



Legislative Budget and Finance Committee

A JOINT COMMITTEE OF THE PENNSYLVANIA GENERAL ASSEMBLY

Offices: Room 400 • Finance Building • Harrisburg • Tel: (717) 783-1600

Mailing Address: P.O. Box 8737 • Harrisburg, PA 17105-8737

Facsimile (717) 787-5487 • Email: PALBFC@aol.com

SENATORS

CLARENCE D. BELL

Chairman

PATRICK J. STAPLETON

Vice Chairman

ROY C. AFFLERBACH

GERALD J. LAVALLE

CHARLES D. LEMMOND, JR.

JEFFREY E. PICCOLA

PA TURNPIKE COMMISSION PERFORMANCE AUDIT

Implementation of Act 61 Turnpike Improvement and Extension Projects

REPRESENTATIVES

RONALD C. RAYMOND

Secretary

WILLIAM R. LLOYD, JR.

Treasurer

ROBERT W. GODSHALL

TIMOTHY L. PESCI

FRANK J. PISTELLA

SAMUEL H. SMITH

EXECUTIVE DIRECTOR

PHILIP R. DURGIN

CHIEF ANALYST

JOHN H. ROWE, JR.

Report I
April 1997

Table of Contents

	<u>Page</u>
Report Summary and Recommendations.....	1
I. Introduction	19
II. Act 1985-61, as Amended	23
III. Status and Costs of PTC Implementation of Act 61 Roadway Improvement and Extension Projects	28
Status of Projects.....	28
Project Costs	36
IV. The Mon/Fayette Expressway and Southern Beltway Projects	39
Project Background	39
The Project Development Process.....	40
PTC's Project Management Structure.....	43
Status of the Mon/Fayette Expressway Projects	45
Status of the Southern Beltway Projects	53
Summary of Mon/Fayette Expressway and Southern Beltway Project Costs	57
Project Support and Opposition.....	58
V. PTC Financing of the Act 61 Projects.....	63
Revenue Bonds	63
Oil Company Franchise Tax	67
Federal Funding	68
Toll Increases.....	71
Funding From Other Agencies	73
Future Funding Strategy	73
VI. PTC Compliance With State and Federal Requirements	85
Act 1985-61, as Amended.....	85
Federal Requirements.....	86

Table of Contents
(Continued)

	<u>Page</u>
VII. PTC Expenditure of Oil Company Franchise Tax Revenues	90
Oil Company Franchise Tax Transfers to the PTC	90
PTC Accounting for Oil Company Franchise Tax Revenues	91
PTC Expenditure of Oil Company Franchise Tax Revenues	91
Audit Oversight	101
VIII. Other Related Issues.....	104
Financial Operating Condition of Act 61 Turnpike Extensions	104
Impacts of Act 61 Implementation on the PTC.....	108
PTC Award of Bond Counsel Contracts	114
Recognition of PTC Project Implementation Efforts	119
PTC Bond Ratings.....	120
Potential Act 61 Project Cost Savings	123
Act 61 Project Overlaps With PennDOT's Twelve-Year Plan	126
Other PTC Roadway Improvement and Extension Activity	128
IX. Background Information on the Pennsylvania Turnpike Commission.....	130
X. Appendices	139
A. Legislative History of Act 61 Project Priority List	140
B. Chronology of Pennsylvania Turnpike Improvements.....	141
C. Turnpike Improvement and Extension Projects Under Act 1985-61, as Amended	142
D. U.S. Route 219 Corridor Feasibility Study Maps	144
E. PA Turnpike Tolls and Per Mile Rates	146

Table of Contents
(Continued)

	<u>Page</u>
X. Appendices (Continued)	
F. Funds Established by the PTC to Account for Oil Company Franchise Tax Revenues.....	148
G. PTC Expenditures From Oil Company Franchise Tax Monies Classified as Purchases, by Project	150
H. Definitions of Key Terms Related to the Transportation Project Development Process	152
I. Pending Legislation Related to the Pennsylvania Turnpike Commission	154
J. Turnpike Commission Response to This Report.....	155

Exhibit 2

Status of Act 61 Roadway Improvement and Extension Activity by the Pennsylvania Turnpike Commission (As of January 1997)

	Completed	Under Construction	Study/Design Planning	Alternate Project Completed	Project Deemed Not Feasible	On Hold	Not Initiated
§ 8911 - Improvement and Extension Authorizations:							
1 Widen Turnpike to Six Lanes between Northeast Extension and Delaware River Interchange.	X						
2 Construct I-95 Interchange with Turnpike.			X				
3 Construct I-476 Interchange (Mid-County) with Turnpike.	X						
4 Construct Keyser Avenue Interchange with PA Turnpike.	X						
5 Construct Beaver Valley Expressway (James E. Ross Highway).	X						
6 Construct Greensburg Bypass (Amos K. Hutchinson Bypass).	X						
7 Construct Additional Lehigh Tunnel on Northeast Extension.	X						
8 Construct Private Interchange with New Cumberland Army Depot.				X			
9 Construct an Interchange with S.R. 903 on Northeast Extension.					X		
§ 8912 - Subsequent Extension Authorizations:							
1 Construct the Mon Valley Expressway from U.S. Route 40 northerly to I-376 including the Southern Beltway toward the Midfield Terminal, Greater Pittsburgh Airport.							
I-70 to S.R. 51 Project. ^{a/}		X	X				
S.R. 51 to Pittsburgh Project.			X				
S.R. 60 to U.S. 22 Project (Southern Beltway).			X				
U.S. 22 to I-79 Project (Southern Beltway).			X				
I-79 to Mon/Fayette Expressway Project (Southern Beltway).			X				
2 Construct the Mon Valley Expressway from U.S. Route 40 southerly to West Virginia border.							
West Virginia to Uniontown. ^{a/}		X	X				
Uniontown to Brownsville.			X				
3 Construct toll road from the Turnpike Exit 10 (Somerset) to Interchange 16 on I-80 near Dubois utilizing existing Route 219 where feasible.						X	
4 Construct an interchange for access to the International Distribution Center at the Wilkes-Barre-Scranton International Airport on Northeast Extension.						X	

Exhibit 2 (Continued)

§ 8912 - Subsequent Extension Authorizations (Continued):

	Completed	Under Construction	Study/Design Planning	Alternate Project Completed	Project Deemed Not Feasible	On Hold	Not Initiated
5 Construct from Turnpike Exit 10 (Somerset) a toll road southerly along U.S. Route 219 to the Maryland State Line.							X
6 Construct a toll road along U.S. Route 219 from Interchange 16 on I-80 near DuBois to connect with U.S. Route 219 Expressway south of Bradford.							X

§ 8913 - Additional Subsequent Extension Authorizations:

1 Construct extension from I-80 Interchange 23 at Milesburg southwest along U.S. 220 to connection with existing U.S. 220 Expressway south of Bald Eagle.							X
---	--	--	--	--	--	--	---

§ 8914 - Further Subsequent Extension Authorizations:

1 Construct extension from intersection of SR 65 and Crows Run Road in Beaver County southeast to a point near Perry Highway Interchange with Turnpike.							X
2 Construct extension from Exit 5 of Turnpike north to Brookville, Jefferson County to intersection with I-80.							X
3 Construct extension into various areas of Berks County to complete the inner and outer loop systems for the City of Reading and to complete the missing links on Routes 222 to 422 to 1035.							X
4 Construct extension at or near the intersections of I-70, I-76, and T.R. 119 in Youngwood, Westmoreland County along T.R. 119 and T.R. 66 to the intersection of T.R. 22 with a bypass around the City of Greensburg then north on T.R. 66 to T.R. 356, and north on T.R. 356 to the intersection with T.R. 28. ^{b/}							X
5 Construct extension at or near the intersection of T.R. 66 and T.R. 22 in Salem Township, Westmoreland County, then west paralleling T.R. 22 to Exit 6 of I-76.							X

^aSegments of this project are under construction as well as in design.

^bThe first part of the project description is in essence the Amos K Hutchinson Bypass. The second part of the project description pertains to the extension of that highway along T.R. 66 to T.R. 356 and then north along T.R. 356 to intersect with T.R. 28.

Source: Developed by LB&FC staff from an examination of Act 1985-61, as amended, and project records obtained from the PA Turnpike Commission.

- d. **PTC Compliance Testing.** Based on LB&FC staff review of project files and records, it appears that the PTC is in compliance with the provisions of Act 1985-61, as amended, as well as pertinent federal requirements of the Intermodal Surface Transportation Efficiency Act (ISTEA), the National Environmental Policy Act (NEPA), and the Clean Water Act.
- e. **Project Recognition.** The PTC has received recognition from several sources for efforts involved in implementing Act 61 projects. These include one resulting from the President's National Performance Review (the "Hammer Award") received in conjunction with PennDOT as well as a Pennsylvania Quality Initiatives Achievement Award. (See pp. 119 to 120.)
- f. **Bond Ratings.** Throughout the implementation of Act 61, the PTC has maintained very strong bond ratings, many in the AAA or Aaa category. (See pp. 120 to 122.)
- g. **Other Roadway Improvement and Extension Activity Required by Legislation.** During the Act 61 implementation time frame, the Commission also completed three projects that were authorized by Act 1978-331. These include the Beaver Valley Climbing Lane, Philadelphia Area Interchanges, and the Downingtown Interchange. The total cost of these projects, which was paid with Turnpike revenue bonds issued as part of the 1986 Trust Indenture, was \$55.6 million.

The Mon/Fayette Expressway and Southern Beltway Transportation Projects

2. The PTC is implementing the Mon/Fayette Expressway and Southern Beltway as seven separate projects. (See pp. 45 to 58.)

- a. **The Mon/Fayette Expressway** projects are intended to address the needs of the economically depressed communities of the Mon Valley in the 70-mile north-south corridor between Pittsburgh, PA, and Morgantown, WV. When completed the Mon/Fayette Expressway will link I-68 in West Virginia with the City of Pittsburgh via the Monongahela River Valley. The Mon/Fayette Expressway projects include:
 - *Interstate 68, W. Virginia/PA State Line to State Route 43 near Uniontown, PA (generally referred to in this report as the "West Virginia to Uniontown" project);*
 - *Uniontown to Brownsville, PA;*
 - *Interstate 70 to State Route 51 near Large, PA; and*
 - *State Route 51 to Pittsburgh.*

- b. **The Southern Beltway** projects are intended to improve the efficiency of the movement of people and goods east and west from the Pittsburgh International Airport to the Mon Valley. The proposed Southern Beltway will begin near the Greater Pittsburgh International Airport west of Pittsburgh and loop south of the city connecting with the Mon/Fayette Expressway in Washington County. The Southern Beltway projects include:
- *PA Route 60 to U.S. Route 22;*
 - *Route 22 to Interstate 79; and*
 - *Interstate 79 to the Mon/Fayette Expressway.*
- c. **Project Management.** To implement the Mon/Fayette Expressway and Southern Beltway projects, the PTC is employing standard procedures that are used by PennDOT for developing major transportation projects. This approach referred to as the “Ten-Step Transportation Project Development Process,” is designed to expedite the movement of a project from preliminary to final design. The Commission has established a special project management team structure to administer this process. (See pp. 43 to 45.)
- d. **Implementation Status.** The PTC has received approval from the federal government to advance two of the Mon/Fayette Expressway projects to the construction phase. The PTC has received a Record of Decision (ROD) from the Federal Highway Administration (FHWA) for two of the four component Mon/Fayette Expressway projects (I-68 to S.R. 43 and I-70 to S.R. 51). As of early 1997, environmental impact studies (EIS) were underway for the remaining two Mon/Fayette Expressway projects and for the three component projects of the Southern Beltway.
- e. **Implementation Goals.** The PTC’s goals over the next four years are to (1) complete 25 miles of the Mon/Fayette Expressway between West Virginia and Uniontown and between Interstate 70 and Route 51, and (2) complete EISs referred alignments for the remaining segments of the Mon/Fayette Expressway and Southern Beltway projects.
- f. **Project Support and Opposition.** The planned construction of the Mon/Fayette Expressway and Southern Beltway projects has evoked strong and vocal sentiment both in support of and in opposition to their completion. Concerned citizens, citizen groups, and state, federal, and local government representatives continue to debate the merits of the Mon/Fayette Expressway and Southern Beltway projects even as planning, design, and, in some cases, construction proceeds. Supporters and opponents alike have argued their respective views in various forums. At

the risk of oversimplifying the major positions of these opposing points of view, it appears that generally the proponents believe the projects are necessary to spark an economic recovery of the region, while the opponents believe that more feasible and less-costly alternatives are available but have not been pursued. (See pp. 58 to 62.)

PTC Expenditures to Implement Act 61

3. Through November 30, 1996, the Turnpike Commission had expended a total of \$1.02 billion to implement Act 61. When adjusted for reimbursements, net expenditures by the PTC for Act 61 projects are \$993.6 million.

Table 1

Act 61 Project Expenditures			
(As of November 30, 1996)			
<u>Completed Projects</u>	<u>Expenditures Thru 11/30/96</u>	<u>Participating Agencies^a</u>	<u>Net PTC Expenditures</u>
Six-Lane Widening	\$ 132,088,485	\$ 0	\$132,088,485
Keyser Avenue Interchange	48,132,289	0	48,132,289
Lehigh Tunnel No. 2	72,245,396	39,416	72,205,980
Mid-County Interchange.....	89,886,269	0	89,886,269
Beaver Valley Expressway	251,337,007	0	251,337,007
Greensburg Bypass	286,496,936	839,270	285,657,666
New Cumberland Army Depot Interchange.....	1,406,453	1,355,172	51,281
Subtotal-Completed	\$ 881,592,835	\$ 2,233,858	\$879,358,977
<u>Projects in Process</u>			
Mon/Fayette Expressway:			
West Virginia to Uniontown	\$ 34,396,550	\$ 7,613,880	\$ 26,782,670
Uniontown to Brownsville	5,270,415	862,774	4,407,641
I-70 to Route 51	63,369,892	8,096,894	55,272,998
Route 51 to Pittsburgh.....	6,220,416	1,177,717	5,042,699
Route 40 to I-70	7,186,564	0	7,186,564
Subtotal Mon/Fayette Expressway	\$ 116,443,837	\$17,751,265	\$ 98,692,572
Southern Beltway:			
PA 60 to U.S. 22.....	\$ 3,737,654	\$ 0	\$ 3,737,654
U.S. 22 to I-79	3,737,654	0	3,737,654
I-79 to Mon/Fayette	3,737,654	0	3,737,654
Subtotal Southern Beltway	\$ 11,212,962	\$ 0	\$ 11,212,962
I-95 Interchange	\$ 9,919,170	\$ 5,577,804	\$ 4,341,366
Subtotal-In Process	\$ 137,575,969	\$23,329,069	\$114,246,900
Act 61 Project Totals.....	\$1,019,168,804	\$25,562,927	\$993,605,877

^aIncludes reimbursements from the federal government (FHWA), PennDOT, and the State of West Virginia; also includes a \$39,416 payment made to the PTC as settlement for a workmen's compensation dispute.

Source: Developed by LB&FC staff from PTC accounting records and project reports.

- a. **Expenditures for Completed Projects** - The Turnpike Commission has expended \$881.6 million for the seven projects listed as "completed" on Table 1. When adjusted, net PTC expenditures were \$879.4 million. The most costly of these projects were the Greensburg Bypass at \$285.7 million and the Beaver Valley Expressway at \$251.3 million. The vast majority of funding for the completed Phase I projects has been from toll-supported revenue bonds. Federal funds accounted for less than 1 percent of the total costs of these projects. Projects in process are being supported primarily by Oil Company Franchise Tax revenues.
- b. **Expenditures for Projects in Process** - Through November 30, 1996, the Commission had expended \$137.6 million on projects that are "in process." These include the Mon/Fayette Expressway, the Southern Beltway, and the I-95 Interchange. When adjusted, net PTC expenditures on these projects have amounted to \$114.2 million. Most of this funding has been for Mon/Fayette Expressway projects.

PTC Expenditure of Oil Company Franchise Tax Revenues

4. Through November 30, 1996, the PTC had expended a total of \$109.9 million from Oil Company Franchise Tax revenues and tax revenue bonds to implement Act 61 projects. This included \$98.7 million for the Mon/Fayette Expressway and \$11.2 million for the Southern Beltway.

- a. **Expenditures, by Purchase Category.** Through November 30, 1996, the vast majority of total spending from Oil Company Franchise Tax revenues was for contracts. The PTC has also charged various purchases, internal staff labor costs, and other expenditures against Oil Company Franchise Tax revenues. Detail on expenditures for each of the spending categories is provided in Section VII.

Table 2

PTC Expenditure of Oil Company Franchise Tax Revenues, by Purchase Category (As of November 30, 1996)

<u>Purchase Category</u>	<u>Amount</u>	<u>% of Total</u>
Contracts.....	\$108,615,115	85.1%
Purchases.....	6,078,068	4.8
Labor (PTC Staff Costs)	3,696,372	2.9
Other ^a	<u>9,267,244</u>	<u>7.3</u>
Total	\$127,656,799 ^b	100.0%

^aIncludes land acquisition fees, relocation expenses paid to families moving from properties purchased by the PTC, legal fees and other professional fees, and miscellaneous costs and adjustments.

^bIncludes \$109,905,534 in expenditures from Oil Company Franchise Tax revenues. The remaining \$17,751,265 in federal, state, and other funding included in each of the individual purchase categories is not readily available. Source: Developed by LB&FC staff from PTC fiscal records and project files.

- b. **Expenditures, by Project Activity.** More than one-half of all spending from Oil Company Franchise Tax revenues has thus far been for design activities and various studies that are required by the project development process. About 14 percent of the spending, or \$17.5 million has been for actual construction. (See Table 3.)

Table 3

PTC Expenditures From Oil Company Franchise Tax Revenues, by Project Phase or Activity*

(Through November 30, 1996)

<u>Project Phase/Activity</u>	<u>Amount</u>	<u>% of Total</u>
Design (Preliminary and Final)	\$ 57,986,255	45.4%
Construction.....	17,453,542	13.7
Right-of-Way and Land Acquisitions	11,896,866	9.3
Design Location Study.....	10,248,059	8.0
Project Review (Michael Baker, Jr., Inc.)	8,436,413	6.6
Engineering.....	7,771,579	6.1
Management	5,286,491	4.1
Traffic and Revenue Study	2,609,693	2.0
Public Relations	1,996,888	1.6
Mapping	878,791	0.7
Utility Relocations	728,406	0.6
Corridor Location Study	632,421	0.5
Building Demolition.....	82,142	0.1
Other Miscellaneous	<u>1,649,253</u>	<u>1.3</u>
Total	\$127,656,799 ^a	100.0%

*All expenditures on this table were made for the Mon/Fayette Expressway and Southern Beltway Projects.

^aThis figure includes \$17,751,265 in reimbursements from participating agencies. Actual expenditures from Oil Company Franchise Tax revenues were \$109,905,534. The amount of federal, state, and other funding in each of the individual categories is not readily available.

Source: Developed by LB&FC staff from examination of PTC project reports and accounting records.

Oil Company Franchise Tax Activity Report

5. As required, the PTC has established a number of special funds and related accounts to record Oil Company Franchise Tax revenues and maintains these tax transfers separately from revenues received from tolls and other revenues. Based on LB&FC staff analysis, we determined that additions to these PTC Oil Company Franchise accounts between June 1, 1992, and November 30, 1996, totaled \$359.2 million while deductions, or expenditures, totaled \$146.0 million. The \$213.2 million balance in the accounts was, as of November 30, 1996, committed to retiring Oil Company Franchise Tax revenue bonds and to the Mon/Fayette Expressway and Southern Beltway projects.

Table 4

Oil Company Franchise Tax Funds Activity Report*

Balance, June 1, 1992.....		\$0
Additions:		
Oil Company Franchise Tax Receipts.....	\$199,890,512	
Bond Proceeds	110,295,276	
Earned Interest	31,310,881	
Federal Funds (FHWA)	14,271,538 ^a	
West Virginia DOT.....	<u>3,479,726^a</u>	
Total Additions.....		\$359,247,933
Deductions:		
Act 61 Project Costs to Date	\$127,656,799 ^b	
Bond Interest Paid	13,814,468	
Bond Retirements	2,285,000	
Bond Expense	1,061,108	
Employee Benefits	690,989 ^c	
Other Professional Fees.....	240,573	
Legal Fees.....	113,865	
Bank Service Charges.....	86,450	
Miscellaneous	69,092	
Real Estate Taxes.....	11,400	
Trustee Fees	<u>7,864</u>	
Total Deductions.....		<u>\$(146,037,608)</u>
Balance, November 30, 1996.....		\$ 213,210,325

*Includes activity of all PTC Oil Company Franchise Tax Funds through November 30, 1996.

^aReimbursement for work done on the Mon/Fayette Project.

^bSee breakdown of these costs in Table 3.

^cThis cost represents the pro rata share of employee benefits for PTC employees who have expended work hours on the Mon/Fayette Expressway and the Southern Beltway projects.

Source: Developed by LB&FC staff using information obtained from the PTC Controller's Office.

Projected Costs to Fully Implement Act 61 Projects

6. The estimated total cost to fully implement Act 61 in its present form is in the range of \$7.5 billion to \$12 billion in current dollars. This includes:

- \$1.02 billion spent through November 30, 1996;
- \$2.46 billion in projected costs to complete the Mon/Fayette Expressway and Southern Beltway projects; and
- an estimate (by LB&FC staff) of \$4 billion to \$8 billion to complete all other remaining projects.

PTC Financing of Act 61 Projects to Date

7. Through late 1996, the bulk of Act 61 project costs had been financed with toll-supported revenue bonds. Toll increases, state Oil Company Franchise Tax monies, federal funds, and reimbursements from PennDOT and the State of West Virginia (see Table 14) have also been used to finance the Act 61 projects.

- a. **Revenue Bonds.** As authorized in statute, the PTC has issued revenue bonds to finance Act 61 projects. As of early 1997, the Commission had issued bonds in the aggregate principal amount of **\$2.276 billion**.
- b. **The Oil Company Franchise Tax.** Through November 30, 1996, the PTC had received **\$199.9 million** from the state Oil Company Franchise Tax. Act 1991-26 provides that the PTC receive an annual share of this tax. This allocation, which amounts to about **\$40 million** a year, is earmarked for construction and for paying debt service on Act 61 projects.
- c. **Federal Funding.** Through November 30, 1996, the PTC had received **\$21.2 million** in federal funding for Act 61 projects. About two-thirds of this amount has been allocated to the Mon/Fayette Expressway projects.
- d. **Toll Increases.** Since the passage of Act 61, the Commission has authorized two toll increases, one in 1987 and the other in 1991. Each increased Turnpike toll rates by 30 percent and were necessary to cover debt service incurred by the PTC to implement Act 61 projects. The Turnpike Commission implemented only two other fare increases in its 45 year history prior to the passage of Act 61.
- e. **Funding From Other Agencies.** Funding in support of Act 61 projects has also included revenues received from PennDOT and the State of West Virginia (West Virginia reimbursed the PTC for costs incurred in preparing an environmental impact statement for the West Virginia segment of the project).

Future Funding of Act 61

8. The Turnpike Commission is about \$1.7 billion¹ short of the \$2.5 billion required to complete the seven projects that comprise the Mon/Fayette Expressway and Southern Beltway extensions. In the short term, the PTC is \$92 million short of completing construction on two of the projects (I-68

¹This figure was calculated prior to the passage of Act 1997-3 on April 17, 1997. Act 1997-3 appropriates \$28 million a year to the PTC from revenues to be generated from increases in motor vehicle registration and other fees. These additional monies, which are to be appropriated from the Motor License Fund beginning in FY 1997-98, will, to some degree, reduce this shortfall.

to S.R. 43 and I-70 to S.R. 51) and the environmental impact statements on the other five. Unless additional funding is forthcoming, the PTC will have only enough funding to proceed with construction into FY 1998-99 on these projects.

9. Federal project development regulations require the development of a “reasonable” financial strategy for obtaining the funds required to complete transportation projects. The PTC’s plan to make up the \$1.7 billion shortfall, however, appears to be highly optimistic:

- a. **Available Funding.** Existing sources of funding available to the PTC are not adequate to construct the Mon/Fayette Expressway and Southern Beltway projects. The funding strategy identifies only \$706.8 million in available funding for the Mon/Fayette Expressway and Southern Beltway projects. This includes revenues from existing bond residuals, 1994 and future Oil Company Franchise Tax bonds, Oil Company Franchise Tax accruals, federal funds, and net toll revenues from the new road. Substantial additional revenues from both the state and federal level will be required if these projects are to be completed.
- b. **Future Funding.** The “potential future funding” component of the PTC’s funding plan amounts to \$1.753 billion and is heavily dependent on the receipt of substantial amounts of additional new federal funding and the bonding of as yet unidentified state “user fees and other dedicated funding” in 1999, 2000, and 2003. Depending upon the outcome of federal reauthorization legislation, the PTC may, to some degree, be in competition with PennDOT for the receipt of available federal funding. The “user fees and other dedicated” financing sources listed in the strategy appear to be anticipated receipts of portions of increases in the state gas tax or other user fees. The PTC plan also includes opening year bonding of toll revenues in the amount of \$128 million from PA 60 to U.S. 22 and Route 51 to Pittsburgh²; and a \$70 million loan from a State Infrastructure Bank in which Pennsylvania is not yet certain of membership.

10. Even if additional federal and state revenues are received, the need for a toll increase on the Turnpike Mainline appears to be a real possibility if debt service costs for Act 61 extensions continue to be shifted to the Turnpike’s Mainline.

²PTC officials project that gross toll revenues from these two projects will be sufficient to cover their operating and maintenance costs but will not be sufficient to cover the debt service costs of the two projects.

Impacts of Act 61 Implementation

11. In part due to the absence of an established reporting mechanism, the PTC has not adequately advised the General Assembly of the actual and potential implications of Act 61 implementation on both the PTC's operations and financial affairs.

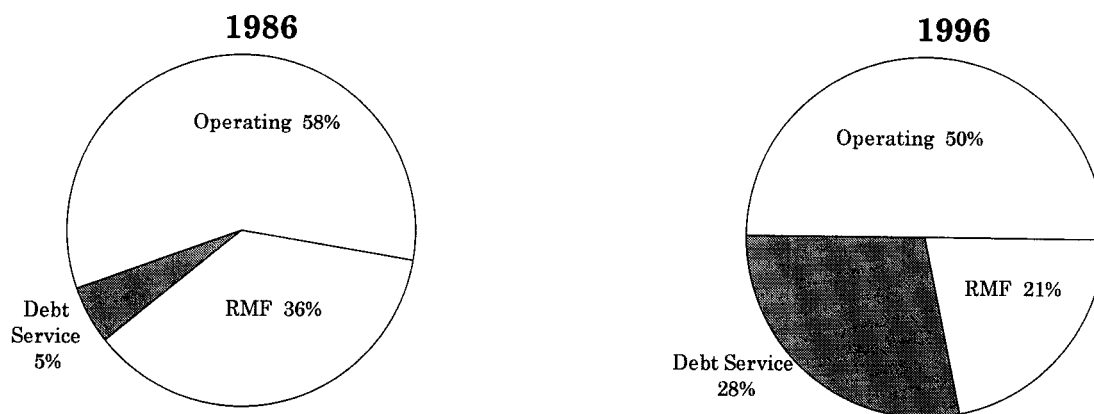
12. Act 61 has had a profound impact on the operations and financial affairs of the Pennsylvania Turnpike:

- **Act 61 initiated a new phase of construction and expansion on the Turnpike, and added the first new route mileage to the system since the Northeast Extension was completed in 1957.**
 - **Implementation of Act 61 projects has increased PTC operating expenses through additional costs for new interchanges and roadways, additional administrative and toll staff, and other operating increases.**
 - **Act 61 implementation has also had pronounced impacts on bonds payable (i.e., total debt), debt service, and transfers to the Commission's Reserve Maintenance Fund.**
- a. **Debt Service.** The act and its resulting borrowing requirements have also placed substantial debt service requirements on the Commission. This additional debt, in essence, provided for the continued existence of the Turnpike Commission at a point in the mid-1980s when the Commission was close to retiring all of its outstanding debt. The law provides that the Turnpike System is to be turned over to PennDOT to operate as part of the state highway system if and when all Turnpike debt is retired. In 1996, PTC debt service costs totaled \$96.0 million, or about 28 cents of each toll dollar collected. This compares to a debt service share of 5.5 cents per toll dollar in 1986. (See pages 108 to 114.)
- b. **Financial Operating Condition of Completed Act 61 Extensions.** Annual traffic volumes and revenues on two completed Act 61 Turnpike extensions (the Beaver Valley Expressway and Greensburg Bypass) are increasing but remain below the PTC's projections. Although revenues generated by each extension are now sufficient to cover the costs of fare collection and routine maintenance, they are covering only a small portion of their debt service. We estimate that the Turnpike's Mainline is covering \$55.5 million a year in debt service for these two extensions. (See pages 104 to 108.)
- c. **Reserve Maintenance Fund.** Implementation of Act 61, as amended, has both increased PTC operating costs and substantially increased debt

service costs. Implementation activities are also reducing the amount of monies available for transfer to the Commission's Reserve Maintenance Fund, a situation which has potential negative implications for necessary maintenance and reconstruction on the Turnpike's Mainline. As shown on Exhibit 3, the PTC transferred 36 percent of its gross revenues to the Reserve Maintenance Fund in 1986 (when debt service was 5 percent of gross revenues). By 1996, the percentage transferred to the Reserve Maintenance Fund dropped to 21 percent with 28 percent going to debt service.

Exhibit 3

Use of PTC Revenues for Operating Expenses, Debt Service Payments, and RMF Transfers (1986 vs 1996)



Source: Pennsylvania Turnpike Commission.

Impacts on Maintenance and Reconstruction on the Turnpike's Mainline

13. As a result of Act 61 implementation, the PTC is required to transfer funds that would otherwise be used for Mainline maintenance and reconstruction to cover increasing debt service costs resulting from Act 61 expansions. The PA Turnpike is the oldest toll road in the Nation and has growing infrastructure needs ranging from total roadway reconstruction (at about \$4 million per mile) to the need for interchange expansions and upgraded fare collection systems. The financial and resource demands posed by Act 61 implementation threaten the Turnpike's ability to continue to adequately maintain the Mainline.

Other Related Matters

14. Potential for Project Cost Savings: The PTC's use of a "fast-tracked" or expedited approach on the Mon/Fayette Expressway projects meets federal compliance requirements and creates the potential for significant time and cost savings. The PTC is using an integrated process initially developed by PennDOT to obtain necessary federal approvals and permits prior to beginning construction. Using this process, the PTC has been able to obtain the required approvals and permits in about two years for each of two Mon/Fayette Expressway projects; the national per project average is 5.6 years. A study of the PTC's use of the expedited process concluded that the PTC could realize net cost savings totaling \$73 million on two Mon/Fayette Expressway projects. These savings are dependent, however, on the availability of funding to proceed with the projects according to their original schedule. (See pages 122 to 126.)

15. Act 61 Project Overlaps With PennDOT's Twelve-Year Plan: There is a degree of overlap between the projects assigned to the PTC by Act 1985-61, as amended, and PennDOT's Statewide Transportation Improvement Program (STIP) for 1997-2000 and companion Twelve-Year Program. The Act 61 projects that appear to be the same as those in the STIP and the Twelve-Year Program are described in Section VIII. While not all of these projects replicate exactly the Act 61 projects, they appear to satisfy the intent of the act. (See pages 126 to 127.)

16. PTC Award of Bond Counsel Contracts: The PTC does not use a competitive selection process to award bond counsel contracts. Retention of bond counsel is at the discretion of the PTC Commissioners. Bond counsel fees paid by the PTC since 1990 for bonds issued under the 1986 and 1994 Trust Indentures totaled \$863,000 (0.1 percent of the amount issued) to five firms. Two firms received 81 percent of these fees. We also found that the PTC frequently uses two separate firms to issue a series of bonds. Although the Commonwealth Executive Branch also does not use competitive selection methods for bond counsel, toll agencies in five of six states contacted by LB&FC staff reported that they award such contracts competitively.

Recommendations

1. **The Turnpike Commission should report to the General Assembly on an ongoing basis concerning the status, costs, and impacts of Act 61 implementation, including the development of:**
 - a. **an annual written report to the Legislature on how the PTC has spent state revenues from the Oil Company Franchise Tax.** This report should be in a format that is agreeable to the House and Senate Appropriations and Transportation Committees and should cover both the immediate past and current Turnpike fiscal years.³ The initial report should be submitted to the Legislature by December 31, 1997, and annually thereafter. Members and key staff of the Turnpike Commission should also be available to appear, upon request, before the House and Senate Appropriations and/or Transportation Committees to provide specific information about the Commission's use of state tax revenues and to respond to questions or concerns legislators may have regarding the use of these funds.
 - b. **a written report on the economic feasibility⁴ and potential fiscal/operational impacts on the Turnpike as a whole of each Act 61 project or group of projects that is to be added to the Turnpike System.** Such reports would include (1) an assessment of the likelihood that the completed projects will generate revenues sufficient to pay their operational expenses (i.e., toll collection and maintenance) and debt service costs and the impacts, if any, the projects will have on Turnpike operations; and (2) the long-term ability of the Commission to adequately maintain the Mainline (i.e., information on the extent to which Act 61 implementation will negatively impact accomplishment of the PTC's 12-Year Capital Plan). For economic development or other policy reasons, the General Assembly may still wish to proceed with projects even if they are found to be not economically feasible from the PTC's perspective.

If necessary, the General Assembly should consider amending the Turnpike Organization, Extension and Toll Road Conversion Act, Act 1985-61, as amended, 36 P.S. §651.1 et seq., to require such reporting.

2. **The Turnpike Commission should develop a “PTC Policy Letter” to formally define the procedure through which the Commission retains bond counsel.** This policy should specify under what circumstances, if any, two

³The PTC fiscal year is June 1 to May 31.

⁴Florida state law applicable to the Florida Turnpike contains a provision related to economic feasibility of Turnpike extension projects. The Legislature and PTC may wish to consider the methodology and criteria used by officials in that state.

or more separate bond counsels should be used to issue one bond series. The Commission should also strongly consider adopting a competitive bid procedure for bond counsel selection as is used by toll authorities in surrounding states. In considering this recommendation, the Commission may wish to examine recent studies and actions taken in New Jersey that resulted in the requirement that bond counsel services be competitively bid.

3. **The Turnpike Commission and PennDOT should jointly identify all current and planned PennDOT projects (in PennDOT's Twelve-Year Program) that replicate or satisfy the objective of Act 61 projects that the PTC has not yet undertaken.** This information should be provided to the House and Senate Transportation Committees by September 30, 1997, along with recommendations, if any, concerning amendments that should be made to the statutory project listings.

I. Introduction

The Legislative Budget and Finance Committee (LB&FC) previously conducted performance audits of the Pennsylvania Turnpike Commission in 1987 and 1989. The 1987 report was done pursuant to Act 1981-142, the Commonwealth's former Sunset Act. The 1989 report was a follow-up audit required by Act 1988-176. This act reestablished the PA Turnpike Commission following sunset review and required that the LB&FC conduct an audit to determine whether the management issues raised during the Sunset Act audit had been addressed.

Ten years following the initial sunset audit, concerns remain about Turnpike operations and accountability. In response to these concerns the LB&FC directed its staff to again conduct a performance audit of the Commission. This audit was carried out in two phases during 1996 and early 1997.

This first report is on the Commission's performance in implementing the Turnpike improvement and extension projects provided for in Act 1985-61, as amended.¹ This report also includes an accounting of the Commission's expenditure of the state tax revenues it has received from the Oil Company Franchise Tax pursuant to Act 1991-26.²

A second report, to be released by the LB&FC in mid-1997, will address a broad range of issues related to Turnpike Commission management and operations. These include planning and budgeting, personnel administration, contracting, financial administration, traveler services, safety administration, and other matters.

Audit Objectives

1. To identify and analyze Turnpike Commission revenues and expenditures, and determine the Commission's current financial position.
2. To evaluate Commission operations and compliance in selected administrative and operational areas, and implementation of the Turnpike improvement and extension provisions of Act 1985-61, as amended.
3. To identify Commission expenditures for contracted services and assess the process through which these contracts are awarded and monitored.
4. To document how the Turnpike Commission is using annual state funding from the Oil Company Franchise Tax.

¹Act 1985-61 has been amended on several occasions and, in some cases, portions of the original act have been repealed. In 1992, the provisions enumerating the improvement and extension projects were codified at 75 Pa. C.S.A. §§8901-8916. For purposes of this report, the term "Act 1985-61, as amended," is used both when referring to the original act and when discussing the provisions of subsequent legislation that amended the original act.

²Under Act 1991-26, the Turnpike Commission is entitled to receive 14 percent of 55 mills of the Oil Company Franchise Tax. This amounts to about \$40 million annually.

Scope and Methodology

This audit report focuses on the Pennsylvania Turnpike Commission's performance in implementing Turnpike improvement and extension projects. The scope of this audit is limited to those projects assigned to the Commission by the Turnpike Organization, Extension and Toll Road Conversion Act, Act 1985-61, as amended, and was not intended to examine the merits of individual Act 61 projects. The audit covers the time period from the Trust Indenture of 1986 through November 30, 1996.³

To gain an understanding of the origin and provisions of Act 1985-61, we examined the work of the 1983 Governor's Toll Roads Task Force and researched legislative debate surrounding the passage of Act 61 and its amendments. We also reviewed the legislative history of the Act and the responsibilities it assigned to the PTC. Staff also identified and examined other state and federal statutes pertinent to the audit.

During the course of the audit, we met extensively with PTC officials and staff at the Commission's Administration Building at Highspire including representatives from the accounting, engineering, finance and administration, and legal departments. We also met with personnel from the Turnpike's consulting engineer--Michael Baker, Jr., Inc., and various consultants on contract to the PTC for specialized services. These contacts took the form of individual in-depth interviews, meetings attended by Turnpike personnel responsible for all aspects of the projects, and tele-conferences when personnel were not readily available for interviews. Meetings and interviews were also held with PTC regional office staff, consultants, and contractor personnel at the Western Regional Office at New Stanton, PA, who are responsible for the day-to-day management of the Mon/Fayette Expressway and Southern Beltway projects; with contractor personnel at the southern interchange construction site of the I-70 to S.R. 51 project on the Mon/Fayette Expressway, and with officials of the Southwestern Pennsylvania Regional Planning Commission. We also received input from various groups and individuals who support construction of the Mon/Fayette Expressway and Southern Beltway projects as well as from groups and individuals who oppose the projects.

To determine PTC progress in implementing the projects enumerated in Act 61, we examined PTC project files and status reports and consulted with PTC design and engineering personnel. Based on this work, LB&FC staff classified the implementation status of each project and identified costs incurred for completed projects, and the estimated or projected costs for projects in process.

Projects underway at the time of the audit, the Mon/Fayette Expressway and Southern Beltway Transportation projects, received in-depth review. In addition to

³November 30 was selected because it represents the mid-point in the PTC's fiscal year; the Turnpike Fiscal year is from June 1 to May 31. References in this report to "fiscal year" (FY) are to the Turnpike fiscal year.

examining project records and meeting with senior project managers at the PTC headquarters, LB&FC staff also conducted field visits to the Mon/Fayette Expressway and Southern Beltway project areas to (1) observe the management approach and transportation project development process being used to implement Act 61 projects; (2) attend an open house public meeting held by the PTC and Southwestern Pennsylvania Regional Planning Commission (SPRPC) to obtain public input on the projects; (3) determine how construction work was proceeding and managed in the field, and interview contractor personnel on site as well as observe construction activities and field laboratory testing procedures; (4) see how senior managers from transportation, planning, and environmental resource agencies and representatives of business groups and other organized special interest groups are kept informed of the status of the projects; and (5) attend two sessions of the Mon/Fayette Expressway and Southern Beltway Executive Committee.

To evaluate the Commission's financing of Act 61 projects, we examined the issuance of bonds through the 1986 and 1994 Trust Indentures and the PTC's bond ratings. We also examined the provisions of state legislation that provides for an annual transfer of a portion of the Oil Company Franchise Tax to the PTC, the Commission's receipt of federal funds and ongoing efforts to acquire additional federal monies, and the role that toll revenues, toll increases, and additional project reimbursements from other sources play in Act 61 project funding.

The audit also identified total state Oil Company Franchise Tax revenues transferred to the PTC through November 1996. Using Commonwealth and PTC fiscal records, we analyzed the Commission's use of funding from this source and classified expenditures by Act 61 project and by type (i.e., by spending for contracts, internal PTC labor costs, and purchases).

In other areas, we also (1) tested to determine if the PTC was in general compliance with requirements established in state and federal law as well as federal regulations relating to highway projects; (2) reviewed audit reports on the PTC completed by the Pennsylvania Department of Transportation's Comptroller's Office, the Auditor General, and the private accounting firm of Ernst and Young; (3) analyzed traffic volume and financial operating statistics on two completed Act 1985-61 projects (the Amos K. Hutchinson Bypass and James E. Ross Highway) and the traffic and revenue projections developed by the PTC for the Mon/Fayette Expressway and Southern Beltway Transportation projects; (4) reviewed the PTC's award of bond counsel contracts and compared it to bond counsel selection procedures used by the Commonwealth's Executive Branch and toll road organizations in a sample of six other states; (5) assessed Act 61 impacts on Turnpike debt service, and maintenance and reconstruction efforts; and (6) examined Act 61 project listings against project listings in PennDOT's Statewide Transportation Improvement Program (STIP) for 1997-2000 and the companion Twelve-Year Program.

Acknowledgments

We gratefully acknowledge the assistance that the Pennsylvania Turnpike Commission members and staff provided during this phase of the performance audit. We thank the Turnpike Commission members: Chairman James F. Malone; Vice Chairman James J. Dodaro; Secretary-Treasurer Robert A. Gleason, Jr.; Commissioner Robert A. Brady; and Secretary of Transportation Bradley L. Mallory; Commission Executive Director John T. Durbin; Associate Executive Director Deborah L. Everly; Deputy Executive Director for Finance and Administration J. Blair Fishburn; Deputy Executive Director of Information and Technology Robert L. Brown; Deputy Executive Director for Customer Services James Alexander, Jr.; PTC Controller Samuel A. Boova; Chief Counsel William A. Chesnutt; Deputy Chief Counsel Kevin F. Longenbach; Legislative Liaison John T. Martino; Finance Director and Assistant Secretary-Treasurer Robert J. Smith; Director of Marketing William J. Capone; Acting Director of Internal Audit Brenda Szeles-Bratina; and Manager of Financial Planning and Analysis Randall L. Mellinger. Ms. Szeles-Bratina and Mr. Mellinger served in the capacity of audit liaison to LB&FC staff.

We also acknowledge numerous other PTC personnel, contractors, and consultants who assisted us in this portion of the audit. These include Paul A. Edmunds, Assistant Chief Engineer; Frank J. Kempf, Jr., Bridge Engineer/Project Director; Jeffrey C. Davis, Engineering Project Manager-Design; David P. Willis, Environmental Manager; Michael S. Kennedy, Director of Operations/Projects (West); Leonard J. Oyler, Engineering Project Director-Expansions; Jeffrey L. Garrett, Chief Engineer, Michael Baker Jr., Inc.; William E. Fusetti, Michael Baker Jr., Inc.; David E. Zazworsky, Special Assistant to the Commissioners; David B. Sheridan, Construction Engineering Manager; Thomas A. Fox, Public Involvement Director; Timothy M. Scanlon, Traffic Engineering Manager; Richard L. Shaw, Chairman, Michael Baker Corporation; Philibert A. Ouellet, Special Assistant; and John F. Graham, Jr., Former DED Engineering and Chief Engineer.

We also greatly appreciate the input and assistance provided by Robert Kochanowski, Executive Director of the Southwestern Pennsylvania Regional Planning Commission, and by numerous staff of the Pennsylvania Department of Transportation.

Important Note

This report was developed by Legislative Budget and Finance Committee staff. The release of this report should not be construed as indicating that the Committee's members endorse all the report's findings and recommendations.

Any questions or comments regarding the contents of this report should be directed to Philip R. Durgin, Executive Director, Legislative Budget and Finance Committee, P.O. Box 8737, Harrisburg, Pennsylvania 17105-8737.

II. Act 1985-61, as Amended

Act 1985-61, the Turnpike Organization, Extension and Toll Road Conversion Act, had its genesis in the work of the Governor's Toll Roads Task Force. In December 1983, the Task Force submitted a report to Governor Thornburgh entitled *Pennsylvania Toll Roads Feasibility Study Final Report*. The study contained recommendations for a \$3.7 billion construction program to improve and extend the Pennsylvania Turnpike. The recommended expanded toll system included some 250 miles of new extensions, reconstruction of approximately 370 miles of existing interstate highways, and needed improvement projects on the existing Turnpike. The task force recommended that the projects be phased because of the magnitude of the total program. The phasing proposed by the study is shown in Exhibit 4.

Exhibit 4

Governor's Toll Roads Task Force Projects

New Routes (Phase A):

1. Beaver Valley Expressway
2. Greensburg Bypass
3. Mon Valley Expressway
4. Route 219 between Ebensburg and I-80

New Routes (Phase B):

1. Route 219 (I-80 - New York)
2. Route 219 (Maryland - Turnpike)
3. Route 220 (Bald Eagle - Milesburg)
4. Route 119/40 (Brownsville - West Virginia)

Improvements/Reconstruction:^a

1. Pennsylvania Turnpike Improvement Program
2. I-80 (entire length)
3. I-70 (western end between Turnpike and West Virginia)

^aWidening and new interchanges in Philadelphia area, Lehigh Tunnel elimination, and Keyser Avenue improvements.

Source: Developed by LB&FC staff based on information contained in the Governor's Toll Road Task Force report entitled *Pennsylvania Toll Roads Feasibility Study Final Report*.

The study stated that none of the new routes would produce sufficient toll revenues to pay for maintenance, operation, and debt service for their construction. The inclusion of the existing Turnpike and the two interstate routes provided an overall toll road system that could support a major part of the package. The extent of support depended on the level of toll rates and the requirements for repayment of federal aid on the interstate routes.

The toll roads program proposed by the Task Force had economic development as its underpinning factor. The study stated that a more efficient transportation system was needed to encourage development of natural resources, to protect existing industries, and to encourage new business activity. It also concluded that the short-term and long-term impacts of constructing new highways could be substantial in terms of increased employment, greater production activity, increased property values, and reduced social costs to the Commonwealth as a whole. The study also stated that a key factor in deciding the merits of constructing toll roads in various locations throughout the Commonwealth was the creation of employment opportunities.

The study also concluded that the traditional methods of financing construction of critical new routes were no longer viable. By the 1980s escalating costs and reduction in funding sources from motor fuel taxes brought the ambitious highway construction program that had existed in Pennsylvania in the 1970s to a halt. Many projects were still on the drawing board or only partially completed. However, the need for new routes was found to continue to exist. The study determined that while the then recent state legislation providing funds for bridge reconstruction and the federal increase in fuel taxes provided needed monies for rehabilitation of roadways, the funds were not sufficient for putting the system back in good condition, much less constructing new roads. The Toll Roads Study concluded the use of tolls appeared to be the only hope at that time to construct the new routes that were being proposed.

The study additionally found that implementation of its recommendations would require modification to Pennsylvania legislation in order to provide an organization with the necessary authority to build the new highways in the program, to permit the imposition of tolls on existing sections of the highway system, and to create necessary funding mechanisms. Federal legislation would also be required to permit tolling of the interstate routes as would agreements with the federal government regarding repayment of any federal aid used to construct the interstate routes proposed for toll roads.

The Turnpike Organization, Extension and Toll Road Conversion Act, Act 1985-61, as amended, 36 P.S. §651.1 *et seq.*, expanded and modified earlier legislation and granted additional powers to the PTC. Act 61 was enacted "to facilitate vehicular traffic within and across the Commonwealth by providing for the construction, reconstruction, improvement, operation and maintenance of toll roads

and the conversion of existing toll-free roads to toll roads” Act 61 also authorized the issuance of turnpike revenue bonds, payable solely from commission revenues, including tolls, to pay the costs of such toll roads.

Specifically, Act 61 authorized the PTC to evaluate and construct various extensions and major improvements to the Turnpike in four phases. The first two phases consisted of 11 projects, to be completed according to a schedule deemed feasible and approved by the Commission. When the first two phases are substantially completed, the PTC has authority to undertake the projects enumerated in the third phase. When the projects in the first three phases are completed, the PTC has authority to undertake the projects listed in the fourth phase. Act 61, however, did not specify a date on which each of the projects was to be initiated or completed.

Additionally, when the PTC completes the projects listed in the first phase, and the General Assembly and the Congress pass appropriate legislation, the PTC has authority to convert interstates to toll roads as may be required in order to facilitate the completion of the turnpike extensions and improvements enumerated in Act 61. Such conversions, which would require the approval of both Congress and the State Legislature, would take place at a time and in a manner set forth in a plan for such conversions prepared by the Department of Transportation.

Since 1985, Act 61’s provisions relating to these specific projects have been amended three times. Act 1990-124 required the construction of an additional project and required the PTC to construct an interchange for the New Cumberland Army Depot (Act 61 required the PTC to negotiate with the U.S. Department of Defense to construct such an interchange). Act 1991-26 moved a project from the third phase to the second phase thus giving it a higher priority and added the Southern Beltway project to the second phase. This act also allocated a portion of the Oil Company Franchise Tax to the PTC for use in constructing the enumerated projects. Act 1992-109 transferred two projects from the third phase to the second phase, giving both projects higher priority. Since 1992, no statutory changes have substantively altered the language of these projects. The list of projects as of early 1997 is recodified at 75 Pa. C.S.A. §8901 et seq. Exhibit 5 provides a listing of projects, by phase or section.

**Turnpike Improvement and Extension Projects
Provided for by Act 1985-61, as Amended**

§8911 (Improvement and Extension Authorizations)

1. Widen to six lanes between the Northeast Extension and the Delaware River Interchange.
2. Construct Turnpike interchange with I-95 in Bucks County.
3. Construct Turnpike interchange with I-476 in Montgomery County.
4. Construct Turnpike interchange with Keyser Avenue in Lackawanna County.
5. Construct extensions to the existing Turnpike from Interchange 2 to a connection with the existing interchange between U.S. 422 and proposed S.R. 60 in Lawrence County and extending to a connection with existing S.R. 60 in Beaver County at or near S.R. 51.
6. Construct Turnpike extension at or near Interchange 8 in Westmoreland County to an interchange with S.R. 66 northwest of Greensburg, continuing to an interchange with U.S. 22 south of Delmont.
7. Construct an additional Lehigh Tunnel on the Northeast Extension.
8. Construct a private Turnpike interchange directly connected to the New Cumberland Army Depot.^a
9. Construct an interchange on the Northeast Extension with S.R. 903 in Carbon County.^b

§8912 (Subsequent Extension Authorization)

1. From interchange with I-70 between the Lover and Speers interchanges with I-376 in Pittsburgh toward the Midfield Terminal, Greater Pittsburgh Airport, Southern Beltway, Extension of the I-79 Findlay Connector and connecting with the existing interchange between U.S. 40 and the Mon Valley Expressway.^c
2. At or near the existing interchange between U.S. 40 and the Mon Valley Expressway in Fayette County along U.S. 40 to Uniontown and continuing along S.R. 857 to the West Virginia border.^d
3. From an interchange at or near Interchange 10 generally following and coincident where feasible with U.S. 219 to an interchange with I-80 at or near Interchange 16.
4. Construction of an interchange for access to the International Distribution Center at the Wilkes-Barre-Scranton International Airport in Luzerne County on the Northeast Extension.
5. From at or near Interchange 10 along U.S. 219 to the Maryland border.^e
6. From at or near I-80 Interchange 16 along U.S. 219 to a connection with the U.S. 219 Expressway south of Bradford in McKean County.^b

Exhibit 5 (Continued)

§8913 (Additional Subsequent Extension Authorization)

1. Construct from a point at or near I-80 Interchange 23 at Milesburg, along U.S. 220 to a connection with the existing U.S. 220 Expressway south of Bald Eagle.

§8914 (Further Subsequent Authorizations)

1. At or near the intersection of S.R. 65 and Crows Run Road in Beaver County to a point at or near the Perry Highway Interchange of the Turnpike.
2. At or near Exit 5 of the Turnpike to Brookville, Jefferson County, to the intersection with I-80.
3. At or near the Turnpike into various areas of Berks County to complete the inner loop and outer loop systems of highways surrounding the City of Reading and to complete the missing links on Routes 222 to 422 to 1035.
4. At or near the intersections of I-70, I-76, and T.R. 119 in the Borough of Youngwood, Westmoreland County, along T.R. 119 and T.R. 66 to the intersection of T.R. 22 with a bypass around the City of Greensburg, Westmoreland County, then north on T.R. 66 to T.R. 356, then north on T.R. 356 to the intersection with T.R. 28.
5. At or near the intersection of T.R. 66 and T.R. 22 in Salem Township, Westmoreland County, then west paralleling T.R. 22 to Exit 6 of I-76.

^aOriginal provision in Act 1985-61 directed the PTC to negotiate with the U.S. Defense Department for the construction and operation of a private turnpike interchange at the New Cumberland Army Depot; amended by Act 1990-124.

^bThis project was added by Act 1990-124.

^cAct 1985-61 did not include the construction of the Southern Beltway project. Act 1991-26 specified construction of the Southern Beltway and Act 1992-109 modified the descriptor language for the Southern Beltway.

^dAct 1985-61 included this project in the §8913 projects. Act 1991-26 transferred this project to §8912.

^eThis project was included in the §8913 projects in Act 1985-61 and in Act 1991-26, and was moved to §8912 by Act 1992-109.

III. Status and Costs of PTC Implementation of Act 61 Roadway Improvement and Extension Projects

Status of Projects

Completed Projects

As of early 1997, most of the Phase I projects (\$8911, Improvement and Extension Authorizations) had been completed. As shown in Exhibit 6, these projects involved construction of two new toll roads, three interchanges, a tunnel, and lane widening. In total, these projects added approximately 31 miles to the Turnpike System.¹ The following briefly describes each of the completed projects:

1. Widen the Turnpike to Six Lanes Between the Northeast Extension and the Delaware River Interchange. The 1983 Governor's Toll Road Task Force Report proposed this project to address the heavy traffic volume on the Turnpike in the Philadelphia area. Although the legislation authorized widening to the Delaware River Interchange, traffic projections completed for the PTC indicated that current traffic volumes east of the Philadelphia interchange would not be heavy enough to warrant the construction of additional lanes.

As implemented, the project widens the roadway from four to six 12-foot lanes beginning at the junction of the Northeast Extension and the mainline and extends to the Philadelphia Interchange in Bucks County. This project also included the widening of 19 bridges that carry the Turnpike, the replacement of the existing metal medial barrier with a concrete barrier, the construction of reinforced earth walls and noise walls, adjustments and additions to the drainage system, and updating the signage along this section. Project construction began in March 1986 and was completed in November 1987.

2. Construct an Additional Lehigh Tunnel on the Turnpike's Northeast Extension. The Governor's Toll Road Task Force Report initially called for a bypass of the Lehigh Tunnel, but construction of a second two-lane tunnel was planned. This project eliminated the only remaining two-lane section of the Turnpike and alleviated a bottleneck and source of delays on the Northeast Extension.

Construction of the new tunnel began in January 1989 and was completed in November 1991. The new tunnel is located 94 feet west and parallel to the first

¹Also, PennDOT completed U.S. 40 to I-70 in October 1990, and transferred it to the PTC in November 1990 as part of the Mon/Fayette Expressway Project (referred to as Turnpike 43). This added another six miles of roadway to the Turnpike System.

Exhibit 6

Act 61 Projects Completed

(As of January 1997)

<u>Project</u>	<u>Description</u>	<u>Start</u>	<u>Complete</u>
Six-lane widening near Philadelphia	A 17-mile section of the main Turnpike widened to six lanes between Philadelphia Interchange and Northeast Extension Junction.	March 1986	November 1987
Second Lehigh Tunnel	Completion eliminated the last two-lane section on the Turnpike's Northeast Extension.	January 1989	November 1991
Beaver Valley Expressway (Turnpike 60 or the James E. Ross Highway)....	Construction of new road from U.S. Rt. 422 south to connect with previously completed portion of Rt. 60 west of Beaver Falls, tying into Turnpike Mainline (17.5 miles).	October 1989	November 1992
I-476 Mid-County Interchange	Construction of a 17-lane interchange near Norristown, linking the Turnpike Mainline, the Northeast Extension, and Interstate 476.	December 1989	December 1992
Greensburg Bypass (Turnpike 66 or Amos K. Hutchinson Bypass)	Construction of a 13 mile north-south highway connecting I-70 and U.S. Rt. 119 at the New Stanton Interchange with U.S. Rt. 30 west of Greensburg and U.S. Rt. 22 near Delmont.	July 1990	December 1993
Keyser Avenue Interchange	Construction of an interchange on the Northeast Extension of the Turnpike.	February 1993	August 1995
New Cumberland Army Depot Interchange.....	Completion of an alternate access road designed by the PTC and constructed by PennDOT.	March 1994	July 1995

Source: Developed by LB&FC staff from the PTC project records and contract files.

Lehigh tunnel, and is 4,378 feet long. The tunnel was constructed using the "New Austrian Tunnel Method," which reduces construction time over traditional methods. The tunnel was designed to have similar drainage, lighting, and ventilation as the first tunnel. Also as part of the project, the roadways approaching the tunnel were adjusted to provide for the new lanes, and a rehabilitation of the original

tunnel was completed. Including these modifications, the total project length is slightly over two miles.

3. Beaver Valley Expressway (Turnpike 60, or the James E. Ross Highway). The Beaver Valley Expressway was also recommended by the Governor's Toll Road Task Force. The project was planned to complete a "missing link" in the connection between PA 60 in the north and PA 51 in the south and was included in the first phase of the program recommended in the Task Force report. The project was intended to facilitate travel in western Pennsylvania by providing easier access to Pittsburgh, the Pittsburgh Airport, and Youngstown, Ohio.

The 17.5 mile addition was divided into two sections. The 7.5 mile southern section is located in Beaver County and begins at the terminus of the existing PA 60 at PA 51. This section includes an interchange with the Turnpike's Mainline three miles west of Interchange 2. The 10.0 mile northern section is located in Lawrence County and continues the toll road to the southern terminus of the existing PA 60. The road has six interchanges (including the termination points and the interchange with the Turnpike Mainline). The highway is tolled through two mainline toll barriers, and through automated collection facilities at four of the interchanges. The project required approximately 380 acres of right-of-way in Beaver County and 384 acres in Lawrence County.

Design studies for the project began in 1986, and groundbreaking for construction occurred in October 1989. Small sections of the highway were opened in 1991 and 1992, and the entire expressway opened on November 20, 1992. Traffic volume on the Beaver Valley Expressway in FY 1995-96 was 5.6 million vehicles generating revenues of \$5.5 million.

There are some right-of-way issues and utility contracts to be finalized for the Beaver Valley Expressway project. While the target date for completion of these actions was year-end 1996, some right-of-way matters (mainly dealing with surface and subsurface mineral rights) and utility contract issues remain to be resolved. The PTC's Consulting Engineer believes that completion of these matters might take another year.

4. I-476 (Mid-County) Interchange. Also part of the Governor's Toll Road Task Force Report improvement program, I-476 was designed to meet the Turnpike's Mainline and Northeast extension. The interchange between the two major highways was planned to increase capacity in the region and relieve some area traffic growth problems.

Project construction began in December 1989. In December 1991, a ramp allowing traffic traveling north from I-476 to continue eastbound on the Turnpike was opened. In May 1992, the PTC opened a ramp allowing traffic traveling south

from the Northeast Extension to continue southbound on I-476. The interchange became fully operational on December 15, 1992.

The new toll plaza is located south of the existing Norristown Interchange. It provides access to the Eastbound Mainline, the Northbound Northeast Extension, and Southbound I-476. The plaza has four entry lanes, eight exit lanes, three reversible lanes and two emergency lanes. The ramps connecting the Northeast Extension and the Mainline were reconstructed as a part of the project in order to accommodate the design for access to the new plaza. The project required the acquisition of 29 acres of right-of-way.

5. Greensburg Bypass (Turnpike 66, or Amos K. Hutchinson Bypass). This bypass was included in the original list of projects in the Governor's Toll Road Task Force Report. It is designed to provide an express connection between the Turnpike and U.S. Route 22, bypassing the City of Greensburg, substantially reducing travel time between New Stanton and U.S. Route 22. This link was originally considered important because of the manufacturing employment in the area and the corridor's designation as a coal-haul route.

The 13.4 mile route was divided into two sections. The 6.3 mile southern portion begins at U.S. Route 119 near the New Stanton Interchange of the Turnpike and continues north to an interchange with U.S. Route 30. The 7.1 mile northern section begins at the U.S. Route 30 interchange and continues north to the existing interchange of PA Route 66 and U.S. Route 22. The road has eight interchanges (including the termination points). The highway is tolled using one Mainline toll barrier in the southern section, and automated toll collection facilities at four of the interchanges. Approximately 306 acres of right-of-way were required for the southern section and 367 acres for the northern section.

The design location studies for the project began in June 1986 and construction began in July 1990. The southern section opened on July 13, 1993, and the road was fully opened to traffic on December 9, 1993. In FY 1995-96, traffic volume on the Greensburg Bypass was 4.3 million vehicles; associated revenues totaled \$4.6 million.

There are still some right-of-way issues to be finalized for the Greensburg Bypass project. While the target date for completion of these actions was year-end 1996, some general right-of-way matters remain to be resolved. The PTC's Consulting Engineer believes that completion of these actions may extend to the end of 1997.

6. Keyser Avenue Interchange. This project was a part of the Turnpike improvement program recommended in the Governor's Toll Road Task Force Report. Designed to promote industrial and commercial growth in the Wilkes-Barre/Scranton region, the project includes a diamond-type interchange at the intersection

of the Turnpike and Keyser Avenue. Also included is a new mainline toll barrier preceding the interchange, another mainline toll barrier south of the Wyoming Valley interchange, and reconstruction of the Clark's Summit toll plaza.

Construction of the interchange began in February 1993. The new mainline toll barrier opened in February 1995 and all phases of construction were completed in August 1995. There are several right-of-way issues related to the Keyser Avenue Interchange yet to be resolved. It is anticipated that resolution of these issues will occur within the next year.

7. Turnpike Interchange Directly Connected to the New Cumberland Army Depot. This project was introduced into the expansion and improvement program by the Legislature in 1985. The original Act 1985-61 language was amended by Act 1990-124 to have the PTC construct rather than negotiate for construction of a private interchange connected to the New Cumberland Army Depot apparently because negotiations with the Defense Department for the construction were not proceeding fast enough.

Subsequently, local opposition brought about a Commonwealth Court ruling that resulted in PennDOT building an alternate access road to satisfy the perceived need. The project was turned over to PennDOT in October 1993. However, the PTC had completed all the environmental studies as well as preliminary and final design before the project was handed over to PennDOT. PennDOT commenced construction for the New Cumberland Army Depot access road in March 1994 and completed the project in July 1995.

Projects in Process

As of January 1997, the PTC was concentrating its design and construction efforts on the Mon/Fayette Expressway and Southern Beltway Transportation Projects. The Mon/Fayette Expressway and the Southern Beltway projects are listed in Phase II, or §8912 - Subsequent Extension Authorizations of Act 1986-61, as amended.

The Mon/Fayette Expressway (four separate projects) and **Southern Beltway** (three separate projects) are listed below:

<u>Mon/Fayette</u>	<u>Southern Beltway</u>
West Virginia to Uniontown	S.R. 60 to U.S. 22
Uniontown to Brownsville	U.S. 22 to I-79
I-70 to S.R. 51	I-79 to Mon/Fayette Expressway
S.R. 51 to Pittsburgh	

Together, these projects will connect the City of Pittsburgh with I-68 in West Virginia. According to project materials, the projects are designed to promote the efficient movement of goods and services through the area, relieve existing and

future congestion, improve vehicular and pedestrian safety, and support economic redevelopment of the area. Further information on these particular projects and their status as of early 1997 is contained in Section IV of this report.

I-95 Interchange. As of early 1997, the construction of a Turnpike interchange with I-95 in Bucks County as prescribed in §8911 (Improvement and Extension Authorizations) of Act 1985-61 as amended was in the study phase of project development. The Needs Study for this project was completed in 1994, and its Congestion Management Study was completed in August 1995. Its Major Investment Study and Environmental Impact Study are underway with anticipated completion in mid-1997 and early 1999, respectively.

The State Transportation Commission's 1994-2006 Twelve Year Program also had the I-95 project included within the first four years of the program at a cost of \$526 million. PennDOT's participation was to provide the federal matching funds for the interchange connection between the Turnpike and I-95, and the PTC was to build the interchange. However, the Twelve Year Program (1997-2008) was updated in 1996 to bring the program into line with available funding. The I-95 project was dropped from the Twelve Year Program at that time due to fiscal constraints. As of early 1997, no federal funds were designated for this project in the 1997-2008 Twelve Year Program.

In late summer 1996, PennDOT and the FHWA were able to jointly provide the \$2 million necessary to put the project studies back on track. On February 13, 1997, the PTC held an open house-type public meeting in Levittown to announce its six preliminary designs for the interchange to connect I-95 to the Pennsylvania Turnpike. According to PTC officials, a decision on the I-95/Turnpike link will not be made until mid-1999 at the earliest. Construction could then begin some three to four years later depending on the amount of funding available for the project.

Project Deemed Not Feasible

Act 1991-26, amending Act 1985-61, provided for the **construction of an interchange with State Route 903 in Carbon County**. The intent of this project was to provide an additional interchange on the Northeast Extension between the Mahoning Valley (U.S. 209) and Pocono (S.R. 940) Interchanges in Carbon County. Proponents believed such an interchange would provide easier access to Pocono Area attractions.

In early 1995, the Turnpike Commission completed a needs study and a traffic revenue study which found that such an interchange was not justified at that time. Their studies found that construction of the interchange would have a minimal impact on improving the operations of the roadways within the study area that were operating at undesirable levels. Additionally, the studies concluded that the proposed interchange would not add a significant amount of new traffic or revenue

to the Turnpike but would actually divert traffic and revenue from existing Interchanges 34 and 35. In an official action taken on August 15, 1995, the Commission decided not to proceed with this project at that time.

Projects on Hold

The PTC classifies two of the Act 61 projects as being in an “on hold” status. Location studies have been completed but no further action has been taken on the following:

1. Construct a Toll Road From Turnpike Exit 10 (Somerset) to Interchange 16 (near Dubois) on I-80 generally following U.S. 219. Corridor Location Studies were completed in mid-1990 for the section of this project located between U.S. 422 in Cambria County and I-80 in Clearfield County. The U.S. 219 Corridor Feasibility Study evaluated engineering, social, economic, and environmental factors that are affected by the construction of a four-lane limited access highway between U.S. 422 and I-80. The project area, which includes the four counties of Cambria, Clearfield, Indiana, and Jefferson, can be characterized as rural agricultural. As a result of an analysis of the five corridors selected for study, two corridors (Corridor E and Corridor G) emerged as the best options to be carried forward to the next stage of project development--the design location/environmental impact statement stage. (See Appendix D for Corridor E and G maps.) The study concluded that Corridor E and Corridor G should be further refined and evaluated environmentally along with a no-build alternative during the Design Location phase. No further action has been taken by the PTC since completion of the corridor location studies.

2. Construct an Interchange for Access to the International Distribution Center at the Wilkes-Barre/Scranton International Airport. This project has been on hold since the completion of the Design Location Study in 1991. In the study the two alternatives that were considered the most feasible of all the alternatives were two diamond interchanges at different Turnpike locations. One alternative, designated the Red Alternative, provided a connection to the International Distribution Center (IDC) via a 300 foot access road to Commerce Road, did not involve any major acquisition of the Wilkes-Barre/Scranton International Airport property, and had no effect on developable IDC property. The other alternative, designated the Green Alternative, also provided a connection to the IDC via an access road to Commerce Road. However, because of its location, replacement of the Wyoming Avenue Bridge would be required since acceleration and deceleration lanes were needed for safety reasons. The study concluded that if the decision was to build an interchange, the Red Alternative should be chosen over the Green Alternative because of the requirement for bridge and embankment replacement, the impact on existing utilities, and the more direct impact of the Green Alternative on the wetlands present in both alternatives.

Projects Not Yet Initiated

As of early 1997, eight projects on the Act 61 listings had not yet been initiated. As shown on Exhibit 7, these include two projects from Section 8912, the Section 8913 project, and five projects under Section 8914.

Exhibit 7

Act 61 Projects Not Yet Initiated

Section 8912:

Construct a Toll Road from Turnpike Exit 10 (Somerset) generally following U.S. 219 to the Maryland State Line.

Construct a Toll Road from Interchange 16 (near Dubois) on I-80 generally following U.S. 219 to connect with U.S. 219 Expressway south of Bradford.

Section 8913:

Construct a Toll Road from I-80 Interchange 23 at Milesburg along U.S. 220 to connect with U.S. 220 Expressway (I-99) south of Bald Eagle.

Section 8914:

Construct a Toll Road Extension from the intersection of S.R. 65 and Crows Run Road in Beaver County to the Perry Highway Interchange with the Turnpike.

Construct a Toll Road Extension from Exit 5 of the Turnpike north to Brookville in Jefferson County to an Intersection with I-80.

Construct a Toll Road Extension into various areas of Berks County to complete the inner and outer loop systems for the City of Reading and to complete the missing links on Routes 222 to 422 to 1035.

Construct a Toll Road Extension at or near the intersection of I-70, I-76, and T.R. 119 in Youngwood, Westmoreland County along T.R. 119 and T.R. 66 to the intersection of T.R. 22 with a bypass around the City of Greensburg, then north on T.R. 66 to T.R. 356, and north on T.R. 356 to the intersection with T.R. 28.

Construct a Toll Road Extension at or near the Intersection of T.R. 66 and T.R. 22 in Salem Township, Westmoreland County, then west paralleling T.R. 22 to Exit 6 of I-76.

Source: Developed by LB&FC staff using project status reports and other information obtained from the PTC.

We found, however, that PennDOT is in the final design stage of one project that will virtually replicate one of these projects and has reconstructed a significant

portion of U.S. 219 north of the Pennsylvania Turnpike. A portion of another Section 8914 project has essentially been completed by virtue of completion of the Amos K. Hutchinson Bypass.

In the first case, PennDOT is in the final design of a segment of I-99 that will run from Bald Eagle via State College and connect with I-80 in the vicinity of Interchange 24 near Bellefonte. This segment of road for all practical purposes will replicate the Act 1985-61 as amended toll road from I-80 Interchange 23 at Milesburg along U.S. 220 to connect with U.S. 220 Expressway (I-99) south of Bald Eagle.

In the second case, PennDOT has reconstructed about 45 miles of U.S. 219 making it a four lane highway from just south of the Pennsylvania Turnpike near Exit 10 to a point just northwest of Ebensburg.

In the third case, the first part of the project description from "Construct a Toll Road Extension at or near the intersection of I-70, I-76, and T.R. 119 in Youngwood, Westmoreland County along T.R. 119 and T.R. 66 to the intersection of T.R. 22 with a bypass around the City of Greensburg" is in essence the Amos K. Hutchinson Bypass which is complete. The second part of the project "then north on T.R. 66 to T.R. 356, and north on T.R. 356 to the intersection with T.R. 28" describes an extension of the completed Amos K. Hutchinson Bypass to intersect with T.R. 28. This part of the project has not yet been initiated by the PTC.

Project Costs

Completed Projects

Seven Act 61 projects had been completed as of November 30, 1996, at a total cost of \$881,592,835. (See Table 5.) This includes a total of \$2,233,858 in funding received from: (1) PennDOT, (2) the FHWA, and (3) a contractor in settlement of a workers' compensation dispute. Several of these projects included lane widening, interchanges, and a tunnel. Two projects, the Beaver Valley Expressway and Amos K. Hutchinson Bypass, have added 30.9 miles of roadway to the Turnpike System at a cost of about \$14.4 million per mile for the Beaver Valley Expressway and \$21.4 million per mile for the Greensburg Bypass.

We compared these costs to a comparable project completed by PennDOT in the same general time frame. The 5.6 mile Turnpike 43 project, constructed by PennDOT and later incorporated into the Mon/Fayette Expressway, had construction costs of \$90.6 million, or about \$16.1 million per mile of roadway constructed. This is comparable to the PTC's costs on the Beaver Valley Expressway. PTC construction costs on the Amos K. Hutchinson Bypass were \$21.4 million per mile. Comparisons of this kind are difficult, however, because of differing cost factors, such as right-of-way acquisition, utilities relocation, toll and maintenance facilities,

construction costs in urban or rural settings, and construction costs in varying terrains.

Table 5

Expenditures for Completed Act 61 Projects

(Through November 30, 1996)

<u>Project</u>	<u>Expenditures</u>
Six-lane Widening Near Philadelphia	\$132,088,485
Second Lehigh Tunnel.....	72,245,396 ^a
Beaver Valley Expressway (Turnpike 60 or the James E. Ross Highway)	251,337,007
I-476 Mid-County Interchange	89,886,269
Greensburg Bypass (Turnpike 66 or Amos K. Hutchinson Bypass).....	286,496,936 ^b
Keyser Avenue Interchange.....	48,132,289
New Cumberland Army Depot Interchange.....	<u>1,406,453^c</u>
Total.....	\$881,592,835 ^d

^aIncludes \$39,416 paid to the PTC as settlement for a workers' compensation dispute.

^bIncludes \$839,270 received from PennDOT.

^cIncludes \$1,355,172 received from FHWA through PennDOT.

^dNet costs to the PTC total \$879,358,977.

Source: PA Turnpike Commission *Quarterly Progress Report for Construction Projects* dated November 21, 1996, and information provided by the PA Turnpike Commission on Act 61 project expenditures through November 30, 1996.

Projects in Process

The estimated cost to complete the four Mon/Fayette Expressway and three Southern Beltway projects is \$2.45 billion. Through November 30, 1996, \$116.5 million had been expended on the Mon/Fayette projects while \$11.2 million had been spent on Southern Beltway projects. Detailed cost information on these projects is presented in Section IV.

Additionally, through November 30, 1996, \$9.9 million had been expended (\$4.3 million from PTC funds) for the required studies leading to construction of the Turnpike interchange with I-95 in Bucks County. The preliminary total estimated cost for this project is \$570 million. The Pennsylvania Turnpike Commission's share of the project cost is dependent on what federal funding is made available to the PTC for the I-95/Turnpike interchange.

Projects Not Feasible and on Hold

Estimated cost data is not available for projects in this category.

Projects Not Yet Initiated

The PTC does not have formal estimates of the costs required to construct the remainder of the Act 61 Turnpike improvement and extension projects. However, we used costs incurred to date to arrive at an overall estimate of the total cost to complete the remainder of the projects (i.e., those that are to follow the Mon/Fayette Expressway and Southern Beltway projects). We determined that the estimated costs of currently planned Act 61 projects (Mon/Fayette Expressway and Southern Beltway projects) range from about \$20 million to \$37 million per mile, although actual costs are dependent on many factors such as terrain, utility relocations required, and right-of-way acquisition costs.

To arrive at an estimate of the costs to complete the remaining Act 61 projects we multiplied the estimated per mile costs by the estimated mileage of the remaining Act 61 projects. We estimate, and the PTC concurs, that the remaining projects would involve constructing approximately 330 additional miles of roadway. When adjusted for the segments already constructed or scheduled to be constructed by PennDOT,² the total estimated mileage of the remaining Act 61 projects is approximately 220 miles. Using this mileage figure, the total costs to complete the remainder of the projects could range from \$4.4 billion to \$8.1 billion in current dollars.

²Including, for example, portions of U.S. 219 north of the Pennsylvania Turnpike but south of I-80 and the completion of I-99 from Bald Eagle to the vicinity of Bellefonte which will closely approximate the project from Bald Eagle north to I-80 in the vicinity of Milesburg.

IV. The Mon/Fayette Expressway and Southern Beltway Projects

Project Background

The “Subsequent Extension Authorization” section (§8912) of Act 1985-61, as amended, provides the authorization for projects commonly referred to as the Mon/Fayette Expressway and Southern Beltway Transportation Projects. The act states that these projects are to be constructed as follows:

- From interchange with I-70 between existing interchanges at Lover and Speers extending northerly to an interchange with I-376 in Pittsburgh extending northwesterly toward the Midfield Terminal, Greater Pittsburgh Airport, Southern Beltway, Extension of the Findlay Connector along I-79 and also extending southerly connecting with the existing interchange between U.S. 40 and the Mon Valley Expressway.¹
- From a point at or near the existing interchange between U.S. 40 and the Mon Valley Expressway in Fayette County southeasterly along U.S. 40 to Uniontown and continuing along S.R. 857 to the West Virginia border.²

The Mon/Fayette Expressway and Southern Beltway Transportation Projects are intended to play a major role in developing the regional transportation system in southwestern Pennsylvania. The Mon/Fayette projects are transportation improvements in the 70-mile north-south corridor between Pittsburgh and Morgantown, West Virginia. The Southern Beltway projects are to address deficiencies in the transportation system south of Pittsburgh that impede the efficient movement of people and goods east and west, from the Pittsburgh International Airport to the Mon Valley.

In its December 1983 report, the Governor’s Toll Road Task Force recommended that a Mon Valley Expressway be constructed as a new route in Phase A of its proposed project list. The study stated that the positive economic and development activity associated with the construction would have both short- and long-term effects on localities and on the Commonwealth as a whole. It also stated that efficient transportation was needed to encourage the development of natural resources, to protect existing industries, and to encourage new activity and employment opportunities.

¹Act 1985-61 did not include the construction of the Southern Beltway project. Act 1991-26 specified construction of the Southern Beltway and Act 1992-109 modified the descriptor language for the Southern Beltway.

²Act 1985-61 included this project in the §8913 projects. Act 1991-26 transferred this project to §8912.

More recently, studies completed by the Southwestern Pennsylvania Regional Planning Commission (SPRPC) and the PTC have concluded that the circumferential highway access in southern Allegheny County and northern Washington County is inadequate. These studies concluded that a new beltway would improve access to the Pittsburgh International Airport, improve east-west mobility, improve freight movement, improve transit connections, stimulate local development, and connect the Mon/Fayette Expressway to link the economically distressed Mon Valley with the Pittsburgh International Airport.

The Project Development Process

The Turnpike Commission has divided these two extensions into parts and is undertaking them as seven separate toll highway projects. If built in their entirety, these two toll roads will extend approximately 100 miles.

To implement these projects the PTC is employing procedures that are used by PennDOT for developing major transportation projects. These procedures apply to projects that require preparation of an Environmental Impact Statement (EIS). Each project evolves over time and passes through five phases: (1) Planning; (2) Prioritization and Programming; (3) Preliminary Design, including the EIS process; (4) Final Design, including right-of-way acquisition and utilities relocation; and (5) Construction.

The Transportation Project Development Process (also referred to as the “Ten-Step Process”) is applied at the EIS, or third project phase. The ten-step process establishes guidelines for preparing an EIS required under the National Environmental Policy Act of 1969 (NEPA) for any federally funded project that could be expected to have significant environmental consequences. The Council on Environmental Quality (CEQ) *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* defines an EIS as a detailed written report that provides “full and fair discussion of significant environmental impacts and [informs] decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.”

The Draft EIS presents the preferred alternative if one is clearly favored above the others. Agencies and the public have an opportunity to review the draft EIS and comment on the document at a public hearing. The Draft EIS is then revised to address the input that is received. A Final EIS which presents the alternative that will be carried into Final Design and Construction is submitted to the FHWA for approval and filed with the EPA. When completed, the process moves a project from the preliminary design stage to final design while promoting compliance with applicable federal and state laws and requirements.

In 1992, a Federal Interagency Task Force signed an agreement to further the objectives of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) by merging the review processes established in the National Environmental Policy Act (NEPA) and Section 404 of the federal Clean Water Act. The federal agencies committed to developing a process that would identify environmental concerns early in the project development and provide formal concurrence at key stages in the process.

Exhibit 8 is a flow chart depicting the Ten-Step Transportation Project Development process that is being used by the PTC. Each square on the chart represents a distinct step that must be taken to advance the project along the road to completion. Each step encompasses a number of key activities, some of which are repeated at various stages of the process.

To stress the importance of on-going consultation with resource agencies and the general public, the arrows beside the steps (Range for Consensus) designate the periods during which the PTC should be striving to gain consensus on needs, phase I and phase II alternatives, the selected alternative, and minimization of impacts. Consensus is to be gained by approaching the agencies and the public as partners in the project and providing opportunities for them to become involved in the decision-making process.

Diamonds appear throughout the entire chart. These signify opportunities to finalize consensus on important issues which allow the project to move ahead to the next step. If agencies or the public still express reservations about key aspects of the projects at these points, the PTC is to consider completing additional studies to address these concerns. However, if every reasonable effort has been made to achieve consensus, the project may advance.

The Transportation Project Development Process procedures encompass project initiation and scoping, needs analysis, environmental and engineering studies and documentation, mitigation, public and agency involvement, and document approval and distribution. The process is designed to promote increased coordination with resource agencies and to foster a commitment to environmental protection and enhancement in keeping with the integrated NEPA/Section 404 process.

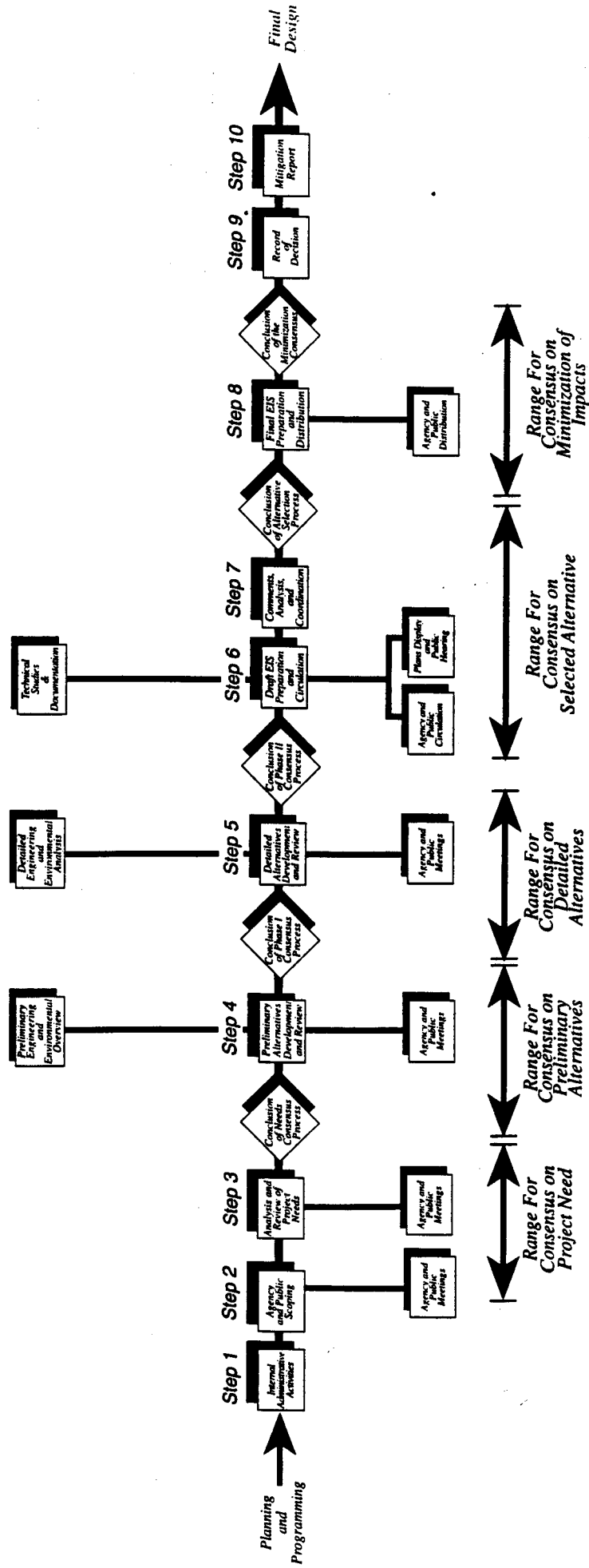
The Preliminary Design Phase concludes in the Record of Decision (ROD) which constitutes compliance with NEPA and FHWA approval of the Final EIS and the selected alternative presented for the project. A ROD must be received and a Final Mitigation Report describing all mitigation commitments must be completed before a project can proceed into the Final Design and Construction Phases.

Final Design follows the receipt of the ROD. It consists of completing final construction plans and specifications including the integration of mitigation measures into design, completing right-of-way plans and acquisition, utility relocations,

Exhibit 8

Ten-Step Transportation Project Development Process

Environmental Impact Statements



Source: Pennsylvania Turnpike Commission, prepared by McCormick, Taylor & Associates, Inc.

and advertisement for construction bid and award of the construction contract. The NEPA/404 component of the Transportation Project Development Process does not end with the completion of Preliminary Design. NEPA compliance is periodically re-evaluated throughout the last two phases of development. During the final design and construction phases, mitigation commitments made during the Preliminary Design Phase are followed up to ensure measures designed to minimize environmental impacts are implemented properly.

PTC's Project Management Structure

The project management structure being used by the PTC to implement the Mon/Fayette Expressway and Southern Beltway transportation projects is based on a structure and process initially developed by PennDOT. The Department developed and applied this process to the Preliminary Design and Environmental Phase of the Lackawanna Valley Industrial Highway, a project which was a high priority for PennDOT in 1991.

The PTC has assigned its Western Regional Office primary responsibility for overseeing the Preliminary Design and Environmental Phase of the Mon/Fayette Expressway and Southern Beltway Transportation Projects. Project management teams have been established to assist with the Preliminary Design and Environmental Impact Statement (EIS) and Final Design phases of the projects. The organizational compositions of the Environmental Impact Statement Management Team and the Mon/Fayette Expressway Final Design Team are shown in Exhibit 9.

Characteristics of the management approach on these projects include:

- The use of a special assistant appointed by the Turnpike Commission to provide leadership and guidance through Pennsylvania's Transportation Project Development Process.
- The creation of an executive committee, comprised of senior transportation agency managers, resource and regulatory agency representatives, local officials, Metropolitan Planning Organization representatives, and state and federal legislators.
- The use of an Environmental Impact Statement management team, comprised of key transportation professionals, consultants, and subconsultants who share the common goal of providing project management.
- The use of a management consultant to assist in managing the EIS studies and to provide oversight coordination and accelerated document review.

```
graph TD; EC["Executive Committee  
PennDOT- PTC - FHWA"] --> SA["Special Assistant  
to the Commissioners"]; SA --> FAC["Financial Advisory  
Committee"]; SA --> EISCG["EIS Coordination  
Group"]; SA --> MOPW["Manager of Operations  
Projects West"]; EISCG --> DEISFEIS["DEIS/FEIS  
Group"]; EISCG --> SUPG["Supplements  
Group"]; EISCG --> PG["Process  
Group"]; EISCG --> EG["Engineering  
Group"]; EISCG --> CRG["Cultural  
Resources  
Group"]; EISCG --> NRG["Natural  
Resources  
Group"]; EISCG --> CIG["Cumulative  
Impacts  
Group"]; EISCG --> ACG["Agency  
Coordination  
Group"]; EISCG --> PIG["Public  
Involvement  
Group"]; CIG --> TTG["Traffic and  
Transportation  
Group"]; CIG --> SESILUG["Socio-Economic  
Secondary  
Impacts  
Land Use Group"]; CIG --> AQG["Air Quality  
Group"];
```

The organizational chart for the EIS Coordination Group is structured as follows:

- Executive Committee**
PennDOT- PTC - FHWA
 - Special Assistant to the Commissioners**
 - Financial Advisory Committee**
 - EIS Coordination Group**
 - DEIS/FEIS Group**
 - Supplements Group**
 - Process Group**
 - Engineering Group**
 - Cultural Resources Group**
 - Natural Resources Group**
 - Cumulative Impacts Group**
 - Traffic and Transportation Group**
 - Socio-Economic Secondary Impacts Land Use Group**
 - Air Quality Group**
 - Agency Coordination Group**
 - Public Involvement Group**
 - Manager of Operations Projects West**

```

graph TD
    Director["Pennsylvania Turnpike Commission  
Final Design Project Director"]
    LiaisonAllegheny["PTC Liaison  
Allegheny County"]
    LiaisonWashington["PTC Liaison  
Washington County"]
    LiaisonFayette["PTC Liaison  
Fayette County"]
    LiaisonGeotechnical["PTC Liaison  
Geotechnical"]
    GM["General Manager"]
    DesignManager["Michael Baker Jr., Inc.  
Design Manager"]
    Coord["Contract  
Coordination"]
    Sched["Scheduling"]
    WestVirginia["West Virginia to  
Fairchance"]
    PTCConstMg1["PTC Construction  
Manager"]
    ConstMg1["Construction  
Manager"]
    PTCRW1["PTC  
Right-of-Way"]
    RW1["Right-of-Way  
Acquisitions"]
    I70SR51["I-70 to S.R. 51"]
    PTCConstMg2["PTC Construction  
Manager"]
    ConstMg2["Construction  
Manager"]
    PTCRW2["PTC  
Right-of-Way"]
    RW2["Right-of-Way  
Acquisitions"]
    Traffic["Traffic/Signing"]
    Toll["Toll Plazas"]
    ROW["Right-of-Way"]
    Structures["Structures"]
    EIS["EIS  
Coordination"]
    Hydrology["Hydrology/SWM"]
    Geotechnical["Geotechnical"]
    Lighting["Lighting/  
Electrical"]
    EnvPermits["Environmental  
Permits"]
    EnvMitig["Environmental  
Mitigation"]
    ETTM["E.T.T.M."]
    Utility["Utility  
Coordination"]
    SectionMgr["Section  
Manager"]
    Consultants["13 Final Design  
Consultants"]

    Director --- LiaisonAllegheny
    Director --- LiaisonWashington
    Director --- LiaisonFayette
    Director --- GM
    Director --- DesignManager
    DesignManager --- Coord
    DesignManager --- Sched
    DesignManager --- WestVirginia
    DesignManager --- PTCConstMg1
    DesignManager --- PTCRW1
    DesignManager --- I70SR51
    DesignManager --- PTCConstMg2
    DesignManager --- PTCRW2
    DesignManager --- SectionMgr
    DesignManager --- Consultants
    WestVirginia -.- I70SR51
    PTCConstMg1 --- ConstMg1
    PTCRW1 --- RW1
    I70SR51 --- PTCConstMg2
    I70SR51 --- PTCRW2
    PTCConstMg2 --- ConstMg2
    PTCRW2 --- RW2
    ConstMg1 --- Traffic
    ConstMg1 --- Toll
    ConstMg1 --- ROW
    ConstMg1 --- Structures
    ConstMg1 --- EIS
    ConstMg1 --- Hydrology
    ConstMg1 --- Geotechnical
    ConstMg1 --- Lighting
    ConstMg1 --- EnvPermits
    ConstMg1 --- EnvMitig
    ConstMg1 --- ETTM
    ConstMg1 --- Utility
    RW1 --- Traffic
    RW1 --- Toll
    RW1 --- ROW
    RW1 --- Structures
    RW1 --- EIS
    RW1 --- Hydrology
    RW1 --- Geotechnical
    RW1 --- Lighting
    RW1 --- EnvPermits
    RW1 --- EnvMitig
    RW1 --- ETTM
    RW1 --- Utility
    RW2 --- Traffic
    RW2 --- Toll
    RW2 --- ROW
    RW2 --- Structures
    RW2 --- EIS
    RW2 --- Hydrology
    RW2 --- Geotechnical
    RW2 --- Lighting
    RW2 --- EnvPermits
    RW2 --- EnvMitig
    RW2 --- ETTM
    RW2 --- Utility
  
```

44

- The adoption of an intensive meeting schedule, in which EIS Management Team Status Meetings are held weekly, Resource Agency Coordination Meetings are held monthly, and Executive Committee Meetings are held quarterly.³
- A commitment from cooperating agencies to participate in the Transportation Project Development Process and to attend monthly special Agency Coordination Meetings.
- Participation in the funding of additional resource agency positions to expedite the review process.
- Use of a Fund Design Manager to coordinate and direct the efforts of the 13 final design consultants working on the I-70 to S.R. 51 and West Virginia to Uniontown projects.
- Use of Right-of-Way Acquisition consultant to assist in the right-of-way acquisition for the I-70 to S.R. 51 and West Virginia to Uniontown projects.

Status of the Mon/Fayette Expressway Projects

The Mon/Fayette Expressway includes the five separate projects listed on Table 6. The Route 40 to I-70 project was built by PennDOT and turned over to the PTC in late 1990. This section provides a brief report on each of these projects including their status as of March 1997:

³Currently, the Team Status Meetings are being held biweekly and the Executive Committee Meetings are being held approximately every four months.

Table 6

The Mon/Fayette Expressway Projects

<u>Project</u>	<u>Length (Miles)</u>	<u>Status</u>	<u>Projected Completion</u>
West Virginia to Uniontown	8 ^a	Final Design Construction	Late 1999/Early 2000
Uniontown to Brownsville.....	11-15	Preliminary Design	No Date Specified
Route 40 to I-70 ^b	6	Completed	October 1990
Interstate 70 to Route 51	17	Final Design Construction	Late 2001
Route 51 to Pittsburgh	<u>24</u>	Preliminary Design	No Date Specified
Totals	66-70		

^aLength in Pennsylvania only. Total length is 12 1/2 miles.

^bThis project was built by PennDOT and turned over to the PTC to operate as a toll road in November 1990.

Source: PTC's Fall 1996 Mon/Fayette Transportation Projects Update and Southern Beltway Transportation Project Update.

Mon/Fayette Expressway Project: I-68 to S.R. 43—Morgantown, WV, to Uniontown

Description. This project will begin at the existing interchange between Interstate 68 and Route 857, just east of Cheat Lake in West Virginia. It then proceeds northward, generally paralleling Route 857, through the valley area between Routes 857 and 119. It ends with completion of the interchange between existing State Route 43 (formerly the Chadville Demonstration Project) and Big Six Road, just west of the Fayette Industrial Park near Fairchance. Interchanges will provide access to I-68 and State Route 857 in West Virginia, as well as to Gans Road, Rubles Mill Road, and Big Six Road in Pennsylvania.

The PTC will operate the expressway from the West Virginia border north to Fairchance as a toll road. The section from I-68 north to the southernmost Pennsylvania interchange (Gans Road) will not be tolled. Ramp collection facilities will be built at the Rubles Mill Road interchange and a mainline toll plaza will be constructed between the Rubles Mill Road and the Big Six Road interchanges. The approximate length in Pennsylvania is eight miles. The

construction by the fall of 1997 and the entire highway is projected to open to traffic in late 1999 or early 2000.

Mon/Fayette Expressway Project: Uniontown to Brownsville

Description. Three general alignment options for the Uniontown-to-Brownsville portion of the Mon/Fayette Expressway were presented on August 24, 1994, at a meeting of the Mon/Fayette Expressway and Southern Beltway Transportation Projects Executive Committee. These included: (1) a route through Brownsville's Northside Historic District using the existing Lane Bane Bridge (which would be widened) and a 1,000-foot-long "cut-and-cover" (a tunnel excavated from ground level rather than bored); (2) a southern Brownsville bypass through Centerville and Luzerne Township; and (3) a northern bypass near California, PA.

West of Brownsville the new expressway would then connect to either the existing Turnpike 43 (a six-mile highway that opened as a toll road on October 12, 1990, after being built by PennDOT) or PA Route 88 near Centerville. At the southeastern terminus, the proposed alternatives interchange with U.S. Route 119 either at PA Route 51 north of Uniontown or PA Route 21 south of Uniontown. The alternative south of Brownsville would require a new bridge over the Monongahela River. The alternative north of Brownsville would require two new bridges--one over the Mon River near California and the other over Redstone Creek northeast of Brownsville.

Project Costs. The PTC estimates total costs of completing the Uniontown-to-Brownsville project at \$296 million. These include \$12.4 million for preliminary engineering and EIS preparation, \$16.6 million for final design, \$26 million for right-of-way acquisition, \$20 million for utility relocation, \$195 million for construction, and \$26 million for construction management. The final total cost for the project will be dependent on the alternative selected for construction. The alternatives vary in length from 11 to 15 miles. As of November 30, 1996, \$5.3 million had been expended for this project. Federal funds of approximately \$863,000 are included in this total. The specific expenditures were as follows:

Expenditures for Uniontown to Brownsville Project (As of November 30, 1996)	
Design Location Study	\$3,980,254
Preliminary Design	570,218
Management Team.....	407,234
Corridor Location Studies.....	183,830
Traffic & Revenue Study.....	<u>128,879</u>
Total	\$5,270,415

Project Status. The project is now in Step 5 (Detailed Alternatives Development and Review) of Pennsylvania's Ten-Step Transportation Project Development Process. The PTC anticipates that a Draft Environmental Impact Statement (DEIS) will be circulated for public review and comment in early 1998 and that a Final Environmental Impact Statement (FEIS) will be circulated and submitted to the FHWA in the summer of 1998. A Record of Decision is expected in December 1998.

Mon/Fayette Expressway Project: I-70 to S.R. 51

Description. The I-70 to S.R. 51 project of the Mon/Fayette Expressway begins with the completion of the interchange between Interstate 70 and Turnpike 43 in Fallowfield Township (its southern end) in Washington County. The toll expressway will then proceed generally northward passing through Carroll, Union, and Nottingham Townships in Washington County--west of the Monongahela River and the Mon Valley communities of Donora, Charleroi, Monongahela, and New Eagle and east of Finleyville Borough before entering Allegheny County. It generally runs east of Peters Creek connecting with State Route 51 in Jefferson Borough.

From south to north, interchanges will provide access to I-70, Coyle-Curtain Road in Fallowfield Township, State Route 136 in Carroll Township near Ringgold High School, Finleyville-Elrama Road in Union Township near Gastonville, and State Route 51 in Jefferson. The selected route reflects route changes in Jefferson Borough made as a result of public input during review of the Draft Environmental Impact Study.

Toll collection facilities will be built at four interchanges--Coyle-Curtain Road in Fallowfield Township, State Route 136 in Carroll Township, Finleyville-Elrama Road in Union Township, and State Route 51 in Jefferson Borough. The facilities in Jefferson will be staffed while the others will be fully automated. There will be no mainline toll barrier. Southbound motorists will pay when they get on while northbound motorists will pay when they exit the Expressway. The estimated length of I-70 to S.R. 51 is 17 miles.

Project Costs. The PTC estimates the total costs of completing the I-70 to S.R. 51 project at \$566 million. These include \$8 million for preliminary engineering and EIS preparation, \$44 million for final design, \$34 million for right-of-way acquisition, \$46 million for utility relocation, \$404 million for construction, and \$30 million for construction management. As of November 30, 1996, \$63.4 million had been expended for this project. Federal funds of \$8.1 million are included in this total. The specific expenditures were as follows:

Expenditures for I-70 to S.R. 51 Project (As of November 30, 1996)	
Final Design.....	\$23,790,705
Construction	13,855,598
Design Location Study	11,492,921
Right-of-Way Acquisition	9,030,510
Final Design, Management.....	3,359,054
Preliminary Design	855,327
Management Team	610,851
Corridor Location Studies	183,830
Traffic & Revenue Study.....	128,879
Building Demolition	57,499
Traffic Study	<u>4,718</u>
Total	\$63,369,892

Project Status. This project is through the Ten-Step Transportation Project Development Process and is now advancing through the final design and property acquisition and construction phases. Three of 17 construction contracts are underway or completed. Mitigation measures contained in the mitigation report included construction of a park-and-ride facility in Jefferson Borough and a widening of 2.25 miles of State Route 51 (for a center turn lane) north from the expressway's northern terminus to Coal Valley Road. The entire I-70 to State Route 51 expressway is projected to open in late 2001, providing additional funding is available.

Mon/Fayette Expressway Project: S.R. 51 to Pittsburgh

Description. The Integrated Congestion Management System Analysis/Major Investment Study/Preliminary Alternatives Analysis report recommended construction of a tolled expressway as the major investment that should be pursued to address transportation deficiencies in the study corridor. It further recommended that one of the expressway alternatives (Major Investment Study Alternative 2) that would include a spur to Monroeville (creating a Squirrel Hill Tunnel bypass) be carried forward for more detailed planning in the Environmental Impact Study phase.

Alternative 2 is a four-lane limited access toll highway which connects with the Mon/Fayette Expressway at the S.R. 51 interchange in the Jefferson Borough of Large. It would then proceed north generally paralleling the Monongahela River through the Boroughs of Jefferson, West Mifflin, and Dravosburg to the City of Duquesne. After crossing the Monongahela River, the route would continue along the north side of the river passing through North Versailles Township, the Boroughs of North Braddock, Braddock, Rankin, and Swissvale, and into the City of Pittsburgh connecting with the Parkway East (I-376). It also includes a four-lane limited access link from the USX Edgar

Thomson Works through the Thompson Run (Union Railroad) Valley and passing through the Boroughs of East Pittsburgh and Turtle Creek, the Township of Wilkins, and the municipality of Monroeville to connect with the Parkway East (I-376).

In approving a resolution on September 30, 1996, endorsing the Integrated Congestion Management Study/Major Investment Study/Preliminary Alternatives Analysis report which advanced Alternative 2 to Step 5 planning, the Southwestern Pennsylvania Regional Planning Commission widened the general corridor location of Alternative 2 to include an evaluation of both north and south sides of the Monongahela River from the City of Duquesne to the Glenwood Bridge. The evaluation will be completed before determining on which side of the Monongahela River this link of the project will be constructed. The estimated length of the S.R. 51 to Pittsburgh project is 24 miles.

Project Costs. The PTC estimates the total costs of completing the S.R. 51 to Pittsburgh project at \$825 million. These include \$19 million for preliminary engineering and EIS preparation, \$48 million for final design, \$44 million for right-of-way acquisition, \$68 million for utility relocation, \$596 million for construction, and \$50 million for construction management. As of November 30, 1996, \$6.2 million had been expended for this project. Federal funds of \$1.2 million are included in this total. The specific expenditures were as follows:

Expenditures for S.R. 51 to Pittsburgh Project (As of November 30, 1996)	
Design Location Study	\$4,925,537
Preliminary Design	570,219
Management Team	407,234
Corridor Location Studies	183,832
Traffic & Revenue Study	128,877
Traffic Study	<u>4,717</u>
Total	\$6,220,416

Project Status. With the SPRPC's endorsement of the findings of the combined CMS/MIS report and concurrence with the Preliminary Alternative Analysis by PennDOT and FHWA, the S.R. 51 to Pittsburgh project has advanced to "Step 5 - Detailed Alternatives Development and Review" of Pennsylvania's Ten-Step Transportation Project Development Process. The PTC anticipates that a Draft Environmental Impact Statement will be circulated for public review and comment in early 1998 and that a Final Environmental Impact Statement will be circulated and submitted to FHWA in the summer

of 1998. A Record of Decision from the FHWA is anticipated in September 1998.

Mon/Fayette Expressway Project: Route 40 to I-70

Description. The Route 40 to I-70 project is known as the James J. Manderino Highway (Turnpike 43). It was completed by PennDOT in October 1990 and was transferred to the PTC in November 1990 as part of the Mon/Fayette Transportation Project. Turnpike 43 runs approximately six miles from Interchange 15 on I-70 generally south to U.S. Route 40 terminating at S.R. 88 west of the Monongahela River.

Project Costs. The total cost for completion of the James J. Manderino Highway was \$97.8 million. Of this amount, PennDOT paid \$90.6 million to construct the project while the PTC paid \$7.2 million for toll plaza construction, toll equipment, and related toll preparation expenses.

Expenditures for Route 40 to I-70 Project (As of November 30, 1996)	
Toll Equipment/Purchases.....	\$4,490,793
Toll Plaza Construction.....	1,975,981
Design.....	<u>719,790</u>
Total	\$7,186,564

Project Status. This roadway is complete and open to traffic.

Status of the Southern Beltway Projects

In 1993, federal, state, and local environmental, transportation, and planning agencies agreed that the PTC's Needs Study data showed that further studies were necessary to examine possible solutions to identified transportation deficiencies in an area south and east from the Pittsburgh International Airport to the proposed Mon/Fayette Expressway Corridor. The agencies also concurred that the Southern Beltway Corridor is comprised of the three independent projects shown on Table 7.

Table 7

The Southern Beltway Projects

<u>Project</u>	<u>Length (Miles)</u>	<u>Status</u>	<u>Projected Completion</u>
Route 60 to Route 22	6	Preliminary Design	No Date Specified
U.S. Route 22 to I-79	13	Preliminary Design	No Date Specified
I-79 to Mon/Fayette Expressway	<u>11</u>	Preliminary Design	No Date Specified
Totals	30		

Source: PTC's Fall 1996 Mon/Fayette Transportation Projects Update and Southern Beltway Transportation Project Update.

The Southern Beltway Traffic Impact Corridor is approximately 30 miles long, starting near the Pittsburgh International Airport and extending southeast to a connection with the Mon/Fayette Expressway. The original impact corridor was as much as eight miles wide.

The *Integrated Congestion Management System Analysis/Major Investment Study Report* for the Southern Beltway Transportation Projects recommended construction of a tolled expressway as the major investment that should be pursued to address transportation deficiencies in the study area and that this design concept should be carried forward for more detailed planning in the Environmental Impact Study phase. The Southwestern Pennsylvania Regional Planning Commission passed a resolution on September 30, 1996, endorsing the recommendations in the Integrated CMS/MIS.

Southern Beltway Project: Route 60 to U.S. Route 22

Description. The Route 60 to U.S. Route 22 project corridor is shown in Exhibit 10. Within the project corridor, two general alignments are being considered. One of these alignments commences with a proposed connection in the vicinity of the partial interchange of Route 60 and Moon-Clinton Road, proceeds generally southwest, and terminates at a proposed interchange with U.S. Route 22 between the existing Bavington and Champion interchanges. The second proposed alignment commences with an interchange on Route 60 in the vicinity of the Pittsburgh International Airport, proceeds generally southwest, and terminates at the same interchange with U.S. Route 22 as the first alignment. It is anticipated that this toll road will be approximately six miles long.

Project Costs. The PTC initially estimated the total costs of completing the Route 60 to U.S. Route 22 project at \$100.2 million. In early 1997, PTC officials revised this estimate to \$150 million. This includes \$4 million for preliminary engineering and EIS preparation, \$6 million for final design, \$12 million for right-of-way acquisition, \$2 million for utility relocation, \$98 million for construction, and \$11 million for construction management. The total cost also includes an estimated cost of \$17 million for cleanup of contaminated waste areas. As of November 30, 1996, \$3,737,654 had been expended for this project.

Expenditures for Route 60 to U.S. Route 22 Project (As of November 30, 1996)	
Preliminary Design	\$3,465,385
Traffic & Revenue Study.....	<u>272,269</u>
Total	\$3,737,654

Project Status. The PA Route 60 to U.S. Route 22, "Findlay Connector," project is in Step 6 (Draft EIS Preparation and Circulation) of Pennsylvania's Ten-Step Transportation Project Development Process. A public hearing on the Draft EIS is targeted for July 1997. A Record of Decision from the FHWA is anticipated in December 1997. Completion of the highway would be possible by late 2001 if funding is available.

Southern Beltway Project: U.S. Route 22 to Interstate 79

Description. The U.S. Route 22 to I-79 project corridor is shown in Exhibit 10. Within the project corridor, three general alignments are being considered. All the alignments under study commence with a common interchange location on U.S. Route 22 between the existing Bavington and Champion interchanges, proceed generally southeast, and terminate at an interchange with I-79 near the Allegheny/Washington County line. One of these proposed route alignments passes to the north and east of the community of McDonald while the other two pass west and south of McDonald. All three alignments merge to a single alignment just north of the Allegheny County line in the vicinity of McDonald and connect to an interchange with I-79 near the border of the two counties. Planners estimate that this toll road will be approximately 13 miles long.

Project Costs. The PTC estimates total costs of completing the U.S. Route 22 to I-79 project at \$261.4 million. These include \$6.4 million for preliminary engineering and EIS preparation, \$16 million for final design, \$20 million for right-of-way acquisition, \$20 million for utility relocation, \$178

million for construction, and \$21 million for construction management. As of November 30, 1996, \$3,737,654 had been expended for this project.

Expenditures for U.S. Route 22 to I-79 Project (As of November 30, 1996)	
Preliminary Design	\$3,465,385
Traffic & Revenue Study.....	<u>272,269</u>
Total	\$3,737,654

Project Status. The U.S. Route 22 to I-79 project is about to begin Step 5 (Detailed Alternatives Development and Review) of Pennsylvania's Ten-Step Transportation Project Development Process. A Record of Decision from the FHWA is anticipated in December 1999.

Southern Beltway Project: I-79 to the Mon/Fayette Expressway

Description. The I-79 to the Mon/Fayette Expressway project corridor is shown in Exhibit 10. As of March 1997, this project had not advanced to the detailed study stage as have the other two Southern Beltway projects (State Route 60 to U.S. Route 22 and U.S. Route 22 to I-79). While there are three general alignments being considered in the preliminary alternatives development stage, they were not sufficiently developed for inclusion in this report. Planners estimate that this toll road will be approximately 11 miles long.

Project Costs. The PTC estimates the total costs of completing the I-79 to Mon/Fayette project at \$261 million. These include \$6.3 million for preliminary engineering and EIS preparation, \$14.7 million for final design, \$24 million for right-of-way acquisition, \$23 million for utility relocation, \$172 million for construction, and \$21 million for construction management. As of November 30, 1996, \$3,737,654 had been expended for this project.

Expenditures for I-79 to the Mon/Fayette Expressway Project (November 30, 1996)	
Preliminary Design	\$3,465,385
Traffic & Revenue Study.....	<u>272,269</u>
Total	\$3,737,654

Project Status. The I-79 to the Mon/Fayette Expressway project is in Step 4 (Preliminary Alternatives Development and Review) of Pennsylvania's

Ten-Step Transportation Project Development Process. A Record of Decision from the FHWA is anticipated in June 2000.

Summary of Mon/Fayette Expressway and Southern Beltway Project Costs

Estimated Project Costs

The total estimated costs to complete all seven of the Mon/Fayette Expressway and Southern Beltway Projects is \$2.45 billion, \$1.83 billion for the Mon/Fayette Expressway and \$622.6 million for the Southern Beltway. (See Table 8.)

Table 8

Estimated Costs to Complete the Mon/Fayette Expressway and Southern Beltway (FY 1993-94 Through FY 2003-04)

	Estimated Costs (\$ Millions)
<u>Mon/Fayette Expressway</u>	
West Virginia to Uniontown.....	\$ 143.1
Uniontown to Brownsville	296.0
I-70 to PA-51.....	565.8
PA-51 to Pittsburgh	<u>825.3</u>
Subtotal Mon/Fayette	\$1,830.2
<u>Southern Beltway</u>	
PA-60 to U.S. 22	\$ 100.2 ^a
U.S. 22 to I-79.....	261.4
I-79 to Mon/Fayette.....	<u>261.0</u>
Subtotal Southern Beltway	\$ 622.6
Total	\$2,452.8

^aEstimated cost as initially presented in the CMS/MIS. In early 1997, PTC officials revised this figure to \$150 million.

Source: Developed by LB&FC staff from information contained in the Pennsylvania Turnpike Commission's *Mon/Fayette and Southern Beltway Transportation Projects Status Report*, dated August 25, 1995.

Project Expenditures Through November 30, 1996

Through the first-half of Turnpike fiscal year 1996-97, a total of \$127,656,799 had been spent for the Mon/Fayette Expressway and Southern Beltway Transportation Projects. As shown on Table 9, the bulk of this spending (91 percent) has been for the five Mon/Fayette Expressway projects, most notably the segments from I-70 to Route 51 and from West Virginia to Uniontown.

Table 9

Mon/Fayette Expressway and Southern Beltway Project Expenditures (Through November 30, 1996)

<u>Project</u>	<u>Total Expenditure</u>
Mon/Fayette Expressway	
West Virginia to Uniontown.....	\$ 34,396,550
Uniontown to Brownsville	5,270,415
Route 40 to I-70 (Turnpike 43) ^a	7,186,564
I-70 to Route 51.....	63,369,892
Route 51 to Pittsburgh.....	<u>6,220,416</u>
Subtotal - Mon/Fayette Expressway	\$116,443,837 ^b
Southern Beltway	
Pa. 60 to U.S. 22	\$ 3,737,654
U.S. 22 to I-79	3,737,654
I-79 to Mon/Fayette	<u>3,737,654</u>
Subtotal - Southern Beltway	\$ 11,212,962
Total	\$127,656,799

^aThis project was built by PennDOT and turned over to the PTC to operate as a toll road in November 1990.

^bIncludes \$14,271,538 from the Federal Highway Administration and \$3,479,726 from the State of West Virginia.

Source: Developed by LB&FC staff from PTC project and fiscal reports.

Project Support and Opposition

Public dialogues are a very important part of the planning process for major transportation investments. Before highway construction can begin, federal law requires that a public involvement process be initiated in which transportation agencies, local officials, resource agencies, and citizens are afforded various opportunities

to voice opinions and present evidence in favor of or against the various project alternatives.

By way of example, the Mon/Fayette Transportation Project has involved the interaction of many committees, groups, and individuals. In addition to public agencies and elected officials (e.g., environmental resource agencies, transportation officials and transit operators, mayors/council members, and civic leaders), the general public has also been invited to participate in the process. From June 1989 through January 1994 (prior to the issuance of the Final Environmental Impact Statement), nearly 30 meetings (public, public officials, and Executive Committee meetings) were held in regard to these projects, about one-third of which were public meetings/hearings. Various public involvement meetings are also ongoing with the Southern Beltway project. This section discusses the positions and perspectives of both those who support and those who oppose these projects.

Project Support

Proponents of the Mon/Fayette Expressway and Southern Beltway Transportation Projects point to the fact that southwestern Pennsylvania, particularly that area known as the Mon Valley, has experienced substantial economic decline during the recent decades. They state that there has been a significant population loss in the region and that the local economy's downturn is due to the decline of the steel industry and the related coal and coke industries. They also suggest that the existing north-south transportation system in the region is inadequate. On the basis of these and other factors they believe that opportunities for economic redevelopment exist which justify a substantial investment in the region's transportation infrastructure.

Consequently, those in favor of the projects say that, when completed, the expressway and the beltway linkage will help revitalize the economy of southwestern Pennsylvania by enticing businesses and industries to locate in that region. An important step toward attracting new industries, in the view of proponents, is to put in place the needed transportation infrastructure.

The transportation needs study that was conducted identified deficiencies in the Mon Valley's transportation infrastructure that planners believed would be addressed by the projects planned for that area:

- Existing poor roadway conditions impede efficient movement of goods and services throughout the area;
- Roadway capacity is insufficient to relieve existing and future congestion;
- Vehicular and pedestrian safety needs to be improved;
- Roadway linkage between major highways serving the area is insufficient;

- Accessibility to social services and accessibility by emergency services in the area need to be improved; and
- Transportation services capable of supporting economic redevelopment of the area are not present.

It seems clear that an increase in economic development activity within the area surrounding the projects is the primary impact anticipated by the projects' proponents. According to an academic source, "economic development occurs when the income and product generated within an area increases." Production increases require either an influx of resources or a more efficient way of using the resources. An area should experience economic development when the cost of doing business in that area is lowered so as to maximize the return on the resources invested.

It follows that investments in highways have the potential of generating economic benefits to the extent that transportation costs are lowered. Reductions in transportation costs can be generated when travel time and fuel and other operating costs are decreased and safety is improved.

Although studies exist which have attempted to explore the relationship between infrastructure investment and economic development, it has been pointed out that research specifically focusing on the relationship between highway investment and economic development is relatively sparse and the findings are often mixed or inconclusive. In general, however, they tend to support the notion that investments to restore the nation's deteriorating infrastructure are typically accompanied by economic benefits. In 1988, for example, the National Council on Public Works Improvement concluded, in its final report to Congress and the President, that:

The quality of America's infrastructure is barely adequate to fulfill current requirements, and insufficient to meet the demands of future economic growth and development.

As states and localities compete for economic activity, government officials are often impressed by arguments that businesses are drawn to locations with convenient access to high-capacity highways. Accessibility to markets and materials is, many believe, what gives a location its competitive edge.

Project Opposition

A number of groups and individuals opposing the construction of the Mon/Fayette Expressway and Southern Beltway Transportation Projects have also been vocal and persistent in communicating their points of view. While most of these groups acknowledge the need for transportation improvements in southwestern Pennsylvania, they disagree that the best solution is to have the Turnpike Commission construct additional toll roads, particularly new toll roads financed

with taxpayer revenue. One group providing testimony to the IMPACCT Commission in December 1995, stated that:

As a result of fiscally irresponsible expenditures connected with the Mon-Fayette/Southern Beltway Projects . . . it is our recommendation that the Pennsylvania Turnpike Commission return to its original mandate and be made to rely solely on revenues from tolls and service plaza commissions. The Pennsylvania Turnpike Commission has not been accountable to the General Assembly and therefore should not receive any additional tax monies from the oil franchise tax, future gas tax increases, or other tax schemes. We feel all public tax monies should be withheld from the Pennsylvania Turnpike Commission.

This same organization made the following additional points:

- That the Turnpike Commission, which already owed more than \$2.6 billion in principal and interest from past bond issues, was planning to expend an additional \$2.5 billion for these projects;
- That the vehicular traffic projections estimated by the Southwestern Pennsylvania Regional Planning Commission were, in their view, insufficient to justify the expenditure of millions of dollars;
- That prudent feasible alternatives to building new toll roads (e.g., improving existing non-toll roads) were summarily rejected by the Turnpike Commission and its agents; and,
- That there was no evidence that economic revival would follow in the wake of the new roadway.

Also, opponents have sought redress through the courts. Several groups opposing the Mon/Fayette Expressway and Southern Beltway Transportation Projects brought action against state and federal agencies which selected the project alternative to construct a seventeen-mile roadway from I-70 to S.R. 51. This action was filed in the United States District Court for the Western District of Pennsylvania in July 1994. The plaintiffs sought injunctive relief pursuant to the National Environmental Policy Act (NEPA) and the Intermodal Surface Transportation Efficiency Act (ISTEA).

The plaintiffs argued that the choice of the northern terminus of the I-70 to S.R. 51 project violated FHWA regulations and regulations of the Council on Environmental Quality (CEQ). They also charged that:

- Alternative projects which might conceivably have satisfied the identified transportation needs and goals were not fully considered;

- The public were not involved in the approval of the Congestion Management Study (CMS) evaluation and the Major Investment Study (MIS);
- The agencies wrongly divided the expressway project into two segments (from I-70 to Route 51 and from Route 51 to Pittsburgh) and as a consequence failed to consider the cumulative impact of the Route 51 to Pittsburgh road in the Environmental Impact Statement (EIS) for the I-70 to Route 51 road;
- The FHWA should have compelled a separate Congestion Management Study and Major Investment Study to be prepared for the project; and
- The Congestion Management Study for the I-70 to S.R. 51 project was flawed because it contributed to an already serious congestion problem on Route 51 and because this problem was not given a high priority.

The United States District Court, on April 3, 1995, denied the plaintiffs' challenge to the actions of the state and federal agencies on the basis that, having reviewed the agencies' actions, their actions were found to be consistent with governing law and regulations.

The ruling by the United States District Court on the I-70 to S.R. 51 project has not abated opposition to the Mon/Fayette Expressway and Southern Beltway Transportation Projects. Among the concerns expressed by opponents is that the Turnpike Commission's efforts to compete for scarce federal highway dollars, if successful, may mean that money needed by PennDOT for road maintenance and repair will be shifted to finance Turnpike projects.

Opponents have also cited research on the relationship of highway construction to economic development. In particular, among the conclusions of a study of one interstate highway constructed in the midwest (referred to as the "Iowa Study") were that:

- Investing public funds in highway projects that are not efficient can actually reduce an area's economic development; and
- Investing in highways in declining regions to improve their development potential is unlikely to influence location decisions to any great extent.

Along the lines of these findings one opposition group has stated their belief that the building of new highways in the Pittsburgh area will hurt the city by causing urban decay and suburban sprawl and that Mon Valley towns may actually lose jobs as businesses move away from the resulting urban sprawl.

V. PTC Financing of the Act 61 Projects

The PTC has used a combination of revenue bonds, toll revenues, Oil Company Franchise Tax monies, federal funds, and monies received from other participating agencies (PennDOT and the State of West Virginia)¹ to finance Act 61 projects.

Revenue Bonds

The PTC is empowered to construct, operate, and maintain the Turnpike System, and to issue Turnpike revenue bonds, payable solely from tolls and other revenues. Bonds are issued pursuant to Commission resolutions. These bonds may be issued all at once, or at various times. Turnpike bonds and notes are to be paid from tolls and other revenues of the Commission, subject to any existing trust indenture or bond resolution. They are not debts of the Commonwealth, and are not backed by the full faith and credit of the Commonwealth. The Commission has considerable discretion over the terms and conditions of the bonds, but bonds cannot mature more than 40 years after issuance.

Borrowing by bonds involves the issuance of certificates of indebtedness. In issuing bonds, the Turnpike Commission enters into a contract with the bond holders called a trust indenture. The trust indenture details the rights and obligations of the contracting parties, indicates property pledged as well as the protection offered on the loan, and names the bank that is to represent the bondholders.

The proceeds of bonds are to be used for paying the costs of the Turnpike, and repaying the United States Treasury for any funds that must be repaid if toll-free roads are converted to toll roads. The proceeds are to be disbursed as required by the resolution authorizing the issuance of the bonds and any trust indenture entered into by the Commission. Excess proceeds are to be used to pay for capital projects and the debt service reserve fund if required.

The Commission may secure the bonds by a trust indenture between the PTC and a corporate trustee. This indenture (or the resolution authorizing the issuance of bonds) may include provisions to protect the rights of bondholders--including provisions concerning the construction, operation, and maintenance of the turnpike, and the custody, safekeeping, and application of all monies. All costs of carrying out the trust indenture may be treated as costs of operating the Turnpike.

Act 1985-61 authorized the PTC to issue bonds to pay the costs of the enumerated improvement and extension projects. All compensation, salaries, and

¹These monies are a reimbursement to the PTC from these agencies. (See Table 14.)

expenses incurred in carrying out Act 1985-61 were to be paid solely from funds provided under authority of that act. This provision has been implicitly repealed by Act 1991-26, which allocated a portion of the Oil Company Franchise Tax to the PTC.

The PTC is authorized to borrow money up to the estimated total cost of the turnpikes and toll road conversions provided for in the act. This borrowing may be evidenced by Commission notes, which are tax exempt. The Commission is also authorized to issue refunding bonds to refund any outstanding turnpike notes or bonds.

1986 Trust Indenture

In 1986 the Commission authorized the issuance of Turnpike revenue bonds in the aggregate principal amount of \$325,005,000 designated as the Pennsylvania Turnpike Commission, Pennsylvania Turnpike Revenue Bonds, Series A of 1986. These bonds were authorized in denominations of \$5,000, or any multiple of this amount at 4.40 percent to 7.875 percent, due in varying installments through December 1, 2017. (See Table 10.)

Table 10

1986 Series A Trust Indenture

<u>Maturity Date</u>	<u>Principal Amount</u>	<u>Interest Rate</u>
1987	\$ 3,225,000	4.40%
1988	3,370,000	5.00
1989	3,540,000	5.50
1990	3,735,000	5.75
1991	3,950,000	6.00
1992	4,185,000	6.25
1993	4,445,000	6.50
1994	4,735,000	6.75
1995	5,055,000	6.875
1996	5,405,000	7.125
1997	5,790,000	7.25
1998	6,210,000	7.50
1999	6,675,000	7.625
2000	7,180,000	7.75
2001	7,740,000	7.75
2006	48,800,000	7.875
2015	151,320,000	7.875
2017	<u>49,645,000</u>	6.00
Total	\$325,005,000	

Source: Compiled by LB&FC staff using data obtained from the PTC Controller.

The 1986 Series A bond revenues were to be used for the purpose of providing funds sufficient to:

1. Call for redemption of certain outstanding bonds of the Commission;
2. Finance the estimated remaining costs of widening the Pennsylvania Turnpike to six lanes between the Northeast Extension and the Philadelphia Interchange;
3. Finance the estimated costs of designing the Beaver Valley Expressway and the Greensburg (North-South) Bypass;
4. Finance the estimated costs of designing and constructing the Mid-County Expressway Connection and the Beaver Valley Climbing Lane;
5. Finance the estimated remaining costs of certain improvements to the Downingtown Interchange and to reimburse the Commission for costs of certain improvements to the Downingtown Interchange and to reimburse the Commission for costs already incurred in connection with such improvements;
6. Reimburse the Commission for the cost of improvements made to the Fort Washington, Willow Grove, and Philadelphia interchanges;
7. Fund a Debt Service Reserve Fund for the 1986 Series A Bonds;
8. Provide funds for capitalized interest; and
9. Pay the costs of issuance of the 1986 Series A Bonds.

As provided under the Trust Indenture of 1986, additional bonds may be issued under and secured by the Indenture for the purpose of paying the cost of additional projects. When additional bonds are issued, the original trust indenture is amended by a supplemental trust indenture. The PTC has issued a number of supplemental trust indentures related to the 1986 bond issuance.

The first supplemental trust indenture of 1986 was dated August 1, 1986. The Commission issued in nine series its \$482,600,000 aggregate principal amount of Pennsylvania Turnpike Multiple Mode Revenue Bonds. The Multiple Mode Revenue Bonds were identified as the "1986 Series B through J Bonds," collectively. The bond proceeds were used to provide funds to finance additional improvements and certain building renovations and to pay the costs of issuance for the Multiple Mode Bonds.

The Commission authorized, in a succeeding supplemental trust indenture, additional bonds in the principal amount of \$241,467,261, designated as "Pennsylvania Turnpike Commission, Pennsylvania Turnpike Revenue Bonds, Series K of 1989." These funds were used to finance the costs of constructing the Greensburg (North-South) Bypass and the Beaver Valley Expressway, to fund

interest on the Series K Bonds during the period of construction, and to finance the costs of issuance of the Series K Bonds.

The debt incurred due to the issuance of these bonds is funded mainly through PTC toll revenues. The 1986 Indenture dictates that toll rates be sufficient to provide funds for the payment of current expenses; and that the toll revenues must be adequate together with the reserve funds available to the Commission, to provide an amount not less than the greater of (1) 120 percent of the maximum principal and interest on the outstanding bonds required for any succeeding fiscal year, or (2) 100 percent of the maximum principal and interest payments for the next fiscal year plus the amount of required transfers from the Revenue Fund to the Reserve Maintenance Fund. If deficiencies should occur, the PTC is authorized to raise tolls appropriately.

The 1986 Trust Indenture also provided for bond refunding to pay the costs associated with retiring a bond. Bond refunding occurs when cash for the retirement of a bond issue is raised through the sale of a new issue. Bond refunding is popular when the interest rates are low as occurred in 1991 and 1992.

On June 1, 1991, the PTC issued Series L Bonds in the amount of \$273,405,000 to refund a portion of the Series A bonds maturing on and after December 1, 1996. Further advance bond refunding was accomplished by issuing Series M and N on December 1, 1991, in the amount of \$267,495,000. The proceeds were used to retire certain outstanding bonds issued under the Supplemental 1986 Trust Indenture for Series C, D, E, and K. The remaining outstanding bonds from Series C through K were redeemed with the issuance of \$570,715,000 in bonds on September 1992 referred to as 1992 Series O and P. The new bond issuances, Series L through P, maintained the same purpose as the bonds that were redeemed.

1994 Trust Indenture

Series A Oil Company Franchise Tax Revenue Bonds were issued on April 15, 1994, for the aggregate amount of \$115,635,000 at 3.5 percent to 6.0 percent, due in varying installments from December 1, 1995, to December 1, 2019. (See Table 11.) The revenue is to be used for the purpose of funding capital expenditures and for the payment of the costs of issuance of the 1994 Series A Bonds. Although the trust indenture does not specify a particular project, the PTC has used the proceeds from these bonds to fund the Mon/Fayette Expressway and the Southern Beltway.

The 1994 Series A Bonds are secured by a pledge and assignment by the PTC of: (1) all proceeds from the PTC's allocation of the Oil Company Franchise Tax; (2) the PTC's right to receive its allocation of the Oil Company Franchise Tax; (3) all moneys deposited into accounts or funds created by the 1994 Indenture and; (4) all investment earnings on all moneys held in accounts and funds established by the 1994 Indenture.

The 1994 Indenture requires the PTC to petition the General Assembly for additional funds in the event that the PTC's allocation of the Oil Company Franchise Tax is inadequate to pay maximum principal and interest payments for the succeeding year.

Table 11

1994 Series A, Oil Company Franchise Revenue Bonds

Maturity Date (December 1st)	Principal Amount	Interest Rate
1995	\$ 2,285,000	3.500%
1996	2,375,000	4.200
1997	2,485,000	4.600
1998	2,600,000	4.800
1999	2,735,000	5.000
2000	2,875,000	5.150
2001	3,030,000	5.250
2002	3,195,000	5.350
2003	3,370,000	5.450
2004	3,560,000	5.500
2005	3,760,000	5.500
2006	3,975,000	5.625
2007	4,210,000	5.750
2008	4,465,000	5.875
2009	4,735,000	6.000
2012	15,915,000	5.500
2014	12,230,000	6.000
2019	<u>37,835,000</u>	6.000
Total.....	\$115,635,000	

Source: Compiled by the LB&FC staff from the April 15, 1994, Trust Indenture.

The proceeds from the Commission's allocation of the Oil Company Franchise Tax were the financing mechanism for the 1994 series bonds. The 1994 Series was issued to fund the Mon/Fayette Expressway and Southern Beltway projects, and the anticipated ongoing proceeds from the Commission's allocation of the Oil Company Franchise Tax are to be used to pay off the bonds.

Oil Company Franchise Tax

The General Assembly enacted the Oil Company Franchise Tax (OCFT) in 1981, 75 Pa. C.S.A. §9501 *et seq.* This is an excise tax imposed on oil companies for the privilege of doing business, exercising a corporate franchise, employing capital,

owning or leasing property, maintaining an office, or having employees in Pennsylvania.

This tax levy is 115 mills on the revenue received from the first sale of petroleum products in Pennsylvania used to fuel motor vehicles for public highway use. Petroleum revenue is derived by multiplying the number of gallons of petroleum products by the average wholesale price as established monthly by the Department of Revenue. Minimum and maximum wholesale prices are statutorily set at \$0.90 and \$1.25 per gallon, respectively.

The OCFT rate of 115 mills is comprised of 60 mills enacted in 1981 and 1983 and 55 mills added in 1991 by Act 1991-26. Receipts from 60 of the 115 mills are deposited in restricted accounts within the Motor License Fund. Monies are allocated to municipalities for such purposes as road, street, bridge, and drainage maintenance, repair, construction, and reconstruction; traffic signs and signal control systems; maintenance of state highways; highway restoration; and local highway maintenance.

Also, the State Highway Transfer Restoration Restricted Account within the Motor License Fund receives 3 of the 60 mills. The remaining 55 mills are distributed to various other restricted accounts, including the Turnpike Commission's allocation.

The 55 mills are allocated as follows:

- 42 percent (or 23.1 mills) to county maintenance districts for highway maintenance;
- 17 percent (or 9.35 mills) for highway capital projects;
- **14 percent (7.7 mills) to the Turnpike for highway maintenance and construction and for paying of bonds;**
- 13 percent (7.15 mills) for bridges;
- 12 percent (6.6 mills) for local roads (this money goes to the municipalities); and
- 2 percent (1.1 mills) for bridges identified as county or forestry bridges.

Through November 30, 1996, the Turnpike Commission had received \$199,890,511 in Oil Company Franchise Tax revenues. Payments were first made to the Commission in FY 1992-93. Section VII of this report examines the PTC's expenditure of these monies.

Federal Funding

Historically, the PTC has not received federal funding. In 1987, the Surface Transportation and Uniform Relocation Assistance Act of 1987 authorized seven

states, including Pennsylvania, to select one tolled highway each which could receive up to 35 percent federal funding. While this act allowed for federal disbursements to a Pennsylvania tolled highway, no monies were allocated to the PTC under this act.

The PTC began to receive federal monies with the implementation of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. Under this act, federal funds in the amount of \$14.0 million (at an 80 percent matching ratio) were made available to the PTC for the Mon/Fayette project under the section designated as "Rural and Urban Access Projects." This money was disbursed to the PTC during fiscal years 1992 through 1997. The Federal Appropriation Acts of 1991, 1992, and 1993 allocated an additional \$10.1 million to the PTC, at a ratio of 35 percent, federal funding, for the Mon/Fayette Expressway projects.

Through November 30, 1996, the PTC had obligated \$21.2 million in federal funds for Act 61 projects. As shown on Table 12, \$14.3 million, or about 67 percent of the total has been received for costs incurred on the Mon/Fayette Expressway projects.

Table 12

Federal Funding Received by the PTC for Act 61 Projects (Through November 30, 1996)

<u>Project and Use</u>	<u>Federal Funding Received</u>
<u>New Cumberland Army Depot Interchange:</u>	
Design Location Study and Environmental Impact Studies	\$ 1,355,172
<u>I-95 Interchange:</u>	
Design and Right-of-Way	5,577,804
<u>Mon/Fayette Expressway:</u>	
Final Design - WV to Uniontown.	1,937,294
Final Design - I-70 to Rte. 51.....	4,520,352
Final Design Management - WV to Uniontown.....	384,848
Final Design Management - I-70 to Rte. 51.....	897,980
Design Location Study - I-70 to Rte. 51	2,577,856
Design Location Study - Rte. 51 to Pittsburgh	1,104,795
Design Location Study - Uniontown to Brownsville.....	789,852
Traffic & Revenue Study - WV to Uniontown.....	17,353
Traffic & Revenue Study - Uniontown to Brownsville	17,353
Traffic & Revenue Study - I-70 to Rte. 51.....	17,353
Traffic & Revenue Study - Rte. 51 to Pittsburgh.....	17,353
Design Location Study - WV to Uniontown	1,711,306
Pre-Design - WV to Uniontown	83,353
Pre-Design - Uniontown to Brownsville.....	55,569
Pre-Design - I-70 to Rte. 51	83,353
Pre-Design - Rte. 51 to Pittsburgh	55,569
Subtotal - Mon/Fayette Expressway	\$14,271,539
Total Federal Funds Obligated.....	\$21,204,515

Source: Compiled by LB&FC staff using information obtained from the PTC Controller's Office.

Pursuant to Act 1992-109, the Turnpike Commission's use of federal funds available for toll roads is subject to the approval of the Secretary of the PA Department of Transportation and the provisions of Act 1985-61. Act 61 provides that PennDOT may enter into an agreement with the U.S. DOT, the FHWA, or other federal agencies to obtain federal funds for use on toll roads. Unless authorized through federal legislation, the use of federal funds on the Turnpike System are restricted to those monies approved by the Secretary of PennDOT, and all federal funds to the PTC are processed through PennDOT.

ISTEA expires on September 30, 1997, and Congress is faced with reauthorization of the country's basic surface transportation legislation. The new bill is currently being referred to as "Next Tea" for the National Economic Crossroads Transportation Efficiency Act. This legislation proposed by the Administration will define federal spending priorities in surface transportation matters for the next six years. During that period, the legislation is expected to allocate as much as \$175 billion in federal funding.

The PTC is seeking additional federal funding as Congress considers reauthorizing legislation. On March 13, 1997, the PTC's Executive Director appeared before the U.S. House Transportation and Infrastructure Committee's Surface Transportation Subcommittee. This subcommittee was hearing requests for funding in preparation for reauthorization of ISTEA. At this hearing, the PTC requested \$500 million in federal funding for the Mon/Fayette Expressway and Southern Beltway Transportation Projects. (This represents 20 percent of the overall funding that is required for these projects.) At the same hearing, a member of the Pennsylvania Congressional delegation requested that \$120 million in NEXTEA monies be allocated to the PTC for another Act 61 project, the completion of an interchange between the Turnpike System and I-95.

The Commission's Legislative Liaison has had an extensive involvement and presence in Washington, D.C., on behalf of the PTC. The Commission has also retained the services of the consulting firm of Baker, Donelson, Bearman, and Caldwell (referred to as "Baker") to represent the interests of the PTC during the reauthorization process. The PTC's contract with Baker states that:

Baker is to provide consultation and strategy development for the funding of major economic development initiatives, expansion of potential toll sources, the increase in federal matching funds and greater utilization of the opportunities provided by ISTEA. The nature of the projects are to be determined by the PTC with advice and assistance of Baker. In this role Baker develops the concept of the project, outlines the proposal, the legislative and public relations strategy for implementing the proposal, arranges individual meetings with members of Congress and testimony before all relevant committees of Congress and the grant release program with appropriate agencies.

The contract authorizes and directs Baker to utilize the services of Ann Epard and Associates as subcontractor. The consultant's objectives during 1997 are to have Congress specifically authorize funding for the I-95 Interchange and secure Congressional authorization for funding sections of the Mon/Fayette Expressway. The annual amount of this contract is \$200,000. It is paid from the Turnpike Commission's Operating Account.

Commission officials acknowledge that the PTC may be in competition with PennDOT for available federal monies. A spokesperson for the FHWA stated that this may be the case, but much is dependent upon the apportionment formula that results in the NEXTEA legislation. The FHWA official also stated that PTC receipt of federal funding may also not directly impact the total received by the Commonwealth if funding is earmarked for specific projects in a state.

Provisions of state law restrict the use of federal funds on the Turnpike to those approved by the Secretary of Transportation in the absence of a specific federal charge to the contrary (e.g., specific projects and funding enumerated in ISTEA). PennDOT's general policy has been to not authorize federal funding for the Turnpike unless the monies are specified in federal law (e.g., ISTEA funding for the Mon/Fayette projects).

Toll Increases

The Commission is authorized to set and adjust toll rates on the Turnpike, subject to any bond resolution or trust indenture. Tolls are not subject to supervision or regulation by any other state board or commission. Tolls are to be fixed and adjusted to provide funds to pay the cost of constructing, maintaining, repairing, and operating the Pennsylvania Turnpike System and its different parts and sections; and to pay any bonds and the interest of the Commission and all sinking fund requirements as they become due.

The per mile toll rate varies by class of vehicle and portion of the Turnpike on which the vehicle is traveling. The differential in rates is based on whether a vehicle is classified as passenger or commercial. A passenger vehicle is defined as a two-axle vehicle not exceeding 7,000 pounds gross weight, whereas a commercial vehicle is defined as a motor vehicle or combination thereof with a gross weight over 7,000 pounds. Commercial vehicles are further broken down into various classes based on vehicle weight.

Each class has its own fare rate. For example, as shown on Table 13 the toll rate per mile for a passenger car traveling on the Turnpike's Mainline is \$.04. The per mile rate for the same vehicle on the Amos K. Hutchinson Bypass is \$.07, and on the James E. Ross Highway, it is \$.09. (See Appendix E for further information on PTC toll rates as of March 1997.)

Table 13

PA Turnpike Per Mile Toll Rates

<u>Turnpike Section^a</u>	<u>Passenger Car</u>	<u>Class 5 30,000 - 45,000 lbs.</u>	<u>Class 8 80,000 - 100,000 lbs.</u>	<u>Class 9 Over 100,000 lbs.</u>
Mainline (East-West Through Trip).....	\$.04	\$.12	\$.29	\$ 1.68
Amos K. Hutchinson Bypass (North-South Through Trip).....	.07	.22	.52	3.06
James E. Ross Highway (North-South Through Trip).....	.09	.27	.65	3.73
Northeastern Extension (North-South Through Trip).....	.04	.13	.29	1.66

^aDoes not include James J. Manderino Highway (Turnpike 43) on which tolls are charged by number of axles. A north-south through trip on Turnpike 43 ranges from \$.09 to \$.45 per mile.

Source: Developed by LB&FC staff using the *Fare Schedule for all Classes of Vehicles*, PA Turnpike Commission Revised February 1, 1995.

Since the passage of Act 1985-61, the Commission has had two toll increases, one in January 1987 and the other in June 1991. In 1987 the passenger vehicle rate on the Mainline increased from \$.024 per mile to \$.0314 per mile for a passenger vehicle and from \$.0724 to \$.0940 per mile for a class 5 commercial vehicle. In 1991, the increase on the Mainline was from \$.0314 to \$.0409 per mile for a passenger vehicle and from \$.0940 to \$.1226 per mile for a class 5 commercial vehicle. According to the PTC Controller, the additional revenues generated by each of these increases were used to service the debt the PTC incurred as a result of the Act 61 projects.

Although both increases were at a rate of 30 percent, the actual yield was closer to 27 percent due to a temporary decline in traffic volume. Overall, gross fare revenue increased \$19.9 million in FY 1987 and \$37 million in FY 1988, and with the June 1991 fare increase, gross tolls increased \$48.0 million. These additional revenues were not needed for the operating expenses of the PTC as those expenditures increased only nominally each year. Instead, the toll increase revenues were necessary to pay for debt service which had grown from \$7.9 million in 1986 to \$59.5 million in 1988, and to \$82.4 million in 1993, all as a direct result of the Act 61 mandates.

Funding From Other Agencies

Through November 30, 1996, funding in support of Act 61 projects has also included revenues received from “participating agencies.” These include the Pennsylvania Department of Transportation (PennDOT) and the State of West Virginia. Table 14 lists the amounts contributed by these agencies.

Table 14

Other Funding Sources for Act 61 Projects

(Through November 30, 1996)

<u>Project</u>	<u>Amount</u>	<u>Source</u>
Lehigh Tunnel #2	\$ 39,416	Private Contractor ^a
Amos K. Hutchinson Bypass.....	839,270	PennDOT ^b
Mon/Fayette Expressway.....	3,479,726	WV DOT

^aRepresents a contractor payment made to the PTC as settlement for a workers' compensation dispute.

^bTwo PennDOT bridges at the southern end of this project required extensive rehabilitation. This work was performed by the PTC contractor, and PennDOT reimbursed PTC for 50 percent of the rehabilitation costs.

Source: Developed by LB&FC staff using information obtained from the PTC Controller's Office.

The State of West Virginia is responsible for funding the portion of the Mon/Fayette Expressway that goes from the Pennsylvania Border to I-68, near Morgantown. As of November 30, 1996, the West Virginia DOT had provided \$3.5 million to reimburse the PTC for costs incurred in preparing the Environmental Impact Statement (EIS) for the West Virginia segment of the project.

Future Funding Strategy

Description

Pursuant to the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), the Federal Highway Administration and the Federal Transit Administration issued joint Statewide and Metropolitan Planning Regulations in late 1993. These regulations require the completion of a Major Investment Study (MIS) for proposed major transportation projects within a metropolitan planning region. A component of the MIS is a reasonable² financial strategy for obtaining the funds required for the transportation projects.

²A financial plan that demonstrates how the transportation improvement program can be implemented, indicates resources from public and private sources that are reasonably expected to be made available to carry out

The PTC developed a financial strategy in the summer of 1995 for obtaining the funding necessary to complete the Mon/Fayette Expressway and Southern Beltway Transportation Projects. This strategy was published in a report entitled *The Mon/Fayette Transportation Project Route 51 to Pittsburgh Integrated Congestion Management System Analysis Major Investment Study and Preliminary Alternatives Analysis Final Report*, dated December 1996.

The funding strategy presented in the CMS/MIS provided for completion of all sections of the Mon/Fayette Expressway and Southern Beltway projects. The strategy is composed of two parts: a “present” or “available” funding component, and a “potential future funding” component.

Available Funding Sources for the Mon/Fayette Expressway and Southern Beltway Projects

As shown on Table 15, the Commission’s funding strategy includes six available funding sources totaling \$706.8 million.

Table 15

Present Funding Sources for Mon/Fayette Expressway and Southern Beltway Transportation Projects

(\$ Millions)

<u>Source:</u>	<u>Amount</u>
Special Federal Funds (1991-1993)	\$ 24.1
Oil Company Franchise Tax Accrual (1991-2004)	239.8
Oil Company Franchise Tax Bond (1994)	100.0
Existing Bond Residual (1996)	100.0
Future Oil Company Franchise Tax Bonds (1999)	236.0
Net Toll Revenue (2001-2006)	<u>6.9</u>
Total - Present Funding	\$706.8

Source: Compiled by the LB&FC staff from information obtained from the PTC.

Special Federal Funds (1991-1993). Special federal funds in the amount of approximately \$24 million were to be received from federal funding authorizations passed between 1991 and 1993. Approximately \$14 million was authorized in the FY 1991 ISTEA legislation and the remaining \$10 million was authorized in FY 1991, 1992, and 1993 federal appropriations acts.

the plan, and recommends any innovative financing techniques to finance needed projects and programs, including value capture, tolls, and congestion pricing.” 23 U.S.C.A. §134(h)(2)(B).

Oil Company Franchise Tax Accrual (1991-2004). Oil Company Franchise Tax monies may be used to support bond issues to pay for Act 61 projects. Oil Company Franchise Tax residual monies not related to issuing or paying debt service of these bonds may also be used to pay Act 61 construction costs. The Oil Company Franchise Tax funds amount to approximately \$40 million per year. Over the period 1991 to 2004 a total of approximately \$240 million will accrue in residual funds not anticipated to be used for debt service. The amounts vary in any given year based on the amount of debt service paid for bonds financed by the Oil Company Franchise Tax in that year.

Oil Company Franchise Tax Bond (1994). The PTC issued a Series A Oil Company Franchise Tax revenue Bond on April 15, 1994, for the aggregate amount of \$115,635,000. Approximately \$100 million of this amount is available for payments of project costs. The remainder was used for financing costs to issue the bonds and payment to the Debt Service Reserve Fund.

Existing Bond Residual (1996). In 1986 and through 1992, the PTC authorized the issuance of Turnpike revenue bonds in the aggregate principal amount of \$2.161 billion. These monies could be used for any Act 61 project. Approximately \$100 million remains from these bond issues after paying for the first group of Act 61 projects. These funds are available for the Mon/Fayette Expressway and Southern Beltway Transportation Projects.

Future Oil Company Franchise Tax Bonds (1999). The PTC plans to issue another bond series supported by Oil Company Franchise Tax revenues in the aggregate of approximately \$236 million.

Net Toll Revenue (2001-2006). When the two sections currently planned for construction (I-70 to S.R. 51 and I-68 to Uniontown) are completed, they will start receiving toll revenue. Based on traffic projections for these roads, the PTC believes approximately \$7 million from tolls will be available for construction costs during the period 2001 to 2006. This figure is net revenue in excess of the operating costs of the two sections.

Potential Future Funding Sources for the Mon/Fayette Expressway and Southern Beltway Projects

The Commission's funding strategy is based upon six categories of potential funding that, if realized, would generate an additional \$1.8 billion in revenues. (See Table 16.)

Table 16

Potential Future Funding Sources for Mon/Fayette Expressway and Southern Beltway Transportation Projects

(\$ Millions)

<u>Source:</u>	<u>Amount</u>
NEXTEA Special Federal Funds - 1998 to 2002	\$ 200
State Infrastructure Bank - 1998 to 2000	70
Private/Public Partnerships - 2000 and 2001	40
Bonding of User Fees and Other Dedicated Funding - 1999	80
Bonding of User Fees and Other Dedicated Funding - 2000	474
Bonding of User Fees and Other Dedicated Funding - 2003	593
Toll Revenue Bonding, PA 60 to U.S. 22 (Opening year)	36
Toll Revenue Bonding, Route 51 to Pittsburgh (Opening year)	92
Accrual of Unbonded State User Fees (1997-2006)	168
Subtotal - Potential Funding	\$1,753
Total Available and Potential Funding	\$2,460

Source: Developed by the LB&FC staff from the Pennsylvania Turnpike Commission's *Funding Strategy for Mon/Fayette and Southern Beltway Transportation Projects, Major Investment Studies* and information contained in the PTC's *Mon/Fayette and Southern Beltway Transportation Projects Status Report*, dated August 25, 1995.

NEXTEA Special Federal Funds (1998-2002) - \$200 Million. The strategy assumes future allocations of special federal funds through federal appropriation acts, the reauthorization of ISTEA (called NEXTEA), or other federal legislation will be provided. A key factor will be the outcome of deliberations on how the transportation monies will be allocated under NEXTEA. The Turnpike Commission is currently pursuing additional special federal funding for these projects. The Commission is working with the state's congressional delegation and has retained a lobbyist to assist the PTC on this matter and other funding requests in Washington, D.C. One strategy projects \$200 million from this source.³ Any action in this regard will require the concurrence of PennDOT.

State Infrastructure Bank (1998-2000) - \$70 Million. The State Infrastructure Bank (SIB) pilot project was authorized by Congress in the National Highway System (NHS) designated legislation in 1995. The pilot program allows states to establish a revolving loan program in order to secure additional private/public transportation project financing. The legislation permits the states to establish the SIB by utilizing up to 10 percent of some categories of federal-aid

³The PTC Executive Director, in testimony before the U.S. House Transportation and Infrastructure Subcommittee on March 13, 1997, requested federal funding in the amount of \$500 million for the Mon/Fayette Expressway and Southern Beltway projects.

funds for fiscal year 1996 and 1997. Currently, 10 states have been selected by the FHWA to participate in the SIB pilot program. Pennsylvania has applied to participate in this program and anticipates that it will be selected. Providing Pennsylvania becomes a pilot SIB state, the PTC's funding strategy proposes \$70 million as a reasonable amount of funds to pursue under this program. This funding is intended to be used for the PA 60 to U.S. 22 (Findlay Connector) project and will require repaying the SIB loan with interest over a period of time. This portion of the funding strategy would also require PennDOT concurrence.

Private/Public Partnerships (2000-2001) - \$40 Million. The PTC is currently engaged in discussions with investors and land owners/developers who may be interested in providing private financing or donating right-of-way to defray a portion of the total cost of the Mon/Fayette Expressway and Southern Beltway Projects. One plan being considered would create one or more Transportation Partnership Districts in the PA 60 to U.S. 22 (Findlay connector project corridor). With the formation of these Transportation Partnership District(s), the school district(s), counties, and township(s) affected would agree to defer receiving taxes on properties developed around the interchange(s) for a certain period of time. The tax money that would have been generated by the taxing of developed properties would be transferred to an authority to pay for the construction of the interchange(s). The developers of property would pay the taxes on the developed property; however, the tax money generated would be transferred to pay for the interchange construction. In this way, by deferring taxes, the school districts, counties, and townships are ultimately beneficiaries since property values increase with the additional development and the resultant tax base is strengthened. The PTC estimates that approximately \$40 million in funds could be derived from this source.

Bonding of State User Fees or Other Dedicated Funding (1999, 2000, 2003) - \$1.147 Billion. According to the funding strategy, user fees or other dedicated funding will be needed in order to maintain planned construction schedules. The strategy proposes that revenues from user fees or other dedicated funding totaling \$133 million annually would be needed to support approximately \$1.147 billion in bonds.

The initial version of the funding strategy proposed that this bonding be linked to proposed state motor fuels tax increases. The funding strategy stated that "because user fees or other dedicated funding have been historically dedicated to specific projects, it is reasonable to assume that as these projects advance, a portion of future increases in state revenue would be allocated toward the construction costs of these projects."

A subsequent resolution of the Southwestern Regional Planning Commission (Resolution No. 21-96) resolved that:

. . . the references to the bonding of state revenues in the financial plan for the recommended preferred design concept and scope be revised to delete any references to state motor fuel gas tax and be replaced with the bonding of user fees and other dedicated revenues, where appropriate.

This was part of a resolution endorsing the Congestion Management System Analysis and Major Investment Study recommendations, dated September 30, 1996.

Bonding of Mon/Fayette Expressway and Southern Beltway Toll Revenue - \$128 Million. Preliminary Traffic and Revenue Projections completed in 1995 for the Mon/Fayette - Route 51 to Pittsburgh Transportation Project and the Southern Beltway Transportation Projects, indicate they will generate toll revenues in excess of that required for operation and maintenance of these facilities. Under the funding strategy, these excess revenues would generate \$128 million in additional construction funds from the sale of bonds supported by toll revenues.

Unbondable State Revenue Accrual (1997-2006) - \$168 Million. Bond underwriters have advised that only 75 percent of revenue from the Oil Company Franchise Tax can be bonded. The other 25 percent of revenue is unbondable and is available to meet current expenditures for the years following payment on the principal and interest on the bonds. The strategy assumes the receipt of \$168 million from this source between 1997 and 2006.

Table 17 outlines the funding plan established by the PTC for the remainder of the Mon/Fayette Expressway and the Southern Beltway Transportation Projects. According to the PTC, the funding levels represented in the table are not to be considered as absolute, but that a funding scenario similar to the one proposed would be required to complete the projects. None of these potential funding sources listed were committed to the projects as of March 1997.

Estimated Project Costs Versus Proposed Funding Strategy

The PTC estimates that, if realized, the funding strategy discussed in this section would be sufficient to complete the Mon/Fayette Expressway and Southern Beltway portions of the Act 61 project schedule. If the PTC is to proceed even further with the Act 61 projects, however, additional funding will again be required.

Table 17 relates the estimated costs of the Mon/Fayette Expressway and Southern Beltway projects to the proposed funding strategy. As shown, the present and potential future funding sources, if realized in the amounts listed in the PTC's strategy, would be sufficient to pay for all seven of these projects. The strategy is, however, far from certain and is heavily dependent on the receipt of substantial additional federal funding and revenues from bonding of anticipated state user fees and other dedicated funding. The strategy assumes \$1.147 billion from bonding of

user fees (e.g., gas tax, license fee increases, and registration fee increases)⁴ and other dedicated funding between 1999 and 2003.

Table 17

Funding Strategy for the Mon/Fayette Expressway and Southern Beltway Projects (\$ Millions)

<u>Funding</u>	<u>Amount</u>
Present Sources (From Table 15).....	\$ 706.8
Potential Future Sources (From Table 16)....	<u>1,753.0</u>
Total.....	\$2,459.8
 <u>Funding Requirements</u>	
<u>Mon/Fayette:</u>	
West Virginia to Uniontown	\$ 143.1
Uniontown to Brownsville.....	296.0
I-70 to PA 51	565.8
PA 51 to Pittsburgh.....	825.3
 <u>Southern Beltway:</u>	
PA 60 to U.S. 22.....	100.2 ^a
U.S. 22 to I-79.....	261.4
I-79 to Mon/Fayette	<u>261.0</u>
Total.....	\$2,452.8

^aIn early 1997, the PTC revised this estimate to \$150.0 million.

Source: Developed by LB&FC staff from information provided by the PTC.

A 1995 report prepared by the PTC staff for the Mon/Fayette Expressway and Southern Beltway projects used estimated project costs and available revenues to project cash flow and project development on the Mon/Fayette Expressway and Southern Beltway projects. One scenario is a “full-build (i.e., build all seven projects) option. The other is a “full build” of two projects (build the West Virginia to Uniontown and I-70 to PA 51 segments of the Mon/Fayette Expressway and complete environmental impact statements only on the other five).

⁴The original version of the strategy specifically referred to receipt of portions of a gas tax increase: 0.17 cent initially, 1.0 cent in 1999, and 1.25 cents in 2003. The strategy’s wording was later changed to “user fees and other dedicated funding.”

Tables 18 and 19 show the projected costs, funding, and annual and cumulative cash flows under the "full build" scenario. As shown on these tables, the PTC is at least \$1.70 billion short of the amount required to complete all seven of the Mon/Fayette and Southern Beltway projects.

Table 18

**Full Build Scenario: Projected Costs
Compared to Available Funding for the
Mon/Fayette Expressway and Southern Beltway Projects***
(\$ Millions - FY 1993-94 Through FY 2003-04)

	<u>Costs</u>
<u>Mon/Fayette</u>	
West Virginia to Uniontown.....	\$ 143.1
Uniontown to Brownsville.....	296.0
I-70 to PA 51	565.8
PA 51 to Pittsburgh.....	<u>825.3</u>
Subtotal Mon/Fayette.....	\$1,830.2
<u>Southern Beltway</u>	
PA 60 to U.S. 22.....	\$ 100.2 ^a
U.S. 22 to I-79.....	261.4
I-79 to Mon/Fayette	<u>261.0</u>
Subtotal Southern Beltway	\$ 622.6
Total Costs	\$2,452.8
	<u>Available Funding</u>
Special Federal Funds.....	\$ 24.1
Oil Company Franchise Tax Base..	239.8
Oil Company Franchise Tax Bond .	336.0
Existing Bond Issue Residual	100.0
Net Toll Revenue ^b	<u>43.6</u>
Total Funding	\$743.5

*Represents fully building all seven individual Mon/Fayette Expressway and Southern Beltway projects.

^aIn early 1997, the PTC revised this estimate to \$150.0 million.

^bAssumes net toll revenues when all sections are operational.

Source: Developed by LB&FC staff using information contained in the Pennsylvania Turnpike Commission's *Mon/Fayette and Southern Beltway Transportation Projects Status Report*, dated August 25, 1995.

Table 19

**Full Build Scenario: Projects Costs, Available Funding, and Cash Flow for the
Mon/Fayette Expressway and Southern Beltway Projects**
(\$ Millions)

Costs and Funding												
<u>Costs</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>Totals</u>
Mon/Fayette Expressway	\$29.0	\$26.0	\$69.5	\$195.9	\$275.5	\$342.8	\$362.0	\$347.5	\$175.0	\$ 7.0		\$1,830.2
Southern Beltway	<u>0.6</u>	<u>0.3</u>	<u>6.2</u>	<u>8.4</u>	<u>15.9</u>	<u>44.5</u>	<u>112.5</u>	<u>177.7</u>	<u>149.0</u>	<u>100.5</u>	<u>\$7.0</u>	<u>622.6</u>
Total Project Costs.....	\$29.6	\$26.3	\$75.7	\$204.3	\$291.4	\$387.3	\$474.5	\$525.2	\$324.0	\$107.5	\$7.0	\$2,452.8
<u>Available Funding</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>Totals</u>
Special Federal Funds.....	\$ 6.7	\$ 5.8	\$ 3.8	\$ 2.6	\$ 5.2			\$ 9.8	\$ 9.8	\$ 9.8	\$ 9.8	\$ 24.1
Oil Franchise Tax Base	99.4	43.7	18.3	9.8	9.8	\$9.8	\$ 9.8	\$ 9.8	\$ 9.8	\$ 9.8		239.8
Oil Franchise Tax Bond	100.0		236.0									336.0
Existing Bond Issue Residual			100.0									100.0
Net Toll Revenue							<u>1.0</u>	<u>1.5</u>	<u>7.7</u>	<u>14.8</u>	<u>18.6</u>	<u>43.6</u>
Total Funding	\$206.1	\$49.5	\$358.1	\$12.4	\$15.0	\$9.8	\$10.8	\$11.3	\$17.5	\$24.6	\$28.4	\$743.5

Mon/Fayette Expressway and Southern Beltway Projects Cash Flow

Annual Cash Flow.....	\$176.5	\$ 23.2	\$282.4	(\$191.9)	(\$276.4)	(\$377.5)	(\$463.7)	(\$ 513.9)	(\$ 306.5)	(\$ 82.9)	\$ 21.4	(\$1,709.3)
Cumulative Cash Flow.....	\$176.5	\$199.7	\$482.1	\$290.2	\$ 13.8	(\$363.7)	(\$827.4)	(\$1,341.3)	(\$1,647.8)	(\$1,730.7)	(\$1,709.3)	

Source: Developed by LB&FC staff from information contained in the Pennsylvania Turnpike Commission's *Mon/Fayette and Southern Beltway Transportation Projects Status Report*, dated August 25, 1995.

Table 19 illustrates estimated project costs and funding availability as well as annual and cumulative cash flows. These projections show that with present funding sources, the Commission will be able to proceed into FY 1998-99 before experiencing a negative cumulative cash flow.

Another scenario for which projections are frequently made is the Administration's 1995 proposal to fully build the West Virginia to Uniontown and I-70 to PA 51 segments of the Mon/Fayette Expressway while proceeding with environmental impact statements only for the other five projects. This scenario has estimated costs of \$756.5 million. (See Table 20.) As shown on Table 21, present funding would allow the Commission to proceed into FY 1998-99 at which time it would experience a negative cash flow of \$92.1 million. This figure has been frequently referenced in the media and other forums as being the amount by which the PTC is short of funding for the projects. Actually, it is the projected amount by which the Commission is short of funds to complete two of the projects and environmental impact statements on the other five.

Table 20

**Partial Build Scenario: Projected Costs
Compared to Available Funding for the
Mon/Fayette Expressway and Southern Beltway Projects***
(\$ Millions - FY 1993-94 Through FY 2003-04)

	<u>Costs</u>
<u>Mon/Fayette</u>	
West Virginia to Uniontown.....	\$143.1
Uniontown to Brownsville	12.4
I-70 to PA 51	565.8
PA 51 to Pittsburgh	<u>19.3</u>
Subtotal Mon/Fayette	\$740.6
<u>Southern Beltway</u>	
PA 60 to U.S. 22.....	\$ 3.2
U.S. 22 to I-79	6.4
I-79 to Mon/Fayette	<u>6.3</u>
Subtotal Southern Beltway	\$ 15.9
Total Costs	\$756.5
<u>Available Funding</u>	
Special Federal Funds.....	\$ 24.1
Oil Company Franchise Tax Base..	239.8
Oil Company Franchise Tax Bond .	336.0
Existing Bond Issue Residual	100.0
Net Toll Revenue	<u>6.9</u>
Total Funding	\$706.8

*Reflects the costs of the Administration's 1995 proposal to fully build two projects (West Virginia to Uniontown and I-70 to PA 51) and do environmental impact statements only for the other five projects.

Source: Developed by LB&FC staff using information contained in the Pennsylvania Turnpike Commission's *Mon/Fayette and Southern Beltway Transportation Projects Status Report*, dated August 25, 1995.

Table 21

**Partial Build Scenario: Projected Costs, Available Funding, and Cash Flow for the
Mon/Fayette Expressway and Southern Beltway Projects***
(\$ Millions)

Project Costs and Funding												
Costs	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	Totals
Mon/Fayette Expressway	\$29.0	\$26.0	\$69.5	\$195.9	\$218.2	\$188.5	\$9.5	\$4.0				\$740.6
Southern Beltway	0.6	0.3	6.2	5.4	3.4							15.9
Total Project Costs.....	\$29.6	\$26.3	\$75.7	\$201.3	\$221.6	\$188.5	\$9.5	\$4.0				\$756.5
Available Funding	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00	FY 01	FY 02	FY 03	FY 04	Totals
Special Federal Funds.....	\$ 6.7	\$ 5.8	\$ 3.8	\$ 2.6	\$ 5.2							\$ 24.1
Oil Franchise Tax Base	99.4	43.7	18.3	9.8	9.8	\$9.8	\$ 9.8	\$ 9.8	\$ 9.8	\$ 9.8	\$ 9.8	239.8
Oil Franchise Tax Bond	100.0		236.0									336.0
Existing Bond Issue Residual..			100.0									100.0
Net Toll Revenue							1.0	1.1	1.4	1.6	1.8	6.9
Total Funding	\$206.1	\$49.5	\$358.1	\$12.4	\$15.0	\$9.8	\$10.8	\$10.9	\$11.2	\$11.4	\$11.6	\$706.8
Mon/Fayette Expressway and Southern Beltway Projects Cash Flow												
Annual Cash Flow	\$176.5	\$ 23.2	\$282.4	(\$188.9)	(\$206.6)	(\$178.7)	\$ 1.3	\$ 6.9	\$11.2	\$11.4	\$11.6	(\$49.7)
Cumulative Cash Flow.....	\$176.5	\$199.7	\$482.1	\$293.2	\$ 86.6	(\$ 92.1)	(\$90.8)	(\$83.9)	(\$72.7)	(\$61.3)	(\$49.7)	

*The Administration's 1995 proposal to fully build two projects and do environmental impact statements only on the other five projects.

Source: Developed by LB&FC staff from information contained in the Pennsylvania Turnpike Commission's *Mon/Fayette and Southern Beltway Transportation Projects Status Report*, dated August 25, 1995.

VI. PTC Compliance With State and Federal Requirements

Act 1985-61, as Amended

This audit examined PTC performance to determine compliance with pertinent provisions of the Turnpike Organization, Extension and Toll Road Conversion Act, Act 1985-61, as amended, 36 P.S. §651.1 et seq. The focus of this examination was on those provisions that relate to the authorization that the PTC construct a series of projects specified in the act and use bonds to pay for construction.

The act contains few provisions that establish specific mandates or identify time frames for implementation. While the act authorizes the Commission to exercise some degree of discretion in constructing the projects, it does require that they be undertaken in distinct phases. Act 61 and subsequent amendments also specify funding provisions, including language pertaining to the use of state Oil Company Franchise Tax monies.

The statute requires those projects in the first two sections (§8911, Improvement and Extension Authorizations and §8912, Subsequent Extension Authorization) to be substantially completed prior to initiation of the project in the third section (§8913, Additional Subsequent Extension Authorization). Legislative debate prior to enactment specifically addressed this issue. The debates indicate that the legislative intent was for the first two sections to be constructed prior to the second two but the individual projects in the first two sections could be constructed in any order.

Based on our examination of the activities dealing with §8911 projects and §8912 projects, we have determined that the PTC has been in compliance with the requirements set forth in Act 1985-61, as amended, and with the intent of the General Assembly as to how to proceed with its desires concerning the construction of these projects.

There are a total of 15 projects in §8911 and §8912. To date, the PTC has completed seven of the 21 projects contained in the entire act as amended. All seven of the completed projects are prescribed in §8911 of Act 61, as amended. Currently, the PTC is concentrating its efforts on two main projects (the Mon/Fayette Expressway and the Southern Beltway) that are part of §8912 of the act as amended.

We further determined that the PTC has elected not to construct one project contained in §8911 of Act 61, as amended--construction of an interchange with State Route 903 in Carbon County--since the needs study and traffic revenue study done

for that project found that the interchange was not justified. This appears to be consistent with the authority granted to the PTC in the act to construct projects according to a schedule deemed “feasible and approved by the Commission.”

In accordance with the provisions of Act 1985-61, as amended, projects in the first three sections are to be completed prior to the commencement of the projects in the fourth section. Our performance audit of PTC activities in this regard has determined that the PTC is presently in compliance with this provision of the act. We observed, however, that the descriptor of the first portion of a project in §8914 is in fact a project (the Amos K. Hutchinson Bypass/Greensburg Bypass/Turnpike 66) prescribed in §8911 that has been completed by the PTC. While we were not able to ascertain why this particular descriptor was included again in this section of the legislation, we did note that the PTC has not proceeded with the second portion of that project. We therefore have concluded that the PTC continues to remain in compliance with the letter and intent of Act 1985-61, as amended.

The PTC was authorized by Act 61 to issue Turnpike revenue bonds supported by tolls to fund these projects. In 1991, the PTC was allocated a portion of the OCFT monies which could also be used to secure bonds. The PTC has issued bonds under both of these provisions to fund the projects in Act 1985-61, as amended. Please see Section V for a discussion of the bond issues.

Federal Requirements

Several federal laws enacted or amended since the passage of Act 61 also contain compliance provisions that affect the construction of turnpike and other transportation projects. We found that the PTC has incorporated provisions of these acts into their planning and construction process to comply with the federal requirements.

Intermodal Surface Transportation Efficiency Act (ISTEA)

The Intermodal Surface Transportation Efficiency Act (ISTEA), passed by Congress in 1991, has a declared policy of developing:

... a National Intermodal Transportation System that is economically efficient and environmentally sound, provides the foundation for the nation to compete in the global economy, and will move people and goods in an energy efficient manner. The National Intermodal Transportation System shall consist of all forms of transportation in a unified, interconnected manner, including the transportation of the future, to reduce energy consumption and air pollution while promoting economic development and supporting the Nation’s preeminent position in international commerce.

The federal law requires Metropolitan Planning Organizations (MPOs) in cooperation with the states to develop transportation plans and programs for urbanized areas (areas with a population of more than 50,000) of the state that provide for the development of transportation facilities which will function as an intermodal transportation system for the state, the metropolitan areas, and the Nation. The law states that it is in the national interest to encourage and promote the development of transportation systems embracing various modes of transportation in a manner which will efficiently maximize mobility of people and goods within and through urbanized areas and minimize transportation-related fuel consumption and air pollution. ISTEA requires that the process for developing these plans and programs provide for consideration of all modes of transportation.

Under this law, MPOs must consider 15 factors in developing their transportation plans and programs. Examples include:

- Preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing transportation facilities more efficiently.
- The likely effect of transportation policy decisions on land use and development and the consistency of transportation plans and programs with all applicable short- and long-term land use and development plans.
- The need for connectivity of roads within the metropolitan area with roads outside the metropolitan area.
- Methods to enhance the efficient movement of freight.
- The overall social, economic, energy, and environmental effects of transportation decisions.

Additionally, under ISTEA, an MPO is required to develop a long range plan for its metropolitan area that identifies the transportation facilities that should function as an integrated metropolitan transportation system; includes a financial plan (it will indicate what public and private resources are reasonably expected to be available to carry out the plan and will recommend any innovative financing techniques to finance needed projects and programs) that demonstrates how the long range plan can be implemented; assesses capital investment necessary to preserve the existing transportation system and makes the most efficient use of existing transportation facilities; and indicates proposed transportation enhancement activities.

Further, MPOs, in cooperation with the state and affected transit operators, are to develop a transportation improvement program for its metropolitan area. This program is to provide citizens, affected public agencies, representatives of transportation agency employees, other affected employee representatives, private

providers of transportation, and other interested parties with a reasonable opportunity to comment on the proposed program.

State departments of transportation are required under the provisions of ISTEA to develop a long range plan for all areas of the state. With respect to the metropolitan areas of the state, the plan will be developed in cooperation with the MPOs. Additionally, the state is required to develop a statewide transportation improvement program which again is accomplished in cooperation with the MPOs and allows the same opportunity for comment required by ISTEA for MPO transportation improvement programs.

As stated above, the 1991 Intermodal Surface Transportation Efficiency Act has placed new emphasis on transportation planning requirements. We have concluded that the PTC, in working with the MPO responsible for the planning function for the majority of the region where the PTC's Act 61 efforts are currently focused (the Southwestern Pennsylvania Regional Planning Commission), has complied with the spirit and intent of ISTEA. The PTC has functioned in a co-lead capacity with the Southwestern Pennsylvania Regional Planning Commission (SPRPC) during the planning phase for the Mon/Fayette Expressway and Southern Beltway Transportation Projects. The Commission has produced, in conjunction with the SPRPC, the studies required by the Joint Statewide and Metropolitan Planning Regulations (23 CFR Part 450) that were issued by the FHWA and FTA in response to the ISTEA legislation. Additionally, the SPRPC and the PTC have complied with the requirements relating to receiving public input for consideration prior to the decision process.

Once the SPRPC, as the MPO for the region, makes decisions as to the direction it desires to proceed on these projects, the PTC then executes the actions required to move the projects forward through the various phases of Pennsylvania's Transportation Project Development Process.

National Environmental Policy Act (NEPA)

NEPA requires highway agencies to identify and assess the environmental consequences of proposed and alternative actions before a federal-aid highway project can be constructed. If FHWA and the states undertake actions that will have a significant impact on resources such as wetlands, air quality, historic sites, or endangered species, NEPA requires them to prepare an environmental impact statement (EIS).¹

¹An EIS is a detailed written report that provides "full and fair discussion of significant environmental impacts and [informs] decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." For federal-aid highway projects, the states typically prepare the EIS and other environmental documents, and the FHWA reviews and signs them as the lead federal agency.

In preparing an EIS, the state identifies (1) the need for a project; (2) alternatives that meet the project's need; (3) impact of the alternatives; and (4) measures to minimize such impacts. Although NEPA requires the state to consider all environmental impacts, the act does not require the state to choose the alternative with the least impact.

Clean Water Act §404 Permit

The federal Clean Water Act of 1977 requires the states to consider the impact that a construction project will have on wetlands or other waters. Section 404 of the act requires the agencies to obtain a permit from the U.S. Army Corps of Engineers (the Corps), or from a state environmental agency that has assumed section 404 responsibilities before discharging dredged or fill material into wetlands. Section 404 requires that the states consider alternatives and demonstrate that the preferred alternative will cause the least environmental damage on the affected wetland area. If a state cannot meet this requirement, the Corps will not issue the permit, and the state will have to modify its preferred alternative or reassess other alternatives.

We concluded that the PTC has complied with the requirements of NEPA/404 through utilization of Pennsylvania's Ten-Step Transportation Project Development Process. (This process is designed to guide highway projects through the environmental process to NEPA/404 approval and FHWA issuance of a Record of Decision.) Actions taken by the PTC during the development of the detailed environmental analysis using this process for two Mon/Fayette Transportation Projects (I-68 to S.R. 43 and I-70 to S.R. 51) resulted in the PTC receiving Records of Decision from the FHWA in September 1994 and May 1994, respectively, and receiving Section 404 Permits from the Army Corps of Engineers in October 1994 and August 1994, respectively.

VII. PTC Expenditure of Oil Company Franchise Tax Revenues

Since FY 1991-92, the PTC has received an annual share of the state Oil Company Franchise Tax. This allocation, which is 14 percent of 55 mills (or 7.7 mills), is earmarked for construction and for paying debt service on Act 61 projects.

All PTC proceeds from the tax prior to April 15, 1994, were required to be used for construction of the Turnpike Act 61 projects and were recorded in separate Oil Company Franchise Tax Construction and Clearing Funds. All proceeds collected on or after April 15, 1994, are required to additionally be used for repayment of the Commission's 1994 Series A Oil Company Franchise Tax Revenue bonds with the remainder to be used for construction of the Turnpike Act 61 projects and are recorded in the Oil Company Franchise Tax Funds under provisions of the 1994 Indenture.

Oil Company Franchise Tax Transfers to the PTC

FY 1992-93 was the first year in which the PTC received funding from state Oil Company Franchise Tax revenues. The first year revenues, which totaled \$58.6 million, included receipts from a portion of FY 1991-92 and all of FY 1992-93. Since that time, the Commission has received about \$40 million annually from this source. (See Table 22.) Monthly revenues are transmitted to the Commission through a wire transfer from the Motor License Fund to the PTC's Oil Company Franchise Tax Revenue Fund.

Table 22

PTC Share of Oil Company Franchise Tax Receipts

(Through November 30, 1996)

<u>Fiscal Year</u>	<u>Amount</u>
1992-93	\$ 58,588,951
1993-94	37,170,563
1994-95	42,175,024
1995-96	40,624,339
1996-97 (6 mos.).....	<u>21,331,634</u>
Total.....	\$199,890,511

Source: Developed by LB&FC staff using information obtained from the PTC Controller's Office, and from the *Report of Revenues and Receipts*, PA Department of Revenue.

PTC Accounting for Oil Company Franchise Tax Revenues

The 1994 Trust Indenture requires the Turnpike Commission to maintain separate funds to account for the 1994 Series A Oil Company Franchise Tax Revenue Bonds. We found that the Turnpike Commission's Controller has established a number of separate funds and related accounts for this purpose. The Commission does not commingle Oil Company Franchise Tax revenues with monies received from tolls and other sources.

All Oil Company Franchise Tax receipts are deposited into the Turnpike's 1994 Series A Revenue Fund. Revenues are then transferred from the Revenue Fund to other accounts (e.g., Debt Service Principal Account and the Debt Service Interest Account) in accordance with the provisions of the Trust Indenture.

Bond proceeds, which amounted to \$110,295,276 from the 1994 Series A Issue, are deposited into a Clearing Fund. The majority of these revenues are then transferred to the Oil Company Franchise Tax Construction Fund. Further information on these and the other Oil Company Franchise Tax funds (including the 1994 Series A Debt Service Reserve, General, and Bond Sinking Funds) is included in Appendix F.

PTC Expenditure of Oil Company Franchise Tax Revenues

Through November 30, 1996, the PTC had expended \$109,905,534 from Oil Company Franchise Tax revenues. This section of the report provides discussion and analysis of how the PTC has used these state revenues. This includes an analysis of expenditures by project and by type (i.e., purchases, contracts, internal labor costs, and other miscellaneous purposes).

Expenditures, by Project

Through November 30, 1996, Oil Company Franchise Tax revenues had been used exclusively for the Mon/Fayette Expressway and the Southern Beltway projects. As of that date, the PTC had expended over \$109 million in Oil Company Franchise Tax monies for these projects. About 75 percent of this spending, or \$82.1 million, was for two Mon/Fayette Expressway projects: I-70 to Route 51 project and West Virginia to Uniontown project. Spending for the Southern Beltway projects totaled \$11.2 million. Because of the preliminary nature of this work (preliminary design and traffic and revenue studies that apply to all three Southern Beltway projects), the PTC has recorded expenditures of \$3.7 million for each of the three projects as of November 30, 1996.

Table 23

PTC Expenditure of Oil Company Franchise Tax Revenues, by Project

(As of November 30, 1996)

<u>Mon/Fayette Expressway:</u>	<u>Expenditures</u>
West Virginia to Uniontown.....	\$ 26,782,670
Uniontown to Brownsville	4,407,641
I-70 to Route 51.....	55,272,998
Route 51 to Pittsburgh.....	5,042,699
Route 40 to I-70.....	<u>7,186,564</u>
Subtotal.....	\$ 98,692,572
 <u>Southern Beltway:</u>	
PA-60 to U.S. 22.....	\$ 3,737,654
U.S. 22 to I-79	3,737,654
I-79 to Mon/Fayette	<u>3,737,654</u>
Subtotal.....	\$ 11,212,962
Total	\$109,905,534 ^a

^aRepresents expenditures from Oil Company Franchise Tax revenues only. Funding from the Federal Highway Administration and the State of West Virginia has also been involved in certain of these projects.

Source: Developed by LB&FC staff from PTC project and fiscal reports.

Initially, the monthly transfers of the Oil Company Franchise Tax were used directly for design and construction activities. In 1994, the PTC issued tax revenue bonds using the annual Oil Company Franchise Tax revenues as security. The proceeds of the bond sale were used for continued project costs for the Mon/Fayette Expressway and Southern Beltway projects. (See Table 23.) The PTC now uses the monthly Oil Company Franchise Tax receipts first for debt service payments and second, for construction and construction-related activities.

The PTC accounting system records Act 61 project expenditures as either purchases, labor (i.e., PTC staff costs), contract costs, or miscellaneous expenditures (mostly costs related to land acquisition). Using accounting records maintained by the PTC Controller's Office, we examined how the Commission has spent the state Oil Company Franchise Tax receipts it had received through November 30, 1996. Our work in this area included an examination and analysis of the PTC's "Capital Project Contract Status Report" and the "Accounts Payable Subproject Transaction Report."

Expenditures for Purchases

We identified all transactions on the Capital Project Contract Status Report coded by the PTC as purchases. We then traced these back to the Accounts Payable Subproject Transaction Report and classified expenditures into various purchase categories.

The PTC had spent almost \$6.1 million which it classified as purchases for the Mon/Fayette Expressway and the Southern Beltway projects through November 30, 1996. As shown on Table 24, the largest expense category was insurance at \$3.9 million. In major construction projects, the PTC uses a specialized insurance program called Wrap-Up Insurance. The purpose of this insurance plan is to have one major insurance program (owner-controlled) in place that provides broad coverages and limits in the areas of worker's compensation and employer's liability, comprehensive

Table 24

PTC Expenditures From OCFT Revenues Classified as Purchases (As of November 30, 1996)

<u>Purchase Category</u>	<u>Mon/Fayette Expressway</u>	<u>Southern Beltway</u>	<u>Total^c</u>
Insurance ^a	\$3,861,111	\$ 0	\$3,861,111
Maintenance Agreements.....	465,384	0	465,384
Travel Expenses.....	191,490	23,894	215,384
Design Work.....	262,211	0	262,211
Legal.....	255,311	0	255,311
Traffic & Revenue Study.....	204,570	0	204,570
Computer Expenses.....	100,554	4,396	104,949
Call Boxes	100,436	0	100,436
Appraisals	75,685	0	75,685
Travel Agency Arrangements	59,668	12,228	71,896
American Express.....	54,241	8,050	62,291
Printing	46,633	0	46,633
Advertising.....	39,568	0	39,568
Shipping	17,229	7,313	24,541
Hotels/Meeting Rooms.....	19,955	246	20,201
Tools	12,922	0	12,922
Telephone.....	12,110	0	12,110
Marriott Family Restaurant	6,118	101	6,219
Office Supplies	1,522	0	1,522
Other ^b	<u>228,581</u>	<u>6,544</u>	<u>235,124</u>
Total ^c	\$6,015,296	\$62,771	\$6,078,067

^aReferred to as Wrap-Up Insurance (owner-controlled). ^bIncludes \$48,800 for a personal services contract for design location and highway alignment services during the early phases of the Mon/Fayette Transportation Project, \$40,000 from four archived projects completed prior to 1989, and various miscellaneous purchases, the majority of which were under \$1,000. ^cMay not add due to rounding. Source: Developed by LB&FC staff from PTC ENGR002, November 30, 1996, and Accounts Payable reports dated November 30, 1996.

general liability, and builder's risk insurance. Individual contractors are then prohibited from including insurance as a cost factor in their contracts.¹

The second largest purchase category was \$465,384 for maintenance agreements (e.g., for fare collection systems). Employee travel expenses related to Act 61 project activities are also classified as purchases in the PTC's accounting system. We determined from PTC records that about \$215,000 had been spent for PTC staff travel expenses through November 30, 1996.

Table 25 lists the major recipients of travel expense reimbursements, by PTC staff position. As the table shows, many of these were design, engineering, and public information specialists. In all cases, the expense reimbursement figures shown are for a multiple-year time period.

We determined that a substantial degree of PTC employee involvement is required in the preliminary stages of the Act 61 projects. In particular, the Ten-Step Transportation Project Development Process involves extensive preliminary planning, design, and study activities as well as numerous agency and public input and coordination meetings.

Table 25

**Employee Travel Reimbursements of \$5,000 or More
Related to the Mon/Fayette Expressway and Southern Beltway
Projects, by Position**
(Through November 30, 1996)

<u>Position</u>	<u>Time Period</u>	<u>Amount</u>
Engineering-Manager Public Involvement Program....	11/92 to 11/96	\$22,188
Engineering-Geotechnical Assistant.....	12/93 to 10/96	16,229
Construction Inspector	6/95 to 11/96	13,498
Engineering Assistant	6/95 to 11/96	12,950
Design Liaison Engineer	10/93 to 11/96	11,207
Engineering-Utility Right-of-Way Coordinator	11/92 to 11/96	9,003
Public Information Specialist.....	1/95 to 10/96	6,611
Environmental Manager	10/89 to 10/96	5,502
Design Liaison Engineer	5/90 to 11/96	5,443
Geotechnical Engineer.....	7/90 to 11/96	5,314

Source: Developed by LB&FC staff from PTC *Accounts Payable Subproject Transaction Report* for 11/30/96.

LB&FC staff did not examine individual travel expense reports as part of this audit. We did, however, review the PTC's travel expense reimbursement policies and procedures and checked for the presence of internal controls on this process.

¹The PTC reported savings of \$6.3 million by using this insurance method on the Amos K. Hutchinson Bypass and James E. Ross Highway.

The PTC has established travel regulations which affect all Commission employees. The Commissioners, Executive Director, Associate Executive Director, Assistant Executive Director, and Deputy Executive Directors are exempt, however, from the monetary limitations of the policy. Other exemptions for PTC employees may be made by the Executive Director and/or the DED of Finance and Administration.²

We compared the PTC travel policy and allowances to the policies established for employees under the Governor's jurisdiction (Management Directive 230.10). As shown below, we found that with the exception of lodging allowances, the policies are very similar.

Subsistence Allowances. Travel reimbursement amounts for PTC employees are similar to those that apply to Executive Branch employees. Reimbursements for PTC employees for a 24 hour period spent in continuous overnight status may not exceed \$27.00. Executive Branch employees are permitted a maximum of \$28.00 for each 24 hour period spent in overnight status.

Lodging Allowances. Lodging reimbursements do differ between the PTC and Executive Branch. The PTC permits a maximum reimbursement of \$75.00 per night. The Executive Branch allows a maximum of \$33.00 per night for all out of state locations and within a 25 mile radius of Allentown, Erie, Harrisburg, Philadelphia, Pittsburgh, Reading, and Scranton. All other areas in the Commonwealth are limited to \$28.00 per night.

Corporate Credit Cards. The benefit of corporate cards is that they eliminate the need for cash advances. The PTC issues American Express Corporate Cards to PTC employees to be used for travel reimbursement. PTC employees are then responsible for paying their own monthly bills and submitting appropriate travel reimbursement documentation to the accounting department. The PTC travel policy states that persons who travel on a regular basis may receive a corporate card. All requests for issuance of a corporate card must be approved by the Executive Director. Management Directive 230.10 does not discuss the issuance of corporate credit cards to Commonwealth employees, but does state that the cards may be used instead of hotel or transportation orders.

Transportation. All PTC travel "shall be by the most expeditious route, and in the most efficient and economic conduct of official business." When travel is made by automobile, Commission automobiles are to be used whenever possible. Reimbursement for personal automobile use is at .315/mile. This is consistent with

²Similar exemptions for Commonwealth employees can be found in MD 230.10. Specifically, the Governor, Lt. Governor, cabinet officers, administrative department heads, deputy administrative heads, and executive directors of the Civil Service, Fish and Boat Commission, Historical and Museum Commission, and the Game Commission are exempt from the established monetary limits.

the Commonwealth and the IRS standard mileage rate. The PTC policy specifically states that first class air travel is not permitted. The Executive Branch Management Directive 230.10 does not specifically prohibit first-class air travel.

We found that the PTC has an internal control system in place to administer the travel policy. The general supervision of the application and administration of the travel policy rests with the PTC Controller's Office. The Commission's Operations Review Group (ORG) is also responsible for conducting periodic reviews to ascertain that expense reports are processed in compliance with the provisions of the policy.

Although several senior management positions are exempt from the monetary limitations imposed by the policy, they are not exempt from other provisions of the policy. The PTC travel policy states that "all employees of the Commission are covered by this policy." The travel policy also states that all expense accounts will be reviewed for reasonableness, legality, consistency with good accounting practices, and must be accompanied by a voucher with receipts.

The travel expense voucher itself requires signatures from the employee certifying that the expenses, services, or materials claimed were actually paid, incurred, rendered, or purchased in the fulfillment of official PTC duties; that they do not include personal expenses; and that the information given is true and correct.

Additional signatures are required on the expense account by the employee's immediate supervisor and the Chief of the employee's Division or Unit, certifying that they have personally examined the statement, that the amounts charged are not excessive, and that payment of the claim is approved.

Expenditures for PTC Staff Labor Costs

The PTC has also used Oil Company Franchise Tax revenues to pay for the labor costs of Commission staff who perform work on Act 61 projects. We analyzed PTC project and accounting records and determined that \$3,696,372 in PTC labor costs had been charged to Oil Company Franchise Tax and augmenting revenues as of November 30, 1996. We further classified this spending by project activity.

We found that PTC personnel have been involved in various activities on the Mon/Fayette Expressway and Southern Beltway projects. Each PTC employee completes a timesheet on which he/she records the number of hours spent on each project. At the end of each payroll period, the PTC Controller's Office is then able to determine the number of hours and pay rate of staff who report working on Act 61 projects.

Much of the PTC staff work has been in the area of design, including design location studies, preliminary design, final design, and final design management.

Other staff activities for which charges were made include right-of-way acquisition, building demolition, and construction. Table 26 provides a listing of in-house staff labor costs paid from Oil Company Franchise Tax and augmenting revenues as of November 30, 1996.

Table 26

PTC Expenditures From OCFT Revenues for In-House Staff Labor Costs

(Through November 30, 1996)

<u>Project Activity</u>	<u>Amount</u>
Traffic and Revenue Study/Construction (California Interchange).....	\$ 772,434
Design Location Study (I-70 to Route 51 and Route 51 to Pittsburgh).....	749,523
Final Design (WV to Uniontown and I-70 to Route 51)	651,240
Preliminary Design (Southern Beltway).....	428,365
Design Location Study (Uniontown to Brownsville).....	227,571
Design Location Study (WV to Uniontown).....	227,292
Construction (I-70 to Route 51)	206,911
Final Design Management (WV to Uniontown and I-70 to Route 51)	135,189
Construction (WV to Uniontown).....	88,089
Corridor Location Study (WV to Uniontown; Uniontown to Brownsville; I-70 to Route 51; and Route 51 to Pittsburgh).....	81,710
Preliminary Design (WV to Uniontown; Uniontown to Brownsville; I-70 to Route 51; and Route 51 to Pittsburgh).....	58,467
Traffic and Revenue Study (WV to Uniontown; Uniontown to Brownsville; I-70 to Route 51; and Route 51 to Pittsburgh).....	45,444
Traffic and Revenue Study (Southern Beltway)	15,588
Building Demolition (WV to Uniontown and I-70 to Route 51).....	4,782
Mapping to Scale (WV to Uniontown).....	2,381
Management Team (WV to Uniontown; Uniontown to Brownsville; I-70 to Route 51; and Route 51 to Pittsburgh).....	1,386
Total	<u>\$3,696,372</u>

Source: Developed by LB&FC staff from PTC ENGR002, November 30, 1996.

Expenditures for Contracts

Through November 30, 1996, the PTC had expended \$108,615,115 of Oil Company Franchise Tax and augmenting revenues on contracts for the Mon/Fayette Expressway and Southern Beltway projects. Contract activity through late 1996 involved the 85 contracts and 48 contractors listed on Table 27.³

As shown on the exhibit, major contractors on these projects include the Mackin Engineering Company (two contracts for which the PTC paid \$16,401,765 as of November 30, 1996), KCI Technologies, Inc. (two contracts with payments of \$12,267,833), the Mashuda Corporation (three contracts with payments of \$10,376,941) and Michael Baker, Jr., Inc. (13 contracts with payments of \$8,436,413).

Also included among the contracts are a number of personal services contracts with individuals who were formerly employed by PennDOT and the FHWA. The PTC retained the services of these individuals to function as part of a management team along with Commission staff, other consultants, and various agencies (e.g., PennDOT, FHWA, and EPA) to assist in resolving issues related to design location and environmental impact in order to obtain approval from environmental agencies.

As of March 1997, the PTC had a contract letting schedule of at least 14 additional contracts to be awarded for construction on the Mon/Fayette projects. The estimated cost of these contracts is in excess of \$345 million.

Other Miscellaneous Expenditures

As of November 30, 1996, the PTC had spent about \$8.0 million to acquire land and properties needed for the Mon/Fayette Expressway and Southern Beltway projects. This amount makes up the bulk of expenditures in the miscellaneous category. Most other miscellaneous costs are associated with the land acquisition (e.g., relocation assistance, real estate tax, right-of-way appraisals, and professional fees). (See Table 28.)

³The selection process used by the PTC to award contracts funded with Oil Company Franchise Tax monies is part of an overall contracting compliance review being conducted by LB&FC staff for presentation in the second report on this audit.

Table 27

PTC Contract Expenditures From Oil Company Franchise Tax Revenues

<u>Contractor</u>	<u>Number of Contracts</u>	<u>Amount Paid as of 11/30/96</u>	<u>Purpose/Services</u>
Mackin Engineering Co.	2	\$ 16,401,765	Design location and EIS, preliminary and final design (Mon/Fayette).
KCI Technologies, Inc.	2	12,267,833	Design locations, EIS, preliminary and final design (Mon/Fayette).
Mashuda Corp.	3	10,376,941	Construction of Mon/Fayette Expressway Section 50A, 52A, and 52B1 (Mon/Fayette).
Michael Baker Jr., Inc. ^a	13	8,436,413	Review of construction contracts, scope of work studies, design management services, and technical review work (Mon/Fayette and Southern Beltway).
Gannett Fleming.	2	5,904,155	Preliminary engineering, EIS, roadway and structure and final design (Mon/Fayette and Southern Beltway).
SAI Consulting Engineers, Inc.	2	5,130,943	Preliminary engineering and EIS, preliminary and final design (Mon/Fayette and Southern Beltway).
Frederic R. Harris.	1	4,928,249	Preliminary and final design (Mon/Fayette).
MS Consultants, Inc.	2	4,335,948	Preliminary and final design, preliminary engineering and environmental studies; and photographic mapping (Mon/Fayette and Southern Beltway).
Benatec Associates.	2	3,720,877	Design location, engineering and environmental studies and photographic mapping (Mon/Fayette).
Buchart Horn, Inc.	3	3,071,998	Preliminary and final design (Mon/Fayette).
Triline Associates, Inc.	3	3,053,500	Market data valuation of coal reserves, preliminary design studies, EIS studies (Mon/Fayette and Southern Beltway).
Trumbull Corporation.	2	2,890,307	On-site inspection and construction management services (Mon/Fayette).
L. Robert Kimball & Assoc.	2	2,635,058	Preliminary and final design (Mon/Fayette).
Urban Engineers.	1	2,199,284	Preliminary and final design (Mon/Fayette).
McCormick, Taylor & Associates .	2	2,174,374	Preliminary, engineering, and EIS review (Mon/Fayette and Southern Beltway).
STV, Inc.	1	2,009,916	Preliminary and final design (Mon/Fayette).
Nello Construction Co.	1	1,945,803	Construction of roadway paving, toll islands, canopy, and project coordination (Mon/Fayette).
O. R. Colan Associates.	1	1,813,843	Right-of-way consulting services (Mon/Fayette).
PRC Public Management Services.	1	1,397,561	Provide fully operating toll collection barrier system (Mon/Fayette).
HDR Engineering, Inc.	1	1,177,748	Preliminary and final design (Mon/Fayette).
Dennis M. Casey Co. ^b	1	1,099,572	Public/community relations (Mon/Fayette).
Delew Cather & Co.	2	964,326	Construction of toll plaza sand filter system (Mon/Fayette).
Wilbur Smith Associates, Inc.	1	950,080	Prefinal and final design of toll plazas and ramp toll collection facilities (Mon/Fayette).
Dick Enterprises, Inc.	1	947,321	On-site inspection and construction management services (Mon/Fayette).
William J. Green & Associates.	1	897,316	Community relations (Southern Beltway).

Table 27 (Continued)

<u>Contractor</u>	<u>Number of Contracts</u>	<u>Amount Paid as of 11/30/96</u>	<u>Purpose/Services</u>
Southwestern PA. Corp.	1	\$ 797,832	Traffic and other data for preliminary and final design (Mon/Fayette and Southern Beltway).
GAI Consultants, Inc.	1	704,801	Preliminary and final design (Mon/Fayette).
Right-of-Way Services, Inc.	1	668,880	Right-of-way consulting services (Mon/Fayette).
Dick Enterprises & N. J. Cunzolo	1	659,483	Construction Manager (Mon/Fayette).
Bruce & Merrilees.....	1	643,154	Electrical work (Mon/Fayette).
Vollmer Associates.....	2	562,447	Traffic and revenue study (Mon/Fayette).
David E. Zazworsky ^c	d	532,810	Design location, environmental impact (Mon/Fayette and Southern Beltway).
Thomas C. Ickes ^c	d	489,232	Design location, environmental impact (Mon/Fayette and Southern Beltway).
Dixon & Associates	1	416,372	Mineral title evaluations (Mon/Fayette).
Robert A Johnson ^c	d	293,504	Design location, environmental impact (Mon/Fayette and Southern Beltway).
Philibert A. Ouellet ^c	d	231,163	Advise and assist the PTC on various state and federal aid projects.
Frank Waardenburg, Jr.....	d	203,895	Advise and assist the PTC with various right-of-way issues involving federal aid projects (Mon/Fayette and Southern Beltway).
George Hannon ^c	d	191,411	Design location, environmental impact (I-95 and some more on Mon/Fayette and Southern Beltway)
Appraisal Associates.....	1	181,888	Property appraisals - right-of-way acquisition (Mon/Fayette).
Alex E. Paris Contracting.....	1	85,821	Construction of wetland replacement (Mon/Fayette).
John F. Graham, Jr.	1	80,123	Design location, environmental impact (Mon/Fayette).
Raymond F. Jaskolski.....	5	72,467	Structural demolition and removal (Mon/Fayette).
W. G. Tomko & Son, Inc.	1	70,814	Plumbing work for northern toll plaza (Mon/Fayette).
Thomas W. Howard, Inc.	1	25,603	Valuation of mining properties (Mon/Fayette).
David K. Ameiss.....	1	22,265	Computer software work at the California Interchange (Mon/Fayette).
PennDOT/Union Township	1	16,500	Improvement of local roads to accommodate new traffic patterns (Mon/Fayette).
West Penn Power Co.....	1	14,438	Extend electrical lines to new interchange (Mon/Fayette).
Harbridge House, Inc.....	1	<u>13,300</u>	Barrier system evaluation (Mon/Fayette).
Total ^e	85	\$108,615,115	

^aThis firm also serves as the PTC's Consulting Engineer.

^bThe PTC is in litigation with this contractor regarding alleged overcharges of contract expenses.

^cThis individual was retained as a consultant by the PTC to function as part of a management team along with Commission staff, other consultants, and various agencies (e.g., PennDOT, FHWA, and EPA) to assist in resolving issues related to design location and environmental impact in order to obtain approval from environmental agencies.

^dThis individual is paid up to a specific, agreed-upon amount per year. The dollar amounts shown reflect the total paid to the individual consultant from the beginning of employment through November 30, 1996.

^eIncludes four contracts for corridor location studies and mapping with total expenditures of \$905,784 that were closed prior to 1989.

Source: Developed by LB&FC staff from PTC ENGR002 Report as of November 30, 1996.

Table 28

Other Miscellaneous Expenditures From Oil Company Franchise Tax Revenues*

(As of November 30, 1996)

<u>Description</u>	<u>Amount</u>
Land in Fee Simple	\$7,983,530
Relocation Assistance	889,502
Other Professional Fees.....	216,228
Legal Fees	115,283
Reimbursements to the General Reserve Fund	40,737 ^a
Real Estate Tax.....	11,400
Right-of-Way Appraisals.....	5,828
Other Costs/Adjustments	<u>4,747</u>
Total	\$9,267,245

*All expenditures relate to the Mon/Fayette Expressway and Southern Beltway Transportation Projects.

^aRepresents a transfer of \$29,358 for final design work and a transfer of \$11,379 for design location study expenses that were erroneously paid out of the General Reserve Fund. These expenses should have been paid with Oil Company Franchise Tax monies as they relate to the Mon/Fayette Expressway. The amount shown here represents the reimbursement to the General Reserve Fund.

Source: Developed by LB&FC staff from *PTC ENGR002 Report as of 11/30/96*.

Audit Oversight

Neither Act 1985-61 nor any of its amendments specifically require that project expenditures be audited. The only statutory reference to an audit of the Commission is found in Act 1988-122. This act requires the Auditor General to conduct a financial and compliance audit of the affairs and activities of the PTC on a quadrennial basis.

Audit provisions are included, however, in both the 1986 and 1994 PTC Trust Indentures. Both require an annual financial audit of the PTC “. . . by an independent certified public accountant of recognized ability and standing.” Among other matters, these audits are to include findings on whether monies received by the Commission under the provisions for the Indenture have been applied in accordance with the provisions of the Indentures. The PennDOT Comptroller's Office is also included in audits of certain Act 61 project expenditures.

Ernst and Young is the independent certified public accountant that has been conducting annual audits of the PTC since FY 1986-87. These audits are financial in nature since Ernst and Young are to assess how fairly the financial data are

reported in PTC financial statements. Much of this firm's work at the PTC involves auditing the bond indentures and the related accounting structure.

A representative of Ernst and Young stated that the results of their audits have been good and that they have not found material weaknesses. The Ernst and Young representative further stated that their audits have not found any material problems with the Commission's accounting of Oil Company Franchise Tax monies and outstanding bond indentures. All audit findings are generally reported in a management letter to the PTC. Ernst and Young's opinion letter, as it relates to the assessment of PTC's financial statements, is included in the PTC's annual report.

Two divisions within PennDOT's Comptroller's Office also audit portions of the PTC's funding. Within the External Audit Division, the Highway Consultant's Audit Section audits federal funds received by the PTC for highway design projects. Specifically, this group audits contracts and agreements that the PTC has with various engineering firms or other highway design companies. They also audit direct expenditures, overhead, and equipment costs and recommend cost adjustments as needed to the PTC.

We reviewed nine audit reports that PennDOT's External Audit Division completed at the PTC during the period July 1994 through September 1996. Four of these audits had no adverse financial findings; the remaining five had financial findings with recommendations that the PTC seek cost adjustments from contractors. Four of the findings related to the PTC being charged the wrong overhead rate by a contractor. The last finding related to PTC being overcharged as a result of CADD computer billings. In each case, PTC followed up with the pertinent contractor for resolution of the billings, and the necessary adjustments were made.

The Internal Review Division of PennDOT's Comptroller's Office also audits the PTC's federal funds. They audit project costs for those projects receiving federal funds (primarily the Mon/Fayette Expressway and the Southern Beltway). These auditors stated that they have not found any material weaknesses related to the funding of these projects.

Since Act 1988-122 was implemented, the Auditor General has completed two audits of the Turnpike Commission. One report covers the years ended May 31, 1986 to 1989. The other report covers the time period for the years ended May 31, 1990 to 1993. The next audit report to be issued by the Office of Auditor General is due in May 1998. Neither of the two audits done to date specifically commented on the PTC's implementation of Act 61 projects.

The PTC reports that it also exercises various internal audit oversight measures relative to Act 61 funding. These measures are performed by the PTC's Controller and the Internal Audit Department. The PTC Controller has implemented

an internal control system for contract costs and payments, for payroll charges, and for the processing of check requisitions. All internal control procedures are followed in the same manner regardless of the source of funding. The Internal Audit Department is responsible for auditing the internal functions of the Turnpike Commission. This unit audits the payroll function on a quarterly basis as well as auditing transactions related to cash disbursements and operating revenue.

A PTC audit found that a contractor who was providing public and community relations services for the Commission overcharged the PTC because of direct payroll, overhead, direct costs, and net fee billings. Following credits and additional billings from the contractor, the PTC determined the net amount due them from the contractor was \$111,747. No payments or credits have been made to the Commission since January 1994. The contractor filed a lawsuit against the Commission in the Board of Claims of Pennsylvania in the amount of \$229,000. The PTC filed an answer to the complaint on February 1, 1997, and the contractor was to file an answer to the Commission response by February 24, 1997. The PTC reports that within 45 days of the response, the Commission's Legal Department will file a discovery which the contractor will answer. The PTC Legal Department will then petition the court to dismiss the claim and a determination will be made to dismiss or go to a jury trial.

VIII. Other Related Issues

Financial Operating Condition of Act 61 Turnpike Extensions

Under ideal operating conditions, all Act 61 Turnpike extensions would be fully self-supporting. That is, toll and other revenues generated by the extension would be sufficient to cover associated operating costs (i.e., fare collection and routine maintenance costs) and its debt service requirements.

We analyzed the financial operating condition of two extensions that were open to traffic at the time of this audit: Turnpike 60 (the James E. Ross, or Beaver Valley Expressway) and Turnpike 66 (the Amos K. Hutchinson, or Greensburg Bypass). This review involved an examination of projected and actual traffic volumes and revenues on each extension and the extent to which they are covering their operating costs and debt service. We also examined traffic and revenue projections for the Mon/Fayette Expressway and Southern Beltway projects.

Turnpike 60 - Beaver Valley Expressway - James E. Ross Highway

The Beaver Valley Interchange opened to traffic on November 20, 1992. The toll rate for a passenger car on a north-south through trip on this road is 9 cents per mile. The comparable rate on the Turnpike Mainline is 4 cents per mile.

Actual Versus Projected Traffic Volume and Revenues. Table 29 shows that both traffic volume and revenues were about one-half or less than the PTC's projections during the highway's first three full years of operation. During FY 1995-96 the traffic volume approached the projected level and annual revenues exceeded the estimates by \$287,000. This same pattern seems to be developing in FY 1996-97.

Table 29

Traffic Volume and Revenues Generated on the Beaver Valley Expressway (Through November 30, 1996)

Turnpike Fiscal Year	Annual Traffic Volume (Million Vehicles/Year)		Annual Revenues Generated	
	Traffic		(\$000)	
	Projected	Actual	Projected	Actual
1991-92 ^a	NA	1.0	\$ 80	\$ 60
1992-93	5.0	2.3	4,220	1,714
1993-94	10.1 ^b	5.2	9,510	3,754
1994-95	11.0 ^b	5.7	9,890	4,624
1995-96	6.3	5.6	5,195	5,482
1996-97	7.0	3.3 ^c	5,716	3,293 ^c

^aOpened to traffic November 20, 1992. ^bBased on initial estimates which were later revised for the PTC Ten-Year Plan. ^cData for six months. Source: Developed by LB&FC staff using information obtained from the PTC Controller's Office.

Coverage of Operational Expenses and Debt Service. Operational expenses include the cost of fare collection and routine maintenance. Toll revenues generated on the Turnpike extension are used to cover operational expenses. Although the traffic volume and revenues on Turnpike 60 are less than original projections, traffic volume is increasing (by about 10 percent annually) and the expressway is covering its operational costs. (See Table 30.) Efforts by the PTC Marketing Department to market the Turnpike extensions (e.g., through publicity, special events, promotional materials, and market research) appear to be contributing to this increase.

Table 30

Annual Revenue and Operating Expenses on the Beaver Valley Expressway

<u>Fiscal Year</u>	<u>Revenues</u>	<u>Operating Expenses</u>	<u>Revenues Greater (Less) Than Expenses^a</u>
1991-92.....	\$ 60,315	\$ 49,069	\$ 11,246
1992-93.....	1,714,240	1,997,072	(282,832)
1993-94.....	3,754,281	2,887,101	867,180
1994-95.....	4,624,430	3,130,814	1,493,616
1995-96.....	5,482,403	3,434,357	2,048,046
1996-97 (6 mos.).	3,292,649	1,546,621	1,746,028

^aApplied to the project's debt service costs.

Source: Developed by LB&FC staff from information obtained from the PTC Controller's Office.

In FY 1995-96, revenues exceeded operating expenses by \$2.0 million. The amount by which revenues exceed operating expenses is deposited in the Revenue Account and is used to help pay the project's debt service costs. While it is not possible to determine exact debt service costs for each project, it is possible to arrive at an estimated debt service amount by project.¹ We estimate that annual debt service requirements for this project are \$27.7 million. Excess tolls, therefore, cover \$2.0 million, or about 7 percent, of the Expressway's debt service costs. The remaining \$25.7 million is supported by the Turnpike's Mainline toll revenues.

¹Bonds were issued for Act 61 projects in total, not by individual project.

Turnpike 66 - Greensburg Bypass - Amos K. Hutchinson Bypass

The Greensburg Bypass opened to traffic on December 9, 1993. The toll rate for a passenger car on a north-south through trip on this road is 7 cents per mile. The comparable rate on the Turnpike Mainline is 4 cents per mile.

Actual Versus Projected Traffic Volume and Revenues. Table 31 shows that annual traffic volumes on Turnpike 66 were from 25 to 80 percent below projected levels from FY 1993-94 through FY 1995-96. Based on six-month data for FY 1996-97, traffic volume could approach 60 percent of projected. Revenues have also been substantially below projections in each year of operation, ranging from 21 percent of projected revenues in FY 1993-94 to 68 percent in FY 1996-97.

Table 31

Traffic Volume and Revenues Generated on the Amos K. Hutchinson Bypass (Through November 30, 1996)

Turnpike Fiscal Year	Annual Traffic Volume (Million Vehicles/Year)		Annual Revenues Generated	
	Traffic		(\$000)	
	Projected	Actual	Projected	Actual
1992-93 ^a	NA	NA	NA	NA
1993-94	7.9	1.7	\$8,120	\$1,686
1994-95	8.5	3.8	8,700	3,826
1995-96	5.8	4.3	7,100	4,608
1996-97	8.4	2.5 ^b	7,948	2,717 ^b

^aOpened to traffic December 9, 1993.

^bSix months.

Source: Developed by LB&FC staff using information obtained from the PTC Controller's Office.

Coverage of Operational Expenses and Debt Service. Operational expenses include the costs of fare collection and routine maintenance. Toll revenues generated on the Turnpike extension are used to cover operational expenses. Although the traffic volume and revenues on Turnpike 66 are less than original projections, traffic volume is increasing (by about 10 percent annually) and the Bypass is covering its operational costs. (See Table 32.) As is the case with the Beaver Valley Expressway, PTC efforts to market and promote the advantages of the Bypass appear to be contributing to this increase.

In FY 1995-96, revenues exceeded operating expenses by \$1.7 million. (See Table 32.) The amount by which revenues exceed operating expenses is deposited

in the Revenue Account and is used to help pay the project's debt service costs. We estimate that annual debt service requirements for this project are \$31.5 million. Excess tolls, are, therefore, covering \$1.7 million, or about 5 percent, of the debt service costs. The remaining \$29.8 million is supported by the Turnpike's Mainline toll revenues.

Table 32

**Annual Revenue and Operating
Expenses on the Amos K. Hutchinson Bypass**

<u>Fiscal Year</u>	<u>Revenues</u>	<u>Operating Expenses</u>	<u>Revenues Greater (Less) Than Expenses^a</u>
1993-94.....	\$1,685,788	\$2,093,915	\$ (408,127)
1994-95.....	3,825,833	2,484,242	1,341,591
1995-96.....	4,608,126	2,923,133	1,684,993
1996-97 (6 mos.).	2,717,547	1,129,975	1,587,572

^aApplied to the project's debt service costs.

Source: Developed by LB&FC staff from information obtained from the PTC Controller's Office.

Mon/Fayette Expressway and Southern Beltway Traffic Volume and Revenue Projections

The Congestion Management System and Major Investment Studies (CMS/MIS) for the Mon/Fayette Expressway and Southern Beltway transportation projects outline a funding strategy to pay for these roads. Toll revenues as a source of bonding are a component of this strategy. The bonding figures supported by toll revenues presented in the report were calculated by the PTC. According to PTC engineering personnel, the estimates take into account the latest SPRPC traffic data, growth factors, estimated fare collection and maintenance operating expenses, the probable toll structure and schedules, and the bond market. The toll revenue portrayed in the funding strategy is also based on the planned phased opening of two sections of the roads by the fall of 1999.

The strategy calls for a total of \$128 million in bonded funding supported by tolls. This means approximately \$15 million in net toll revenue is required. The \$128 million represents slightly over 7 percent of the total \$1.753 billion outlined in the potential future funding strategy to complete the Mon/Fayette Expressway and Southern Beltway projects.

The traffic volume and revenue projections for the Mon/Fayette Expressway and Southern Beltway projects shown in Table 33 are derived from the PTC's *Ten Year Plan*. According to the PTC Consulting Engineer, they are preliminary projections which are being revised by a consultant who is using more current data and updated computer models. According to the PTC, figures now being developed are expected to be higher than the figures used in the toll revenue portion of the funding strategy.

Table 33

Projections of Traffic Volume and Revenues on the Mon/Fayette Expressway and Southern Beltway

	Annual Traffic Volume (Million Vehicles/Year)		Revenues (\$000)	
	<u>Mon/Fayette</u>	<u>Southern Beltway</u>	<u>Mon/Fayette</u>	<u>Southern Beltway</u>
1998-99	1.6	--	\$ 800	--
1999-00	11.0	--	5,500	--
2000-01	11.2	2.4	5,600	\$ 1,200
2001-02	30.6	4.8	15,000	2,400
2002-03	50.0	9.2	25,000	4,600
2003-04	53.0	19.8	26,500	9,900
2004-05	56.2	24.0	28,100	12,000

Source: Developed by LB&FC staff using information obtained from the PTC.

Impacts of Act 61 Implementation on the PTC

Implementation of Act 61 projects has increased PTC operating expenses through additional costs for new interchanges and roadways, additional administrative and toll staff, and other operating increases. We also found pronounced impacts on bonds payable (i.e., total debt), debt service, and Reserve Maintenance Fund transfers as a result of Act 61 implementation.

Bonds Payable/Total Outstanding Debt

As authorized by Act 61 and subsequent legislation, the PTC issued revenue bonds to finance the costs of Act 61 projects. In 1991, Act 26 authorized the PTC to issue additional bonds supported by Oil Company Franchise Tax revenues. Table 34 lists the PTC bonds that have been issued to support Act 61 projects.

Table 34

PTC Bonds Issued to Support Act 61 Projects

(Through March 1997)

(\$000)

<u>Bond Series</u>	<u>Amount Issued</u>	<u>Purpose</u>
<u>1986 Trust Indenture:</u>		
1986 Series A.....	\$325,005	Design for Beaver Valley Expressway and Amos K. Hutchinson Bypass. Construction of six-lane widening, Mid-County Interchange, and other miscellaneous projects.
1986 Series B-J.....	482,600	Construction of Beaver Valley Expressway, Amos K. Hutchinson Bypass, Lehigh Tunnel No. 2, and Keyser Avenue Interchange.
1989 Series K.....	241,467	Additional funding for the Beaver Valley Expressway and Amos K. Hutchinson Bypass.
1991 Series L.....	273,405	Advance refunding of certain Series A Bonds.
1991 Series M & N ..	267,495	Advance refunding of certain Series C, D, E, and K Bonds.
1992 Series O & P....	570,715	Advance refunding of outstanding Series C, D, E, F, G, H, I, J, and K Bonds.
<u>1994 Trust Indenture:</u>		
1994 Series A ^a	115,635	Finance costs of Mon/Fayette Project or other projects in Act 61 groups one and two.

^aOil Company Franchise Tax Revenue Bonds. No Turnpike toll or operating revenues are pledged or will be available to pay the 1994 Series A bonds.

Source: Developed by LB&FC staff using information obtained from the Pennsylvania Turnpike Commission.

In the aggregate, the total amount of bonds issued in support of these projects is \$2,276,322,000. When adjusted for refunding bonds issued, the total is \$1,552,255,000. As shown on Table 35, the total debt outstanding as of November 30, 1996, was \$1.229 billion. The amount of revenue bonds outstanding around the time Act 61 was enacted was only \$65,088,000.

Table 35

Act 61 Bond Issues Outstanding

(As of November 30, 1996)

<u>Bond Series</u>	<u>Amount Outstanding</u>
1986 Series A	\$ 49,645,000
1991 Series L.....	272,140,000
1991 Series M & N....	260,995,000
1992 Series O & P	532,530,000
1994 Series A ^a	<u>113,350,000</u>
Total	\$1,228,660,000

^aOil Company Franchise Tax Revenue Bonds.

Source: Developed by LB&FC staff using information obtained from the Pennsylvania Turnpike Commission.

Debt Service and Borrowing Capacity

Debt service is the amount of interest and principal payments owed as a result of a bond issuance. As a result of more than ten years of bond issuances necessitated by Act 61, the PTC's annual debt service costs have risen from \$7.9 million in 1986 to \$96 million in 1996.

Table 36 shows the relationship between debt service and total PTC revenues since 1980. As can be seen from the table, debt service has increased dramatically as a result of Act 61.

Immediately prior to the 1986 Trust Indenture, the PTC had outstanding revenue bonds of \$65.1 million with annual debt service of \$7.9 million. At that time, debt service accounted for 5.5 cents of every toll dollar and the Commission was in a position to conceivably retire all outstanding obligations within a few years. If this had occurred, the Commission would have gone out of existence and the Turnpike would have reverted to PennDOT as stipulated in law. Instead,

Table 36

Debt Service as a Percentage of Total PTC Revenue
(FY 1979-80 to FY 1995-96)
(\$000)

<u>Fiscal Year Ending May 31</u>	<u>Total Revenue</u>	<u>Debt Service</u>	<u>Debt Service as % of Revenue</u>
1980.....	\$115,427	\$26,723	23.2%
1981.....	121,622	9,934	8.2
1982.....	132,046	12,365	9.4
1983.....	131,083	10,355	7.9
1984.....	144,815	8,902	6.1
1985.....	154,542	9,708	6.3
1986.....	161,450	7,937	4.9
1987.....	180,393	34,469	19.1 ^a
1988.....	221,056	59,479	26.9
1989.....	244,688	96,652	39.5
1990.....	250,741	67,157	26.8
1991.....	247,533	74,223	30.0 ^b
1992.....	282,275	77,360	27.4
1993.....	291,197	82,364	28.3
1994.....	300,001	76,258	25.4
1995:			
Toll Revenue Bonds.....	\$325,340	\$82,112	25.2%
OCFT	<u>42,175</u>	<u>7,428</u>	17.6 ^c
Total 1995	\$367,515	\$89,540	24.4%
1996:			
Toll Revenue Bonds.....	\$332,663	\$87,293	26.2%
OCFT	<u>40,624</u>	<u>8,756</u>	21.6
Total 1996	\$373,287	\$96,049	25.7%

^aIn 1986, the Commission issued toll revenue bonds for the support of Act 61 projects.

^bBy 1991, the Commission issued more toll revenue bonds for the continued support of Act 61 projects.

^cIn 1994, the Commission issued Oil Company Franchise Tax revenue bonds for the support of the Mon/Fayette Expressway and the Southern Beltway projects.

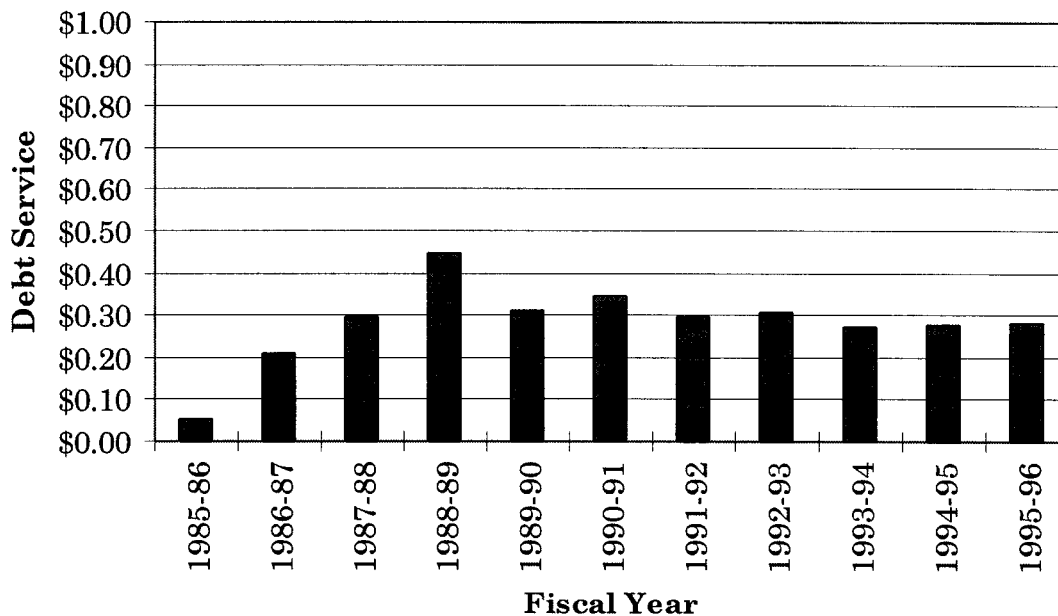
Source: Developed by LB&FC staff using information obtained from the PA Turnpike Commission.

as a direct result of Act 61, bonded indebtedness and associated debt service costs have risen rapidly in the intervening years. This can be seen in Exhibit 11 with 28 cents of each toll dollar now going towards debt service as opposed to 5.5 cents in 1986.

The PTC's debt service schedule projects annual debt service payments through 2005 to be in the \$97 million to \$98 million a year range. The Commission's "Ten-Year Plan" for 1996 to 2005 projects that debt service payments over the period will total \$969,253,000, more than two-thirds of which will represent interest payments. The projected balance of bonds payable at May 31, 2005, is \$931,635,000. These figures do not take into account any additional debt service payments that would be required if further bond issues are made.

Exhibit 11

Cents of Every Toll Dollar Spent for Debt Service (FY 1985-86 to FY 1995-96)



Source: Developed by LB&FC staff using information obtained from the PA Turnpike Commission.

Without any additional funds coming into the Turnpike, the PTC's borrowing capacity is considered "maxed out." Toll revenues are used for the debt service of the bonds issued under the 1986 indenture, and Oil Company Franchise Tax revenues are used for the debt service of the bonds issued under the 1994 indenture.

The PTC's Controller, its Consulting Engineer, and a representative of the Commission's independent auditing firm (Ernst and Young) have stated that the PTC does not have the capacity to issue more bonds (i.e., borrow funds) without a new source of revenue.*

PTC Reserve Maintenance Fund

PTC Reserve Maintenance Fund expenditures are actual dollars reinvested in the Turnpike infrastructure. The Reserve Maintenance Fund is used to pay the cost of resurfacing, replacing, or reconstructing parts of the Turnpike System, and for extraordinary maintenance and repairs. Funds are transferred from the PTC's Revenue Fund each month, with each transfer equal to one-twelfth of the amount that was required at the beginning of the fiscal year to meet the Reserve Maintenance Fund requirement (as identified by the Consulting Engineer).

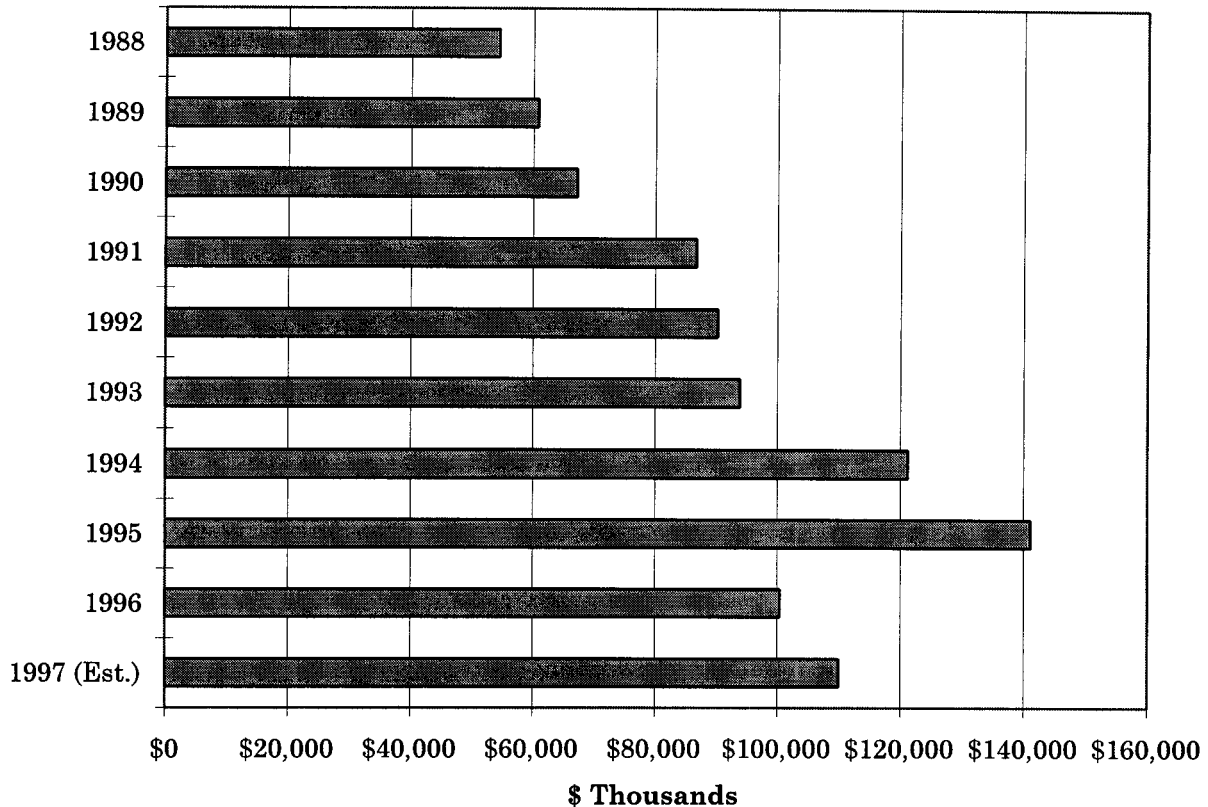
The amount available for transfer to the Reserve Maintenance Fund is impacted by the amount of operating expenses and the amount of money needed for debt service payments. The PTC arrives at an operating profit by deducting operating expenses from operating revenue. This profit must then be shared by debt service requirements and transfers to other funds, primarily the Reserve Maintenance Fund. With the rising debt service payments the PTC has experienced over the past ten years, the amount available for transfer to the Reserve Maintenance Fund has declined. For example, in 1986, the PTC was able to transfer 36 percent of its profit to the Reserve Maintenance Fund; by 1996, this percentage was down to 21 percent.

The diversion of funds that might otherwise be deposited in the Reserve Maintenance Fund to cover increasing debt service costs has significant potential implications for maintenance and reconstruction of the Mainline of the Turnpike. The PTC's Consulting Engineer believes that funding has been sufficient to adequately maintain the Turnpike's maintenance. However, the ongoing financial demands of Act 61 implementation are reducing the amounts available for transfer to the Reserve Maintenance Fund. As shown on Exhibit 12, expenditures from the Reserve Maintenance Fund peaked in 1995. With the full impact of the 1994 Series A Oil Company Franchise Tax bonds being realized in FY 1995-96, the PTC was unable to transfer as much money to the Reserve Maintenance Fund. Such a pattern is expected to continue.

*LB&FC Staff Note: In the PTC's official response to this report, the Commission's Executive Director stated that, while borrowing capacity for toll bonds is "maxed out," at least some additional bonding capacity is available within the Oil Company Franchise Tax funding levels.

Exhibit 12

PTC Reserve Maintenance Fund (RMF) Expenditures



Source: Developed by LB&FC staff from information obtained from the PA Turnpike Commission.

PTC Award of Bond Counsel Contracts

The PTC contracts for a special type of legal assistance (bond counsel) when issuing bonds to finance Turnpike construction and improvement projects. A bond counsel is an independent expert who provides an objective legal opinion concerning the issuance and sale of bonds. Bond counsel has expertise in various legal specialties such as municipal, election, constitutional, tax, securities, real estate, commercial, and bankruptcy law.

Generally, bonds are not marketable without an accompanying opinion of bond counsel. The opinion generally addresses whether the bonds are valid and binding obligations of the issuer; the sources of payment or security for the bonds; and to what extent interest on the bonds is exempt from federal income and other taxes. The purpose of the bond opinion is to provide assurance to investors and to

remove from the pricing of bonds the risk of invalidity, lack of enforceability, or interest being includable in gross income for federal income tax purposes.

Bond counsel may also assist in planning the financing and structuring of the bond issue; obtaining from governmental authorities such approvals, rulings, permissions, and exemptions as necessary or appropriate; and assisting in presenting information to bond rating organizations and bond insurers.

Bond counsel may be engaged (1) for a single transaction, (2) for a series of transactions, (3) for all transactions of a particular type by the issuer over a period of time, or (4) for all transactions by the issuer over a period of time. The appropriate length of engagement will depend upon the issuer's overall financial program or upon the nature of a particular financing.

PTC Retention of Bond Counsel

PTC Policy Letter No. 58 establishes the process to be used for the retention of outside legal services. For services on a retainer basis, the Commissioners suggest providers based upon their familiarity with the provider's services, staff, and reputation. Chief counsel may also assist in the selection. Retention on a case-by-case basis occurs when chief counsel notifies the Executive Director that the PTC (1) has been named in a lawsuit, (2) seeks to undertake litigation, or (3) otherwise requires outside counsel services. In these instances, two Commissioners, who are practicing attorneys, coordinate the selection of law firms with the Chief Counsel based on their familiarity with the provider's services, their staff, and reputation. The firms are contacted to eliminate any potential conflict of interest. The types of cases for which outside legal services have been retained include labor law, contract litigation, and insurance defense. However, Policy Letter No. 58 does not address the retention of bond counsel.

In practice, retention of bond counsel is at the discretion of the PTC Commissioners. Although there is no formal written policy, an informal process for the retention of bond counsel was used for both the 1986 and the 1994 Trust Indentures. We found that in both cases, the PTC Chief Financial Officer recommended a law firm to the Commissioners based on the firm's reputation and experience with municipal bonds. In these cases, the Commission accepted the Chief Financial Officer's recommendation. The PTC's method of selection is similar to that used by the State Executive Branch to retain bond counsel. The Commonwealth is not required by statute or policy to use competitive selection for the retention of bond counsel. According to the Director of the Bureau of Revenue, Cash Flow and Debt in the Office of the Budget, bond counsel for general obligation bonds is selected from a list of law firms compiled by Thompson Financial Publishing which lists all firms which have provided tax exempt municipal bond services. Although the Commonwealth

has issued requests for proposals for other bond services (e.g., banking), bond counsel services have not been retained through competitive selection.²

PTC Expenditures for Bond Counsel

Since 1990, the PTC has issued seven series of bonds under the 1986 Trust Indenture and one under the 1994 Trust Indenture. Table 37 shows the amount of the bond issue and the cost for bond counsel services as a percentage of the bond issue. PTC costs for bond counsel services have ranged from 0.08 percent to 0.20 percent of the total issuance.

Table 37

Fees Paid by the PTC for Bond Counsel

(1986 and 1994 Trust Indentures)

<u>Description</u>	<u>Amount of Issue</u>	<u>Bond Counsels</u>	<u>Counsel Fees</u>	<u>Percent of Issuance</u>
1986 Series G	\$ 60,000,000	Baskin Flaherty Elliott & Mannino, P.C. Rose, Schmidt, Hasley & DiSalle	\$ 25,000 25,000	0.04% 0.04
1986 Series H	60,000,000	Cohen & Grigsby Flaherty & Sheehy	25,000 28,000	0.04 0.05
1986 Series I & J	120,600,000	Cohen & Grigsby Flaherty & Sheehy	55,000 55,000	0.05 0.05
1991 Series L	273,405,000	Cohen & Grigsby Flaherty & Sheehy	112,500 112,500	0.04 0.04
1991 Series M & N	267,495,000	Cohen & Grigsby Flaherty & Sheehy	100,000 100,000	0.04 0.04
1994 Series A	115,635,000	Cohen & Grigsby Astor, Weiss, Kaplan & Rosenblum	112,500 112,500	0.10 0.10

Source: Developed by LB&FC staff using information obtained from the PA Turnpike Commission.

As shown on the table, the Series A of 1994 bonds supported by the Oil Company Franchise Tax funds were 0.20 percent (\$225,000) of the amount of the bond issue. In each case, the PTC has chosen to use co-bond counsel.

Bond Counsel Selection in a Sample of Other States

We contacted the toll road authorities in the states of Indiana, Maryland, New Jersey, New York, Ohio, and West Virginia to obtain comparative information on their bond counsel selection procedures. Five of the six states contacted reported using competitive selection through an RFP process.

²Two bills (Senate Bill 1105 and House Bill 2571) were introduced during the 1995-96 legislative session which would have required bond counsel services for all state agencies to be competitively selected.

Table 38 lists the contracting procedures for bond counsel in the sample states along with bond counsel costs associated with recent bond issues. As shown, the reported costs for various bond issues ranged from 0.03 percent in New York to 0.09 percent in West Virginia. PTC costs have ranged from 0.08 to 0.20 percent of the total issuance.

Maryland, pursuant to a regulatory requirement, issues an RFP to retain bond counsel, who is then retained for a specific time frame, not for each individual bond issue.

New Jersey recently enacted Executive Order No. 1994-26, which requires that state agencies competitively bid for bond counsel services. This order was established after a report to New Jersey's Governor, prepared by the Advisory Panel on Government Contracting Procedures, recommended changes to the state's contracting procedures to ensure public confidence in such process and to receive the highest quality service at the lowest prices.

The July 1994 report noted that the present process of pre-qualification and selection of bond counsel had certain flaws, including a lack of consistent criteria and failure to afford sufficient weight to experience-related criteria such as past performance. As a result, the Attorney General established procedures for the appointment of bond counsel on a competitive basis. Criteria were also established which places great weight on the firm's qualifications and suitability for a particular transaction as well as the firm's fee proposal. Such criteria includes, for example:

1. Experience of the firm and the proposed team with similar transactions.
2. Familiarity with state laws relevant to the proposed bond issue.
3. Proficiency with securities, tax, and other laws relevant to the financing.
4. Quality of proposed legal strategy with respect to specific questions posed in the RFP.
5. Quality of past legal services rendered to the state and its authorities.
6. Fees.

Ohio is required by law to competitively bid any contract over \$10,000 except for personnel services. Ohio's Turnpike Commission considers bond counsel services to be a personnel service. The Commission, however, chooses to use an RFP process to obtain bond counsel services.

West Virginia, in 1989, competitively bid for bond counsel services to handle a major bond issuance at that time. In 1989, several firms were reportedly short-listed, and, subsequent to that time, bond counsel has been chosen from this list.

Table 38

Information on Bond Counsel Selection and Costs in a Sample of Other States

<u>Toll Authority</u>	<u>Bond Counsel Obtained by</u>	<u>Bond Issue</u>	<u>Bond Counsel Fees</u>	<u>Percent of Issuance</u>	<u>Comments</u>
Indiana	Use same firm	1996 - \$135 million	\$50,000 - \$60,000	.04%	Indiana reported that they have used the same bond counsel firm for at least ten years.
Maryland.....	RFP process	1994 - \$162 million	\$107,700	.07	Bond counsel is retained for specific time frame, not for each bond issue.
New Jersey	Competitive bid				Executive Order 1994-26 requires that bond counsel services be competitively bid. Since the issuance of this Order, the Authority has not issued any bonds.
New York	Competitive selection through RFP process	1996 - \$279 million 1995 - \$333 million	\$71,900 \$109,200	.03 .03	Amounts shown were paid based on detailed billings of hours and expenses submitted by the firm. Each contract has an expense cap.
Ohio	RFP process	1994 - \$125 million 1995 - \$370 million	\$70,000 \$131,500	.06 .04	Ohio law requires competitive bidding for any contract over \$10,000, except for personnel services. The Commission considers bond counsel to be a personnel service and, therefore, chooses to use the RFP process to obtain bond counsel.
West Virginia...	Competitive bid in 1989, then short- listed bond counsel	1989 - \$143 million 1993 - \$119 million 1995 - \$6 million	\$122,500 \$65,000 - 75,000 \$30,000	.09 .05-.06 .50	In 1989, the Authority competitively bid for bond counsel services. At that time, several firms were short-listed, and, since that time, bond counsel was selected from this list.

Recognition of PTC Project Implementation Efforts

The PTC has received recognition from several sources for efforts involved in implementing Act 61 projects:

– *President's National Performance Review - Hammer Award:*

The PTC's NEPA/404 Process Merger Team³ was awarded the federal Hammer Award in 1996. This award gives recognition to teams of federal employees, state and local employees, and citizens who make significant contributions in support of the President's National Performance Review principles. In the case of the PTC, the award was made in recognition of the Commission's efforts to integrate the environmental review processes of NEPA compliance and the federal Clean Water Act permits. According to a study⁴ by McCormick, Taylor and Associates, Inc., this resulted in significant potential time and cost savings on two Mon/Fayette projects (I-70 to S.R. 51 and I-68 to S.R. 43) and PennDOT's Lackawanna Valley Industrial Highway project.

– *The Association for Bridge Construction and Design Award:*

The Mahoning River Bridge received this award for Outstanding New Bridge for 1991.

– *Consulting Engineers Council of Pennsylvania:*

- Amos K. Hutchinson Bypass (Turnpike 66) - Wetland Engineering Excellence Achievement Award for the design of the wetland mitigation site. This award recognizes outstanding engineering accomplishment and contribution to society.
- Mid-County Interchange - Transportation System Improvement - Engineering Excellence Achievement Award for the design of Transportation System Improvement linking the Blue Route to the Turnpike System.
- Mon/Fayette Expressway - Archeology Modeling - This award was received for the development of a GIS Archeological Model in the category of studies research and consulting services.

³In addition to PTC members, the team includes individuals from the Environmental Protection Agency, Federal Highway Administration, Pennsylvania Department of Agriculture, Pennsylvania Department of Environmental Protection, Pennsylvania Department of Transportation, Pennsylvania Fish and Boat Commission, Pennsylvania Game Commission, Pennsylvania Historical and Museum Commission, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers (Pittsburgh and Washington).

⁴Prepared for the PTC, PennDOT, and FHWA.

- *Construction Industry - Dispute Avoidance and Resolution Task Force Award:*
 - The James E. Ross Highway (Turnpike 60) Project was selected from a nationwide field of entrants as a runner-up in the 1993 DART effective project team awards program.
 - This award was instituted to recognize those owners, designers, contractors, and subcontractors who best demonstrate the benefits of partnering and teamwork on their construction projects.
- *Pennsylvania Quality Initiatives Achievement Award:*

The James E. Ross Highway (Turnpike 60) Project was submitted to the Pennsylvania Quality Initiatives Committee in 1995 for the Pennsylvania Quality Initiatives Award. This award recognizes a construction project in Pennsylvania which emphasizes quality workmanship. The Commission received a merit award as runner-up in this category.

PTC Bond Ratings

Bond issues of the magnitude used by the PTC are evaluated by a bond rating service. The purpose of such a rating is to provide investors with an assessment of the degree of risk associated with investing in the bond issue. Bond ratings are determined at the time of issue and may be downgraded at any time depending on changes in economic conditions. The two principal rating services are Moody's Investors Service and Standard & Poor's.

The municipal bond credit rating system used by Moody's grades the investment quality of the municipal bonds in a nine-symbol system that ranges from the highest investment quality which is "Aaa," to the lowest credit rating which is "C." The respective nine alphabetic ratings and their definitions are summarized in Exhibit 13. Municipal bonds in the top four categories (i.e., Aaa, Aa, A, and Baa) are considered to be of investment grade quality. Moody's also applies numerical modifiers 1, 2, and 3 in each generic rating classification from Aa through B indicating the security ranks in the higher end of the category.

Exhibit 13

Moody's Municipal Bond Rating System

<u>Rating</u>	<u>Definition</u>
Aaa.....	<i>Best Quality:</i> carries the smallest degree of investment risk.
Aa.....	<i>High Quality:</i> margins of protection not quite as large as the Aaa bonds.
A.....	<i>Upper Medium Grade:</i> security adequate but could be susceptible to impairment.
Baa.....	<i>Medium Grade:</i> neither highly protected nor poorly secured; lacks outstanding investment characteristics and sensitive to changes in economic circumstances.
Ba.....	<i>Speculative:</i> protection is very moderate.
B.....	<i>Not Desirable Investment:</i> sensitive to day-to-day economic circumstances.
Caa.....	<i>Poor Standing:</i> may be in default but with a workout plan.
Ca.....	<i>Highly Speculative:</i> may be in default with nominal workout plan.
C.....	<i>Hopelessly In Default.</i>

Source: Developed by LB&FC staff from the Municipal Bond Handbook.

The municipal bond rating system used by Standard & Poor's grades the investment quality of municipal bonds in a 10-symbol system that ranges from the highest investment quality, "AAA," to the lowest credit rating, "D." Bonds within the top four categories (i.e.; AAA, AA, A, and BBB) are considered by Standard and Poor's as being of investment grade quality. The respective 10 alphabetical ratings and summarized definitions are shown in Exhibit 14.

Exhibit 14

Standard & Poor's Municipal Bond Rating System

<u>Rating</u>	<u>Definition</u>
AAA.....	<i>Highest Rating:</i> extremely strong security.
AA	<i>Very Strong Security:</i> differs from AAA in only a small degree.
A.....	<i>Strong Capacity:</i> but more susceptible to adverse economic effects than the above two categories.
BBB.....	<i>Adequate Capacity:</i> but adverse economic conditions more likely to weaken capacity.
BB	<i>Lowest Degree of Speculation:</i> risk exposure.
B.....	<i>Speculative:</i> risk exposure.
CCC.....	<i>Speculative:</i> major risk exposure.
CC	<i>Highest Degree of Speculation:</i> major risk exposure.
C.....	<i>No Interest Is Being Paid.</i>
D.....	<i>Bonds in Default with Interest and/or Repayment of Principal in Arrears.</i>

Source: Developed by LB&FC staff from the Municipal Bond Handbook.

The credit analysis of bonds requires the collection and assessment of information in four basic categories. The first category includes obtaining information on the issuer's debt structure so that the overall debt burden can be determined. The second category of needed information relates to the issuer's ability and political discipline for maintaining sound budgetary operations. The third category involves determining the specific local taxes and intergovernmental revenues available to the issuer, as well as obtaining historical information on both tax collection rates, and on the dependency of local budgets on specific revenue sources. The fourth and last general category of information necessary to the credit analysis is an assessment of the issuer's overall socioeconomic environment.

There are major differences between Moody's and Standard & Poor's in their respective approaches toward these four categories, as well as other conceptual differences that the two rating agencies bring to bear before assigning their respective general obligation credit ratings. As a result, the basic difference between the two services is that Moody's tends to focus on the debt burden and budgetary operations of the issuer, while Standard & Poor's considers the issuer's economic environment as the most important element in its analysis. The two services can therefore, at times, arrive at different ratings for the same issuer's bonds.

We found that the Pennsylvania Turnpike Commission's bond issues have consistently been awarded very high bond ratings. The ratings range from A1 to Aaa in the Moody's categories and from A to AAA in the Standard & Poor's categories. All the PTC bond issues associated with Act 61 implementation were considered to be of investment quality by both rating services (see Table 39).

Table 39

Pennsylvania Turnpike Commission Bond Ratings

<u>Bond Issue</u>	<u>Moody's</u>	<u>Standard and Poor's</u>
1986 Series A.....	Aaa	A to AAA
1991 Series L.....	Aaa	AAA
1991 Series M & N.....	A1	A
1992 Series O & P.....	Aaa	A
1994 Series A.....	A1 to Aaa	A to AAA

Source: Developed by LB&FC staff from Moody's Bond Record, November 1996, Standard and Poor's Bond Rating Service, and the PA Department of Treasury.

Potential Act 61 Project Cost Savings

The National Environmental Policy Act (NEPA) and permit review processes for highway projects that require a permit under section 404 of the Clean Water Act of 1977 can increase the costs of highway projects. However, the PTC's use of an integrated NEPA/404 process to fast-track the review and permitting requirements has the potential to result in considerable cost savings.

Before a federal-aid highway project can be constructed, the Federal Highway Administration (FHWA) and the states are responsible for ensuring that the project complies with NEPA requirements. NEPA requires the highway agencies to identify and assess the environmental consequences of proposed and alternative actions. If FHWA and the states undertake actions that will have a significant impact on the environment, NEPA requires them to prepare an environmental impact statement (EIS). In preparing an EIS, the state must balance the environmental impacts and the benefits of the alternatives and select a preferred alternative.

As further described in federal program materials, the Clean Water Act of 1977 requires the states to consider the impact that construction projects will have on wetlands or other waters. Section 404 of the act requires the agencies to obtain a permit from the U.S. Army Corps of Engineers (the Corps), or from a state environmental agency that has assumed section 404 responsibilities before discharging dredged or fill material into wetlands. Section 404 requires that the states consider alternatives and demonstrate that the preferred alternative will cause the least environmental damage on the affected wetland area. If a state cannot meet this requirement, the Corps will not issue the permit, and the state will have to modify its preferred alternative or reassess other alternatives.

Project Implementation Approach Used by the PTC

The PTC has used an integrated NEPA/404 process for the two Mon/Fayette Expressway projects for which RODs have been obtained and is continuing to use this integrated process for remaining projects. This approach coordinates activities and makes it possible to obtain NEPA environmental approval and the U.S. Army Corps of Engineers Section 404 permit concurrently. This process was adopted by the FHWA and other pertinent federal agencies in July 1992, and was first used in Pennsylvania by PennDOT.

The process that the PTC used to expedite the Mon/Fayette projects was initially developed by PennDOT and applied to the Lackawanna Valley Industrial Highway project. Using this approach, PennDOT obtained necessary NEPA/404 approvals in 15 months. According to a 1994 study by the U.S. General Accounting Office, the average time for obtaining approval on such projects nationally is 5.6 years.

A July 1995 report by McCormick, Taylor & Associates, Inc., on the NEPA/404 approval process stated that the process can reduce construction costs, make economic benefits available to the community sooner, and incorporate environmental information into engineering solutions early in the process. The same report, which was prepared for the FHWA, PennDOT, and PTC, evaluated the cost savings of expedited NEPA/404 approvals on the two Mon/Fayette projects.

Assessment of PTC Use of the Integrated NEPA/404 Process

McCormick, Taylor and Associates, Inc., calculated that the PTC could realize substantial cost savings by using the expedited NEPA/404 process: \$52.9 million on the I-70 to PA 51 phase of the Mon/Fayette project and \$22.5 million on the I-68 to PA 43 phase. (See Table 40.)

Table 40

Estimate of Potential Construction Cost Savings That Can Result From the Expedited NEPA/404 Approval Process

Mon/Fayette Projects:	I-70 to S.R. 51	I-68 to S.R. 43
Actual Time for NEPA/404 Approval ^a	1.9 Years (23 Months)	2.2 Years (27 Months)
Average Time for NEPA/404 Approval ^b	5.6 Years	5.6 Years
Time Savings	3.7 Years	3.4 Years
Percent Cost Savings ^c	11.1%	10.2%
Estimated Construction Cost ^d	\$477.0 Million	\$221.0 Million
Estimated Construction Savings as a Result of Expedited NEPA/404 Approval	\$52.9 Million	\$22.5 Million

^aFrom the date the project was expedited. Figures do not reflect work done prior to expediting the process.

^bNational average.

^cAssumes 3 percent inflation per year.

^dConstruction cost estimates at the time of the FEIS.

Source: Excerpted from a report by McCormick, Taylor & Associates, Inc., entitled *Cost Savings of Expedited NEPA/404 Approvals - An Analysis of Three Projects in Pennsylvania*, July 1995.

The expedited process has considerable cost savings potential but can also involve additional costs. While it is difficult to identify additional costs related solely to expediting NEPA/404 approval, the costs over and above the expenses

related to a project proceeding at the average pace, can be grouped into a number of categories as follows:

- *Final Design Effort Moved to Preliminary Design* - The two Mon/Fayette projects were expedited to construction by making permit applications to the U.S. Army Corps of Engineers and requests for Water Quality Certification to the Pennsylvania Department of Environmental Resources during the development of the EIS rather than waiting until final design. This action permitted the issuing of the required permits/certifications immediately after the Record of Decision was received from the FHWA. This cost was really not additional to the project, but merely transferred from one point in the process to an earlier point. Similarly, mitigation design plans, soil borings, detailed mapping, and Agricultural Land Condemnation Approval Board presentations are tasks that could be completed during final design if the process was not being expedited. For this reason, these costs are not really “additional costs,” but rather are costs that were transferred from one point in the process to another.
- *Higher Level Personnel* - McCormick, Taylor & Associates, Inc., estimate that the total additional costs for higher level personnel for each Mon/Fayette project were approximately \$100,000. According to McCormick, Taylor & Associates, Inc., increased costs resulted because these two projects received a high degree of visibility and the intensity of effort required was greater than normal. The projects, therefore, involved a higher level manager or executive from the consulting firms involved in the projects.
- *Additional Coordination Meetings* - McCormick, Taylor and Associates, Inc., determined that weekly EIS Management Team Meetings and monthly Agency Coordination Meetings were the most effective management techniques for expediting the work. The consultant concluded that efficiency and progress were achieved by scheduling regular meetings, assigning follow-up responsibilities, monitoring progress, and reinforcing schedules and priorities. Additionally, the project team was able to respond to new regulations such as the Congestion Management System Analysis and Major Investment Studies as they were issued. However, bringing the key people together on a weekly basis had an additional cost above and beyond that which would normally have occurred in a project. McCormick, Taylor and Associates, Inc., calculated that the additional meetings increased I-70 to PA 51 project costs by \$200,000 and I-68 to PA 43 costs by \$304,000.
- *Additional Studies to Expedite the Projects* - The McCormick, Taylor and Associates, Inc., analysis also identified additional studies as an extra cost

factor in the expedited process. Studies identified include functional evaluation of wetlands, studies of secondary impacts of the projects, project overviews, and other miscellaneous studies on activities completed in order to obtain consensus including, for example, field studies in an expanded study area, additional water quality testing, and evaluation of minor alignment shifts. The analysis found that such studies added \$813,000 in costs to the I-70 to PA 51 project and \$916,000 to the I-68 to PA 43 project.

The McCormick, Taylor and Associates, Inc., analysis concluded that the estimated construction cost savings of expediting the projects outweigh the additional costs that were incurred. In total, the higher level of personnel, extra meetings, and additional studies required by the expedited process resulted in additional costs of \$1.1 million on the I-70 to PA 51 project and \$1.3 million on the I-68 to PA 43 project. When viewed in relation to the estimated construction savings, the net savings estimates are \$51.8 million on the I-70 to PA 51 project and \$21.2 million on I-68 to PA 43.

Act 61 Project Overlaps With PennDOT's Twelve-Year Plan

We found that there is overlap between the project requirements in PennDOT's Statewide Transportation Improvement Program (STIP) for 1997-2000 and the companion Twelve-Year Program with projects specified in Act 1985-61, as amended, that are to be constructed by the PTC. Several PennDOT projects on the STIP and Twelve-Year Program appear to replicate projects or portions of projects listed in Sections 8912 (Subsequent Extension Authorization) and 8913 (Additional Subsequent Extension Authorization) of Act 61.

Section 8912 Projects. This section of Act 61 directs the construction of three projects along the length of U.S. 219 from the Maryland border to the vicinity of Bradford, Pennsylvania. These PTC projects and their status as of March 1997 are shown below:

- *A project from interchange with turnpike near Interchange 10 north following where feasible U.S. 219 to interchange with I-80 at Interchange 16.* This project is currently on hold. Corridor Location Studies were completed in mid-1990 for the section of the project located between U.S. 422 in Cambria County and I-80 in Clearfield County. A recommended corridor was selected, but no further action had been taken as of March 1997.
- *A project from Turnpike Interchange 10 south along U.S. 219 to Maryland border.* This project had not been initiated as of March 1997.

- *A project from I-80 Interchange 16 north along U.S. 219 to connection with U.S. 219 Expressway south of Bradford in McKean County. This project had not been initiated as of March 1997.*

We found that PennDOT has constructed/reconstructed about 45 miles of U.S. 219 making it a four lane highway from just south of the Pennsylvania Turnpike near Exit 10 to a point just northwest of Ebensburg. PennDOT also has two major projects (the Johnsonburg Bypass and Bradford Bypass Extension) scheduled for construction on U.S. 219 commencing in 1998 and 1999 at an estimated total cost of \$16.5 million and \$8.5 million, respectively.

Section 8913 Projects. This section of Act 61 directs the construction of an extension from I-80 Interchange 23 at Milesburg southwest along U.S. 220 to a connection with the existing U.S. 220 Expressway (I-99) south of Bald Eagle. As of March 1997, PennDOT had three construction projects in Centre County on the Department's STIP and Twelve-Year Program. These projects, which appear to replicate the Act 61 projects, are:

- I-99: Bald Eagle to U.S. 322;
- I-99: State College to I-80; and
- U.S. 220 Relocation: Bald Eagle to I-80.

The I-99: Bald Eagle to U.S. 322 and I-99: State College to I-80 projects are scheduled to commence construction in 1998 at an estimated total cost of \$345 million and \$172 million, respectively. The \$30 million estimated cost for design for the U.S. 220 Relocation: Bald Eagle to I-80 is intended to fund the preliminary and final engineering design phase of that project.

Based on initial examination of the PennDOT project, it appears the intent of Act 1985-61, as amended, to provide a link from I-80 to I-99 at Bald Eagle will be satisfied by this project.

The PennDOT project will not, however, follow exactly the direction description expressed in Act 1985-61, as amended. PennDOT's extension of I-99 to I-80 will generally parallel U.S. 220 on the east from where it currently ends at Bald Eagle to about one mile south of the village of Port Matilda where I-99 will cross U.S. 220 and proceed west of Port Matilda to a point where it will again cross U.S. 220 north of Port Matilda and join U.S. 322. It will then proceed to Sky Top and connect with the State College Bypass (Mount Nittany Expressway). At Exit 24 of the State College Bypass, I-99 will generally parallel PA 26 north connecting with the Bellefonte Bypass (PA 26) eventually connecting with I-80 in the vicinity of Interchange 24. Construction is expected to commence on the State College Exit 24 to I-80 Interchange 24 in 1998.

Other PTC Roadway Improvement and Extension Activity

In addition to Act 61 projects, the Turnpike Commission has been engaged in other roadway improvement and extension activity. The PTC pursues an annual maintenance plan that includes a resurfacing schedule and proposed structure repair projects as recommended by its Consulting Engineer, Michael Baker, Jr., Inc. These projects include such things as bridge construction, rehabilitation, and replacement; resurfacing designated sections of the existing roadway; tunnel rehabilitation; and interchange improvements.

Additionally, we identified three other projects that have been completed by the PTC since 1985 that were specified in legislation. This legislation, Act 1978-331, authorized the PTC to construct a Western Extension Climbing Lane--eastbound near Beaver Valley Interchange; widen the turnpike to six lanes between the Northeastern Extension and Philadelphia Interchange (including related interchange projects); and selected interchange projects including Downingtown.

A Pennsylvania Turnpike official explained that after the act was passed, the Commission did not authorize the issuance of bonds for these and other projects set forth in the act. The interchange projects were paid for through Reserve Maintenance Funds (RMF), but construction of the Beaver Valley Climbing Lane did not occur until after the 1986 Trust Indenture. The Pennsylvania Turnpike Commission included these projects in the 1986 Trust Indenture in order to use bond funds to reimburse the RMF for the funds expended for the interchanges, as well as to pay for the Beaver Valley Climbing Lane.

We found that some PTC fiscal reports, maps, and other documents refer to these as "Act 61 projects." This may result from a misunderstanding that all projects funded through the 1986 Indenture are from Act 61. Expenditure data presented in this report on Act 61 projects does not include the costs of the Beaver Valley Climbing Lane, the Philadelphia Area Interchanges, or the Downingtown Interchange.

Each of these projects is briefly described below:

- 1. Beaver Valley Climbing Lane (M.P. 13.4 to 15.7).** This project entailed the construction of an east-bound truck climbing lane on the Mainline of the Pennsylvania Turnpike, east of the Beaver Valley Bridge. The project commenced in August 1989 and was completed in November 1990.
- 2. Philadelphia Area Interchanges.** This project involved the rebuilding of three interchanges on the Mainline of the Pennsylvania Turnpike in the vicinity of Philadelphia: Fort Washington, Willow Grove, and Philadelphia. Construction and right-of-way acquisition for the three projects were

completed in 1984, funded through the Reserve Maintenance Fund. The fund was reimbursed from the proceeds of the 1986 Bond Issue.

3. Downingtown Interchange. This project involved improvements on the Mainline of the Pennsylvania Turnpike to the interchange in the vicinity of Downingtown. The project commenced in April 1986 and was completed in November 1987. A total amount of \$3,150,000 from the 1986 Bond Issue was assigned to this project. The remaining costs for this project, including right-of-way acquisitions, were funded from the Reserve Maintenance Fund.

As of November 30, 1996, the Pennsylvania Turnpike had expended the amounts shown in Table 41 for these projects. No Oil Company Franchise Tax revenues have been involved in this funding.

Table 41

**PTC Expenditures on Improvement and Extension
Projects Required by Act 1978-331**
(Through November 30, 1996)

<u>Project</u>	<u>Expenditures</u>
Beaver Valley Climbing Lane	\$ 8,181,122
Philadelphia Area Interchanges	32,122,037
Downingtown Interchange.....	<u>15,264,316^a</u>
Total PTC Costs for These Projects	\$55,567,475

^a\$13,914,316 paid from the Reserve Maintenance Fund.

Source: PA Turnpike Commission Quarterly Progress Report for Construction Projects dated November 21, 1996, and information provided by the PA Turnpike Commission on Act 61 Project Expenditures through November 30, 1996.

IX. Background Information on the Pennsylvania Turnpike Commission

Legal Background

The Pennsylvania Turnpike Commission (PTC) was established as an instrumentality of the Commonwealth by Act 1937-211, 36 P.S. §652a *et seq.* The Commission had the power to construct, maintain, and operate a turnpike at locations approved by the Department of Transportation. The PTC was given authority to issue revenue bonds, to pay construction costs, and to collect tolls for the payment of the bonds, among other powers and duties.

Currently, the PTC operates under the “Turnpike Organization, Extension and Toll Road Conversion Act,” Act 1985-61, 36 P.S. §651.1 *et seq.*, which expanded and modified earlier legislation and granted additional powers to the PTC. Act 61 authorized and empowered the PTC to undertake a specific program of capital improvements as well as other construction projects and authorized the issuance of revenue bonds to pay for the cost of such projects.

Act 1988-176 reestablished the Commission under the Sunset Act and continued the Commission to December 31, 1998.¹ This act also increased the salary of the Commission members and required the LB&FC to conduct a follow-up to its 1987 Sunset Performance Audit to determine if management issues identified during the Sunset review process had been addressed. As required in the act, this audit was completed by November 1989.

Act 1991-26 rescheduled the projects that were authorized, and empowered the Commission to construct, operate, and maintain turnpike extensions and improvements at such locations and according to a schedule deemed feasible by the PTC, together with connecting roads, storm water management systems, tunnels, and bridges. After completion of these enumerated projects and subject to prior legislative approval by the General Assembly and U.S. Congress, the PTC is authorized and empowered to convert such portions of Pennsylvania’s interstate highway system to toll roads as necessary for the completion of the turnpike extensions and improvements.

Subsequent legislation, Act 1992-109, transferred the list of projects to the Vehicle Code and revised the list of projects that the PTC is authorized to undertake according to a set of priorities enumerated in the act.

¹The Sunset Act expired in 1991; therefore, this termination date is no longer valid.

Commission Composition

The Commission consists of five members, one of whom is the Secretary of Transportation serving as an ex-officio member. The other four commissioners are appointed by the Governor with the advice and consent of two-thirds of the members of the Senate. The Secretary of Transportation may authorize the Deputy Secretary for Highway Administration to act and vote on his/her behalf. Members serve four-year terms. At the expiration of this term, a member may continue to hold office for 90 days, or until his/her successor is appointed and qualified, but may not continue to hold office after 90 days unless reappointed.

Commission Powers and Duties

The PTC has a broad mandate to oversee the entire Pennsylvania Turnpike System. More specifically, the PTC has the following powers and duties:

- to maintain a principal office as designated by the Commission;
- to contract and be contracted with in its own name;
- to sue and be sued, plead and be impleaded;
- to promulgate rules and regulations;
- to acquire, hold, accept, own, use, hire, lease, exchange, operate, and dispose of personal property, real property, and interests in real property;
- to make and enter into all contracts and agreements necessary or incidental to the performance of its duties and the execution of its powers;
- to employ engineering, traffic, architectural, and construction experts and inspectors, attorneys, and other employees as necessary, and fix their compensation;
- to provide grade separations, at its own expense, with respect to all public roads, state highways, and interstate highways intersected by the turnpikes and to change and adjust the lines and grades thereof;
- to petition the court of common pleas for the vacation, relocation, or supply of any public road;
- to provide for the policing of the Turnpike;
- to issue Turnpike revenue bonds, notes, or other obligations of the Commission for the purpose of paying the cost of the turnpikes;

- to condemn any lands, interests in lands, property rights, rights-of-way, franchises, easements, and other property deemed necessary or convenient for the construction and efficient operation of the turnpikes and the toll road conversions or necessary in the restoration or relocation of public or private property damaged or destroyed;
- to control the maintenance and repair of the turnpikes; and
- to fix tolls; and, to borrow money, from time to time, to provide preliminary or interim financing, up to, but not exceeding, the estimated total cost of the turnpikes and the toll road conversions.

Commission Staffing and Organizational Structure

The Turnpike Commission had an authorized staff complement of 2,379 positions as of October 1996. Of that number, the actual number of filled positions was 2,258; there were 121 vacancies (see Table 42). Approximately 22 percent of the complement is considered Central Office staff. The balance of the employees (in Fare Collection and Turnpike Maintenance) are located at various toll plazas, maintenance facilities, and other field locations throughout the Turnpike System.

Table 42

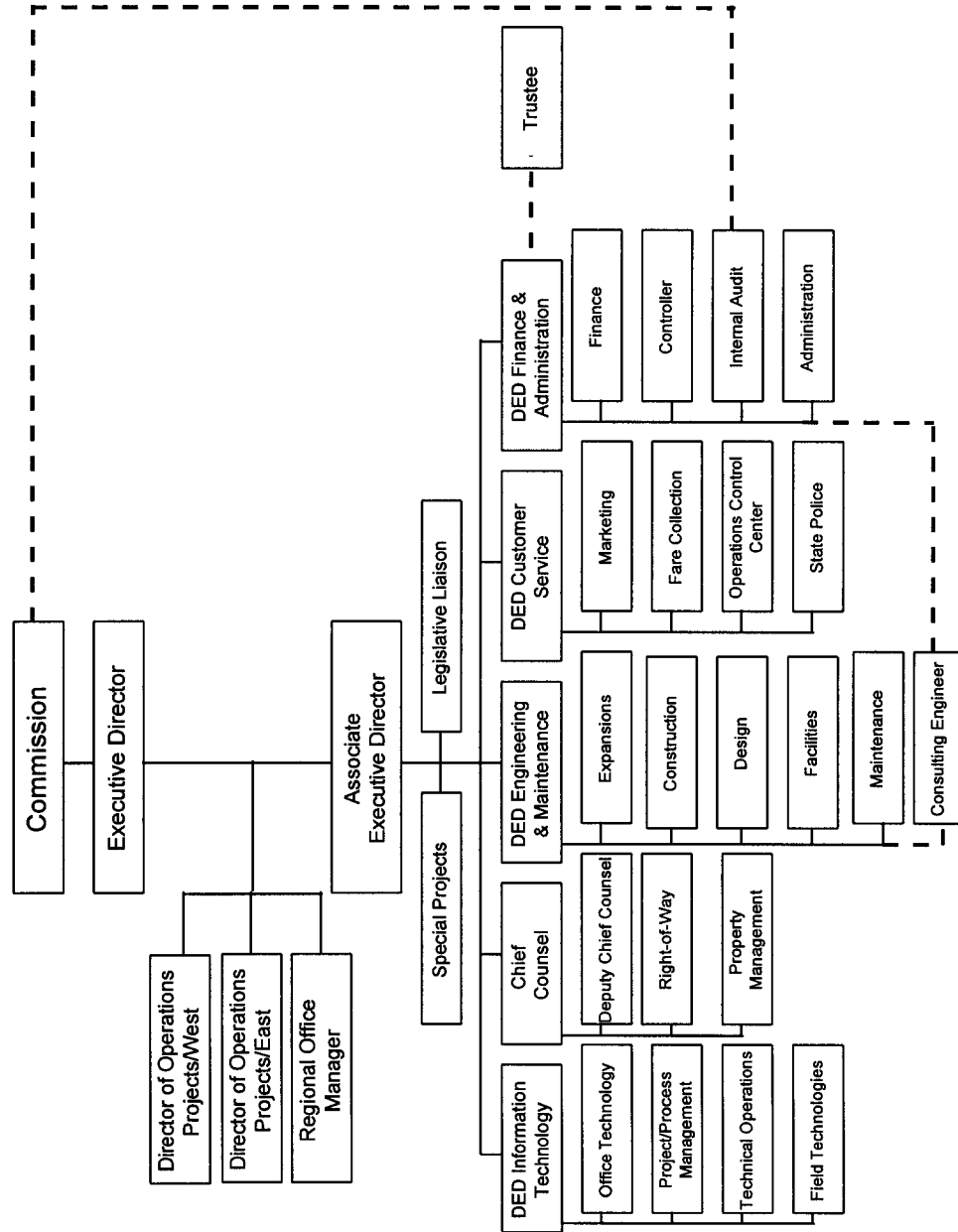
PTC Staff Complement (As of October 15, 1996)			
<u>Function^a</u>	<u>Filled</u>	<u>Vacant</u>	<u>Total</u>
Fare Collection	991	31	1,022
Maintenance	771	29	800
Engineering	235	34	269
Finance and Administration	143	12	155
Executive Director's Office	39	5	44
Marketing	38	2	40
Information Services	30	3	33
Chief Counsel	<u>11</u>	<u>5</u>	<u>16</u>
Total ^b	2,258	121	2,379

^aThe functional categories and personnel listed on this table do not correspond with the PTC organizational structure depicted on the PTC Organization Chart on the following page. The chart reflects changes in the agency's structure made since the date of the personnel report used to develop this table.

^bIncludes both salaried and wage positions. Does not include part-time or summer positions.

Source: Developed by LB&FC staff from *Report of Authorized Positions and Vacancies*, PA Turnpike Commission, as of October 15, 1996.

Pennsylvania Turnpike Commission Organization Chart



Source: Pennsylvania Turnpike Commission, March 1997.

The organizational structure of the PA Turnpike Commission is shown on Exhibit 15. As outlined on the chart, the Commission's upper management staff structure includes an executive director, an associate executive director, and four deputy executive directors.

The Commission's headquarters are in the Administration Building located at the Harrisburg-East Interchange of the Turnpike. This building provides offices for the Commissioners and their administrative staff, the Commission's engineering staff, as well as offices for the Pennsylvania State Police, Troop T, and the Consulting Engineer. Additional office space is also rented in the Harrisburg area to accommodate other Commission personnel.

The Commission also maintains Eastern and Western Regional Offices which are located near Philadelphia and Pittsburgh, respectively. In addition to management and their administrative staff, each regional office includes personnel from the Engineering and Maintenance Departments, who oversee projects in their respective districts of the System. The remaining office space at these locations is occupied by Pennsylvania State Police, fare collection, and public information personnel.

The Commission's Consulting Engineer

The trust indenture between the PA Turnpike Commission and Fidelity Bank, Trustee, dated July 1, 1986, requires the Commission to have a consulting engineer. Section 706 of that agreement states:

The Commission covenants that, until the Bonds secured hereby and the interest thereon shall have been paid or provision for such payment shall have been made, it will, for the purpose of performing and carrying out the duties imposed on the Consulting Engineer by this Indenture, employ an independent engineer or engineering firm or corporation having a nationwide and favorable repute for skill and experience in such work.

Michael Baker, Jr., Inc., an engineering consulting and construction firm based in Pittsburgh, PA, is the PTC's Consulting Engineer. This firm has served as the Consulting Engineer since 1956. The six personnel of the Michael Baker firm who are assigned to the PTC are located at the Turnpike Administration Building and include a chief engineer, three civil engineers (two structural and one roadway), an accountant, and one clerical support person. The PTC paid Michael Baker, Jr., Inc., approximately \$650,000 for basic consulting engineering services provided in FY 1995-96. (This does not include amount paid to Michael Baker, Jr., Inc., for other specialized services provided under separate contracts.)

The services to be provided by Michael Baker, Jr., Inc., in its capacity as Consulting Engineer are stated in the 1986 and 1994 Trust Indentures. These include duties related to the issuance of revenue bonds, budget development, financial administration, and toll-setting. The Consulting Engineer is also required to review and approve all plans and specifications, prepare progress reports on PTC construction projects and approve payments, and make an annual inspection and report on the maintenance, repair, and operation of the Turnpike System.

The Trust Indenture places additional responsibilities on the Consulting Engineer in such areas as insurance; the sale, lease, or encumbrance of property; and inspection of records. The Commission may also impose other duties on the Consulting Engineer by contract.

Descriptive and Operational Data

The Pennsylvania Turnpike is referred to as America's first modern toll highway. The original 160-mile toll road opened on October 1, 1940. During the 1950s, four major extension projects expanded the Turnpike from the Ohio State Line to the New Jersey border, and from Norristown to Scranton. Since 1990, three major expansions have occurred on the Turnpike, creating the James J. Manderino Highway, the James E. Ross Highway, and the Amos K. Hutchinson Bypass.

As of January 1997, the Commission controlled a total of 506 roadway miles. The Pennsylvania Turnpike system includes an east-west Mainline section (about 360 miles) traversing the southern portion of Pennsylvania and connecting with the Ohio Turnpike at its western terminus and the New Jersey Turnpike at its eastern terminus. Connecting with the Mainline section is the Northeast Extension (110 miles). The Western Expansion projects added an additional 36 miles.

The Commission manages 20 maintenance facilities, 41 interchanges, and 5 barrier toll plazas on the Mainline, as well as 14 ramp plazas, and 4 barrier toll plazas on the new extensions. The Commission also oversees the operation of 22 service plazas and 2 traveler information centers. Prominent features of the PA Turnpike include five tunnels and an extensive number of bridges, (including eight major bridges ranging from about 1,200 feet to nearly 6,600 feet in length).

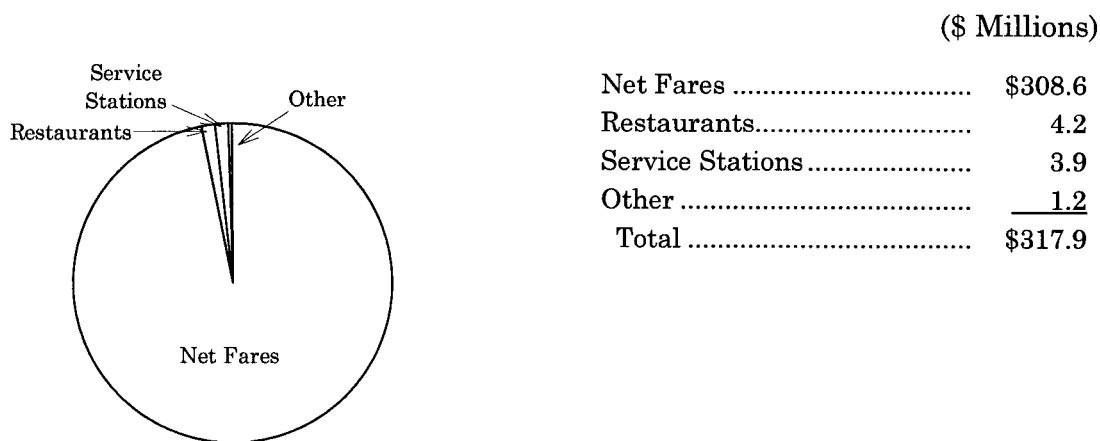
During FY 1995-96, traffic volume on the PA Turnpike totaled 138,630,000 vehicles, including 121.9 million passenger vehicles (88 percent) and 16.7 million commercial vehicles (12 percent). The total net revenue generated from tolls in FY 1995-96 was \$308.6 million (\$172.3 million or 56 percent from passenger vehicles, and \$136.3 million or 44 percent from commercial vehicles). On a per mile revenue basis, passenger cars generated 4.7 cents per mile; commercial vehicles 14.2 cents per mile.

Revenues and Expenditures

The PTC receives the majority of its operating revenues from tolls. Other operating income is derived from interest earnings, service plaza concessions, and the sale or lease of land and equipment. As shown on Exhibit 16, revenues from these sources amounted to \$317.9 million in FY 1995-96.

Exhibit 16

PTC Operating Revenues, FY 1995-96



Source: Developed by LB&FC staff from information obtained from the PA Turnpike Commission.

Since FY 1991-92, the PTC has also received an annual allocation of monies from the state Oil Company Franchise Tax. This allocation is equal to 14 percent of 55 mills of the tax. Through November 30, 1996, the PTC had received \$199,890,511 from this source. (See Section VII for further information.)

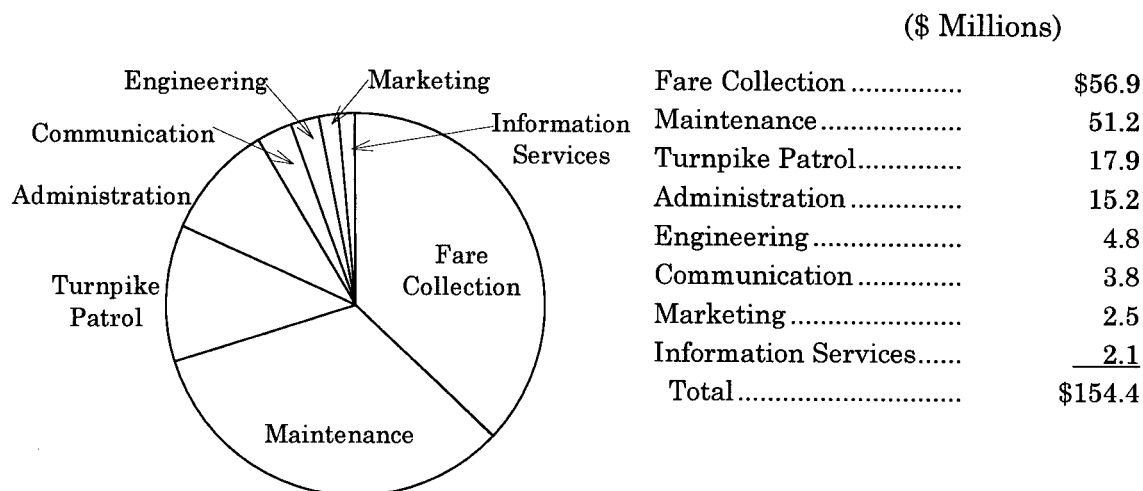
Turnpike expenditures can be grouped into four major categories, as follows:

- operating expenditures;
- debt service;
- Reserve Maintenance Fund; and
- capital project expenditures (construction).

Operating expenses totaled \$154.4 million in FY 1995-96. As shown on Exhibit 17, about 70 percent of operating expenditures went toward fare collection and Turnpike maintenance.

Exhibit 17

PTC Operating Expenditures, FY 1995-96



Source: Developed by LB&FC staff from information obtained from the PA Turnpike Commission.

Debt service expenditures in FY 1995-96 were \$96.1 million and spending from the Reserve Maintenance Fund (RMF) was \$101.0 million. Expenditures from the RMF are actual dollars reinvested in the Turnpike infrastructure for resurfacing, replacing, or reconstructing parts of the Turnpike System, and for extraordinary maintenance and repairs. This differs from maintenance spending from the operating account which includes such things as winter maintenance, landscaping, and building maintenance. Expenditures for capital projects totaled \$62.8 million.

Table 43 shows that income from all available sources amounted to \$390.7 million while total PTC spending amounted to \$416.6 million in FY 1995-96. As shown on the table, operating income was substantially greater than operating expenditures but, when debt service, reserve maintenance fund, and capital spending are considered, overall spending exceeded income. This is possible because beginning year fund balances and interest earnings are available for spending. These amounts are not reflected on this table.

Table 43

PTC Revenues and Expenditures*

(June 1, 1995, to May 31, 1996)

(\$ Millions)

	<u>Amount</u>
Income:	
Operating Income	\$317.9
Oil Company Franchise Tax (OCFT) Receipts	40.6
Misc. Revenues Credited to OCFT Accounts	17.4 ^a
Interest Collected	14.3
Proceeds From Sale of Land and Equipment	0.5
Bond Proceeds.....	<u>0.0^b</u>
Total Income	\$390.7
Expenditures:	
<i>Operating Expenditures</i>	\$154.4
<i>Debt Service:</i>	
Oil Company Franchise Principal.....	2.3 ^c
Oil Company Franchise Interest.....	6.5 ^c
Toll Bonds Principal	21.6 ^d
Toll Bonds Interest.....	65.7 ^d
<i>Reserve Maintenance Fund</i>	101.0
<i>Capital Projects:</i>	
Oil Company Franchise Construction.....	41.3
Construction Fund.....	22.5
<i>Other Expenditures:</i>	
Other Expenses Paid From OCFT Accounts	1.0 ^e
Self Insurance.....	<u>0.3</u>
Total Expenditures	\$416.6

*This table is not intended to be a balance sheet or income statement of the PTC. It merely represents all sources of income and all cash outflows for the PTC. Therefore, revenue does not have to exceed or equal expenditures. Expenditures may exceed revenues since beginning of the year fund balances and interest earnings are available for spending.

^aIncludes interest earnings and FHWA and West Virginia reimbursements.

^bWhile bond proceeds can be a source of income to the PTC, a bond sale has not occurred since 1994.

^cPayments per the 1994 Bond Indenture where bonds were sold with Oil Company Franchise Tax receipts used as security for the debt service.

^dPayments per the 1986 Bond Indenture where bonds were sold with toll revenues used as security for the debt service.

^eIncludes right-of-way appraisals, professional fees, legal fees, bond issuance fees, and other miscellaneous items.

Source: Developed by LB&FC staff using information obtained from the PTC Controller's Office

X. Appendices

APPENDIX A

Legislative History of Act 61 Project Priority List

... the Commission is hereby authorized and empowered to construct, operate and maintain turnpike extensions and turnpike improvements at such specific locations and according to such schedule as shall be deemed feasible and approved by the Commission. . . . 75 Pa.C.S.A. §8911

ACT 61 OF 1985 36 P.S. 651.1 et seq.	ACT 124 OF 1990 36 P.S. 651.3 (a) (8) & (9)	ACT 26 OF 1991 74 Pa.C.S.A §8111 et seq.	ACT 109 OF 1992 75 Pa.C.S.A. §8911 et seq.
<u>§651.3(a) Improvement and Extension Authorizations</u> 1. Six-lane widening 2. Construct I-95 I/C 3. Construct Mid-County I/C 4. Construct Keyser Avenue I/C 5. Construct Beaver Valley Expway. 6. Construct Greensburg (AKH) Bypass 7. Construct additional Lehigh Tunnel 8. Negotiate w/DOD for New Cumberland I/C	<u>§651.3(a) Improvement and Extension Authorizations</u> 1. Six-lane widening 2. Construct I-95 I/C 3. Construct Mid-County I/C 4. Construct Keyser Avenue I/C 5. Construct Beaver Valley Expway. 6. Construct Greensburg (AKH) Bypass 7. Construct additional Lehigh Tunnel 8. Construct New Cumberland I/C 9. Construct S.R. 903 I/C - NE Ext.	<u>§8111 (Formerly Group a) Improvement and Extension Authorizations</u> 1. Six-lane widening 2. Construct I-95 I/C 3. Construct Mid-County I/C 4. Construct Keyser Avenue I/C 5. Construct Beaver Valley Expway. 6. Construct Greensburg (AKH) Bypass 7. Construct additional Lehigh Tunnel 8. Construct New Cumberland I/C 9. Construct S.R. 903 I/C - NE Ext.	<u>§8911 (Formerly Group a) Improvement and Extension Authorizations</u> 1. Six-lane widening 2. Construct I-95 I/C 3. Construct Mid-County I/C 4. Construct Keyser Avenue I/C 5. Construct Beaver Valley Expway. 6. Construct Greensburg (AKH) Bypass 7. Construct additional Lehigh Tunnel 8. Construct New Cumberland I/C 9. Construct S.R. 903 I/C - NE Ext.
<u>§651.3(b) Subsequent Extension Authorizations</u> 1. Construct M/F Exp. from I-70 to I-376 2. Construct U.S. 219 from Somerset to I-80 3. Construct IDC I/C - NE Ext.	<u>§651.3(b) Subsequent Extension Authorizations</u> 1. Construct M/F Exp. from I-70 to I-376 2. Construct U.S. 219 from Somerset to I-80 3. Construct IDC I/C - NE Ext.	<u>§8112 (Formerly Group b) Subsequent Extension Authorizations</u> 1. Construct M/F Exp. from I-70 to I-376 And S. Beltway along Washington/ Allegheny County Line to Airport 2. Construct M/F Exp. from U.S. 40 to WV 3. Construct U.S. 219 from Somerset to I-80 4. Construct IDC I/C - NE Ext.	<u>§8912 (Formerly Group b) Subsequent Extension Authorizations</u> 1. Construct M/F Exp. from I-70 to I-376 And S. Beltway (along Washington/ Allegheny County Line - DELETED) 2. Construct M/F Exp. from U.S. 40 to WV 3. Construct U.S. 219 from Somerset to I-80 4. Construct IDC I/C - NE Ext. 5. Construct U.S. 219 from Somerset to MD 6. Construct U.S. 219 from I-80 to NY (Bradford)
<u>§651.3(c) Additional Subsequent Extension Authorizations</u> Upon substantial completion of (a) and (b) ... 1. Construct M/F Exp. from U.S. 40 to WV 2. Construct U.S. 219 from Somerset to MD 3. Construct U.S. 219 from I-80 to NY (Bradford) 4. Construct U.S. 220 from I-80 to Bald Eagle	<u>§651.3(c) Additional Subsequent Extension Authorizations</u> Upon substantial completion of (a) and (b) ... 1. Construct M/F Exp. from U.S. 40 to WV 2. Construct U.S. 219 from Somerset to MD 3. Construct U.S. 219 from I-80 to NY (Bradford) 4. Construct U.S. 220 from I-80 to Bald Eagle	<u>§8113 (Formerly Group c) Additional Subsequent Extension Authorizations</u> Upon substantial completion of (a) and (b) ... 1. Construct U.S. 219 from Somerset to MD 2. Construct U.S. 219 from I-80 to NY (Bradford) 3. Construct U.S. 220 from I-80 to Bald Eagle	<u>§8913 (Formerly Group c) Additional Subsequent Extension Authorizations</u> Upon substantial completion of (a) and (b) ... 1. Construct U.S. 220 from I-80 to Bald Eagle
<u>§651.3(d) Further Subsequent Extension Authorizations</u> Upon completion of (a), (b) and (c) ... additional projects listed	<u>§651.3(d) Further Subsequent Extension Authorizations</u> Upon completion of (a), (b) and (c) ... additional projects listed	<u>§8114 (Formerly Group d) Further Subsequent Extension Authorizations</u> Upon completion of (a), (b) and (c) ... additional projects listed	<u>§8914 (Formerly Group d) Further Subsequent Extension Authorizations</u> Upon completion of (a), (b) and (c) ... additional projects listed

APPENDIX B

Chronology of Pennsylvania Turnpike Improvements (1962 to 1995)

September 1962...	Groundbreaking on Laurel Hill Bypass and boring of second Allegheny Tunnel.
October 1964	Laurel Hill Bypass opened, eliminating two-lane Laurel Hill Tunnel.
March 1965.....	Second Allegheny Tunnel opened; original tunnel closed for refurbishing.
December 1965....	Median barrier installation completed on entire east-west Turnpike.
April 1966.....	Work begins on second tunnels at Blue, Kittatinny, and Tuscarora mountains.
August 1966	Original Allegheny Tunnel re-opened.
November 1968 ...	Sideling Hill Bypass opened, eliminating two-lane tunnels.
November 1968 ...	Second Blue, Kittatinny, and Tuscarora tunnels opened.
August 1969	Median barrier completed on entire Turnpike.
December 1981....	Completion of three climbing-lane projects.
May 1982	Computerization and renovation of toll collection system begins.
September 1983...	Last original 1940 toll booth still in service is decommissioned, dismantled, and sent to the Smithsonian Institution.
March 1986.....	Six-lane widening project begins.
July 1987	Computerized toll collection system goes into service.
November 1987 ...	Opening of six-lane section near Philadelphia.
February 1989	Groundbreaking for second Lehigh Tunnel.
October 1989	Groundbreaking for Mahoning River Bridge.
December 1989....	Phase 1 of installation of call boxes along Turnpike.
December 1989....	Groundbreaking for Mid-County Interchange.
June 1990	Second Lehigh Tunnel is "holed through."
June 1990	Groundbreaking for first roadway section of James E. Ross Highway.
July 1990	Turnpike initiates cellular-phone emergency service.
October 1990	Opening of the first six-mile section of the Manderino Highway.
July 1991	Opening of Keyser Avenue ramp located on the Northeastern Extension.
June 1992	First mainline weigh barrier.
September 1992...	Mainline weigh barrier at Clarks Summit replaced the Scranton Interchange.
November 1991 ...	First coin drop ramp opened on James E. Ross Highway.
November 1991 ...	Complete installation of call boxes along the entire Turnpike.
November 1991 ...	Opening of new Lehigh Tunnel.
November 1992 ...	Opening of James E. Ross Highway.
December 1992....	Opening of the new Mid-County Interchange.
July 1993	Opening of southern section of Hutchinson Bypass.
December 1993....	Opening of northern section of Hutchinson Bypass.
November 1994 ...	Groundbreaking on the Mon/Fayette WV to Uniontown project.
February 1995	Opening of the Keyser Avenue Interchange.
May 1995	Opening of the Allentown and Sideling Hill Farmers' Markets.
June 1995	Groundbreaking on the Mon/Fayette I-70 to Route 51 project.

Source: Pennsylvania Turnpike Commission.

APPENDIX C

Turnpike Improvement and Extension Projects Under Act 1985-61, as Amended

December 1983	Governor's Toll Roads Task Force issues its final report entitled <i>Pennsylvania Toll Roads Feasibility Study</i> . The study contained recommendations for a \$3.7 billion construction program to improve and extend the Pennsylvania Turnpike.
September 30, 1985	Act 1985-61 enacted authorizing PTC to construct, operate, and maintain 20 improvement and extension projects at specific locations and authorizing a new financial trust indenture.
March 10, 1986	Six-lane widening project begins (junction of Northeast Extension to Philadelphia Interchange).
July 1, 1986.....	Commission enters into Trust indenture. This indenture, together with its nine supplements, permitted bond issues totaling \$807.6 million.
November 27, 1987	Opening of six lane section near Philadelphia.
June 9, 1988.....	Groundbreaking for James J. Manderino Highway (Turnpike 43--Part of the Mon/Fayette Expressway) linking I-70 and U.S. 40 in Washington County.
February 14, 1989.....	Groundbreaking for second Lehigh Tunnel (\$72 million) to eliminate the last remaining section of two-lane highway on the Turnpike.
May 15, 1989.....	Remarketing of \$60 million of Series E Bonds of 1986 CD issuance of \$241.5 million of Series K Bonds of 1989, or a total of \$301.5 million which provided additional funding for the Beaver Valley Expressway and Amos K. Hutchinson Bypass.
October 20, 1989	Groundbreaking for \$20 million Mahoning River Bridge, first part of 16.5 mile, \$250 million James E. Ross Highway (Turnpike 60--Beaver Valley Extension Expressway) expansion project.
December 19, 1989.....	Groundbreaking for \$90 million Mid-County Interchange (17 lanes) with I-476 (Blue Route) in Montgomery County.
June 13, 1990.....	Second Lehigh Tunnel is "holed through" (crews from north and south ends met where last unexcavated section was blasted away).
June 15, 1990.....	Groundbreaking for first roadway section of James E. Ross Highway (Turnpike 60).

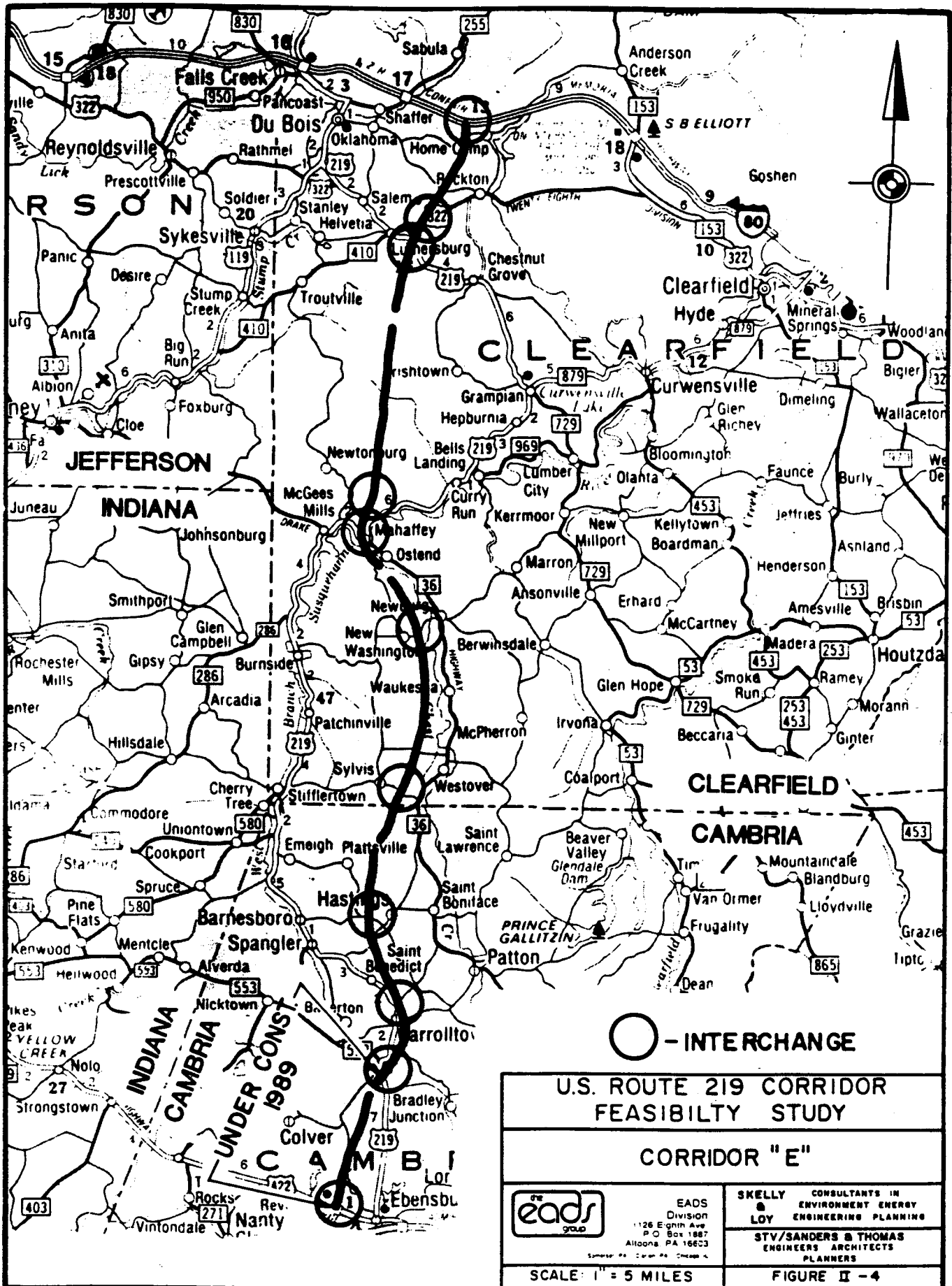
Appendix C (Continued)

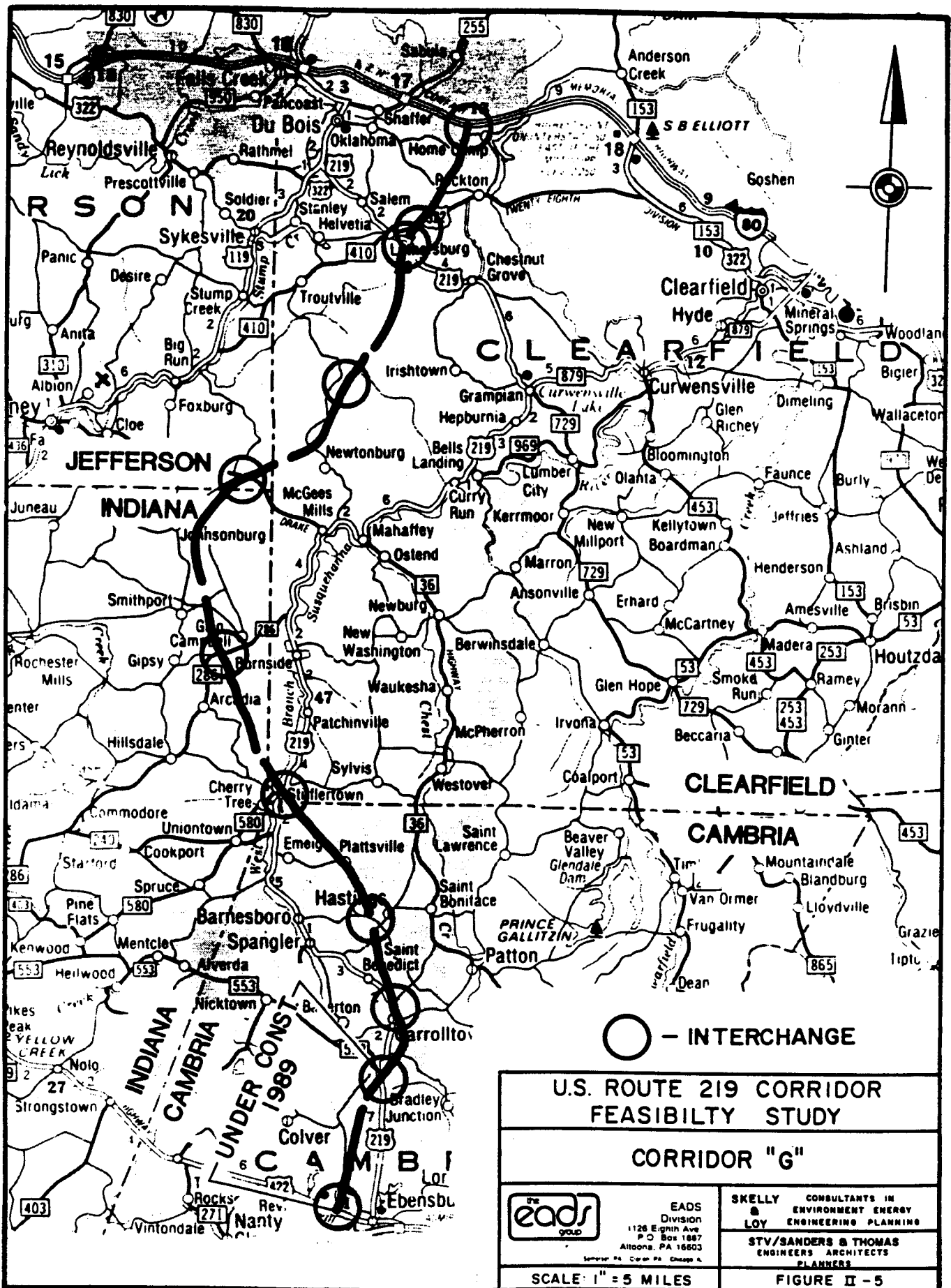
July 11, 1990.....	Act 1990-124 enacted. Amended Act 1985-61 by modifying the language about a project and adding a new project (the PTC was to construct an interchange on the Northeast Extension with S.R. 903 in Carbon County).
October 12, 1990	Opening of the first six mile section of the James J. Manderino Highway (Turnpike 43). Cost: \$90.6 million.
July 16, 1991.....	Opening of Keyser Avenue "Ramp C" located on the Turnpike's Northeast Extension.
August 5, 1991	Act 26 of 1991. Repealed the list of projects in Act 1985-61, as amended, but added a very similar list to Chapter 81 of Title 75.
November 8, 1991	First coin drop ramp opened on the James E. Ross Highway (Turnpike 60) at Mt. Jackson.
November 22, 1991	Opening of the new Lehigh Tunnel. Construction of a new two-lane tunnel, approximately 94 feet west of and running nearly parallel to the existing Lehigh Tunnel is complete.
June 30, 1992.....	South (Turnpike 60) - First mainline weigh barrier.
November 20, 1992	Opening of the entire 16.5 miles of James E. Ross Highway (Turnpike 60). Patrons traveling on this section utilize America's first weigh barrier toll system.
November 24, 1992	Act 109 of 1992. Repealed the list of projects in Chapter 81 of Title 75, but added a very similar list to Chapter 89 of Title 75.
December 15, 1992.....	Opening of the new Mid-County Interchange. Seventeen-lane interchange links the Turnpike Mainline, the Northeast Extension, and I-476 (Blue Route).
July 13, 1992.....	Opening of southern section of Amos K. Hutchinson Bypass (Turnpike 66--Greensburg Bypass).
December 9, 1993.....	Opening of northern section of Amos K. Hutchinson Bypass (Turnpike 66--Greensburg Bypass). Total of 13.2 miles for southern and northern sections.
November 1, 1994	Groundbreaking on the Mon Fayette--West Virginia to Uniontown transportation project.
February 1, 1995.....	Opening of the Keyser Avenue Interchange.
June 2, 1995.....	Groundbreaking on the Mon/Fayette--I-70 to Route 51 transportation project.

Source: Developed by LB&FC staff.

APPENDIX D

U.S. Route 219 Corridor Feasibility Study





APPENDIX E

PA Turnpike Tolls and Per Mile Rates

Mainline (East-West Through Trip)

Vehicle Toll <u>Class</u>	Gross Vehicle Weight <u>(Thousand Pound)</u>	<u>Toll</u>	<u>Per Mile Rate</u>
1	1-7	\$ 14.70	\$.0409
2	7-15	21.70	.0604
3	15-19	26.50	.0738
4	19-30	31.20	.0869
5	30-45	44.00	.1226
6	45-62	55.50	.1546
7	62-80	79.95	.2227
8	80-100	104.40	.2908
9	over 100	603.35	1.6806

Amos K. Hutchinson Bypass (North-South Through Trip)

Vehicle Toll <u>Class</u>	Gross Vehicle Weight <u>(Thousand Pound)</u>	<u>Toll</u>	<u>Per Mile Rate</u>
1	1-7	\$ 1.00	\$.0746
2	7-15	1.50	.1119
3	15-19	1.75	.1306
4	19-30	2.00	.1493
5	30-45	3.00	.2239
6	45-62	3.75	.2799
7	62-80	5.50	.4104
8	80-100	7.00	.5224
9	over 100	41.00	3.0597

James E. Ross Highway (North-South Through Trip)

Vehicle Toll <u>Class</u>	Gross Vehicle Weight <u>(Thousand Pound)</u>	<u>Toll</u>	<u>Per Mile Rate</u>
1	1-7	\$ 1.50	\$.0909
2	7-15	2.20	.1333
3	15-19	2.70	.1636
4	19-30	3.20	.1939
5	30-45	4.50	.2727
6	45-62	5.65	.3424
7	62-80	8.15	.4939
8	80-100	10.65	.6455
9	over 100	61.60	3.7333

Appendix E (Continued)

Northeastern Extension (North-South Through Trip)

Vehicle Toll Class	Gross Vehicle Weight (Thousand Pound)	Toll	Per Mile Rate
1	1-7	\$ 4.30	\$.0389
2	7-15	6.90	.0625
3	15-19	8.50	.0770
4	19-30	10.60	.0960
5	30-45	14.70	.1332
6	45-62	18.35	.1662
7	62-80	25.25	.2287
8	80-100	32.15	.2912
9	over 100	183.65	1.6635

James J. Manderino Highway (North-South Through Trip)

Number of Axles	Toll	Per Mile Rate
2	\$.50	\$.0893
3	1.00	.1786
4	1.50	.2679
5	2.00	.3571
6	2.50	.4464

Source: Developed by LB&FC staff from the *Pennsylvania Turnpike Commission Fare Schedule for all Classes of Vehicles*, Revised February 1, 1995, and information obtained from the PTC.

APPENDIX F

Funds Established by the PTC to Account for Oil Company Franchise Tax Revenues

1994 Series A Revenue Fund. All oil company franchise tax receipts which the PTC is entitled to receive from the Commonwealth are to be deposited into this Fund. The tax receipts or other tax revenues received initially by the Commission will be deposited into a segregated account of the PTC. Oil Company Franchise Tax revenues will be transferred within one business day following receipt to the credit of the Revenue Fund. Revenues from any other source are to be disbursed in a separate account. Funds are then transferred from the Revenue Fund to other accounts in accordance with the Trust Indenture.

Series A Oil Company Franchise Tax Construction Fund. Payment of the costs of the construction portion of any project shall be made from the Construction Fund. The definition of construction costs are previously outlined in relation to bond proceeds. This account is funded by the proceeds from the bonds as monies are primarily transferred from the Oil Company Franchise - 1994 Series A Clearing Fund to pay the construction costs of Act 61 projects.

Oil Company Franchise - 1994 Series A Oil Company Franchise General Fund. If any funds are still available after making deposits to the Debt Service Principal and Interest Accounts and the Debt Service Reserve Fund, the balance from the Revenue Fund is allocated to the 1994 Series A General Fund on or before the business day immediately preceding an interest payment date. The account is used to make up deficiencies in any funds or accounts so established under the indenture and for the following purposes, with no one item having priority over any of the others: to purchase or redeem bonds or any other obligations issued by the Commission; to secure and pay the principal or redemption price of and interest on any subordinated indebtedness; to make payments into the Construction Fund; to fund improvements, extensions, and replacements of the Pennsylvania Turnpike System; and to further any corporate purpose.

Oil Company Franchise - 1994 Series A Oil Company Franchise Clearing Fund. All of the net proceeds from the sale of the bonds, including accrued interest payable are deposited in this fund. The following payments and transfers may be made from the Clearing Fund pursuant to an order from a PTC official directing the application of the proceeds of the bonds: (1) the amount of accrued interest on the 1994 Series A Bonds, which amount will be transferred to the Interest Account of the Debt Service Fund; (2) the amount to be expended for costs of Construction, which amount will be transferred to the Construction Fund; (3) the amounts to be expended for costs and expenses in connection with the issuance of the 1994 Series A Bonds (i.e., first year's annual Trustee's fees); and (4) the amount of the Debt Service Reserve Requirement for the 1994 Series A Bonds, which amount will be transferred to the Debt Service Reserve Fund.

Appendix F (Continued)

Oil Company Franchise - Debt Service Principal Account. This account is used for the payment of principal on the Series A Bonds. On or before the last business day of each calendar month, money is transferred from the Revenue Fund equal to one-twelfth (1/12) of the principal amount necessary to pay on any 1994 Series A Bonds for the next succeeding maturity date occurring on or before the second interest payment following such deposit.

Oil Company Franchise - Debt Service Interest Account. The debt service interest is payable semiannually on the first days of June and December in each year. On or before the last business day of each calendar month, an amount equal to one-sixth (1/6) of the interest due on the 1994 Series A Bonds for the next succeeding interest payment date is deposited in the Debt Service Interest Account. This money is transferred from the Revenue Fund for interest payable.

In the event that there is a deficiency in the amount required to be deposited into any account in the Debt Service Principal or Interest Accounts in any month, the deficiency will be added to and deposited in the succeeding month. If at the time that a withdrawal is necessary from these accounts and the accounts are insufficient in funds, then the deficiency should come from monies from the stated funds in the following order: the Debt Service Reserve Fund, the Oil Company Franchise Tax General Fund, and the 1994 Series A Bond Sinking Fund.

Oil Company Franchise - 1994 Series A Debt Service Reserve Fund. In each fiscal year, after deposits to the Debt Service Principal and Interest Accounts are made, money should be transferred out of the balance of the Revenue Fund, if any, on or before the business day immediately preceding an interest payment date, to the Series A Debt Service Reserve Fund. The money is used as a reserve for payment of interest and principal on outstanding bonds in the event that moneys are not available in the other funds. The amount to be maintained in this fund is equal to the maximum principal and interest requirement for any succeeding fiscal year. In lieu of the deposit of money into the Debt Service Reserve Fund, the Commission may provide a surety bond or an insurance policy payable for the benefit of the holders of the bonds or have a letter a credit to cover the deficiency.

Oil Company Franchise - 1994 Series A Bond Sinking Fund. The PTC does not have a Bond Sinking Fund. Through discussions with the PTC Controller, we determined that although the account is set up, a Bond Sinking Fund is not necessary since the principal on the outstanding bonds is insured.

APPENDIX G

PTC Expenditures From Oil Company Franchise Tax Monies Classified as Purchases, by Project

(As of November 30, 1996)

Mon/Fayette Projects:

FT-93-001 - Final Design, Sections 50 (WV to Uniontown) and 52(I-70 to Rte. 51);

FT-93-002 - Final Design Management, Sections 50 (WV to Uniontown) and 52 (I-70 to Rte. 51);

FT-94-001 - Construction, Section 50 (WV to Uniontown);

FT-94-002 - Construction, Section 52 (I-70 to Rte. 51); and

FT-94-003 - Right-of-Way Acquisition for Sections 50 (WV to Uniontown) and 52 (I-70 to Rte. 51).

<u>Purchase Category</u>	<u>FT-93-001</u>	<u>FT-93-002</u>	<u>FT-94-001</u>	<u>FT-94-002</u>	<u>FT-94-003</u>
Insurance.....	\$ 0	\$ 0	\$441,548	\$3,257,908	\$ 0
Maintenance Agreements.....	16,500	0	0	0	0
Travel.....	44,581	3,908	13,346	31,155	4,516
Computer Expenses	0	0	0	0	0
Appraisals.....	0	0	0	0	7,105
Travel Arrangements.....	4,503	438	0	0	0
American Express	4,175	1,171	250	933	0
Printing.....	0	3,578	0	0	0
Advertising	520	0	2,990	5,566	0
Shipping.....	385	89	684	2,232	0
Hotel & Meeting Rooms.....	2,033	4,358	30	0	0
Tools.....	0	0	12,922	0	0
Telephone	0	0	0	463	0
Office Supplies.....	0	0	0	215	0
Other.....	<u>1,290</u>	<u>0</u>	<u>9,254</u>	<u>3,358</u>	<u>0</u>
Total ^a	\$73,986	\$13,543	\$481,022	\$3,301,831	\$11,621

FT-94-004 - Building Demolition, Sections 50 (WV to Uniontown) and 52 (I-70 to Rte. 51);

GR-88-002 - Traffic and Revenue Study, California Interchange;

GR-89-010 - I-70 to Route 51 and Rte. 51 to Pittsburgh;

GR-89-011 - Uniontown to Brownsville; and

GR-89-012 - Traffic and Revenue Study, WV to Uniontown, Uniontown to Brownsville, I-70 to Rte. 51, and Rte. 51 to Pittsburgh.

<u>Purchase Category</u>	<u>FT-94-004</u>	<u>GR-88-002</u>	<u>GR-89-010</u>	<u>GR-89-011</u>	<u>GR-89-012</u>
Insurance.....	\$ 0	\$ 160,301	\$ 0	\$ 0	\$ 0
Maintenance Agreements.....	0	448,884	0	0	0
Travel.....	444	46,108	15,443	5,210	538
Design Work	0	0	14,933	0	0
Legal	0	0	255,311	0	0
Traffic & Revenue Study.....	0	204,570	0	0	0
Computer Expenses	0	100,554	0	0	0
Call Boxes	0	100,436	0	0	0
Appraisals.....	0	0	62,462	6,118	0
Travel Arrangements.....	0	3,912	28,180	7,543	4,480
American Express	0	16,653	18,041	1,740	877
Printing.....	0	0	28,570	14,484	0
Advertising	4,448	3,358	18,030	0	0
Shipping.....	0	1,442	11,574	0	22
Hotel & Meeting Rooms.....	0	593	4,806	2,990	302
Telephone	0	11,647	0	0	0
Marriott Restaurant.....	0	0	555	130	2,810
Office Supplies.....	0	1,306	0	0	0
Other.....	<u>0</u>	<u>95,133</u>	<u>35,807</u>	<u>18,486</u>	<u>12,882</u>
Total ^a	\$4,893	\$1,194,897	\$493,713	\$56,701	\$21,911

Appendix G (Continued)

Mon/Fayette Projects (Continued):

GR-89-023 - WV to Uniontown;

GR-91-018 - Buchart-Horn Engineering;

GR-92-004 - Preliminary Design, WV to Uniontown, Uniontown to Brownsville, I-70 to Rte. 51, and Rte. 51 to Pittsburgh; and

GR-93-003 - Management Team WV to Uniontown, Uniontown to Brownsville, I-70 to Rte. 51, and Rte. 51 to Pittsburgh.

<u>Purchase Category</u>	<u>GR-89-023</u>	<u>GR-91-018</u>	<u>GR-92-004</u>	<u>GR-93-003</u>
Insurance	\$ 1,354	\$ 0	\$ 0	\$ 0
Travel.....	6,533	250	7,152	12,304
Design Work	247,278	0	0	0
Travel Arrangements	7,153	0	3,459	0
American Express	8,168	67	2,167	0
Advertising	4,655	0	0	0
Shipping.....	488	14	299	0
Hotel & Meeting Rooms.	4,350	0	299	195
Marriott Restaurant.....	0	0	2,622	0
Other	<u>4,321</u>	<u>0</u>	<u>7,904</u>	<u>0</u>
Total ^a	\$284,300	\$331	\$23,903	\$12,499

Southern Beltway Projects:

GR-89-014 - Traffic and Revenue Study; and

GR-92-005 - Preliminary Design.

<u>Purchase Category</u>	<u>GR-89-014</u>	<u>GR-92-005</u>
Travel	\$2,092	\$21,802
Computer Expenses.....	0	4,396
Travel Arrangements	1,286	10,942
American Express.....	0	8,050
Shipping	8	7,304
Hotel & Meeting Rooms.	0	246
Marriott Restaurant.....	0	101
Other	<u>0</u>	<u>6,544</u>
Total ^a	\$3,386	\$59,385

^aMay not add due to rounding.

Source: Developed by LB&FC staff from examination of pertinent PTC financial records.

APPENDIX H

Definitions of Key Terms Related to the Transportation Project Development Process

Alternative - One of the number of specific transportation improvement proposals, alignments, options, design choices, etc., in a study. Following detailed analysis, one improvement alternative is chosen for implementation. Sometimes the term “alternate” is used interchangeably with “alternative.”

CEQ Regulations - Directives issued by the Federal Council on Environmental Quality (40 CFR 1500-1508) that govern the development and issuance of environmental policy and procedure for federal aid actions to public agencies. The regulations contain definitions, spell out applicability and responsibilities, and mandate certain processes and procedures to be followed by state agencies that administer federally funded programs.

Congestion Management System (CMS) Analysis - This analysis is required by the provisions of the Joint Statewide and Metropolitan Planning Regulations (23CFR450) issued by the Federal Highway Administration and the Federal Transit Administration to determine if the CMS strategies, such as improved transit, carpooling, etc., would eliminate the need for additional single occupancy vehicle (SOV) capacity within the study area.

Construction Phase - The last of the five phases of the Transportation Project Development Process in which a contractor selected by the PTC constructs the improvement alternative selected through the EIS process. After a thorough final inspection, the new and/or improved transportation facility is opened for public use.

Environmental Impact Statement (EIS) - As defined in the *CEQ Regulations*, a detailed written report that provides “full and fair discussion of significant environmental impacts and [informs] decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” The Draft EIS evaluates a range of reasonable alternatives and their associated impacts and presents a preferred alternative if one option is clearly favored above the others. After review, the Draft EIS is circulated among agencies and the public for comment. Following the Public Hearing held to formally record comments on the Draft EIS, a Final EIS is prepared incorporating public and agency input and recommending a selected alternative.

Feasibility Study - Refers to various types of systemic evaluations carried out to better assess the desirability or practicality of further developing a proposed action. Such studies are typically performed during the planning stages, or very early in the preliminary design phase when certain improvement proposals or design concepts have need to be more fully investigated.

Federal Highway Administration (FHWA) - An agency of the U.S. Department of Transportation responsible for carrying out federal highway and transportation mandates through a network of several regional offices and a Division Office in each state.

Final Design Phase - The fourth of the five phases of the Transportation Project Development Process involving the development of detailed working drawings, specifications, and estimates for approved transportation projects. Final design follows the receipt of necessary design and/or environmental approval, and it includes right-of-way acquisition, utility relocation, and contract advertisement and award.

Major Investment Study (MIS) - This study evaluates the effectiveness and cost-effectiveness of alternative transportation investments in attaining local, state, and national goals and objectives for a metropolitan area. The MIS integrates the planning and environmental processes so that the performance, cost, financing, and environmental effects of reasonable alternatives can be considered early in the project development process.

Appendix H (Continued)

Mitigation Report - A summary document prepared by the originating office for every Final EIS to inform design consultants, value engineering teams, project engineers, and construction contractors of committed project design, operational, and construction measures to minimize or avoid the anticipated environmental consequences. The report is an internal informational document subject to modification, if necessary, as the project proceeds through final design.

Planning Phase - The first of five phases of the Transportation Project Development Process is a prelude to the entire process. It involves the development of transportation plans for a particular area or region of the state. This phase involves inventories; data collection; problem/needs assessment; generating and comparing alternative plans; evaluating the social, economic, and environmental impacts of proposed transportation actions with a variety of public, agency, and citizen groups; and selecting the preferred plan. The planning phase involves elements of policy planning, systems planning, or facility planning. The focus of the effort may be short-range, intermediate range, or long-range.

Preliminary Design Phase - The third of the five phases of the Transportation Project Development Process encompasses all major design steps associated with the development and comparison of alternate locations, alternate alignments, detailed engineering and environmental studies, on-going public and agency interaction, project review, and final project selection of a project alternative.

Prioritization/Programming Phase - The second of the five phases of the Transportation Project Development Process involves the review and evaluation of planning data, together with a consideration of available fiscal resources as related to needs, in order to identify, draw up, and schedule transportation improvements which will be carried forward into subsequent phases of preliminary design, final design, and construction.

Public Meeting - An announced meeting conducted by transportation officials designed to facilitate participation in the decision-making process and to assist the public in gaining an informed view of a proposed project at any level of the Transportation Project Development Process. Such a gathering may also be referred to as a Public Information Meeting.

Record of Decision (ROD) - A document prepared by the Division Office of the Federal Highway Administration that presents the basis for selecting and approving a specific transportation proposal that has been evaluated through the various environmental and engineering studies of the Transportation Project Development Process. Typically, the Record of Decision identifies the alternative selected in the Final EIS, the alternatives considered, measures to minimize harm, monitoring or enforcement programs, and an itemized list of commitments and mitigation measures.

Transportation Project Development Process - Pennsylvania's procedures for advancing a transportation improvement project from concept to construction which are divided into phases from planning, prioritization and programming, preliminary design, final design, to construction. The philosophy behind the process emphasizes the integration of engineering and environmental studies as well as continuous coordination among state and federal agencies and the public. The ultimate goal is to select, design, and construct the most reasonable, practical, cost-effective, technically sound, and environmentally sensitive transportation improvement option.

Source: Pennsylvania Department of Transportation's Publication No. 278, *The Transportation Project Development Process - Environmental Impact Statement Handbook* and 23 CFR §450.318, §450.320, and §500.505.

APPENDIX I

Pending Legislation Related to the Pennsylvania Turnpike Commission

(As of April 22, 1997)

Senate Bill 87: Providing for leaving the Turnpike at other than established interchanges under emergency conditions. Senate Transportation, January 21, 1997.

Senate Bill 124: Providing for access and egress by emergency vehicles on the Turnpike. Senate Transportation, January 21, 1997.

Senate Bill 535: Requiring service station convenience stores to offer for sale certain items, such as first aid items and basic food items such as bread and milk and lunch meats. Senate Transportation, February 25, 1997.

Senate Resolution 10: A resolution urging the PTC and PennDOT to consider providing parking areas at interchanges of the Turnpike and Northeast Extension and at interchanges of other major highways in the State. Senate Transportation, January 27, 1997.

House Bill 296: Providing for additional turnpike extension authorizations, directing the construction of an interchange on the Northeast Extension between Norristown and Quakertown Interchanges. House Transportation, February 5, 1997.

House Bill 369: Providing for the organization of corporations for the purpose of constructing and operating toll roads; providing for PennDOT supervision; establishing the Toll Road Improvement Fund. House Transportation, February 10, 1997.

House Bill 514: Reducing tolls by 10% and providing that tolls shall not be increased without specific statutory authorization. House Transportation, February 12, 1997.

House Bill 957: Requiring certain PTC contracts to give preference to items produced in the Commonwealth. House Transportation, March 19, 1997.

House Bill 1145: Requiring the PTC to submit estimated total expenditures to the Governor and General Assembly. House Transportation, March 3, 1997.

House Bill 1146: Requiring the PTC to submit annual reports to the Governor and General Assembly. House Transportation, March 3, 1997.

House Bill 1147: Establishing the Turnpike oversight Committee; requiring the PTC to issue reports. House Transportation, March 3, 1997.

House Bill 1148: Defining the PTC as an independent administrative commission. House Transportation, March 3, 1997.

House Bill 1312: Providing for uniformity of tolls. House Transportation, April 15, 1997.

House Resolution 98: Directing the Transportation Committee to study greater use of toll roads, among other issues. House Rules, March 2, 1997.

Source: Developed by LB&FC staff.

APPENDIX J

Response to This Report



COMMONWEALTH OF PENNSYLVANIA
PENNSYLVANIA TURNPIKE COMMISSION
HARRISBURG PA 17106-7676

JOHN T. DURBIN
EXECUTIVE DIRECTOR

April 25, 1997

Mr. Philip R. Durgin
Executive Director
Legislative Budget and Finance Committee
P. O. Box 8737
Harrisburg, PA 17105-8737

Dear Mr. Durgin:

The Commissioners and members of the staff of the Pennsylvania Turnpike Commission (Commission) have received copies of the Legislative Budget and Finance Committee (LB&FC) Confidential Draft Report, "Implementation of Act 61 Turnpike Improvement and Extension Projects." The Commission appreciates the opportunity to review and submit comments on the draft report.

I would like to commend the Committee Staff for the professional manner in which the audit was conducted and the comprehensiveness and quality of the content of the report.

I wish to use this opportunity to express on behalf of the entire Pennsylvania Turnpike Commission organization, including the Commissioners, administrators and staff, that we all take pride in the accomplishments that have been documented in this draft report. The Commission has accepted its mandate from the legislature to develop Act 61 projects and responded in a professional and efficient manner by constructing the Beaver Valley Expressway, the Amos K. Hutchinson Bypass and other completed Act 61 projects on time and within their budgets. Also, as noted in the report, the Commission has received numerous awards related to our development and completion of Act 61 projects including the President's National Performance Review Award and the Pennsylvania Quality Initiatives Achievement Award.

Given the extensive scope of the audit, we were pleased to note that the Legislative Budget and Finance Committee's recommendations were limited to potential reporting requirements, consideration of bond counsel selection, and elimination of duplicate projects between the Commission and PennDOT. I have discussed the details of the draft report with staff and have the following comments:

- Recommendation No. 1 from the draft report stated, "The Turnpike Commission should report to the General Assembly on an ongoing basis concerning the status, costs and impacts of Act 61 implementation." This should include the development of an annual report on the Commission spending of Oil Company Franchise Tax monies, as well as a written report on the economic feasibility and potential fiscal impact to the Commission regarding each Act 61 project.

The Commission concurs with this finding. Currently, the Commission publishes an annual financial report certified by an independent public accounting firm (Ernst & Young) as required by our trust indenture. This report is available and distributed to each member of the General Assembly. The Commission will be accountable and report to, or appear before, the appropriate legislative committee regarding the status of Act 61 projects and on funding streams which the legislature has provided for specific projects. It should be further noted that through our office of legislative liaison, we work diligently with the House and Senate Transportation Committees and the State Government Committee of the House of Representatives. Our existing reporting relationship may be adapted to a format more suitable for the purposes of the recommended report requirement.

Additionally, we concur that a reporting mechanism designed to assess the potential fiscal and operational impacts of each additional Act 61 project would be beneficial. This would ensure any potential mainline operations will be identified for any negative impacts while at the same time segregate funding streams for both capital construction and maintenance of Act 61 projects. Financial provisions should be identified prior to undertaking feasibility studies and prudent measures employed to ensure that bondholders do not carry the burden of excessive studies. Instead, Oil Company Franchise Tax funds should be used to support these feasibility studies.

- Recommendation No. 2 from the draft report stated, "The Turnpike Commission should develop a 'PTC Policy Letter' to formally define the procedure through which the Commission retains Bond Counsel."

The Commission follows the existing procedure that is

-continued-

utilized by the State Executive Branch to select bond counsel. In all cases, Commission members are familiar with the professional reputation of the firms, as well as that of the individual attorneys who will provide the services. This knowledge has enabled the Commission to obtain high quality legal services. Our policy is to negotiate the fees based on prevailing market rates for required services with each firm selected. The size and complexity of each bond issue are factors regarding the selection of counsel and other professionals. We believe this approach provides us with effective legal services and has overall value for the Commission.

- Recommendation No. 3 from the draft report stated, "The Turnpike Commission and PennDOT should jointly identify all current and planned projects (in PennDOT's 12-year program) that replicate or satisfy the objective of Act 61 projects that the Pennsylvania Turnpike Commission has not yet undertaken."

The Commission agrees that there is overlap between Act 61 and the PennDOT 12-year program and that the Pennsylvania Turnpike Commission and PennDOT must meet to achieve elimination of the overlap.

We suggest that the Commission work with PennDOT via the Turnpike/PennDOT Coordination Committee to identify all overlaps and provide a recommendation to the Legislature that would eliminate these overlaps between the two organizations by September 30, 1997. Upon completion, the Legislature should decide appropriate amendment of Act 61 and remove projects, or parts thereof, from the current listing.

With regard to the Commission's plan to make up the \$1.7 billion shortfall for construction of the Mon/Fayette and Southern Beltway Transportation projects, the report states that this future funding plan is "highly optimistic." We agree that this funding plan is optimistic and we would like to stress that Act 61 and subsequent related acts have imposed a liability of approximately \$2.5 billion on the Commission to build the Mon/Fayette and Southern Beltway Transportation projects. The primary funding source for the past several years has been the Oil Company Franchise Tax which has provided approximately \$40

-continued-

million per year. It is not possible to fund this level of construction required with a \$40 million per year allocation, therefore, the Commission must identify any and all other additional possible funding alternatives.

Information regarding potential funding sources for the Mon/Fayette and Southern Beltway Transportation projects were identified prior to 1997 and the corresponding financial information provided to the LB&FC was for the time frame up to and including November 30, 1996. With the recent passage of the gas tax, our understanding is that the Commission will receive an additional \$28 million of funding which we will use to help fund the Mon/Fayette and Southern Beltway Transportation projects. Furthermore, in February of 1997, the Commission, with assistance from PennDOT, submitted a funding proposal to the United States Congress under the heading of National Economic Crossroads Transportation Efficiency Act (NEXTEA) in the amount of \$500 million. This represents 20% of overall costs for the Mon/Fayette and Southern Beltway Transportation Projects. Determination of NEXTEA funding is expected to be completed by September 30, 1997.

The subject of the Commission's ability to borrow additional funds under a bond issue is discussed in the section entitled "Impacts of Act 61 Implementation of the PTC." It appears that the staff of the LB&FC may not have clearly understood the information provided by the Commission's Controller, Consulting Engineer and outside auditing firm representative. While our borrowing capacity is considered to be "maxed out" for toll bonds, we still have additional bonding capacity within the Oil Company Franchise Tax funding levels. We receive approximately \$40 million per year from the Oil Company Franchise Tax. Our Trust Indenture requires a 150% coverage ratio for debt service. Our current debt service on the Oil Franchise Tax Revenue Bonds, Series A of 1994, is approximately \$9 million per year, therefore, we have funds available to support a future bond issue.*

Regarding the LB&FC's assessment of the impact of implementation of Act 61 on the Commission, we are in general agreement with the analysis of these impacts. The LB&FC staff has accurately documented in the report that the Commission's operational and maintenance costs have increased due to the development of Act 61 projects. In 1986 approximately 5¢ out of every

-continued-

*LB&FC Staff Note: Page 113 of the report has been adjusted to reflect these comments.

Mr. Philip R. Durgin
Page Five
April 25, 1997

revenue dollar was utilized to pay debt service while, in 1996, approximately 26¢ out of every revenue dollar was used to pay debt service. In response to this large increase of our debt service, the Commission twice raised tolls, in 1987 and 1991, in order to generate the additional funds needed to pay the debt service for Act 61 projects.

The effect on the Commission's reserve maintenance fund (RMF) is also discussed in the report. This fund is used to pay for the cost of resurfacing, replacing or repairing the Turnpike system. The Commission's consulting engineer, Michael Baker, Jr., Inc. believes that the funding provided in the RMF has been sufficient to adequately maintain the Turnpike system and that appropriate procedures are in place for inspection of the Turnpike System to ensure its proper maintenance. Annual inspections are performed and a report is generated by the consulting engineer, as required by the Trust Indenture. This annual inspection is supplemented by additional inspections for specific roadway sections and all tunnels and bridges. Based upon these inspections, any necessary work is planned for within the RMF program.

The report states that the percentage of revenue transferred to the RMF has decreased since 1986. More accurate is the fact that debt service has consumed a greater percentage of the increased revenue since then. Actual dollar amounts transferred to, and expended from, the RMF have steadily increased since 1986. RMF transfers have increased from \$56 million (FY87) to \$98 million (FY96), whereas RMF expenditures increased from \$50 million (FY87) to \$101 million (FY96), with a peak of \$145 million in FY95. It should be understood that while additional funds may be needed for major mainline improvements, Act 61 projects will not be allowed to impact our ability to fund such improvements.

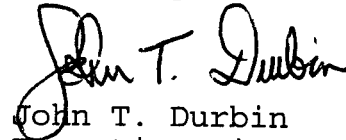
In closing, I wish to stress that our mission is to operate and manage, in a fiscally responsible manner, a safe, reliable and valued toll road system. Let me assure you that the Commission will continue to focus on improving operations. If you

-continued-

Mr. Philip R. Durgin
Page Six
April 25, 1997

have any questions concerning this response, or any other topics relevant to the Commission, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "John T. Durbin". The signature is stylized with a large, looped initial "J".

John T. Durbin
Executive Director

JTD/BSB/pk