

# FISCAL YEAR 2010 CAPITAL BUDGET &

## FISCAL YEARS 2010-2021

CAPITAL PROGRAM













# SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY FISCAL YEAR 2010 CAPITAL BUDGET FISCAL YEARS 2010-2021 CAPITAL PROGRAM AND COMPREHENSIVE PLAN

APPROVED BY THE SEPTA BOARD MAY 28, 2009

## Photographs on Cover

Left Side: Croydon Station Reconstruction Middle Top: Exton Station Parking Expansion

Middle Bottom: Hybrid Bus

Right Side Top: Ambler Station Reconstruction Right Side Bottom: Wayne Station Reconstruction

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## **SEPTA AT A GLANCE**

## **SEPTA AT A GLANCE**

The Southeastern Pennsylvania Transportation Authority (SEPTA) is the nation's sixth-largest public transportation system. The Authority is an instrumentality of the Commonwealth of Pennsylvania, created by the State Legislature, and is a vital regional asset. SEPTA's service area includes the heavily populated southeastern Pennsylvania counties of Bucks, Chester, Delaware, Montgomery, and Philadelphia. This area encompasses approximately 2,202 square miles.

In Fiscal Years 2008 and 2009, SEPTA experienced significant gains in ridership. Total ridership increased by 22 million unlinked passenger trips. The SEPTA system serves over one-half million customers daily and provided approximately 330 million (unlinked) passenger trips in Fiscal Year 2009. SEPTA's service also extends to Trenton and West Trenton, New Jersey and Newark, Delaware.

SEPTA is a multi-modal transit system as it provides a vast network of fixed-route services including bus, subway, subway-elevated, regional rail, light rail, and trackless trolley, as well as customized community service. In Philadelphia, City Transit Operations serves a network of 85 subway-elevated, light rail, trackless trolley and bus routes. In Fiscal Year 2009 approximately 920,000 (unlinked) passenger trips were generated per weekday.

SEPTA's Railroad Operations serves all five counties with a network of thirteen regional rail lines, serving approximately 124,000 (unlinked) passenger trips per day in Fiscal Year 2009. This service also operates to Newark, Delaware and to Trenton and West Trenton, New Jersey.

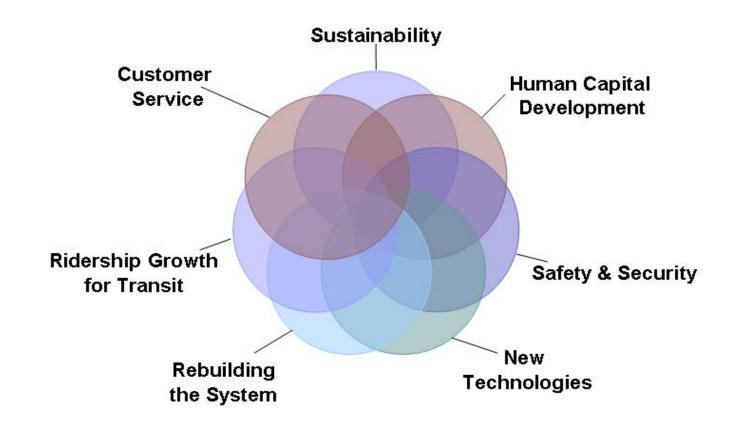
Suburban Operations (Victory and Frontier Divisions) provides service in the suburbs, north and west of the City of Philadelphia, with a network of 47 bus and light rail routes generating approximately 67,000 (unlinked) passenger trips per day in Fiscal Year 2009.

Customized Community Transportation (CCT) serves Philadelphia and the surrounding counties and schedules approximately 7,100 customized weekday trips for seniors and persons with disabilities.

SEPTA's seven small bus circulator and shuttle services connect fixed route operations to business, health and educational centers, as well as to park and ride facilities. In Fiscal Year 2009, these services provided transportation for approximately 4,000 passengers per weekday.

SEPTA's Five-Year Strategic Business Plan describes SEPTA's vision, mission statement, strategic objectives and performance metrics for Fiscal Years 2010-2014. The focus is macro-level as opposed to micro/tactics-based. The plan explains the basic strategies for fulfilling the Authority's mission and achieving business goals. The Authority will be making decisions on allocating resources to pursue the strategic objectives of the plan. For more information regarding the plan or to read its full contents, please visit www.septa.org.

SEPTA has committed to focusing on seven key, interrelated, strategic objectives for the next five years:



The Strategic Business Plan enables the organization to measure its progress toward the strategic objectives and serves as a management tool in directing the activities of the organization. SEPTA will use the plan as a mechanism to inform and assure stakeholders of the organization's successes and management's ability to direct business by reporting its progress every six months through fourteen established key performance indicators (KPIs).

As part of the strategic focus, SEPTA will look at planning beyond the 5-year horizon and how regional consensus and new decision-making modeling are key to investments and infrastructure expansion projects.

The strategic business plan is designed to drive management decision-making and other major planning processes of SEPTA, which include the Operating and Capital Budget Programs, as well as the Annual Service Plan.

Below is a matrix showing the projects programmed for funding in Fiscal Years 2010 through Fiscal Year 2013 and the relationship of these projects with SEPTA's seven strategic objectives.

Strategic Objectives  Projects  Bus Purchase Program  Capital Asset Lease Program  City Hall Station/15th Street Station Rehabilitation  Congestion Relief & Railroad Grade Crossings  Debt Service  Elwyn to Wawa Rail Service  Infrastructure Safety and Renewal Program  X  X  X  X  X  X  X  X  X  X  X  X  X	
Bus Purchase Program x x x x x x x x X X X X X X X X X X X	Ş
Capital Asset Lease Program       x         City Hall Station/15th Street Station Rehabilitation       x       x       x         Congestion Relief & Railroad Grade Crossings       x       x       x         Debt Service       x       x       x         Elwyn to Wawa Rail Service       x       x       x         Infrastructure Safety and Renewal Program       x       x       x	у 
City Hall Station/15th Street Station Rehabilitation       x       x       x       x         Congestion Relief & Railroad Grade Crossings       x       x       x       x         Debt Service       x       x       x       x         Elwyn to Wawa Rail Service       x       x       x       x         Infrastructure Safety and Renewal Program       x       x       x       x	
Congestion Relief & Railroad Grade Crossings       x       x       x         Debt Service       x       x       x         Elwyn to Wawa Rail Service       x       x       x         Infrastructure Safety and Renewal Program       x       x       x	
Debt Service       x       x       x         Elwyn to Wawa Rail Service       x       x       x         Infrastructure Safety and Renewal Program       x       x       x	
Elwyn to Wawa Rail Service x x x x x Infrastructure Safety and Renewal Program x x x x x x	
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New Payment Technologies x x x x	
New Starts/Service Initiatives x x x x	
Paoli Transportation Center x x x x x x	
Paratransit Vehicle Acquisition x x x	_
Parking Expansion Program x x	
R5 Paoli Line Improvements x x x x x	_
Regional Rail Signal Modernization Program x x x	_
Regional Rail Substation Improvements x x x	
Safety and Security Improvements x x	_
Smart Stations x x x x	
State of Good Repair Initiatives x x	
Station Accessibility x x x	_
System Improvements Program x x x x x	
Transit Enhancements x x x x x x	_
Transit & Regional Rail Station Program x x x x	
Utility Fleet Renewal x x x	_
Vehicle Overhaul Program x x x x	_

#### **Making Our System Great**

A major factor in achieving SEPTA's strategic business plan goals is long term investment of capital dollars to upgrade existing facilities and implement service improvements. SEPTA invests millions of dollars to upgrade its vehicles and infrastructure. Here are some examples of capital investment projects.



Hybrid (Diesel/Electric) Bus



North Philadelphia Transportation Center



Regional Rail Silverliner V Car



Lansdale/Doylestown Line (R5)
North Wales Station



Paoli/Thorndale Line (R5)
Exton Station Parking Expansion



Market-Frankford Line 63<sup>rd</sup> Street Station

#### **Capital Investment Categories**

Each project in the Fiscal Year 2010 Capital Budget is categorized into one of the following types of capital investments:

<u>State of Good Repair</u> - These projects correct past deferred maintenance, or replace capital assets that have exceeded their useful life. An asset or system is in a state of good repair when no backlog of needs exists and no component is beyond its useful life.

<u>Normal Replacement of Assets</u> - These projects will replace assets at the end of their normal useful life. Normal replacement investments are based on the age and life cycle of capital assets, and are made according to a scheduled program of replacement to keep assets in a state of good repair.

<u>System Improvement</u> - These projects will expand or improve operations, or add new system capabilities or service. Applied to a pre-existing function, a system improvement represents a major advancement over current technology, with the express purpose of adding new system capabilities.

<u>System Expansion</u> - These projects will expand the current system to serve new markets. This category includes new bus or rail lines, additional tracks, parking expansion, or service extensions beyond existing terminals.

When projects contain elements of more than one category, the principal or dominant focus of the project will be used to classify the project.

#### A Look Back at the Fiscal Year 2009 Capital Budget

The Fiscal Year 2009 Capital Budget consisted of 24 capital projects totaling \$367.7 million. Project highlights by capital investment category are described below.

State of Good Repair - These projects totaled \$155.5 million, or 42.3% of the budget. Projects included Broad Street Subway Stations Rehabilitation (Girard & Spring Garden), Market Street Elevated Reconstruction, R5 Paoli Line Improvements, Regional Rail Substation Improvements, Infrastructure Safety and Renewal Program, Transit & Regional Rail Station Program, State of Good Repair Initiatives, and Lease of Amtrak Trackage.

<u>Normal Replacement</u> - These projects totaled \$131.6 million, or 35.8% of the budget. Projects included the Bus Purchase Program, Paratransit Vehicle Purchase, the purchase of Utility Vehicles, and the Vehicle Overhaul Program.

<u>System Improvement</u> – These projects totaled \$69.9 million, or 19% of the budget. Projects included New Payment Technologies, Station Accessibility Improvements, Paoli Transportation Center, Regional Rail Signal System Modernization Program, Smart Stations, System Improvements Program, Transit Enhancements, Railroad/Highway Grade Crossing Improvements, and Safety and Security Improvements.

<u>System Expansion</u> – These projects were programmed at \$10.7 million, or 2.9% of the budget. Projects included Elwyn to Wawa Rail Service, U.S. Route 202 Congestion Mitigation Activities, and the continuation of the Parking Expansion Program.

#### American Recovery and Reinvestment Act (ARRA) of 2009

On February 17, 2009, President Obama signed into law the "American Recovery and Reinvestment Act (ARRA) of 2009." The intent of this legislation is to maintain and create jobs, build and repair infrastructure, infuse cash into under-funded state programs and encourage the flow of money into the economy through tax cuts and other incentives for individuals and organizations. Of the total appropriation under the Act, \$8.4 billion has allocated for new capital investment in public transportation nationwide. Based on transit funding apportionment information provided by the Federal Transit Administration, SEPTA has been allocated approximately \$191 million from the Transit Stimulus Formula Funding. The federal share for these projects is 100 percent.

SEPTA ARRA Stimulus Program projects were selected based on their "ready-to-go status." In addition, the following principles were applied in determining the types of projects to advance under this program: 1) improve system reliability; 2) enhance

customer service and comfort; 3) improve infrastructure across all modes; 4) reduce long-term maintenance and operational costs; 5) the ability to continue operations during construction; 6) projects are of varying sizes and complexities in order to utilize small, medium and larger firms, including Disadvantage Business Enterprise (DBE) firms; 7) no lengthy permitting processes; and 8) minimal need for Amtrak and other outside agency construction support. SEPTA further refined this list of projects to distribute the projects across various modes of transit and throughout SEPTA's five-county territory of operations.

On February 26, 2009, the SEPTA Board amended the Fiscal Year 2009 Capital Budget to include projects in SEPTA's ARRA Stimulus Program. As a result of bid savings on several projects, on May 28, 2009, the SEPTA Board approved a second amendment to the Fiscal Year 2009 Capital Budget to include additional projects to the Authority's Stimulus Program. A listing of the SEPTA ARRA projects can be found in Appendix A, page 85.

#### Fiscal Year 2010 Capital Budget

The Fiscal Year 2010 Capital Budget was developed based on following principles:

- Direction set forth by the SEPTA Board;
- Early input from SEPTA Board members, local government officials, the general public, and SEPTA staff;
- Input received from local officials, member governments, riders and the public at a January 12, 2009 public meeting and throughout the year;
- SEPTA's Capital Project Selection Process;
- Expected Federal, State and Local Funding Levels;
- Budgeting based on Annual Cashflow Projections and Financial Obligations.

### Fiscal Year 2010 Projects

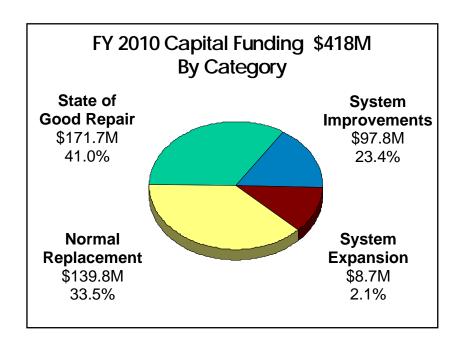
The Fiscal Year 2010 Capital Budget consists of 23 capital projects totaling \$418 million. Project highlights by capital investment category are described below.

State of Good Repair projects total \$171.7 million, or 41% of the budget. Projects programmed include Market Street Elevated Reconstruction, Regional Rail Substation Improvements, Infrastructure Safety and Renewal Program, Transit and Regional Rail Station Program, State of Good Repair Initiatives, and Lease of Amtrak Trackage.

Normal Replacement projects are programmed at \$139.8 million, or 33.5% of the budget. Projects programmed include the Bus Purchase Program, Paratransit Vehicle Purchase, the purchase of Utility Vehicles, and the Vehicle Overhaul Program.

System Improvement projects total \$97.8 million, or 23.4% of the budget. Projects programmed include New Payment Technologies, Station Accessibility Improvements, City Hall Station/15<sup>th</sup> Street Station Rehabilitation, Paoli Transportation Center, Regional Rail Signal System Modernization Program, Smart Stations, System Improvements Program, Transit Enhancements, Railroad/Highway Grade Crossing Improvements, and Safety and Security Improvements.

System Expansion projects are programmed at \$8.7 million, or 2.1% of the budget. Projects programmed include Elwyn to Wawa Rail Service, U.S. Route 202 Congestion Mitigation Activities, and the continuation of the Parking Expansion Program.



#### Fiscal Year 2010 Capital Budget and Fiscal Years 2010 to 2021 Capital Program Budget Segments

The first four years of the 12-year capital program are highlighted in the budget book to coincide with the four-year Regional Transportation Improvement Program (TIP). This capital budget document is presented as a 12-year program as it is coordinated with PennDOT's statewide 12-year transportation plan.

The budget document is divided into three segments: the annual budget, which lists projects proposed for funding in Year One of the capital program; Years 2 through 4; and Years 5 through 12. The Years 5 through 12 segment provides an overview of projects proposed for programming in future budget years. In addition, a list of transit planning efforts recently completed or currently underway in the region is included beginning on Page 26. These transit planning efforts, which are being conducted by SEPTA, the Delaware Valley Regional Planning Commission, local governments or other regional transit operators, are included in the budget document as they are of interest to SEPTA's stakeholders.

## **Funding Sources**

#### **Federal**

Fiscal Year 2009 was the final year of the Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU). Congress has initiated work on a new multi-year Surface Transportation Bill, although a short term extension of the current authorization is likely. The American Public Transportation Association (APTA) and the transit industry are working with the Administration and members of Congress on reauthorization of SAFETEA-LU.

#### A Look Back at SAFETEA-LU

SAFETEA-LU provided \$286.4 billion in guaranteed funding for federal surface transportation programs over six years – Fiscal Year 2004 through FY 2009, including \$52.6 billion for federal transit programs. SAFETEA-LU increased annual guaranteed transit funding from a level of \$7.2 billion in FY 2003 (the last year of TEA 21) to \$10.3 billion in FY 2009.

SAFETEA-LU retained formula and capital investment programs established in prior transportation bills, but also made some changes to prior programs and added new programs. In addition, security and emergency preparedness projects, including training and drills, were eligible projects for federal capital funding.

<u>Formula Programs (\$28.5 billion)</u> – Formula programs are those under which funds are appropriated by a formula specified in authorizing law. Funding programs applicable to SEPTA include Urbanized Area, Growing States, New Freedom, and Job Access and Reverse Commute. Program include

- <u>Urbanized Area Formula Program (Section 5307) (\$22.2 billion)</u> Formula funding allocations were based on population statistics for urbanized areas and operating statistics reported by transit agencies. Statistics used include population, population density, vehicle revenue miles, fixed guideway route miles, passenger miles, and operating costs.
- Growing States and High Density States (Section 5340) (\$1.7 billion) Formula program apportionments included funds apportioned under a new Growing States and High Density States program. One-half of the funds made available under the Growing States formula were apportioned by a formula based on state population forecasts for 15 years beyond the most recent Census. The other half of the funds were made available under the High Density States formula and were apportioned to states with population densities in excess of 370 persons per square mile. There were seven states identified in SAFETEA-LU to receive High Density States funds Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, and Rhode Island. These funds were apportioned only to urbanized areas within those states.

- <u>Job Access and Reverse Commute (JARC) Program (Section 5316) (\$851.5 million)</u> The JARC program was allocated by formula, rather than by a competitive discretionary grant program as was the case under TEA-21. The formula was based on ratios involving the number of eligible low income and welfare recipients for urban and rural areas. The program's objective continued to be the provision of maximum flexibility to job access projects designed to meet the needs of individuals who were not effectively served by public transportation. Coordination of this program was required between private, non-profit, and public transportation providers and other federal programs including the New Freedom program and the Elderly and Disabled program.
- New Freedom Program (Section 5317) (\$339 million) The New Freedom program provided formula funding for operating and capital costs for new transportation services and public transportation alternatives beyond those required by the Americans with Disabilities Act to assist persons with disabilities. The New Freedom program was apportioned using a formula based on the elderly and disabled population in a state. The program mandated coordination of transportation services with other federal human service programs.

<u>Capital Investment Programs (Section 5309) (\$22.7 billion)</u> – These programs provided funds for transit capital projects that meet specific criteria either by appropriation (earmarks) or by apportionment under a formula. Capital Investment categories included the Fixed Guideway Modernization, New Starts, and Bus and Bus Facilities programs and were authorized under Section 5309 of the law. The Fixed Guideway Modernization Program (\$8.5 billion) was unchanged under SAFETEA-LU. Highlights of changes under the New Starts and Bus Facilities Programs included:

- New Starts (\$9.4 billion) For this program, the federal New Starts share remained at 80 percent. However, the Federal Transit Administration gave preference to projects that over match the minimum 20 percent local share. Economic development and transit supportive land use policies were explicitly added to the project justification criteria. A new Small Starts Program (\$600 million) was created for smaller projects with a federal New Starts share of less than \$75 million. Projects can include streetcar, trolley, bus rapid transit (if a substantial portion of the project operates in a separate right of way in a defined corridor dedicated for public transit use during peak hours or it has other characteristics of a fixed guideway system), and commuter rail projects. Small Starts projects could not total more than \$250 million. As part of the Federal Transit Administration's rulemaking process for implementing the Small Starts Program, a second sub-category titled, Very Small Starts, was created. Total project cost for Very Small Starts must be less than \$50 million.
- <u>Bus and Bus Facilities (\$4.9 billion)</u> An intermodal facilities category was established within this funding program with a \$35 million annual set aside. Intercity terminals that were part of an intermodal facility were made eligible for funding under this program, if the terminal serves as a connector to public transportation. \$10 million was available annually for ferry boats or related terminals that were specifically earmarked under this program.

#### Other programs include:

- <u>Planning (\$559.9 million)</u> Metropolitan Planning Organizations are required to develop a participation plan that affords parties, who participate in the metropolitan planning process, a specific opportunity to comment on the plan prior to its approval.
- <u>Clean Fuels Program (\$288.1 million)</u> This was a discretionary program which made funding available for the purchase of clean fuels buses in certain non-attainment areas and areas trying to maintain compliance with clean air standards. This program included the purchase of clean diesel vehicles, as eligible projects.

Under SAFETEA-LU, transit continued to be eligible for participation in the following Federal Highway Programs:

- Congestion Mitigation and Air Quality Improvement Program (CMAQ) This program provides a flexible funding source to state and local governments for non-attainment and maintenance areas (formerly non-attainment areas) to help meet the requirements of the Clean Air Act. SAFETEA-LU authorized approximately \$8.9 billion for this program.
- <u>Intelligent Transportation Systems (ITS) Performance Incentive Program</u> The ITS Program was authorized at \$810 million. This program provides for the research, development, and operational testing necessary to develop and deploy advanced technology to improve safety and performance of transportation systems. Priority areas for research are redefined to include enhancement of mobility and productivity, enhancement of safety and security, and facilitation of the integration of intelligent infrastructure, vehicle, and control technologies.
- <u>Surface Transportation Program (STP)</u> This program provides for the flexing of STP funds for projects including transit capital projects, and intercity bus terminals and facilities. A portion of the \$32.7 billion authorized under this program is eligible for flexing to transit. In addition, the ten percent set aside of STP funds for transportation enhancements remained as a provision within this program under SAFETEA-LU.
- Railway-Highway Grade Crossings This program is designed to reduce the number of fatalities and injuries at public highway-rail grade crossings through the elimination of hazards and/or the installation/upgrade of protective devices at grade crossings.

#### State and Local

For projects funded by the Federal Transportation Program, the federal share is generally 80 percent of the transit project's total cost. The remaining 20 percent of the project cost is provided by the Commonwealth of Pennsylvania and local governments Local governments include the City of Philadelphia and Bucks, Chester, Delaware and Montgomery Counties. SEPTA provides the local match for certain City Transit Division projects through the Renewal and Replacement (R&R) Fund. The R&R Fund is funded from farebox revenues.

On July 18, 2007, Governor Rendell signed into law Act 44 of 2007. This legislation established the Public Transportation Trust Fund. Under Act 44, state funding for public transit in Pennsylvania was completely restructured. The old patchwork system of funding transit agencies from the State General Fund, Lottery Fund, Act 26 of 1991, and Act 3 of 1997 was repealed. The previous General Fund sources were replaced with a dedicated portion of the Sales and Use Tax to ensure that transit programs have a reliable source of funding. State sources of funding deposited into the Public Transportation Trust Fund include PTAF funds, 4.4 percent of Sales Tax, Lottery Money, Pennsylvania Turnpike Commission funding and Act 3 Capital Commitment. All public transportation funds are deposited into the Public Transportation Trust Fund for statewide distribution on an annual basis.

Act 44 establishes five major public transportation programs:

Operating Program (Section 1513) – Operating funds are allocated among public transportation providers based on operating assistance received in Fiscal Year 2005-2006 increased by a factor of 1.0506; and the remaining funds in the Operating Account distributed based on total passengers, senior passengers, revenue vehicle miles and revenue vehicle hours. Act 44 also includes a hold harmless provision, growth caps to ensure equitable distribution and sustainable system development and a single local match requirement – 15 percent of state funding. Act 44 also includes performance criteria for the evaluation of public transportation services, such as passengers per revenue vehicle hour, operating costs per revenue vehicle hour, operating revenue per revenue vehicle hour, operating costs per passenger and other criteria that may be established by PennDOT.

- Asset Improvement Program (Section 1514) State Capital Bond funds are used to match federal grants and support State funded initiatives, such as the Vehicle Overhaul Program and the Infrastructure Safety Renewal Program. In addition to state bond funds, additional capital funds are distributed to transit agencies based on their demonstrated need. Priorities are: 1) Support of existing debt service or asset leases that are currently supported with state revenue sources; 2) Use as match for federally funded projects; 3) Essential emergency asset improvement projects; 4) Standard replacement of existing assets that have exceeded their useful life; 5) Asset improvement projects to extend the useful life of the affected assets; and 6) Acquisition of new assets and other acceptable purposes, other than projects that would be funded under the New Initiatives Program. Transit agencies will be required annually to submit a four and twelve year capital plan that coincides with their regional Transportation Improvement Program.
- New Initiatives Program (Section 1515) This is a new program that provides the framework to advance new or expansion of existing fixed guideway projects. Funding to this program is at the discretion of PennDOT. Priority in the use of funds is given first to satisfy the local matching portion of federally approved New Starts projects. Projects that do not receive federal New Starts funding may be funded under this program provided there is sufficient evidence that the transit operator can meet all of the following requirements: 1) Investments in existing service areas have been optimized; 2) An analysis reveals a reasonable return on investment; 3) Public benefit of the project has been identified; 4) A local dedicated funding commitment exists to pay any required local match for the project and ongoing costs; 5) Local technical ability and capacity exists to manage, construct and operate the project; and 6) The project is supported by the adoption of an integrated land use plan by local municipalities.
- <u>Programs of Statewide Significance (Section 1516)</u> This section includes programs such as Persons With Disabilities, Welfare to Work, Job Access and Reverse Commute, intercity passenger rail and bus services, community transportation capital and service stabilization, as well as technical assistance, demonstration and research projects and other programs as determined by PennDOT.
- <u>Capital Improvement Program (Section 1517)</u> A portion of the Public Transportation Trust Fund is distributed on a formula based on the number of passengers carried so that transit agencies will have a steady reliable stream of capital funding.

As part of an agreement between the Commonwealth of Pennsylvania and the transit community during the enactment of Act 3 of 1997, a total of \$25 million a year in federal highway funding will continue to be flexed to transit agencies for capital improvement projects.

## **Funding Assumptions**

The following references were used to develop the programming amounts for SEPTA's Fiscal Year 2010 Capital Budget and Fiscal Years 2010-2021 Capital Program:

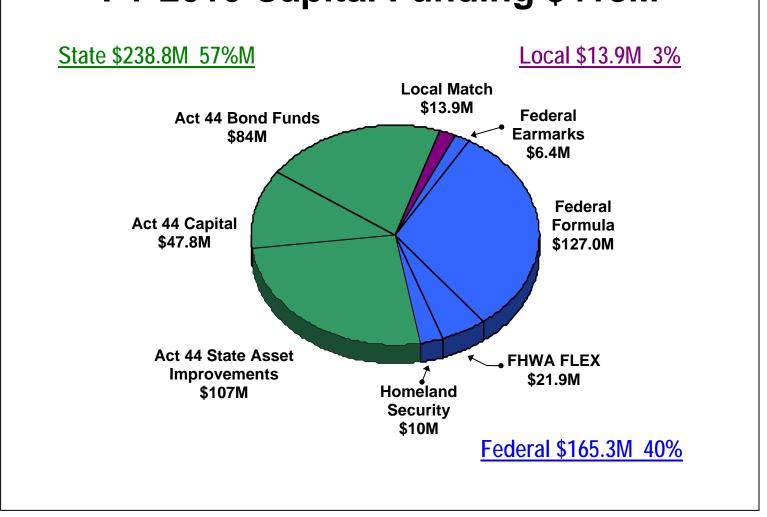
- President Obama's Fiscal Year 2010 budget proposal Announced on February 26, 2009.
- FY 2010 earmark requests submitted by SEPTA.
- Governor Rendell's Fiscal Year 2010 budget proposal Announced on February 4, 2009.
- City/Counties local match requirements on federal and state funding.

#### Fiscal Year 2010

Total Fiscal Year 2010 funding for capital projects has been programmed at \$418 million. This projected funding level consists of the following funding components:

- 1) Estimated federal formula program (Sections 5307/5340 and 5309) totaling \$127.0 million is based on the President's budget proposal;
- 2) Estimated funding from Federal bus and bus facilities earmarks for \$6.4 million;
- 3) Federal Highway Flexible funding projection of \$21.9 million Based on an anticipated SEPTA share of regional flexible funds and additional Federal Highway Flex funds committed by the Commonwealth as part of the April 17, 1997 Supplemental State Public Transportation Assistance Act;
- 4) U.S. Department of Homeland Security funding of \$10 million, based on an anticipated SEPTA share of regional funds;
- 5) State funds from the Public Transportation Trust Fund have been programmed at \$238.8 million;
- 6) \$13.9 million from the City and Counties as local match on Federal and State funding.

# FY 2010 Capital Funding \$418M



#### **Fiscal Years 2011-2013**

Federal formula funds are programmed with increases from \$147.8 million in Fiscal Year 2011 to \$179.9 million in Fiscal Year 2013. Federal earmark funds are programmed at \$6.4 million a year for Fiscal Years 2011 through 2012. Federal Highway flexible funding is programmed at \$21.9 million per year. This level reflects the anticipated SEPTA share of available regional flexible funds and \$17.1 million as committed by the Commonwealth as part of the April 17, 1997 Supplemental State Public Transportation Assistance Act. New Starts/Service Initiatives funding is programmed at a total of \$175 million for Fiscal Years 2011 through 2013. U.S. Department of Homeland Security funding is programmed at \$10 million a year, based on an anticipated SEPTA share of regional funds.

State funding from the Act 44 Public Transportation Trust Fund is programmed at \$238.9 million each year for Fiscal Years 2011 through 2013. However, without I-80 tolling or another identified state funding solution, the funding levels assumed for Fiscal Year 2011 and beyond are subject to a significant reduction. Should this reduction in State funding occur, the implications, which are severe, will be addressed during the development of the Fiscal Year 2011 Capital Budget and Twelve Year Program.

This section includes a list of transit planning projects underway, or recently completed, in the region. These projects are included to provide information on planning studies that are currently being conducted by SEPTA, the Delaware Valley Regional Planning Commission (DVRPC); Bucks, Chester, Delaware and Montgomery Counties; the City of Philadelphia; and other transportation agencies and associations.

#### **Long Range Planning**:

• Long Range Regional Transportation Plan – Connections: A Regional Plan for a Sustainable Future (2035) Lead Agency: DVRPC

Description: DVRPC has embarked upon updating its regional Long Range Plan – *Destination* 2030, to the Year 2035. Regional trends and forecasts will be updated with respect to land use, environmental, economic and transportation indicators. DVPRC will gather public input via an online opinion survey followed by countywide workshops. In similar fashion to the previous Long Range Plan, *Connections* (2035) will conduct a series of 'what if' planning scenarios and include a fiscally constrained transportation plan. The DVRPC board adopted the *Connections* (2035) Regional Long Range Plan in July, 2009.

#### • Amtrak Northeast Corridor Infrastructure Master Plan (2030)

Lead Agency: Amtrak

Description: Amtrak is conducting a strategic initiative intended to develop greater cooperation between Amtrak, the nine regional rail operators, including SEPTA, and seven freight companies operating on the northeast rail corridor (NEC) between Boston and Richmond. The aim is to better forecast anticipated increased service levels on the corridor and develop an appropriate capital plan to respond to increasing demand. Stakeholder working groups, including railroads, state DOTs, the FRA and Amtrak, have been established to define objectives and direct development of the master plan. The Phase I Project Development Report is complete and a Phase II Interim Report was presented to the NEC Masterplan Executive Committee in February, 2009. Completion of the plan is anticipated by Fall 2009.

#### Pennsylvania Mobility Plan – Statewide Long Range Transportation Plan

Lead Agency: PennDOT

Description: Pennsylvania's Mobility Plan is intended to chart the course of transportation investment through the year 2030. Beginning with a 'mobility vision' for the state, the mobility plan set out a series of goals with specific objective outcomes. Subsequent strategies were developed with accompanying steps outlining the implementation process. A multi-faceted public outreach effort was a major feature of the mobility plan. The Pennsylvania Mobility Plan was completed in June, 2007.

#### • Philadelphia Central Delaware Riverfront Master Plan

Lead Agencies: PennPraxis, University of Pennsylvania / Philadelphia City Planning Commission
Description: PennPraxis embarked on a collaborative planning effort aimed at creating a civic vision for the Philadelphia
Central Delaware Riverfront. Certain key principles were identified as part of the process, including the need to reconnect the
City to the riverfront; acknowledgment of the historic industrial heritage and the importance of the continued port operations;
respect for the ecological function of the riverfront; creating a blend of land uses; the need for a long-term view; the
establishment of public places; and finally, the necessity for sustained community engagement. Movement systems,
including public transit, were an integral part of the plan's framework for growth. The Civic Vision for the Central Delaware
was completed in November, 2007, and adopted by the Philadelphia City Planning Commission in Spring, 2009.

#### **Expansion Project Planning:**

#### • Norristown High-Speed Line Extension

Lead Agency: SEPTA

Description: An Alternatives Analysis (AA) extending the Norristown High-Speed Line for a 4.9 mile segment from a point just north of Hughes Station, westward along the Norfolk-Southern Morrisville line right-of-way and then northward to King of Prussia and ending in Valley Forge. The study completed in 2006 projected an additional 3,800 daily rides to the line. The costs of construction were estimated at \$277 million. In 2008, federal funding of \$500,000 was approved for advancing to the next stages of this project. Construction and operating costs need to be updated and an appropriate environmental study needs to be undertaken.

#### DRPA/PATCO Transit Expansion Alternatives Analysis Studies

Lead Agency: Port Authority Transit Company (PATCO)

Description: PATCO, a subsidiary of the Delaware River Port Authority (DRPA), has undertaken an Alternatives Analysis (AA) study to evaluate transit service expansion along the Philadelphia Waterfront. Initial 'Build' alternatives that are currently being considered include adding transit service along the Waterfront, with a connection at Franklin Square; an extension of SEPTA trolley lines to Franklin Square and on to the Waterfront; and an extension of trolley lines along or under Market Street to the Waterfront. Public input sessions were completed in 2008. The study is expected to be complete by November, 2009.

#### R5 Thorndale Extension – Chester County

Lead Agency: DVRPC

Description: A Needs and Opportunities study evaluated the potential of reactivating SEPTA regional rail service west of the current terminus of Thorndale, to Parkesburg and Coatesville (discontinued in 1995), and on to Atglen. DVPRC completed this study in June 2007. In 2008, renewed discussion among stakeholders and the Chester County Planning Commission occurred as a result of City of Coatesville planning, design and construction efforts focused on capital improvements to the Coatesville Station and parking lot area.

#### • R6 Norristown Line Extension Study – Montgomery, Chester and Berks Counties

Lead Agency: Montgomery County Planning Commission (MCPC)

Description: MCPC conducted a feasibility study which explored the extension of rail service from the current regional rail terminus in Norristown, along the US 422 Expressway in Montgomery, Chester and Berks Counties. The study used long-range population and employment forecasts when reviewing various rail service alternatives, and identified innovative funding options, including the tolling of the US 422 Expressway. Study recommendations were released in February, 2009. A new wider phase of planning is expected to begin in the winter of 2009, which will provide additional information to facilitate a decision on the tolling of the expressway and determine if there is adequate revenue for capital and operating costs for an R6 Norristown line extension.

### • Broad Street Subway Extension – Pattison Avenue to the Philadelphia Navy Yard Feasibility Study

Lead Agency: Philadelphia Industrial Development Corporation (PIDC)

Description: PIDC received a DVRPC FY 2007 Transportation and Community Development Initiative (TCDI) grant to evaluate transit needs and alternatives for enhancing public transportation connections to Navy Yard redevelopment sites in South Philadelphia, including the extension of the Broad Street Subway Line from its current terminus at Pattison Avenue. A final report was issued in September 2008. Estimated costs for the various alignment options are in the \$370 M to \$510 M range.

#### Quakertown Rail Restoration - Alternatives Analysis

Lead Agencies: Transportation Management Association of Bucks County, and Bucks County and Montgomery County Planning Commissions.

Description: The Alternatives Analysis (AA) study investigated the feasibility of restoring passenger rail service linking Upper Bucks County and North Penn communities with Center City Philadelphia, via Lansdale. The AA examined transit options that would mitigate highway congestion in the corridor. The AA also identified cost-effective, productive and affordable means to use transit capital investments and service improvements to strengthen mobility connections between Upper Bucks County and Montgomery County, along with key activity centers. The final report, issued in November 2007, recommended diesel rail shuttle service along the former Bethlehem Branch of the Reading Railroad between Lansdale and Shelly as the Locally Preferred Alternative (LPA). Daily ridership was projected to exceed 4,000 persons. A second phase of planning steps is currently underway to refine service alternatives and prepare ridership modeling forecasts, operating and capital cost estimates and user benefit estimates for the new alternatives. This effort will be managed by DVRPC, and coordinated with Bucks and Montgomery County Planning Commissions, the Bucks County TMA and SEPTA.

#### Roosevelt Boulevard Corridor - Transportation Investment Study

Lead Agency: Philadelphia City Planning Commission

Description: A study evaluated transit needs and potential solutions in the Roosevelt Boulevard Corridor of Northeast Philadelphia, which ranged from lower-cost transportation system management (TSM) strategies to major rail investments. The LPA was to include a phased extension of the Broad Street Line along the Roosevelt Boulevard (US Route 1), with an extension to the Market-Frankford Line. The study was completed in March 2003, with the rail options estimated to between \$2.3 billion and \$3.4 billion depending on the design. The annual incremental operating costs were estimated at \$56 million (all figures are in 2003 dollars).

#### **Other Planning Activities:**

• DVRPC Transportation and Community Development Initiative (TCDI) Studies

Lead Agencies: Selected Municipalities / DVRPC

Description: The TCDI program is administered by DVRPC to support the local planning efforts of municipalities in the region that are consistent with county, regional and state objectives. Goals of the TCDI program are to promote investment, redevelopment and growth in the region's core cities and mature suburbs. A total of \$2 million is made available every other fiscal year to eligible projects in the five southeastern Pennsylvania counties, with the next funding round beginning in Fiscal Year 2010. Many TCDI studies focus on exploring Transit Oriented Development (TOD) opportunities and improved access to transit. The latest TCDI projects, recently completed or underway, that SEPTA has directly contributed to include:

- Broad & Erie Transportation and Community Development Plan, Philadelphia
- Highland Avenue Station (R2) TOD Study Chester City
- City Avenue Corridor Overlay District, Philadelphia and Lower Merion Township
- Germantown and Nicetown TOD Neighborhood Plan, Philadelphia.
- PA Dept. of Community & Economic Development (DCED) Transit Revitalization Investment District (TRID) Program Lead Agencies: Selected Municipalities / Community Organizations / PA DCED

Description: The PA DCED has awarded grants to several municipalities and community organizations across the region for the purposes of developing a TRID. Through Commonwealth legislation enacted in 2004, a TRID became a legally defined area centered around a transit station. The TRID value-capture concept is designed to use anticipated increased property tax revenue resulting from redevelopment as leverage to help finance transit improvements and other public projects within the district. DCED has provided \$75,000 to each recipient, with \$25,000 required as local matching funds. SEPTA is actively involved in the TRID plans currently underway in the five-county region, including: Ambler (R5), Bryn Mawr (R5), Croydon (R7), Marcus Hook (R2), 46<sup>th</sup> Street (MFL), and Temple University (R1, R2, R3, R5, R6, R7 & R8).

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# FISCAL YEAR 2010 CAPITAL BUDGET (Year 1)

## FISCAL YEAR 2010 CAPITAL BUDGET

Project	FY 2010 Funding Requirement
Bus Purchase Program	\$54,200,000
Capital Asset Lease Program	29,729,000
City Hall Station/15 <sup>th</sup> Street Station Rehabilitation	6,900,000
Congestion Relief & Railroad Grade Crossings	5,000,000
Debt Service	48,700,000
Elwyn to Wawa Rail Service	4,500,000
Infrastructure Safety and Renewal Program	33,000,000
Market Street Elevated Reconstruction Program	30,000,000
New Payment Technologies	14,400,000
Paoli Transportation Center	1,500,000
Paratransit Vehicle Acquisition	3,800,000
Parking Expansion Program	2,300,000
Regional Rail Signal System Modernization	23,800,000
Regional Rail Substation Improvements	11,504,000
Safety and Security Improvements	10,000,000
Smart Stations	12,306,000
State of Good Repair Initiatives	27,698,000
Station Accessibility	3,000,000

## FISCAL YEAR 2010 CAPITAL BUDGET

Project	FY 2010 Funding Requirement
System Improvements Program	\$11,100,000
Transit and Regional Rail Station Program	26,300,000
Transit Enhancements	1,191,000
Utility Fleet Renewal	3,500,000
Vehicle Overhaul Program	<u>53,600,000</u>
TOTAL FY 2010 Capital Budget	\$418,028,000

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# FISCAL YEARS 2010-2013 CAPITAL PROGRAM (Years 1-4)

<u>Project</u>	FY 2010	FY 2011	FY 2012	FY 2013	<u>Total</u>
Bus Purchase Program	\$54,200,000	\$58,500,000	\$62,505,000	\$101,900,000	\$277,105,000
Capital Asset Lease Program	29,729,000	31,139,000	32,025,000	33,041,000	125,934,000
City Hall Station/15th Street Station Rehabilitation	6,900,000	14,500,000	21,800,000	22,500,000	65,700,000
Congestion Relief & Railroad Grade Crossings	5,000,000	5,000,000	5,000,000	5,000,000	20,000,000
Debt Service	48,700,000	48,600,000	48,500,000	48,300,000	194,100,000
Elwyn to Wawa Rail Service	4,500,000	25,600,000	16,500,000	12,613,000	59,213,000
Infrastructure Safety and Renewal Program	33,000,000	33,000,000	33,000,000	33,000,000	132,000,000
Market Street Elevated Reconstruction Program	30,000,000	0	0	0	30,000,000
New Payment Technologies	14,400,000	18,000,000	18,000,000	15,000,000	65,400,000
New Starts/Service Initiatives	0	25,000,000	50,000,000	100,000,000	175,000,000
Paoli Transportation Center	1,500,000	1,500,000	1,500,000	1,500,000	6,000,000
Paratransit Vehicle Acquisition	3,800,000	4,500,000	4,700,000	4,400,000	17,400,000
Parking Expansion Program	2,300,000	12,700,000	24,500,000	18,500,000	58,000,000
R5 Paoli Line Improvements	0	5,000,000	5,000,000	5,000,000	15,000,000
Regional Rail Signal Modernization Program	23,800,000	28,500,000	27,400,000	43,000,000	122,700,000
Regional Rail Substation Improvements	11,504,000	10,000,000	12,000,000	8,000,000	41,504,000
Safety and Security Improvements	10,000,000	10,000,000	10,000,000	10,000,000	40,000,000
Smart Stations	12,306,000	0	0	0	12,306,000

# FISCAL YEARS 2010-2013 CAPITAL PROGRAM (Years 1-4)

<u>Project</u>	FY 2010	FY 2011	FY 2012	FY 2013	<u>Total</u>
State of Good Repair Initiatives	\$27,698,000	\$25,700,000	\$16,600,000	\$2,700,000	\$72,698,000
Station Accessibility	3,000,000	10,000,000	10,926,000	1,942,000	25,868,000
System Improvements Program	11,100,000	3,100,000	2,000,000	2,000,000	18,200,000
Transit Enhancements	1,191,000	1,231,000	1,164,000	1,364,000	4,950,000
Transit & Regional Rail Station Program	26,300,000	27,400,000	44,600,000	32,400,000	130,700,000
Utility Fleet Renewal	3,500,000	3,500,000	4,000,000	4,000,000	15,000,000
Vehicle Overhaul Program	53,600,000	55,200,000	56,900,000	58,600,000	224,300,000
Total – Capital Projects	\$418,028,000	\$457,670,000	\$508,620,000	\$564,760,000	\$1,949,078,000

# FISCAL YEARS 2010-2013 CAPITAL PROGRAM (Years 1-4) PROJECT DESCRIPTIONS

#### **BUS PURCHASE PROGRAM**

SEPTA's Bus Fleet Management Plan provides for the acquisition of different size buses based upon needs and route characteristics. The current bus fleet consists of a variety of buses ranging from 60-foot articulated and 40-foot buses for heavy use routes to 27- and 30-foot buses for suburban circulator and contracted service routes. On September 27, 2007, the SEPTA Board approved the award of a contract to New Flyer, Inc. for 400 hybrid (diesel/electric) forty-foot low-floor transit buses with an option to purchase an additional 80 buses. SEPTA has ordered 40 of the option buses, which are being funded by American Recovery and Reinvestment Act of 2009 (ARRA) transit funds. Buses will be delivered between Calendar Years 2008 and 2011. With the delivery of the 440 hybrid buses, SEPTA will become the operator of one of the largest public transit hybrid bus fleets in the country.

Operating hybrid (diesel/electric) buses enables SEPTA to reduce engine exhaust emissions in the region including carbon monoxide, nitrous oxide, hydrocarbons, particulate matter, and carbon dioxide. In addition to emission superiority, hybrid buses achieve greater gas mileage, superior brake lining life and faster acceleration.

Each new bus will have a public address system that will enable the operator to clearly communicate with passengers inside and outside the vehicle. For the hearing and visually impaired, an audio/visual annunciating system will be installed, which will automatically announce upcoming bus stops and informational messages. All buses will be low-floor and equipped for wheelchairs to address accessibility needs. Additional features include an onboard video surveillance system and a bicycle rack.

The Bus Purchase Program provides the following benefits: 1) Dependable and improved service for our customers, 2) Systematic replacement of aging components of the fleet, 3) Maintaining an average bus fleet age of approximately six years, and 4) Introduction of new technology to the fleet.



FY 2010 FUNDING SOURCE:	FTA <u>X</u> FHWA <u>X</u>	STATE ACT 44 X LOC	AL_X_		
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	IR NORMAL REPLACEME	NT X SYSTEM IMP S	YSTEM EXPANSION	
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$151,995,000	\$54,200,000	\$222,905,000	\$520,000,000	\$949,100,000	

## **CAPITAL ASSET LEASE PROGRAM**

The Capital Asset Lease Program provides for lease payments attributable to the acquisition, through financial leasing arrangements, of the following capital assets:

- Amtrak Trackage (State of Good Repair Project)
- Communications Antennas and Radios (System Improvement Project)
- Copiers (System Improvement Project)
- Tires (Normal Replacement of Assets)
- Warehouse Facility (State of Good Repair Project)

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 X LOC	CAL_X_		
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR X NORMAL REPLACEMENT X SYSTEM IMP. X SYSTEM EXPANSION					
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$0	\$29,729,000	\$96,205,000	\$266,400,000	\$392,334,000	

## CITY HALL STATION/15th STREET STATION REHABILITATION

This project will provide for the renovation of City Hall Station on the Broad Street Subway Line and 15th Street Station on the Market-Frankford Subway Elevated Line. City Hall Station is the heaviest patronized station on the Broad Street Subway Line serving 28,000 passengers on a daily basis. 15th Street Station serves 29,200 passengers a day. These stations are part of a junction point between the Broad Street Line, Market-Frankford Line, Subway-Surface Lines and Regional Rail Lines. City Hall Station, which opened in 1928, has deteriorated over the years and is in need of rehabilitation. In addition, both stations require accessibility improvements to meet ADA standards, as well as passenger amenity improvements and aesthetic enhancements to improve stations' overall appearance and appeal.

The design for this project will focus on the following items: 1) new entrance to both stations in Dilworth Plaza; 2) elevator accessibility from street level to the platforms of the Broad Street Subway Line and the Market-Frankford Subway Elevated Line; 3) modification of fare collection facilities on the lower concourse level; 4) more open space at the platform level of City Hall Station; 5) straightening and widening of passageways; 6) new architectural finishes, lighting and signage; 7) Art-In-Transit; 8) mechanical and natural ventilation in re-opened shafts; 9) structural repairs; 10) prevention/interception of water infiltration/inflow; 11) 15th Street Station accessibility improvements, including elevators and platform raising; and 12) modification of 15th Street Station fare collection facilities.

The design phase of the project is scheduled to resume in the Fall of 2009.



Artist Rendering
City Hall Station Platform Level

FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	CAL _X_		
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR X NORMAL REPLACEMENT SYSTEM IMP. X SYSTEM EXPANSION					
SERVICE AREA: CITY OF PHILADELPHIA					
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$6,500,000	\$6,900,000	\$58,800,000	\$27,800,000	\$100,000,000	

#### **CONGESTION RELIEF & HIGHWAY GRADE CROSSINGS**

The Delaware Valley Regional Planning Commission (DVRPC) approved the Transportation Improvement Program (TIP) for Fiscal Years 2009-2012. The following projects are included in Fiscal Year 2010 of the TIP, which took effect on October 1, 2008.

**U.S. Route 202 Reconstruction Congestion Mitigation Activities (\$1,360,000)** – As part of the U.S. Route 202 Highway Reconstruction Program, PennDOT has supported the funding of congestion mitigation activities operated by SEPTA. Funds are programmed in Fiscal Year 2010 in anticipation of continued funding for the following SEPTA strategies: 1) Continuation of Paoli/Thorndale Regional Rail Line (R5) service improvements and Bus Route 204 service, which were implemented as congestion mitigation activities for the U.S. Route 202, Section 400 reconstruction; 2) Additional Paoli/Thorndale Regional Rail Line (R5) service between Malvern and Thorndale Stations; 3) Bus Route 205 operating from the Paoli Station to Main Line Industrial Park, which will serve Paoli Memorial Hospital, Paoli Industrial Park, Great Valley Corporate Center, and other employment centers along the PA Route 29 corridor; and 4) Bus Route 306 operating from the Brandywine Town Center, New Castle County, Delaware to the Mainline Industrial Park, Chester County serving employment, shopping and educational centers along U.S. Route 202, in West Chester, along U.S. Route 30, and the Great Valley Corporate Center area.

Route 101/102 Media-Sharon Hill Trolley Lines Grade Crossings (\$1,072,000) – In partnership with PennDOT, funding programmed under this project provides for the installation or upgrading of warning devices, such as priority traffic and bar signals, and the renewal of highway grade crossing surfaces. SEPTA will work with PennDOT on the selection of the next list of grade crossing locations.

Congestion Mitigation and Air Quality (CMAQ) Competitive Program (\$2,568,000) – Candidate projects will be submitted to DVRPC by SEPTA and other agencies and reviewed by a regional CMAQ selection committee for initial eligibility and general merits. Based on their emissions reduction potential, as well as other criteria, such as cost effectiveness, ease of implementation, project readiness, and sponsor commitment to provide matching funds, candidate projects will be ranked and then selected by the DVRPC Board for inclusion in the regional Transportation Improvement Program.

FY 2010 FUNDING SOURCE:	FTA FHWA _X_	STATE ACT 44 X LOC	CAL_X_			
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMP. X SYSTEM EXPANSION X						
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA					
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST						
\$0	\$5,000,000	\$15,000,000	\$0	\$20,000,000		

#### **DEBT SERVICE**

State capital funds will provide for debt service and the cost of issuance of bonds, notes and other indebtedness incurred by SEPTA. The Fiscal Year 2010 annual element will provide funds for the following debt service payments:

- Payments on Special Revenue Bonds, Series 1999, which were issued on February 23, 1999. These bonds provided funds for the Market-Frankford Subway Elevated cars, various capital improvement projects, and partial refunding of Series 1995A Bonds at favorable rates to SEPTA. (Normal Replacement and State of Good Repair)
- Payments on Variable Rate Revenue Refunding Bonds, Series 2007. The Variable Rate Refunding Bonds were used
  to refund the Special Revenue Bonds, Series 1997, which provided funds for the buyout of leases on Bombardier Rail
  Cars, General Motors Locomotives and Frazer Rail Car Maintenance Shop and for other capital improvement projects,
  including the Market-Frankford Subway Elevated car acquisition, Broad Street Subway Line cable replacement, Frazer
  Yard interlocking construction and Market-Frankford Subway Elevated Line infrastructure improvements. (Normal
  Replacement and System Improvement)
- SEPTA expects to issue bonds in late Fiscal Year 2010 or early Fiscal Year 2011 to assist in the financing of 120 Silverliner V Regional Rail cars. See page 57 for additional information on the acquisition of regional rail cars.

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 X LOC	AL_X_			
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	IR X NORMAL REPLACEME	ENT X SYSTEM IMP. X S	SYSTEM EXPANSION		
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA						
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST						
\$0	\$48,700,000	\$145,400,000	\$345,000,000	\$539,100,000		

#### **ELWYN TO WAWA RAIL SERVICE**

This project will provide for the restoration of rail service from the existing Media/Elwyn Regional Rail Line (R3) terminus at Elwyn, Delaware County, to a new terminus at Wawa, Delaware County. The growth and development of suburban communities in western Delaware County and southern Chester County have resulted in substantial increases in population, employment and traffic. This project, which will extend service approximately three miles, represents an opportunity for SEPTA to capture the Center City commuter market in the expanding suburban locations while increasing the overall mobility of residents in the area.

Service restoration will require new track and catenary between Elwyn and Wawa. A new bi-directional signal system will be installed, along with an improved communications system. Grade crossings at Lenni Road and SEPTA's Lenni Facility will be reconstructed. Bridges within the project area will be repaired or replaced based on their condition, and new bridges will be constructed where required. A new railcar storage/layover yard and crew sign up location will be constructed at SEPTA's Lenni Facility in Delaware County. Right-of-way improvements including culvert installation/repairs and ditching will be addressed.

The project also includes the construction of a new station and a parking facility, with a minimum of 500 spaces, at Wawa, Delaware County. The station will consist of a station building with a passenger waiting area, a sales office, ticket vending machines, and restroom facilities; high level platforms with canopies and windscreens; an Audio-Visual Public Address system; and signage. This new station, including stairs, ramps, pathways and parking facility, will be fully ADA compliant. A new intersection and access road connecting to U.S Route 1, a major highway artery in the area, will be constructed. This will provide excellent access to the station and large park and ride facility proposed at Wawa.

The design/engineering phase of this project is underway and scheduled for completion in the 3<sup>rd</sup> quarter of Calendar Year 2010.

FY 2010 FUNDING SOURCE:	FTA X_ FHWA	STATE ACT 44 X LOC	CAL_X_			
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMP SYSTEM EXPANSION _X_						
SERVICE AREA: CHESTER A	SERVICE AREA: CHESTER AND DELAWARE COUNTIES					
PRIOR FUNDING FY 2011 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST						
\$10,373,000	\$4,500,000	\$54,713,000	\$10,414,000	\$80,000,000		

#### INFRASTRUCTURE SAFETY AND RENEWAL PROGRAM

This project provides for the restoration of SEPTA's transit and railroad infrastructure to a state of good repair. Highlights of the Fiscal Year 2010 Program include:

- <u>Track and Right-of-Way</u> Renewal or replacement of track, switches, and special work including yard and shop areas; track surfacing; fencing; and grade crossing improvements. Projects include renewal of special track work on the Broad Street Subway Line at Chinatown and Fern Rock; continuous welded rail renewal on the Lansdale/Doylestown (R5) and Warminster (R2) Lines; track renewal on Trolley Route 36 from Buist Avenue to Lindbergh Boulevard, on Trolley Route 10 at 63<sup>rd</sup> Street from Lansdowne Avenue to Master Street; grade crossing renewal on the West Trenton Line (R3) at Tomlinson Avenue, Pine Road, Red Lion Road and Rydal Road, on the Media/Elwyn Line (R3) at Union Avenue and Wycombe Avenue, and on the Norristown Line (R6) at Main Street; renewal of timbers on several Regional Rail bridges; tie replacement and track surfacing on the West Trenton Line (R3) between Wood Interlocking and Jenkintown Interlocking, and on the Media/Elwyn Line (R3) between 30<sup>th</sup> Street Interlocking and Elwyn Station; and replacement of curve worn rail along a variety of City Transit Division, Suburban Transit Division and Regional Rail lines.
- Station Facilities Rehabilitation of rail and transit station buildings and associated facilities including roofs, shelters and canopies; ticket offices and waiting rooms; platforms; stairways; lighting; ventilation; sanitary facilities; crew quarters and locker rooms; parking; and accessibility improvements. Projects include, but are not limited to, stairway replacements at Angora and 49<sup>th</sup> Street Stations on the Media/Elwyn Line (R3); selected improvements to Lansdale/Doylestown Line (R5) stations including glass block retrofit, installation of shelters and shelter heating, station painting, platform improvements, and catenary rehabilitation; selected improvements to Marcus Hook, Eddystone, Crum Lynne, Ridley Park, Prospect Park, Norwood, Glenolden, Sharon Hill, and Curtis Park Stations on the Wilmington Line (R2); installation/replacement of intertrack fencing at Angora Station; various improvements on the Warminster (R2) and Norristown (R6) Lines; and various improvements to Market East Station and Temple University Station; entrance improvements to selected stations on the Broad Street Subway and Market-Frankford Subway Elevated Lines; design of improvements to the Susquehanna/Dauphin Station on the Broad Street Subway Line; reconstruction of Media-Sharon Hill Line Marshall Road, Beatty Road, Springfield Mall Road and Irvington Stations; design and installation of new signage for Media-Sharon Hill Stations; and design of improvements to Norristown High Speed Line Ardmore Avenue and 69<sup>th</sup> Street Stations.
- <u>Signals and Communications Systems</u> Rehabilitation of signal systems and selected communications equipment. Projects include retirement of leased communications facilities and installation of fiber optic communications infrastructure on the Media/Elwyn (R3) Line, implementation of a wireless data network for the Regional Rail system; and replacement of the existing copper-connected communications modems in all field Remote Terminal Units (RTU), which control the power sectionalizing switches.

### **INFRASTRUCTURE SAFETY AND RENEWAL PROGRAM**

- Power Systems Rehabilitation of electric traction and power systems and associated components including catenary and support structures; feeders and transmission lines; and localized and centralized control facilities. Projects include the replacement of DC traction power feeder cables for Broad and Woodland Substations; replacement of AC cables on the Market-Frankford Subway Elevated Line; improvements to substations on the Broad Street Subway, Market-Frankford Subway Elevated, and Subway Surface Lines; replacement of trolley wire on Trolley Route 10 and on Trackless Trolley Route 75; improvements to Regional Rail catenary power system at several locations to allow for improved sectionalization of the power and remote control from SEPTA's control center; replacement of battery control systems for Neshaminy Falls and Lenni Regional Rail Substations; replacement of existing traction power feeder, insulators and associated hardware in the Center City Commuter Tunnel; replacement of Norristown High Speed Line power, signal and communications wood poles with new Class 1 poles; and catenary system upgrade on several sections of the Lansdale/Doylestown Line (R5) between Glenside and Lansdale Stations.
- <u>Maintenance/Support Facilities</u> Rehabilitation of shops; maintenance/storage yards; and associated maintenance and support facilities including improvements or replacement of air compressors, sump pumps, sprinkler systems, tunnel lighting, duct banks, vehicle servicing equipment, and other support functions. Projects include emergency exit and vent well improvements on the Broad Street Subway and Market-Frankford Sunway Elevated Lines; installation of a new boiler for Frankford Shop/Depot; expansion of Fern Rock Truck Repair Shop; and the installation of new tunnel lighting on the Broad Street Subway Line.
- <u>Structures</u> Rehabilitation/replacement of bridges and tunnels on rail lines and SEPTA right-of-ways including culverts, pedestrian bridges, catenary structures and associated bridge support structures. Projects include improvements to Bridge #7.63 on the Chestnut Hill East Line (R7) (near Washington Station) and Tunnel #11.31 at the Swarthmore Station on the Media/Elwyn Line (R3).

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 X LOC	AL		
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	IR X NORMAL REPLACEME	ENT SYSTEM IMP S	YSTEM EXPANSION	
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA					
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$0	\$33,000,000	\$99,000,000	\$264,000,000	\$396,000,000	

## MARKET STREET ELEVATED RECONSTRUCTION PROGRAM

The Market Street Elevated portion of the Market-Frankford Subway Elevated Line operates above Market Street from the vicinity of 45<sup>th</sup> Street in Philadelphia to the western abutment near Millbourne Station in Millbourne Borough, Delaware County. The Market Street Elevated is a two track, heavy rail guideway supported by recurring structural steel bents totaling approximately 11,000 feet in length. The Market Street Elevated was opened for service in 1907 and recently celebrated its 100<sup>th</sup> year of operation.

The Market Street Elevated Reconstruction Program provides for the complete reconstruction of the Market Street Elevated superstructure, sub-structure and foundations, and the rehabilitation of abutments and bearings. Passenger stations located at 46<sup>th</sup>, 52<sup>nd</sup>, 56<sup>th</sup>, 60<sup>th</sup>, 63<sup>rd</sup> Streets and Millbourne Station will be completely reconstructed and will comply with the requirements of the Americans with Disabilities Act.

With the exception of station areas, the elevated guideway will be supported by a single column support system. The new support system offers benefits to SEPTA and the community including: 1) Reduction in maintenance costs resulting from a structure with fewer columns and a high restraint direct fixation system; 2) Improved lighting and aesthetics of West Market Street; and 3) Enhanced pedestrian safety, as passengers will no longer be required to cross traffic to board buses. In addition, this construction effort will complement and assist in the City's Streetscape Plan, which proposes to convert Market Street into a two-lane road with bike lanes.

The elevated guideway portion of the project reached completion in December 2008. All six stations included in this project have been completed as follows: 56<sup>th</sup> Street (February 2006), 60<sup>th</sup> Street Station (June 2007), 52<sup>nd</sup> Street Station (March 2008), 46<sup>th</sup> Street Station (April 2008), Millbourne Station (June 2008), and 63<sup>rd</sup> Street Station (May 2009). Project closeout activities are in progress.

FY 2010 FUNDING SOURCE:	FTA X_ FHWA	STATE ACT 44 X LOC	CAL_X_			
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR X NORMAL REPLACEMENT SYSTEM IMP. SYSTEM EXPANSION						
SERVICE AREA: DELAWARE	SERVICE AREA: DELAWARE COUNTY AND THE CITY OF PHILADELPHIA					
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST						
\$710,000,000	\$30,000,000	\$0	\$0	\$740,000,000		

# MARKET STREET ELEVATED RECONSTRUCTION PROGRAM









**63rd Street Station** 

#### **NEW PAYMENT TECHNOLOGIES**

The New Payment Technology Project will modernize and improve SEPTA's current fare payment and collection system by offering riders a variety of payment choices to suit their travel needs. Fareboxes on buses and light rail vehicles will accept electronic fare media such as contactless cards and emerging media forms. New vending machines located in stations and other terminal locations will improve customer convenience of fare instrument purchases. Electronic media will also be widely available in retail establishments throughout the SEPTA service area.

In addition to bus, rail transit, and regional rail fare collection improvements, this project will also include improvements to the payment and collection procedures for SEPTA's Customer Community Transportation (CCT) operation and parking operations. Computer equipment and software systems will be replaced to support the enhanced system-wide fare collection system.

Control, accountability and reconciliation will be made an integral part of the new fare collection system. The introduction of new fare collection technology will attract riders to the system and facilitate more accurate gathering of ridership and revenue information. Electronic fare media used in conjunction with modern fare collection devices will allow customers to move seamlessly throughout the transit network.

SEPTA advanced the procurement phase of the New Payment Technologies project with the release of a Request for Proposals (RFP) on November 7, 2008.

FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	CAL_X_		
CAPITAL INVESTMENT CATE	CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMPX SYSTEM EXPANSION				
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$13,875,000	\$14,400,000	\$51,000,000	\$20,725,000	\$100,000,000	

#### **NEW STARTS/SERVICE INITIATIVES**

Collaboration and regional consensus are key factors in determining the region's capital investment priorities for New Starts and new Service Initiatives. The Authority will work with the Delaware Valley Regional Planning Commission (DVRPC), the City of Philadelphia, the Counties of Bucks, Chester, Delaware and Montgomery, and other regional partners to establish a model for collaborative decision-making to determine the viability of long-range capital projects and to develop regional priorities. It is envisioned that such a model would consider, but not be limited to, the following factors: a project's impact on the region's economic vitality and growth, impact on the environment, identification of all stakeholders, a broader vision of land-use planning and individual transit projects, the benefits of each investment, including the highest return on investment, and the identification of available and equitable funding avenues.

Several New Starts projects and new service initiatives have been studied by SEPTA, the Delaware Valley Regional Planning Commission (DVRPC); Bucks, Chester, Delaware and Montgomery Counties; the City of Philadelphia; and other transportation agencies and associations. Please refer to the Transit Planning Efforts section of the budget document for further details on the various studies.

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 LOC.	AL		
CAPITAL INVESTMENT CATE	CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMP SYSTEM EXPANSION _X_				
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$61,299,000	\$0	\$175,000,000	\$2,200,000,000	\$2,436,299,000	

#### PAOLI TRANSPORTATION CENTER

This project provides for the engineering and construction of a transportation center in Paoli, Chester County. The new facility will be located on SEPTA's Paoli/Thorndale Regional Rail Line (R5) west of the existing station. Paoli Station is one of the most utilized SEPTA passenger facilities outside of Center City Philadelphia with average daily ridership of 1,280 passengers. The Paoli Station also serves Amtrak westbound trains bound to Harrisburg, Pittsburgh and Chicago and eastbound trains to Philadelphia, Washington and New York. This station complex must be reconstructed to address the needs of the ever-increasing number of bus and train customers using this facility.

This facility provides intermodal access between bus service in Chester County and rail service to Philadelphia. Currently, five SEPTA bus routes - 92, 105, 204, 205 and 206 - provide feeder service to and from this station. These bus routes serve the

employment areas in Chester, Delaware and Montgomery Counties including major pharmaceutical, technological and financial services employers. In addition, private operators and area employers provide van and bus service to this station to transport passengers to respective employment centers.

The project includes: 1) Construction of an intermodal station facility complete with high-level platforms, waiting area, ticket office and passenger amenities; 2) Construction of bus facilities; 3) Construction of a commuter parking facility; 4) Reconfiguration of access roads and entrances to the station; 5) Construction of new pedestrian linkages throughout the station area including sidewalks, crosswalks, and a concourse linking inbound and outbound station platforms; and 6) reconfiguration of, and improvements to, the Paoli Interlocking to accommodate the new transportation center.

A Fiscal Year 2010 Congressional federal earmark has been requested in support of this project.



**Existing Outbound Station** 

FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	CAL_X_	
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	R NORMAL REPLACEME	ENT SYSTEM IMPX S	SYSTEM EXPANSION
SERVICE AREA: CHESTER COUNTY				
PRIOR FUNDING	FY 2010 FUNDING	FY 2011-2013	FY 2014-2021	TOTAL COST
\$4,385,000	\$1,500,000	\$4,500,000	\$29,615,000	\$40,000,000

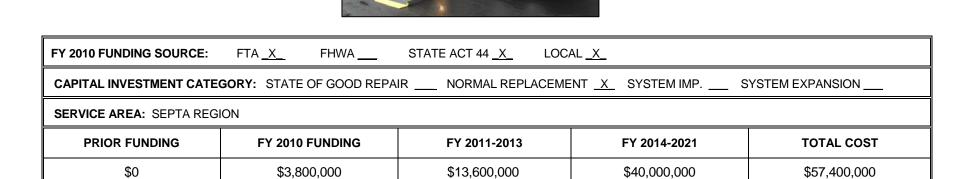
#### PARATRANSIT VEHICLE ACQUISITION

Quality control, service reliability and customer satisfaction are key objectives of the Authority. To achieve these objectives, SEPTA routinely acquires new revenue vehicles for its paratransit and shared-ride services to replace vehicles that have exceeded their useful life of five years. These vehicles are provided to private carriers, which operate the services and maintain the vehicles under contract to SEPTA.

SEPTA ownership of these vehicles provides the following benefits:

- The flexibility to rapidly exchange vehicles between carrier networks should the need arise.
- Creates an economic incentive for carriers to provide quality service.
- More control over fleet composition and standardization of the fleet.
- More control over vehicle design features.

In Fiscal Year 2010, 63 vehicles will be acquired consisting of 32 minibuses with wheelchair lifts and 31 12-passenger minibuses.



#### PARKING EXPANSION PROGRAM

This program provides for the design and construction of parking facility expansions, new parking facilities including garages, and the rehabilitation of existing parking facilities. All new and rehabilitated facilities will be compliant with the requirements of the Americans with Disabilities Act of 1990. Lighting, signage, landscaping, and drainage improvements will be incorporated into each project. Pathways from the new/improved parking facilities to the station area will be constructed or improved as needed to complement parking projects.

There are parking facilities at 149 stations with a total of 27,900 parking spaces that support SEPTA's rail and transit network. On a daily basis, most of these facilities are at, or near, full capacity. Over the last ten years, SEPTA and PennDOT have added 3,200 parking spaces. In April 2008, SEPTA opened a 510-car parking garage at the Norristown Transportation Center. This new garage provided for a net increase of 380 spaces for transit customers in, and around, Norristown, Montgomery County. By increasing parking capacity throughout the transit system, SEPTA will be better able to attract new customers and further assist in the mitigation of traffic congestion and reducing air pollution in the region.

Projects programmed for funding in the next few years are as follows:

- West Trenton Line (R3): Philmont Station

- Lansdale/Doylestown Line (R5): Jenkintown and Glenside Stations,

and Gwynedd Valley Station

- Paoli/Thorndale Line (R5): Ardmore Transportation Center

- Multimodal 69<sup>th</sup> Street Station Parking Garage



**Exton Station Parking Expansion** 

In addition, the American Recovery and Reinvestment Act (ARRA) of 2009 will support expansion of parking facilities at Malvern Station on the Paoli/Thorndale Regional Rail Line (R5) and at Elwyn Station on the Media/Elwyn Regional Rail Line (R3).

FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	CAL_X_	
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	IR NORMAL REPLACEME	NT SYSTEM IMPX SY	YSTEM EXPANSION X
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING	FY 2010 FUNDING	FY 2011-2013	FY 2014-2021	TOTAL COST
\$34,700,000	\$2,300,000	\$55,700,000	\$90,000,000	\$182,700,000

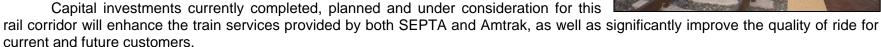
#### **R5 PAOLI LINE IMPROVEMENTS**

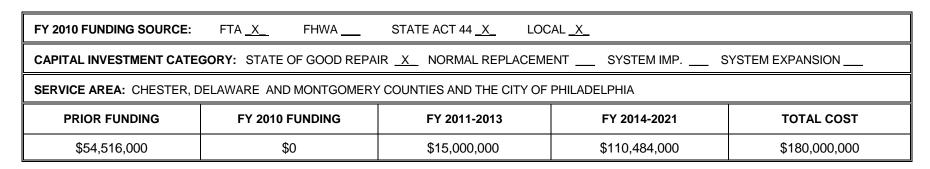
SEPTA, PennDOT, and Amtrak are working together to improve the infrastructure of the Amtrak-owned Keystone corridor between Philadelphia and Harrisburg. This corridor serves the PennDOT-subsidized and Amtrak-operated Keystone service, and SEPTA's Paoli/Thorndale Regional Rail Line (R5). The project will restore the infrastructure to a state of good repair, improve operating speeds and enhance service reliability. Amtrak and PennDOT have jointly funded the installation of new concrete ties and new continuous welded rail on Tracks 2 and 3 between Zoo Interlocking and Paoli Station and infrastructure improvements west of Paoli including ties, rail, signals, catenary and bridges. The project also included the rehabilitation of Amtrak rail vehicles for use on this line. The investment by PennDOT and Amtrak in the Keystone corridor totaled \$145.5 million. The jointly funded Amtrak/PennDOT improvements were substantially completed in Calendar Year 2006.

Amtrak and SEPTA are sharing the cost of improvements from Zoo Interlocking (west of Amtrak's 30<sup>th</sup> Street Station) westward to the Paoli Station in Chester County. SEPTA funds provide for improvements between Zoo Interlocking and Paoli Station. This project will be advanced in phases over a multi-year period.

Amtrak-SEPTA Phase 1, which was completed in Calendar Year 2007, included the installation of 85,000 concrete crossties and new continuous welded rail, track surfacing, and track realignment (Tracks 1 and 4). Phase 2 includes the design and construction of three track interlockings (Paoli, Villanova and Wynnefield) and a new bi-directional train signal system. The construction of Phase 2 improvements will be addressed over a four year period starting in the Calendar Year 2010.

The scope of work for Phase 3 is under development and will include additional track interlocking modifications, deletions and additions, as well as improvements to power substations, the power distribution system, and track beds.





#### REGIONAL RAIL CAR ACQUISITION

This project provides for the acquisition of 120 new rail cars for SEPTA Regional Rail service. These new electric multiple-unit (EMU) cars will replace the existing Silverliner II and III rail cars, which are currently 43 to 47 years old, and will provide additional cars to supplement the regional rail car fleet in response to recent ridership growth. Regional Rail ridership on weekdays now exceeds 124,000 passengers.

Vehicles acquired will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems. Each car will also accommodate two wheelchairs. Federal Railroad Administration (FRA) passenger car strength and safety requirements will be incorporated into the design of the vehicles. The car design will also incorporate recent technology and proven components and enhanced passenger amenities to ensure overall safety, security and passenger comfort.

Passenger amenities will include larger windows, wider aisles, a state-of-the-art climate control system and enhanced seating arrangement with more two-passenger seating. These features will provide a more pleasant environment for passenger movement and seating. The new cars will have electronic exterior and interior destination signs and voice annunciation of train destination and upcoming station stops. The enhanced public address system will enable SEPTA's Control Center to broadcast messages directly to customers on the trains.



On March 23, 2006, SEPTA awarded a contract to United Transit Systems for 104 rail cars. The SEPTA Board executed an option for 16 additional cars on April 26, 2007 of which the State of Delaware will fund the acquisition of four rail cars. Pilot cars for testing are due December 2009.

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 X LOC	CAL X	
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	IR NORMAL REPLACEME	ENT X SYSTEM IMP. X S	SYSTEM EXPANSION
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING	FY 2010 FUNDING	FY 2011-2013	FY 2014-2021	TOTAL COST
\$94,402,000	*	*	*	\$94,402,000 *

<sup>\*</sup> SEPTA expects to issue bonds for the balance of the project cost to assist in the financing of this project. Project budget totals \$330,000,000.

#### REGIONAL RAIL SIGNAL SYSTEM MODERNIZATION

This project provides for the modernization of the signal system on SEPTA's entire Regional Rail system. The Automatic Block Signal System currently in use on the Warminster (R2), Lansdale/Doylestown (R5) - Lansdale to Doylestown segment, Cynwyd (R6), Norristown (R6), Chestnut Hill East (R7) and Chestnut Hill West (R8) Regional Rail Lines will be replaced with an Automatic Train Control (ATC) System. The ATC System, which operates on a microprocessor based platform, will ensure effective train separation, as well as provide train overspeed protection with automatic braking. The new signal system will also enable bi-directional train movements with full signaling, thus greatly enhancing the flexibility of service when a portion of track is out of service for maintenance or repair.

As part of this project, track interlockings and switches will be improved or replaced to complement the capabilities of the new combined signal system. These improvements, in conjunction with completed and planned communications system upgrades, will significantly improve service quality and provide a more reliable and maintainable operation. In addition, these infrastructure improvements will expand opportunities to increase overall travel speed and reduce travel time. Improvements to the Warminster Line (R2) are in progress and scheduled for completion by the end of Calendar Year 2009. Lansdale/Doylestown Line (R5) improvements (Lansdale to Doylestown segment) advanced to construction in the 4<sup>th</sup> quarter of Calendar Year 2008. Chestnut Hill East Line (R7) improvements will advance to construction in the 1<sup>st</sup> quarter of Calendar Year 2010.

In addition, a Positive Train Control (PTC) System will be superimposed atop the ATC on all Regional Rail lines. Working in unison, these two systems will provide the functionality the "Rail Safety Improvement Act of 2008" has mandated to be operational by December 31, 2015. This Act requires that operators who regularly schedule intercity or commuter rail passenger transportation submit a plan to the Secretary of Transportation for the implementation of a positive train control system. The PTC will enhance the ATC System by providing the ability to enforce a stop, enforce civil speed restrictions and enforce temporary speed restrictions through a network of transponders, while maintaining the continuous track monitoring advantages of the ATC. The installation of this system will ensure complete interoperability with Amtrak and the various freight carriers that operate over the Northeast Corridor.

Engineering and procurement of materials for the overlaid PTC system will advance during FY 2010, with installation of the prototype system, finalized systems design, and creation of construction bid documents to follow in FY 2011-2012. SEPTA's initial step to comply with the legislation will be to solicit consulting expertise for both the development and prototyping of this unified control system.

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 X LOC	CAL_X_			
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	NORMAL REPLACEM	ENT SYSTEM IMPX_	SYSTEM EXPANSION		
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA					
PRIOR FUNDING	FY 2010 FUNDING	FY 2011-2013	FY 2014-2021	TOTAL COST		
\$5,700,000	\$23,800,000	\$98,900,000	\$47,100,000	\$175,500,000		

#### REGIONAL RAIL SUBSTATION IMPROVEMENTS

This program provides for improvements to the traction power supply system for SEPTA's Regional Rail service. Critical components of the power system have far exceeded their useful life and are in need of replacement. This program will provide for the replacement of sixteen substations over the next decade and a half, and the construction of a new static frequency converter. As a result of the substation improvement program, the traction power distribution network will be more reliable, rail service interruptions will be reduced, and Regional Rail customers will benefit from enhanced service quality. The first four facilities to be addressed under this program are: 1) Replacement of 30th Street Substation (Sub 1-A); 2) Replacement of Callowhill Substation, 3) Replacement of Jenkintown Substation, and 4) the design and construction of a new static frequency converter adjacent to the Jenkintown Substation.

The 30<sup>th</sup> Street Substation is located in Amtrak's Penn Coach Yard. This Amtrak-owned facility distributes traction power to catenary circuits at Zoo Interlocking, Arsenal Interlocking, Powelton Avenue Yard, Suburban Station, and the Center City Commuter Rail Tunnel. This substation and electrical apparatus date back to the late 1920's. A new substation will be constructed within SEPTA's Powelton Yard. The construction phase of this project commenced in the 3<sup>rd</sup> Quarter of Calendar Year 2008, with completion scheduled for the 4<sup>th</sup> Quarter of Calendar Year 2011.

The Callowhill and Jenkintown Substations are two of twelve autotransformer substations that distribute power to Regional Rail lines north of the Center City Commuter Rail Tunnel. New substation facilities will house state-of-the-art circuit breakers, switchgears and control equipment. Callowhill Substation is located on the former Reading Railroad Viaduct just south of the north portal of the Center City Commuter Rail Tunnel. The Callowhill Substation is being replaced by a new facility, Fairmount Substation, near the intersection of Fairmount Avenue and 9<sup>th</sup> Street in the City of Philadelphia. Construction of the new Fairmount Substation is progressing with completion scheduled for the 3<sup>rd</sup> quarter of Calendar Year 2009. The Jenkintown Substation is located just north of Jenkintown Station in Montgomery County at a key juncture of SEPTA's northern Regional Railroad traction power system and will be replaced with a new substation at the same location. The design of Jenkintown Substation improvements commenced in the 3<sup>rd</sup> quarter of Calendar Year 2008 and is scheduled to be completed in the 3<sup>rd</sup> quarter of Calendar Year 2010. A Supplemental Agreement will provide for the demolition of the old Jenkintown Substation facility, making room for installation of a new Static Frequency Converter facility (SFC). The SFC will supplement SEPTA's existing SFC at Wayne Junction. The SFC will be supplied 60hz power from the adjacent PECO substation and will provide 25hz power to SEPTA's system through the new Jenkintown Substation.

FY 2010 FUNDING SOURCE:	FTA_XFHWA	STATE ACT 44 X LOC	CAL_X_		
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR X NORMAL REPLACEMENT SYSTEM IMP. SYSTEM EXPANSION					
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING         FY 2011-2013         FY 2014-2021         TOTAL COST					
\$47,996,000	\$11,504,000	\$30,000,000	\$145,500,000	\$235,000,000	

#### SAFETY AND SECURITY IMPROVEMENTS

The Transit Security Grant Program (TSGP) provides funds to operators of transit systems to protect critical surface transportation and the traveling public from acts of terrorism, major disasters, and other emergencies. Currently, the U.S. Department of Homeland Security's (DHS) funding priorities include: 1) training, operational deterrence, drills, and public awareness activities; 2) multi-user key infrastructure protection; 3) single-user key infrastructure protection; 4) key operating asset protection; and 5) other mitigation activities. SEPTA is part of the Philadelphia Area Regional Transit Security Working Group (PARTSWG), which is working to advance safety and security improvements for all transit operations into and out of Philadelphia.

Projects funded with TSGP funding include:

- Closed-Circuit Television (CCTV) Cameras on Buses
- Closed-Circuit Television (CCTV) Cameras on Broad Street Subway and Market-Frankford Subway Elevated Railcars
- Multi-jurisdictional counter-terrorism emergency simulation drills on various transit modes
- Directed SEPTA Transit Police Patrols in strategically designated areas during periods of elevated alert

Prior funding has also enabled SEPTA to conduct preliminary engineering for an underground interoperable communications system in Philadelphia; purchase explosive detection devices, intrusion detection equipment and bullet proof vests; increase its Special Operations and Response Teams (SORT) and K-9 patrol teams; upgrade its mobile communications; advance the implementation of a video data monitoring system including on-board video surveillance cameras on revenue vehicles and transit facilities; and the implementation of a radio interoperability system (RIOS) for the Philadelphia region.

On July 31, 2009, SEPTA was awarded \$4.5 million of American Recovery and Reinvestment Act (ARRA) of 2009 Transit Security Grant Program (TSGP) funding from the U.S. Department of Homeland Security (DHS) for additional Special Operations and Response Teams (SORT).

FY 2010 FUNDING SOURCE:	FTA FHWA	STATE ACT 44 LOC	AL DHS <u>X</u>		
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMPX SYSTEM EXPANSION					
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING         FY 2011-2013         FY 2014-2021         TOTAL COST					
\$32,161,000	\$10,000,000	\$30,000,000	0	\$72,161,000	

#### **SMART STATIONS**

This project consists of an amalgam of project elements designed to improve passenger safety, security, communications and the station environment. The Smart Stations project combines improvements such as modern fire detection and reporting equipment; chemical and wet fire suppression systems in certain areas; security systems, including emergency lighting, intrusion and robbery alarms, and CCTV surveillance; audio-visual public address systems; emergency exits; platform emergency phones and expanded maintenance alarm systems. In addition, station lighting improvements will be undertaken at selected locations.

In conjunction with the Smart Stations project, the Fiber Optic Platform project will improve, upgrade and modernize the communications facilities at stations by enlarging and modernizing communications rooms and installing new communications multiplexing equipment and associated systems. These communications enhancements are necessary to provide a state-of-the-art infrastructure to support the Smart Stations project, as well as other communications improvements.

The Smart Stations project will be implemented in 2 phases and will encompass most Market-Frankford, Broad Street Subway and Subway/Surface Trolley Lines stations as follows:

Phase 1 Market-Frankford Line: 2<sup>nd</sup>, 11<sup>th</sup>, 15<sup>th</sup>, 34<sup>th</sup>, 40<sup>th</sup> and 69<sup>th</sup> Street Stations

Broad Street Line: Fern Rock, Olney, Erie, Susquehanna-Dauphin, Allegheny, Tasker-Morris, Snyder and Pattison Stations

Subway-Surface Trolley Lines: 15<sup>th</sup>, 19<sup>th</sup>, 22<sup>nd</sup>, 33<sup>rd</sup>, 36<sup>th</sup>, 37<sup>th</sup> and 40<sup>th</sup> Street Stations

Phase 2 Market-Frankford Line: Frankford Transportation Center, Margaret-Orthodox, Church, Erie-Torresdale, Tioga, Allegheny,

Somerset, Huntingdon, York-Dauphin, Berks, Girard, Spring Garden, 8<sup>th</sup> Street, 13<sup>th</sup> Street, 30<sup>th</sup> Street, 46<sup>th</sup> Street, 52<sup>nd</sup> Street, 56<sup>th</sup> Street, 60<sup>th</sup> Street, 63<sup>rd</sup> Street and Millbourne Stations

Broad Street Line: Logan, Wyoming, Hunting Park, North Philadelphia, Fairmount, Race-Vine, Walnut-Locust, Lombard-South, Ellsworth-Federal and Oregon Stations

Broad Street Line (Ridge Spur): Fairmount, Chinatown and 8<sup>th</sup> Street Stations

Subway-Surface Trolley Lines: Juniper and 30<sup>th</sup> Street Stations

Subway-Surface Holley Liftes. Surfiper and 30 Street Stations

Phase 1 construction reached substantial completion in February 2009. Phase II advanced to construction in May 2008 and is scheduled to be complete in the 3<sup>rd</sup> guarter of Calendar Year 2011.

FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	CAL_X_		
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMPX SYSTEM EXPANSION					
SERVICE AREA: DELAWARE	SERVICE AREA: DELAWARE COUNTY AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING         FY 2011-2013         FY 2014-2021         TOTAL COST					
\$67,704,000	\$12,306,000	\$0	\$0	\$80,010,000	

#### STATE OF GOOD REPAIR INITIATIVES

This program is designed to bring transit and railroad facilities to a state of good repair. Projects included in this program are categorized as follows:

- Maintenance & Support Facilities Rehabilitation of shops, maintenance/storage yards, and associated maintenance and support facilities including tunnel lighting; duct banks; vehicle maintenance equipment; and other support functions. Projects include the overhaul of the vehicle washers at Frazer Car Shop, Fern Rock and Frankford; construction of a new fueling facility for Victory Avenue Bus Garage; installation of fire suppression systems at Frankford and Elmwood Maintenance Facilities; installation of fire detection equipment at Bridge Street El Shop, Callowhill Garage, Frankford Depot and Frontier Garage; installation of car hoists and body stands at Fern Rock and Overbrook Shops; improvements to 1234 Market Street Headquarters; and replacement of the Berridge Shop/2<sup>nd</sup> & Wyoming Office roof.
- Power, Signal, and Communications Systems Rehabilitation of electric traction, power, signal and communications systems and associated components including catenary and support structures, feeders and transmission lines, fiber optics, switchgear, signal and communications equipment; maintenance and passenger information systems; dispatching equipment; and other localized control facilities. Projects include, but are not limited to, improvements to Easton Road/Susquehanna Road grade crossing on the Warminster Line (R2) and the Broad Street Subway Signal System.
- Track and Right of Way Renewal or replacement of track, switches, and special work including yard and shop areas; track surfacing; grade crossing improvements; and acquisition of specialized track equipment. Projects include the purchase of steel wheel maintenance equipment, and train access accommodations for the new Silverliner V railcars at stations on the Wilmington/Newark (R2), Paoli/Thorndale (R5) and Trenton (R7) Regional Rail Lines.
- <u>Station Facilities</u> Rehabilitation of station buildings and associated facilities including roofs and canopies; ticket offices and waiting rooms; platforms; lighting; escalators; elevators; parking; signage; and accessibility improvements. Projects include improvements to, or replacement of, escalators at selected stations; and installation of fire detection equipment at Market East Station.
- Environmental Clean Up and Protection Remediation and testing activities associated with underground storage tanks, lead-based paint and asbestos abatement, contaminated soil and groundwater, and air quality. Site assessments to determine environmental exposures prior to acquiring properties are also included in this project element.
- <u>Bridges</u> Rehabilitation/replacement of bridges on rail lines and SEPTA private right-of-way including culverts and associated bridge support structures. Projects include the rehabilitation of Bridge 0.35 on the Chestnut Hill West Line (R8).

## STATE OF GOOD REPAIR INITIATIVES

<u>Vehicles</u> - Upgrades and modifications to revenue and non-revenue vehicles and components. The replacement of Broad Street Subway B-IV car control boxes will be advanced under this category, as well as the purchase of maintenance and construction vehicles to support various capital projects.



Lansdale Doylestown Line (R5) Bridge 8.53 at Delaware Valley College (Before & After)

FY 2010 FUNDING SOURCE:	FTA_X FHWA	STATE ACT 44 X LOC	AL_X_		
CAPITAL INVESTMENT CATE	CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR X NORMAL REPLACEMENT SYSTEM IMP. SYSTEM EXPANSION				
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING         FY 2011-2013         FY 2014-2021         TOTAL COST					
\$0	\$27,698,000	\$45,000,000	\$80,000,000	\$152,698,000	

#### STATION ACCESSIBILITY

The Station Accessibility Program provides for the continuation of SEPTA's efforts to improve accessibility at railroad and rail transit stations. This program complements work of other accessibility efforts that are being advanced as part of other projects and programs included in SEPTA's Capital Budget and Program. Currently, SEPTA serves 86 fully accessible stations and 3 partially accessible stations (one direction only). Over the next five years, an additional 20 stations will be made accessible within the SEPTA system through projects currently in progress or planned.

Accessibility improvements to 35 Federal Transit Administration-designated Key Stations were fully funded under the first phase of this program. With the completion later this calendar year of accessibility improvements at the Chester Transportation Center and Radnor Station, all Key Stations will be complete and fully accessible.

The objective of this program is to further expand the network of accessible stations. Additional stations were selected based on a number of factors, including station ridership, intermodal connections, and proximity to identified disability magnet sites as recommended by the SEPTA Advisory Committee for Accessible Transportation (SAC). These stations include:

- Allegheny, Race-Vine, Erie & Snyder Stations on the Broad Street Subway Line
- Margaret-Orthodox and 40<sup>th</sup> Street Stations on the Market-Frankford Subway Elevated Line

Allegheny Station improvements advanced to construction in July 2009. The design phase of the Margaret-Orthodox Station project is scheduled for completion in the 2<sup>nd</sup> quarter of Calendar Year 2010. The design phase of Race-Vine improvements will be advanced next.



Rendering of Allegheny Station Entrance with Elevator

FY 2010 FUNDING SOURCE:	FTA X_ FHWA	STATE ACT 44 X LOC	CAL_X_		
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMPX SYSTEM EXPANSION					
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING         FY 2011-2013         FY 2014-2021         TOTAL COST					
\$15,952,000	\$3,000,000	\$22,868,000	\$48,000,000	\$89,820,000	

#### SYSTEM IMPROVEMENTS PROGRAM

As part of the System Improvements Program, projects will be developed, designed and implemented to enhance communications, security, customer satisfaction and service quality. Future projects will be evaluated using criteria that include the project's effect on ridership, comparison of the project's cost and benefit, operating cost savings, expected useful life, years to implement, safety enhancements, customer convenience, and employee productivity. Projects include:

- <u>Customized Community Transportation (CCT) Communications System/Control Center</u> This project will upgrade and enhance the dispatching and reservation operation of SEPTA's ADA and Shared-Ride programs. The dispatching portion of the operation will be relocated to SEPTA's centralized Operations Control Facility located on the 19<sup>th</sup> Floor of its 1234 Market Street Headquarters. Fourteen dispatcher workstations will be constructed and voice and data communications infrastructure will be upgraded. The existing dispatching and trip scheduling computer system will be replaced with a new system, which will provide Automatic Vehicle Locator (AVL), telephone interactive voice response and Internet capabilities. Automatic vehicle locator equipment will be installed in SEPTA's Customized Community Transportation (CCT) vehicles. These enhancements will enable customers to reserve and cancel trips through the telephone interactive voice response system, the Internet, or by a traditional telephone call to a reservationist. The Automatic Vehicle Locator (AVL) System will enable SEPTA's dispatcher to know the exact location of vehicles. This feature will improve the dispatching of vehicles, as well as allow the dispatcher to more accurately inform customers about vehicle location and arrival time. The new system will also automatically initiate "next day" reservation reminder calls to customers. The construction phase of this project is advancing with substantial completion scheduled for the 1<sup>st</sup> quarter of Calendar Year 2010.
- Rail Transit Stations Fiber Optic Platform (Phase II) This project will provide for the design, purchase, and installation of fiber optic platforms to be deployed at locations throughout SEPTA's Subway/Elevated and Light Rail Systems. This modernization project will provide for the installation of new communications multiplexing equipment and associated systems to support existing and future installation of Audio/Visual Public Address (AVPA) Systems, Closed Circuit TV (CCTV), alarms and phone services at Broad Street Subway, Market-Frankford, and Subway Surface Line stations. This multi-year project is scheduled for completion in the 3<sup>rd</sup> quarter of Calendar Year 2010.

#### SYSTEM IMPROVEMENTS PROGRAM

- Route 15 Turnback This project provides for the construction of a trolley turnback along SEPTA's Trolley Route 15 at Frankford Avenue. This new routing will allow eastbound trolley service to continue through to the Market-Frankford Subway Elevated Line during PennDOT's reconstruction of Interstate I-95 Girard Avenue Interchange. This turnback will become a permanent feature of the trolley line. The turnback will be constructed along Frankford Avenue from Girard Avenue to Delaware Avenue. The project will provide for new track and overhead wire; and traffic signal improvements at Girard and Delaware Avenues. This project will commence in the summer of 2010.
- Information Technology This project will provide for enhancements to SEPTA's information technology infrastructure and computer software applications. Projects may include improvements to SEPTA's communications infrastructure; construction of a backup network server farm site; replacement of aged desktop systems, network servers and peripheral equipment; upgrade and purchase of computer software business applications; improvements to system security across computer platforms; and enhancements to SEPTA's Internet web site.

FY 2010 FUNDING SOURCE:	FTA X_ FHWA	STATE ACT 44 X LOC	CAL_X_		
CAPITAL INVESTMENT CATE	GORY: STATE OF GOOD REPA	IR NORMAL REPLACEME	ENT SYSTEM IMP. X S	SYSTEM EXPANSION	
SERVICE AREA: BUCKS, CHE	SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
PRIOR FUNDING FY 2010 FUNDING FY 2011-2013 FY 2014-2021 TOTAL COST					
\$0	\$11,100,000	\$7,100,000	\$48,000,000	\$66,200,000	

#### TRANSIT ENHANCEMENTS

Under the Federal Transit Administration's Transit Enhancements Program, eligible activities include historic preservation, rehabilitation, and related activities; bus shelters; landscaping and other scenic beautification including street lights, public art, pedestrian access and walkways; bicycle access including storage facilities and installation of equipment for transporting bicycles on transit vehicles; transit connections to parks; signage; and enhanced access to transit for persons with disabilities. Through the Delaware Valley Regional Planning Commission (DVRPC), an evaluation and selection process of candidate projects for Federal Highway Transportation Enhancements and Federal Transit Administration Transit Enhancements funding is conducted by representatives of Bucks, Chester, Delaware and Montgomery Counties, the City of Philadelphia, the Pennsylvania Department of Transportation, the Regional Citizens Committee, and members of the public. The projects selected for Transit Enhancements funding in the past included:

- <u>Allen Lane Station</u> Renovations include rehabilitation of the covered pedestrian bridge, canopies, and inbound and outbound shelters; installation of new lighting and signage; construction of new high level platforms and ramps to platforms from accessible path; and drainage improvements.
- Queen Lane Station Renovations include rehabilitation of canopies, shelters, and covered pedestrian bridge; repairs to the station building and existing stairs leading to both platforms; installation of new lighting and signage; and drainage improvements.
- Wayne Station Renovations include rehabilitation of the station building, including roof replacement, masonry repairs, and making both bathrooms accessible; rehabilitation of the inbound and outbound canopies; installation of lighting and signage; construction of new inbound and outbound high level platforms, shelters, retaining walls, stairways, ramping, and drainage system.

The next evaluation and selection process for Federal Highway Administration and Federal Transit Administration Enhancements projects is proposed for Fiscal Year 2010, and will be conducted by the Delaware Valley Regional Planning Commission (DVRPC).

FY 2010 FUNDING SOURCE:	FTA X_ FHWA	STATE ACT 44 X LOC	CAL_X_			
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT SYSTEM IMPX SYSTEM EXPANSION						
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA						
PRIOR FUNDING	FY 2010 FUNDING	FY 2011-2013	FY 2014-2021	TOTAL COST		
\$0	\$1,191,000	\$3,759,000	\$10,912,000	\$15,862,000		

#### TRANSIT AND REGIONAL RAIL STATION PROGRAM

This program provides for the reconstruction or rehabilitation of transit and regional rail stations and terminals, bus/trolley loop facilities, and transportation centers. Program elements include the replacement or rehabilitation of station and loop facility components, such as station buildings, ticket offices and waiting rooms, passenger shelters, canopies, platforms, crosswalks and overpasses, escalators and elevators, lighting, signage, and accessible paths. All improvements will fully comply with the Americans with Disabilities Act of 1990.

Stations and bus loops programmed for major capital improvements and funding in the next few years are as follows:

- Warminster Line (R2): Willow Grove, Hatboro, Roslyn

- Media/Elwyn Line (R3): Primos, Secane

- Paoli/Thorndale Line (R5): Wayne, Villanova, Exton

- Lansdale/Doylestown Line (R5): Ambler
- Norristown Line (R6): East Falls
- Trenton Line (R7): Levittown

- Chestnut Hill West Line (R8): Queen Lane, Allen Lane

Fox Chase Line (R8): Olney, RyersRegional Rail Mainline: Wayne Junction

- Broad Street Subway Line: 8<sup>th</sup> & Market (Spur), Fairmount, Wyoming

- Market-Frankford Line: 5<sup>th</sup> Street

- Bus Loops: Bells Corner, Parkside, 61<sup>st</sup> & Pine,

Dauphin Street, Wycombe



**R5 North Wales Station** 

Fiscal Year 2010 funds will support the design and/or construction of improvements to Wayne, Queen Lane, Allen Lane, Ambler, Olney, Exton, Primos, Secane, Hatboro, Ryers, 5<sup>th</sup> Street, 8<sup>th</sup> & Market (BSS Spur), Bells Corner, Parkside and 33<sup>rd</sup> and Dauphin Loops. Fiscal Year 2010 Congressional earmarks have been requested to assist in the funding of this program. In addition, the American Recovery and Reinvestment Act (ARRA) of 2009 will support improvements to the station and parking facilities at Croydon Station on the Trenton Regional Rail Line (R7) and improvements to Girard and Spring Garden Stations on the Broad Street Subway Line.

FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	CAL X			
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR X NORMAL REPLACEMENT SYSTEM IMP. SYSTEM EXPANSION						
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA						
PRIOR FUNDING	FY 2010 FUNDING	FY 2011-2013	FY 2014-2021	TOTAL COST		
\$64,100,000	\$26,300,000	\$104,400,000	\$120,000,000	\$314,800,000		

### **UTILITY FLEET RENEWAL**

The Utility Fleet Renewal Program is a comprehensive effort to upgrade and replace the Authority's utility fleet and automotive service fleet. SEPTA utility vehicles support transit and railroad operations. These vehicles include automobiles for transit supervisors and operations support personnel; utility vehicles for the maintenance of operating facilities; and service vehicles and equipment for use in garages, shops, and operations support functions. In order to have adequate and reliable utility vehicles, SEPTA has developed a program to periodically renew this fleet on a vehicle-by-vehicle basis, contingent on the vehicle's age, condition and usage within the Authority. Fleet size reduction through efficient replacement of vehicles continues to be an objective of the Utility Fleet Renewal Program.

The utility fleet is comprised of the following types of vehicles:

- Utility vehicles and equipment for transit supervisors, SEPTA police officers, paratransit support, and administrative services.
- Utility vehicles for inspection, maintenance and construction of buildings, overhead power systems, communications systems, signal systems and track. These vehicles include trucks, cranes, high rail vehicles and maintenance-of-way equipment.
- Transport vehicles used in garages and shops including revenue trucks, forklifts for material handling, pick-up trucks for material movement between depots and shops and for snow removal.
- Service vehicles used for vehicle maintenance including wreckers, tow tractors, man lifts and pick-up trucks.
- Miscellaneous equipment such as generators, compressors, trailers, floor scrubbers and welding units.

Fiscal Year 2010 funds will provide for the replacement of various supervisory vehicles, service trucks, and construction equipment that have exceeded their useful life.

FY 2010 FUNDING SOURCE:	FTA X_ FHWA	STATE ACT 44 X LOC	CAL_X_			
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT _X_ SYSTEM IMP SYSTEM EXPANSION						
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA						
PRIOR FUNDING	PRIOR FUNDING FY 2010 FUNDING		FY 2014-2021	TOTAL COST		
\$0	\$3,500,000	\$11,500,000	\$32,000,000	\$47,000,000		

### **VEHICLE OVERHAUL PROGRAM**

The Vehicle Overhaul Program provides for the major overhaul of SEPTA's rolling stock. Vehicles are scheduled for overhauls during their service lives based on vehicle type. A vehicle must receive periodic overhauls if it is to achieve, or exceed, its full, useful service life. Prudent fleet management requires a program of heavy maintenance and overhauls for optimal fleet reliability, service quality, cost efficiency, and passenger comfort. The advanced scheduling of vehicle overhauls allows SEPTA to purchase material and produce rebuilt components in an efficient and effective manner. In addition to vehicle overhauls, this program also provides for vehicle campaigns. Each vehicle type undergoes its own specialized overhaul program and campaign work. Campaigns address both critical items and vehicle equipment upgrades and modifications, which are accomplished on a fleet-wide basis. The Vehicle Overhaul Program will allow SEPTA to continue its overhaul of rolling stock, thus ensuring continued safe and reliable service.

Highlights of the Fiscal Year 2010 program include the overhaul of 40-foot low-floor hybrid (diesel/electric) New Flyer buses, 40-foot low-floor New Flyer buses, Broad Street Subway B-IV cars, Subway-Surface trolleys, Media/Sharon Hill Line trolleys, Regional Rail Silverliner IV railcars, Regional Rail Bombardier Push-Pull railcars and locomotives, Market Frankford M-4 cars, Norristown High Speed Line N-5 cars, and maintenance of way equipment. Campaigns for Fiscal Year 2010 include Regional Rail Silverliner IV A/C condenser unit overhaul and rotating equipment change out, and trolley destination signs.







FY 2010 FUNDING SOURCE:	FTA X FHWA	STATE ACT 44 X LOC	AL <u>X</u>				
CAPITAL INVESTMENT CATEGORY: STATE OF GOOD REPAIR NORMAL REPLACEMENT _X SYSTEM IMP SYSTEM EXPANSION							
SERVICE AREA: BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA							
PRIOR FUNDING	FY 2010 FUNDING	FY 2010 FUNDING FY 2011-2013		TOTAL COST			
\$0	\$53,600,000	\$170,700,000	\$468,800,000	\$693,100,000			



## FISCAL YEARS 2014-2021 CAPITAL PROGRAM (Years 5-12)

PROJECT	FY 2014-2021 BUDGET ALLOCATION
30 <sup>th</sup> Street to Suburban Station Bridges	\$66,670,000
Bus Facilities Renovations	25,000,000
Bus Purchase Program	520,000,000
Callowhill Garage Replacement	115,600,000
Capital Asset Lease Program	266,400,000
City Hall Station/15 <sup>th</sup> Street Station Rehabilitation	27,800,000
Debt Service	345,000,000
Eastwick Transportation Center	7,230,000
Elwyn to Wawa Rail Service	10,414,000
Infrastructure Safety Renewal Program	264,000,000
Light Rail Infrastructure Improvements (Routes 23 & 56)	189,000,000
Light Rail Vehicle Purchase (Route 23 & 56)	130,000,000
Light Rail Vehicle Replacement (Subway-Surface & Media-Sharon Hill Lines)	300,000,000
New Payment Technologies	20,725,000
New Starts/Service Initiatives	2,200,000,000
Paoli Transportation Center	29,615,000
Paratransit Vehicle Acquisition	40,000,000
Parking Expansion Program	90,000,000
R5 Paoli Line Improvements	110,484,000
Rail Bridge Improvement Program	50,000,000
Regional Rail Car Acquisition (Silverliner IV Replacement)	750,000,000
Regional Rail Signal System Modernization Program	47,100,000

## FISCAL YEARS 2014-2021 CAPITAL PROGRAM (Years 5-12)

PROJECT	FY 2014-2021 BUDGET ALLOCATION
Regional Rail Substation Improvements	\$145,500,000
State of Good Repair Initiatives	80,000,000
Station Accessibility	48,000,000
System Improvements Program	48,000,000
Transit Enhancements	10,912,000
Transit and Regional Rail Station Program	120,000,000
Utility Fleet Renewal	32,000,000
Vehicle Overhaul Program	<u>468,800,000</u>
Total FY 2014-2021 Capital Program	\$6,558,250,000

#### PROJECT TITLE (BUDGET ALLOCATION FY 2014-2021)

#### 30<sup>th</sup> Street to Suburban Station Bridges (\$66,670,000)

This project provides for the rehabilitation of seven regional rail bridges and related signal, track and communications improvements between 30th Street Station and Suburban Station at 16th Street and John F. Kennedy Boulevard. The seven bridges include Bridge 0.49 over 21st Street, Bridge 0.58 over 22nd Street, Bridge 0.61 over 22nd and 23rd Streets, Bridge 0.64 over 23rd Street, Bridge 0.68 between 23rd Street and the CSX Railroad right-of-way, Bridge 0.72 located over the CSX Railroad right-of-way and Bridge 0.76 over the Schuylkill River.

#### Bus Facilities Renovations (\$25,000,000)

This project provides for improvements at SEPTA's bus facilities in order to adequately maintain new buses and their more sophisticated components. The renovations will include, but are not limited to, the installation of bus lifts, wheel alignment machines and specialized testing equipment; the construction of bus washers; and improvements to, or replacement of, roofs, boilers, lighting and other building systems.

#### Bus Purchase Program (\$520,000,000)

This program provides for the acquisition of accessible, user-friendly buses to replace vehicles, which have reached the end of their useful life. SEPTA's Bus Fleet Management Plan provides for the acquisition of different size buses for use on SEPTA city and suburban routes based on needs and route characteristics. The current bus fleet consists of a variety of buses ranging from 60-foot articulated and 40-foot buses for heavy use routes to 27- and 30-foot buses for suburban, circulator and contract service routes.

#### Callowhill Garage Replacement (\$115,600,000)

This project provides for the replacement of the 96-year old Callowhill Garage, which is located at 59<sup>th</sup> Street and Callowhill Street. The Callowhill Garage, which was originally constructed as a trolley carbarn, is ill equipped to support the needs of a modern bus fleet. A myriad of deficiencies and limitations currently exist at this garage, such as the poor condition of the roof and underground drains; obsolete equipment; and narrow bus storage bays, which limit vehicle maneuverability. The new facility will also include a new trolley shop and storage yard. The trolley shop will be used to perform running repairs for SEPTA's trolleys operating on the Route 10 and Route 15 Trolley Lines.

#### Capital Asset Lease Program (\$266,400,000)

This project provides for capital lease payments attributable to the acquisition through financial leasing arrangements of copiers, tires, communications antennas and radios, a warehouse facility, and Amtrak trackage.

#### City Hall Station/15<sup>th</sup> Street Station Rehabilitation (\$27,800,000)

This project will provide for the renovation of City Hall Station on the Broad Street Subway Line and 15th Street Station on the Market-Frankford Subway Elevated Line. These stations are part of a junction point between the Broad Street Line, Market-Frankford Line, Subway-Surface Lines and Regional Rail Lines. City Hall Station, which opened in 1928, has deteriorated over the years and is in need of rehabilitation. In addition, both stations require accessibility improvements, as well as passenger amenity improvements and aesthetic enhancements to uplift their overall appearance and appeal.

#### Debt Service (\$345,000,000)

This project will provide for debt service and the cost of issuance of bonds, notes and other indebtedness incurred by SEPTA. Debt service includes payments on: 1) Special Revenue Bonds, Series 1999, which provided funds for the acquisition of Market-Frankford Subway Elevated cars, several capital improvement projects, and partial refunding of Series 1995A bonds, 2) Variable Rate Revenue Refunding Bonds, Series 2007, used to refund the Special Revenue Bonds, Series 1997, which provided funds for the buyout of leases on Bombardier Rail Cars, General Motors Locomotives and Frazer Rail Car Maintenance Shop, acquisition of Market-Frankford Subway Elevated cars, and several capital improvement projects, and 3) SEPTA expects to issue additional bonds in Fiscal Year 2010/2011 to assist in the financing of 120 Silverliner V Regional Rail cars.

#### Eastwick Transportation Center (\$7,230,000)

This project will provide for the engineering and construction of a new transportation center and parking facility on the Airport Regional Rail Line (R1). The new transportation center will replace the interim rail station, which was constructed in Calendar Year 1997 at Bartram Avenue and 84<sup>th</sup> Street. The Eastwick Transportation Center will serve as a transit hub for the Eastwick and Airport areas. Surface transit routes that connect to the station include Route 37, Route 68, Route 108 and Route 115.

#### Elwyn to Wawa Rail Service (\$10,414,000)

This project will provide for the restoration of rail service from the existing Media/Elwyn Regional Rail Line (R3) terminus at Elwyn, Delaware County, to a new terminus at Wawa, Delaware County. The growth and development of suburban communities in western Delaware County and southern Chester County have resulted in substantial increases in population, employment and traffic. This project, which will extend service approximately three miles, represents an opportunity for SEPTA to capture the Center City commuter market in the expanding suburban locations while increasing the overall mobility of residents in the area.

#### Infrastructure Safety and Renewal Program (\$264,000,000)

This program is a continuation of SEPTA's effort to upgrade its infrastructure and associated components of transit and railroad operations in order to bring existing facilities to a state of good repair.

#### Light Rail Infrastructure Improvements - Routes 23 & 56 (\$189,000,000)

This project provides for the restoration of trolley service to Routes 23 and 56.

#### Light Rail Vehicle Purchase - Routes 23 & 56 (\$130,000,000)

This project provides for the purchase of vehicles for the restoration of trolley service to Routes 23 and 56.

#### <u>Light Rail Vehicle Replacement - Subway-Surface & Media-Sharon Hill Lines (\$300,000,000)</u>

This project provides for the purchase of trolleys for SEPTA's Subway-Surface and Media-Sharon Hill Lines. These rail transit lines are currently operated with 141 trolleys that were built in 1981. Vehicles acquired will fully comply with Americans with Disabilities Act (ADA) requirements.

#### New Payment Technologies (\$20,725,000)

This project will modernize and improve SEPTA's current fare payment and collection system by offering riders a variety of payment choices to suit their travel needs. In addition to bus, rail transit, and regional rail fare collection improvements, this project will also include improvements to the payment and collection procedures for SEPTA's Customer Community Transportation (CCT) operation, as well as SEPTA's parking operations. Control, accountability and reconciliation will be made an integral part of the new fare collection system.

#### New Starts/Service Initiatives (\$2,200,000,000)

This program provides for the engineering and construction of New Starts/service initiatives.

#### Paoli Transportation Center (\$29,615,000)

This project provides for the engineering and construction of a transportation center in Paoli, Chester County. The new facility will be located on SEPTA's Paoli/Thorndale Regional Rail Line (R5) west of the existing station. The project includes: 1) Construction of an intermodal station complete with high-level platforms, waiting area, ticket offices and passenger amenities; 2) Construction of bus facilities; 3) Construction of a new commuter parking facility; 4) Reconfiguration of access roads and entrances to the station; 5) Construction of new pedestrian linkages throughout the station area including sidewalks, crosswalks, and a concourse linking inbound and outbound station platforms; and 6) reconfiguration of, and improvements to, the Paoli Interlocking to accommodate the new transportation center.

#### Paratransit Vehicle Acquisition (\$40,000,000)

This project provides for the acquisition of revenue vehicles for SEPTA's paratransit and shared-ride operations.

#### Parking Expansion Program (\$90,000,000)

This program provides for the design and construction of parking facility expansions, new parking facilities including garages, and the rehabilitation of existing parking facilities. All new and rehabilitated facilities will be compliant with the requirements of the Americans with Disabilities Act of 1990. Lighting, signage, landscaping, and drainage improvements will be incorporated into each project. Pathways from the new/improved parking facilities to the station area will be constructed or improved as needed to complement parking projects.

#### R5 Paoli Line Improvements (\$110,484,000)

SEPTA, PADOT, and Amtrak are working together to improve the infrastructure of the Amtrak-owned Keystone corridor between Philadelphia and Harrisburg. This corridor serves the PADOT-subsidized and Amtrak-operated Keystone service, and SEPTA's Paoli/Thorndale Regional Rail Line (R5). The project will restore the infrastructure to a state of good repair, improve operating speeds and enhance service reliability. Amtrak has requested SEPTA's participation in the funding of improvements from Zoo Interlocking (west of Amtrak's 30<sup>th</sup> Street Station) westward to the Paoli Station in Chester County.

#### Rail Bridge Improvement Program (\$50,000,000)

This project will restore SEPTA's bridges to a state of good repair.

#### Regional Rail Car Acquisition - Silverliner IV Replacement (\$750,000,000)

This project provides for the purchase of approximately 231 new rail cars to replace SEPTA's Silverliner IV rail car fleet. The Silverliner IV rail cars, which were built between 1974 and 1976, are advancing towards the end of their useful life. Vehicles acquired will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems.

#### Regional Rail Signal System Modernization Program (\$47,100,000)

This project provides for the modernization of the signal system on the Warminster (R2), Lansdale/Doylestown (Lansdale to Doylestown segment) (R5), Cynwyd (R6), Norristown (R6), Chestnut Hill East (R7) and Chestnut Hill West (R8) Regional Rail Lines. The Automatic Block Signal System currently in use on these lines will be replaced with an Automatic Train Control (ATC) System. The ATC System, which operates on a microprocessor based platform, will ensure effective train separation, as well as provide train overspeed protection with automatic braking. The new signal system will also enable bi-directional train movements with full signaling, thus greatly enhancing the flexibility of service when a portion of track is out of service for maintenance or repair. As part of this program, track interlockings and switches will be improved or replaced to complement the capabilities of the new signal system. In addition, a Positive Train Control (PTC) System will be superimposed atop the ATC on all Regional Railroad lines. Working in unison, these two systems will provide the functionality the "Rail Safety Improvement Act of 2008" has mandated to be operational by December 31, 2015.

#### Regional Rail Substation Improvements (\$145,500,000)

This program provides for the engineering, design, and construction of improvements to the traction power supply system for SEPTA's Regional Rail service. Critical components of the power system have far exceeded their useful life and are in need of replacement. In total, this program will provide for the replacement of sixteen substations and numerous static frequency converters over the next decade and half.

#### State of Good Repair Initiatives (\$80,000,000)

This project is designed to bring transit and railroad facilities to a state of good repair. Project categories include maintenance/support facilities; power systems; signal/communications systems; station facilities; track and right-of-way; bridges and vehicles.

#### Station Accessibility (\$48,000,000)

This project will provide for facility modifications to improve accessibility at regional rail and rail transit stations.

#### System Improvements Program (\$48,000,000)

Under this program, projects will be developed, designed and implemented to further enhance communications, security, customer satisfaction and service quality.

#### Transit Enhancements (\$10,912,000)

Under the Federal Transit Administration Transit Enhancements Program, eligible activities include historic preservation, rehabilitation, and related activities; bus shelters; landscaping and other scenic beautification enhancements including street lights, public art, pedestrian access and walkways; bicycle access including storage facilities and installation of equipment for transporting bicycles on transit vehicles; transit connections to parks; signage; and enhanced access to transit for persons with disabilities.

#### Transit and Regional Rail Station Program (\$120,000,000)

This program provides for the reconstruction or rehabilitation of transit and regional rail stations and terminals, bus/trolley loop facilities, and transportation centers. Program elements include the replacement or rehabilitation of station and loop facility components, such as station buildings, ticket offices and waiting rooms, passenger shelters, canopies, platforms, crosswalks and overpasses, escalators and elevators, lighting, signage, and accessible paths. All improvements will fully comply with the Americans with Disabilities Act of 1990.

#### Utility Fleet Renewal (\$32,000,000)

This program is a continuation of SEPTA's effort to upgrade its utility fleet and automotive service fleet.

#### Vehicle Overhaul Program (\$468,800,000)

This program is a continuation of SEPTA's effort to overhaul and upgrade its rolling stock. Related shop maintenance and engineering studies are also included in this project.

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### FISCAL YEARS 2010-2021 PROGRAMMING SCHEDULE

#### FY 2010-2021 CAPITAL PROGRAMMING SCHEDULE

	Prior Funding	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014-2021	Total
30th St. to Suburban Station Bridges	\$0	\$0	\$0	\$0	\$0	\$66,670,000	\$66,670,000
Bus Facilities Renovations	φ0 0	0	0	φ0 0	0	25,000,000	25,000,000
	_	_	_	_	•	, ,	, ,
Bus Purchase Program	151,995,000	54,200,000	58,500,000	62,505,000	101,900,000	520,000,000	949,100,000
Callowhill Garage Replacement	4,400,000					115,600,000	120,000,000
Capital Asset Lease Program	0	29,729,000	31,139,000	32,025,000	33,041,000	266,400,000	392,334,000
City Hall Station/15th Street Station Rehabilitation	6,500,000	6,900,000	14,500,000	21,800,000	22,500,000	27,800,000	100,000,000
Congestion Relief & Railroad Grade Crossings	0	5,000,000	5,000,000	5,000,000	5,000,000	0	20,000,000
Debt Service	0	48,700,000	48,600,000	48,500,000	48,300,000	345,000,000	539,100,000
Eastwick Transportation Center	4,400,000	0	0	0	0	7,230,000	11,630,000
Elwyn to Wawa Rail Service	10,373,000	4,500,000	25,600,000	16,500,000	12,613,000	10,414,000	80,000,000
Infrastructure Safety and Renewal Program	0	33,000,000	33,000,000	33,000,000	33,000,000	264,000,000	396,000,000
Light Rail Infrastructure Improvements (Routes 23 & 56)	0	0	0	0	0	189,000,000	189,000,000
Light Rail Vehicle Purchase (Routes 23 & 56)	0	0	0	0	0	130,000,000	130,000,000
Light Rail Vehicle Replacement (Subway-Surface & MSHL)	0	0	0	0	0	300,000,000	300,000,000
Market Street Elevated Reconstruction Program	710,000,000	30,000,000	0	0	0	0	740,000,000
New Payment Technologies	13,875,000	14,400,000	18,000,000	18,000,000	15,000,000	20,725,000	100,000,000
New Starts/Service Initiatives	61,299,000	0	25,000,000	50,000,000	100,000,000	2,200,000,000	2,436,299,000
Paoli Transportation Center	4,385,000	1,500,000	1,500,000	1,500,000	1,500,000	29,615,000	40,000,000
Paratransit Vehicle Acquisition	0	3,800,000	4,500,000	4,700,000	4,400,000	40,000,000	57,400,000
Parking Expansion Program	34,700,000	2,300,000	12,700,000	24,500,000	18,500,000	90,000,000	182,700,000
R5 Paoli Line Improvements	54,516,000	0	5,000,000	5,000,000	5,000,000	110,484,000	180,000,000
Rail Bridge Improvement Program	0	0	0	0	0	50,000,000	50,000,000
Regional Rail Car Acquisition (Silverliner II & III Replacement) *	95,402,000	0	0	0	0	0	95,402,000
Regional Rail Car Acquisition (Silverliner IV Replacement)	0	0	0	0	0	750,000,000	750,000,000
Regional Rail Signal Modernization Program	5,700,000	23,800,000	28,500,000	27,400,000	43,000,000	47,100,000	175,500,000

<sup>\*</sup> SEPTA expects to issue bonds in Fiscal Year 2010/2011 to assist in the financing of this project. Project budget totals \$330,000,000.

#### FY 2010-2021 CAPITAL PROGRAMMING SCHEDULE

	Prior Funding	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014-2021	Total
Regional Rail Substation Improvements	\$47,996,000	\$11,504,000	\$10,000,000	\$12,000,000	\$8,000,000	\$145,500,000	\$235,000,000
Safety and Security Improvements	32,161,000	10,000,000	10,000,000	10,000,000	10,000,000	0	72,161,000
Smart Stations	67,704,000	12,306,000	0	0	0	0	80,010,000
State of Good Repair Initiatives	0	27,698,000	25,700,000	16,600,000	2,700,000	80,000,000	152,698,000
Station Accessibility	15,952,000	3,000,000	10,000,000	10,926,000	1,942,000	48,000,000	89,820,000
System Improvements Program	0	11,100,000	3,100,000	2,000,000	2,000,000	48,000,000	66,200,000
Transit Enhancements	0	1,191,000	1,231,000	1,164,000	1,364,000	10,912,000	15,862,000
Transit & Regional Rail Station Program	64,100,000	26,300,000	27,400,000	44,600,000	32,400,000	120,000,000	314,800,000
Utility Fleet Renewal	0	3,500,000	3,500,000	4,000,000	4,000,000	32,000,000	47,000,000
Vehicle Overhaul Program	0	53,600,000	55,200,000	56,900,000	58,600,000	468,800,000	693,100,000
Grand Total	\$1,385,458,000	\$418,028,000	\$457,670,000	\$508,620,000	\$564,760,000	\$6,558,250,000	\$9,892,786,000

# Appendix A AMERICAN RECOVERY and REINVESTMENT ACT of 2009 SEPTA Stimulus Program

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009 SEPTA Stimulus Program

#### **Projects (Budgetary Amounts)**

#### 40 Hybrid Buses (\$20,548,675)

This project provides for the purchase of 40 additional hybrid (diesel/electric) buses through an option under the existing contract with New Flyer of America.

#### 69th Street Terminal Restroom Renovations (\$689,031)

Renovation of the Men's and Women's Public Restrooms located at the 69th Street Terminal. The existing fixtures, partitions and appurtenances will be removed and replaced. The restrooms will receive new doors, ceilings, energy efficient lighting, finishes, and signage. The existing ventilation and drainage systems will be upgraded.

#### Airport Line (R1) Right of Way Fencing (\$2,623,818)

Installation of new fencing and the extension of existing right-of-way fence on the Airport Line (R1) between milepost 4.06 to milepost 7.95, from where the line branches off the Amtrak Northeast Corridor to the viaduct over I-95.

#### Bridge Rehabilitation (\$7,820,519)

This project provides for the rehabilitation of 5 bridges:

- Lansdale/Doylestown Line (R5) Bridge 13.04: This 1930's era bridge spans North Hills Avenue adjacent to the North Hills Station. It has deteriorating concrete fascia, parapets and walls that will be repaired, along with replacement of the waterproofing.
- Lansdale/Doylestown Line (R5) Bridge 18.87: This 1930's era bridge over Penllyn Pike at the Penllyn Station in Lower Gwynedd Township has deteriorating concrete fascia, parapets, and walls that will be repaired, along with replacement of the waterproofing.
- Lansdale/Doylestown Line (R5) Bridge 20.25: The superstructure of this 1905 steel girder, open deck bridge will be replaced. The
  bearing seats will be replaced along with repairs made to the stone abutments. This bridge spans the Wissahickon Creek north of
  the Gwynedd Valley Station.
- Lansdale/Doylestown (Main Line) Line (R5) Bridge 8.38: This precast concrete box girders on this bridge will have the joints between the girders repaired and new waterproofing installed to stop water from leaking through the deck. This bridge spans Valley Road adjacent to the Melrose Park Station in Cheltenham Township.
- Norristown High Speed Line Bridge 12.81: This project will repair, scour and armor the pedestals supporting the Bridgeport-Norristown Viaduct in Montgomery County. The Viaduct was built in 1911. Repairs are based upon the recommendations of the latest underwater inspection report. The piers are located in the Schuylkill River, immediately downstream of the Norristown Dam.

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009

### SEPTA Stimulus Program

#### Chestnut Hill East Regional Railroad Station Amenity, Chestnut Hill East Line (R7) (\$1,903,760)

This project provides improvements at various stations on the Chestnut Hill East Line (R7):

- Chestnut Hill East Station: Painting unroofed canopy structure along with replacing the wooden walkway with a concrete walkway and new steel railings.
- Germantown Station: Painting the bridge over Germantown Avenue, cleaning and painting concrete walls, rail replacement, new signage, additional lighting, sidewalk repairs, landscaping, and miscellaneous painting.
- Gravers Station: Painting the railing beyond platform boundaries and new signs.
- Mt Airy Station: Painting the existing building and railings, new signs, sidewalk, curb, and driveway repairs.
- Sedgwick Station: Installation of a new shelter, new signs, sidewalk repairs, and landscaping.
- Stenton Station: Glass block glazing of the existing shelter, painting the existing buildings, new signs, and sidewalk repairs.
- Washington Lane Station: Modifications to driveway, new signs, landscaping, and repairing/replacing and painting the existing railings.
- Wister Station: Cleaning and painting the pedestrian tunnel, installing additional tunnel lighting, painting the existing station building, replacing platform railings, and landscaping.

#### Chestnut Hill West Retaining Wall (R8) (\$683,700)

Repairs include replacing stone retaining wall along the outbound platform, construction of a new concrete retaining wall to stabilize the rock cut at the end of the platform, and repair and paint street level wood canopy structure.

#### Chestnut Hill West Line (R8) Station Improvements (\$2,397,169)

This project provides for improvements at various stations on the R8 Chestnut Hill West Line, as follows:

- Chestnut Hill West Station: New signage, new platform tactile edge, and painting of the catenary structure columns.
- Highland Station: New passenger shelter on the inbound platform, new signage, and concrete stair repairs.
- St Martins Station: New concrete stairs and walkways, new lighting, new signage, and concrete curb and stair repairs.
- Carpenter Lane Station: New lighting, new signage, replacing the existing shelter roof, and painting of the existing station building and guardrails.
- Upsal Station: New concrete walkways, replacing the existing shelter roof; and painting the existing station building.
- Chelten Avenue Station: New lighting in the stairways, new signage on both platform and street levels, repairing and painting the
  platform canopy, painting the entire concrete structure, and infilling the existing window openings at stairways with glass block.

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009 SEPTA Stimulus Program

#### Communication Based Train Control (CBTC) Upgrade, Trolley Tunnel (\$4,713,184)

Replacement and/or upgrade of computers and hardware, and update of software for the CBTC system. This project will utilize improvements in technology along with the operational experience SEPTA has gained since the system was first installed about 10 years ago. This project will increase reliability of the system and provide capacity improvements at the portals.

#### Croydon Station Improvements, Trenton Line (R7) (\$8,500,000)

Installation of intermodal facilities, including a new Route 128 bus loop and construction of bus shelters, installation of inbound and outbound high level platforms, new platform canopies, ADA accessibility improvements including ramps and stairs to access a new sidewalk in the Cedar Avenue underpass, highway and traffic signal work to realign the Cedar Avenue/Route 13 intersection, new lighting and landscaping, drainage improvements, and parking expansion. An additional 145 parking spaces will be constructed on the outbound side of station. The existing inbound parking lot will be reconfigured, resulting in 49 spaces. Once improvements are complete, total parking capacity at Croydon Station will be 194 spaces.

#### Darby Transit Center Renovation and Site Expansion (\$2,131,888)

Renovation of the Darby Terminal including site expansion, improved passenger services, and a one way cartway for buses, enhancing safety at the existing turnaround. A new passenger platform with windscreens, shelter, and canopy will be provided. The site expansion involves the construction of a new park adjacent to the new transportation center and additional pathways connecting Main St. to MacDade Blvd. The new passenger services will include improved signage and lighting.

#### Elwyn Station Additional Parking, Media/Elwyn Line (R3) (\$1,690,322)

Construction of a new 90-space parking lot at the Elwyn Station. Total spaces after completion will be 316.

#### Elwyn to Wawa Line (R3) Track Bed Stabilization (\$7,404,100)

The stabilization of areas of slope near milepost 17 on the Media/Elwyn Line (R3). Due to heavy rains and poor soil conditions, a portion of the track bed has failed. The track bed was temporarily repaired and the track realigned. However the slope failure area must be permanently repaired to support the Elwyn to Wawa service restoration along with existing operations on this section of track, including freight access to Glen Mills Quarry for Amtrak ballast maintenance operations. The project will include construction of retaining walls between Lungren Rd (MP 17.13) and Lenni Road (MP 17.35). The catenary structures in the slope failure and retaining wall areas have deteriorated and will be repaired or replaced.

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009 SEPTA Stimulus Program

#### Fern Rock Yard Track Work, Broad Street Subway (\$18,903,649)

Installation of new track, special work and ties throughout both the North and South Fern Rock yards. The track work was initially installed in 1925.

#### Fox Chase Station Building Reconstruction, Fox Chase Line (R8) (\$1,573,179)

Reconstruction of the existing station building at the Fox Chase Station. The existing glass enclosed building, built in 1975, is deteriorated and difficult to maintain. The building is to be gutted down to existing structural frame and rebuilt to match the appearance of other recently renovated railroad station buildings. The rebuilt building will have brick siding with wood truss roof framing, new energy efficient HVAC and lighting systems, and ADA accessibility. Vandal resistant materials will be utilized. This project will be a Leadership in Energy and Environmental Design (LEED) Certified renovation.

#### Frazer Yard Catenary Poles Replacement (\$4,118,100)

Replacement of the existing wood poles supporting the overhead traction power contact system with new steel catenary structures. The existing wood poles are reaching the end of their useful life and failures have occurred. Frazer Yard, including the wood poles, was originally built in 1988.

#### Girard & Spring Garden Stations Rehabilitation, Broad Street Subway (\$30,034,267)

Rehabilitation of the Girard and Spring Garden Stations on the Broad Street Subway. These stations were originally constructed between 1928 and 1932 and are showing signs of disrepair and deterioration due to their age and use. Station elements to be improved by this project include energy efficient lighting; wall, floor and ceiling finishes; passenger amenities; signage; passenger control and cashier facilities; platform tactile warning strips; audio-visual public address system; and the installation of elevators. Materials installed at these stations will be easy to maintain, have a long life expectancy, and possess vandal resistant qualities. These improvements will convert the stations into modern, attractive, well-illuminated, functional and secure transit facilities.

#### Gwynedd Valley Cut Stabilization Cut, Lansdale/Doylestown Line (R5) (\$4,279,981)

Stabilization of the soil and rock slopes along the Gwynedd Cut, between Catenary Structure 20/20 and Catenary Structure 21/20 on the Lansdale Line (R5). This section is midway between Gwynedd Valley and North Wales Stations. This area is subject to flooding, mud slides, and rock falls. Completion of this work will permit SEPTA to increase the operating speed up to 70mph. The deepest portion of this rock cut was originally a tunnel. The roof of the tunnel was removed in the 1920's as part of the electrification of this line. The work includes storm water control, erosion control, and rock/slope stabilization. The work area is located between US Route 202 and West Prospect Avenue.

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009

### SEPTA Stimulus Program

#### Malvern Station Parking Lot and Related Improvements, Paoli/Thorndale Line (R5) (\$12,475,988)

Construction of a new pedestrian underpass, new energy efficient lighting, intertrack fencing, and related exterior improvements at the Malvern Station, including expansion and improvements to the existing parking lot. All work will be completed in accordance with ADA requirements.

#### Media Line Warning Device Replacement, Route 101 (\$3,086,614)

Upgrade the highway grade crossing warning devices at 10 crossings on the Media Line, Route 101. This project will better control trolley movement across the roadway and railroad intersections with less impact on traffic, by interfacing with new traffic signals to control vehicle movement. The 10 crossings are as follows: Wildell Avenue, Scenic Road, East Springfield Road, Saxer Avenue, West Leamy Avenue, West Woodland Avenue, Thompson Avenue, Paper Mill Road, Pine Ridge Road and Beatty Road.

#### Media-Sharon Hill Line Continuous Welded Rail, Routes 101/102 (\$11,734,793)

Replacement of the rail on the Media Sharon Hill Line with Continuous Welded Rail (CWR) and Pandrol fixation. Sections of the rail along this line date back to 1922.

Media-Sharon Hill Line Fiber Optic Cable for Power Control & Passenger Information System, Routes 101/102 (\$4,890,190)
Installation of fiber optic cabling along the Media Sharon Hill Line. This will permit installation of Audio Visual Public Address (AVPA) devices at all passenger stations and improve power substation control.

#### Media-Sharon Hill Line Painting of Steel Catenary Structures, Routes 101/102 (\$922,660)

Improvements will made to steel catenary structures supporting the overhead traction power contact system on the Media Sharon Hill Line. The work will include miscellaneous steel structural repairs.

#### Media-Sharon Hill Line, Traction Power Sectionalization, Routes 101/102 (\$4,931,072)

Installation of new sectionalizing for overhead traction power contact system on the Media Sharon Hill Line. This will enable SEPTA to single track on the line for greater flexibility in operations, allow for track outages for maintenance, and have fewer service disruptions for customers.

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009 SEPTA Stimulus Program

#### Media Sharon Hill Line, Trunk Line Grade Crossings, Routes 101/102 (\$11,269,596)

Improvement of highway grade crossings at 19 locations on the Media Sharon Hill Line. These include Windermere Avenue, Fairfax Road, Irvington Road and Shadeland Avenue on the Media Sharon Hill Trunk Line; Turner Avenue, Rosemont Avenue, Huey Avenue, Edmonds Avenue, School Lane and Burmont Road on the Media Line; and Turner Avenue, Garrett Road, Edmonds Avenue, Burmont Road, Marshall Road, Baltimore Pike, Broadway Avenue, Penn Avenue and Berkley Ave on the Sharon Hill Line. This project will greatly improve traffic flow in these areas. The signal system will interact with the existing traffic signals.

#### North Wales Station Building Renovation, Lansdale/Doylestown Line (R5) (\$1,080,664)

Rehabilitation of the existing historic station building at the North Wales Station. New high-level platforms were installed previously and this is the remaining unimproved element at this station. The work includes the rehabilitation of the entire interior and exterior of the building, new energy efficient HVAC, new lighting systems, and ADA accessibility.

#### Norristown High Speed Line Power Control Fiber Optics, Route 100 (\$4,197,600)

Installation of fiber optic cables to support power control and passenger information systems along the Norristown High Speed Line. This will permit Audio Visual Public Address (AVPA) devices to be installed at all Norristown High Speed Line stations and improve power substation controls.

#### Norristown Traction Power Substation (\$5,162,200)

Installation of new transformers, trolley breakers, feeder, substation switch great and protective relaying. This project will replace the major power components of the substation that were originally build in 1929.

#### Paoli/Thorndale Line (R5) Signage Upgrades for 17 Stations (\$2,548,930)

Installation of new standardized signage at the following stations: Overbrook, Merion, Narberth, Wynnewood, Haverford, Bryn Mawr, Rosemont, Radnor, St. Davis, Strafford, Devon, Berwyn, Daylesford, Paoli, Whitford, Downingtown and Thorndale. Signage upgrades for the five remaining stations on this line are being addressed under separate ongoing or future projects. The signage was last replaced in 1984.

#### Philmont Station Rehabilitation, West Trenton Line (R3) (\$1,385,420)

The roof of the existing building and canopy will be replaced.

## AMERICAN RECOVERY and REINVESTMENT ACT of 2009 SEPTA Stimulus Program

Roof Replacement at Lansdale Substation, Warminster, and Glenside Stations (\$831,994) Rehabilitation of the roofing on three buildings:

- Lansdale Substation, Lansdale/Doylestown Line (R5): The existing roof will be removed and replaced with a modified bitumen roofing system. The parapet wall will receive new metal copings and flashings.
- Warminster Station, Warminster Line (R2): The existing roof will be removed and replaced with a modified bitumen roof, new flashing, and new fascias.
- Glenside Station, Warminster Line (R2): The existing station building and canopy roof will be replaced along with new soffits. The wooden structure will be painted. In addition, the outbound platform will receive a new passenger shelter equipped with signage, lighting, trash receptacles and benches. The original structure dates back to the early 1900's.

#### <u>Station Building Renovation, Clifton-Aldan, Folcroft, Langhorne, Morton (\$4.936.938)</u> Renovation of the following four stations:

- Clifton-Aldan Station, Media/Elwyn Line (R3): Exterior of existing station building will be rehabilitated and painted.
- Folcroft Station, Wilmington Line (R2): Mechanical and electrical upgrades per building code and energy efficiency requirements.
- Langhorne Station Building Replacement, West Trenton Line (R3): Replacement of existing station building with new station building with passenger waiting area and ticket sales office. Areas adjacent to the building will also be improved.
- Morton Station, Media/Elwyn Line (R3): Exterior of existing station building will be rehabilitated and painted.

#### Tulpehocken Station Building Improvements, Chestnut Hill West Line (R8) (\$1,421,216)

Rehabilitation of the station building and canopy. The work will include replacing the roof with new roof trusses, canopy repairs, new roofing, and other exterior repairs. New signage, new lighting in the tunnel, new guardrails, and new passenger shelter on the inbound platform