005		Change in Actual vs. Projected Revenue from 2004 to 2005	
						vehicles	percent	dollars	percent
District									
1	Trenton-Morrisville	6,679,216	\$ 8,211,669.99	6,808,271	\$ 8,317,617.59	129,055	1.93%	\$ 105,947.60	1.29%
1	New Hope-Lambertville	2,121,353	\$ 2,226,596.24	1,781,534	\$ 2,005,090.90	-339,819	-16.02%	\$ (221,505.34)	-9.95%
2	Interstate 78	9,328,334	\$ 33,731,132.61	9,508,252	\$ 34,314,495.11	179,918	1.93%	\$ 583,362.50	1.73%
2	Easton-Phillipsburg	6,055,170	\$ 8,963,277.14	6,169,487	\$ 9,023,865.35	114,317	1.89%	\$ 60,588.21	0.68%
3	Portland-Columbia	1,227,835	\$ 1,476,801.20	1,276,966	\$ 1,531,679.91	49,131	4.00%	\$ 54,878.71	3.72%
3	Delaware Water Gap	9,694,218	\$ 22,976,411.02	9,849,549	\$ 23,198,261.21	155,331	1.60%	\$ 221,850.19	0.97%
3	Milford-Montague	1,345,885	\$ 1,183,181.50	1,379,643	\$ 1,201,013.92	33,758	2.51%	\$ 17,832.42	1.51%
	Total	36,452,011	\$ 78,769,069.70	36,773,702	\$ 79,592,024.00	321,691	0.88%	\$ 822,954.30	1.04%

* 2004 volumes taken as sum of 11 monthly reports from January to November, with December 2004 volumes approximated

** 2004 revenues taken as sum of 11 monthly reports from January to November, with December 2004 revenues approximated



Table 15: Actual Revenue and Expenditures for 2004

District	Bridge	2004 Volume *	2004 Revenue **
1	Trenton-Morrisville	6,679,216	\$ 8,211,669.99
1	New Hope-Lambertville	2,121,353	\$ 2,226,596.24
2	Interstate 78	9,328,334	\$ 33,731,132.61
2	Easton-Phillipsburg	6,055,170	\$ 8,963,277.14
3	Portland-Columbia	1,227,835	\$ 1,476,801.20
3	Delaware Water Gap	9,694,218	\$ 22,976,411.02
3	Milford-Montague	<u>1,345,885</u>	<u>\$ 1,183,181.50</u>
	Total	36,452,011	\$ 78,769,069.70
	Total Toll Revenue	(From above)	\$ 78,769,069.70
	Interest Income	(Provided by Commission)	\$ 2,700,000.00
	Other Income	(Provided by Commission)	<u>\$ 236,000.00</u>
	1. Total Revenue - 2004		\$ 81,705,069.70
	2. Operating Expenses - 2004	(Provided by Commission)	<u>\$ 34,572,536.00</u>
	3. Net Revenue	(Line 1 - Line 2)	\$ 47,132,533.70
	4. Maximum Annual Debt Service	(Provided by Commission)	\$ 12,092,850.00
	5. 130% of Maximum Annual Debt Service		\$ 15,720,705.00
<p>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).</p>			
*	December 2004 Volumes are approximated		
**	December 2004 Revenues are approximated		



Table 16: Projected Revenue and Expenditures for 2005

Projected Revenue by Bridge/District		2005 Volume	2005 Revenue
1	Trenton-Morrisville	6,808,271	\$ 8,317,617.59
1	New Hope-Lambertville	1,781,534	\$ 2,005,090.90
2	Interstate 78	9,508,252	\$ 34,314,495.11
2	Easton-Phillipsburg	6,169,487	\$ 9,023,865.35
3	Portland-Columbia	1,276,966	\$ 1,531,679.91
3	Delaware Water Gap	9,849,549	\$ 23,198,261.21
3	Milford-Montague	<u>1,379,643</u>	<u>\$ 1,201,013.92</u>
Total		36,773,702	\$ 79,592,024.00
Total Toll Revenue		(From above)	\$ 79,592,024.00
Interest Income		(Provided by Commission)	\$ 2,957,249.00
Other Income		(Provided by Commission)	<u>\$ 231,750.00</u>
1. Total Projected Revenue - 2005			\$ 82,781,023.00
2. Operating Expenses - 2005		(Provided by Commission)	<u>\$ 39,166,155.00</u>
3. Net Revenue		(Line 1 - Line 2)	\$ 43,614,868.00
4. Maximum Annual Debt Service		(Provided by Commission)	\$ 12,092,850.00
5. Projected Debt Service Coverage Ratio		(Line 3 / Line 4)	3.61
<p>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).</p>			