

# SEPTA FISCAL YEAR 2011 CAPITAL BUDGET & FISCAL YEARS 2011-2022 CAPITAL PROGRAM



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**SOUTHEASTERN PENNSYLVANIA  
TRANSPORTATION AUTHORITY  
FISCAL YEAR 2011 CAPITAL BUDGET  
FISCAL YEARS 2011-2022 CAPITAL PROGRAM  
AND  
COMPREHENSIVE PLAN**

**Approved by the SEPTA Board  
May 27, 2010**

**Photographs on Cover – ARRA Construction**

***Left Side Top: Fern Rock Yard Trackwork***

***Left Side Bottom: Malvern Station Rehabilitation***

***Middle Top: Langhorne Station Rehabilitation***

***Middle Bottom: Media-Sharon Hill Trackwork***

***Right Side: Lansdale Bridge 20.25***

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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. 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, trolley, and trackless trolley, as well as customized community service. In Philadelphia, City Transit Operations serves a network of 84 subway-elevated, trolley, trackless trolley and bus routes. In Fiscal Year 2009, approximately 928,000 (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, trolley, and heavy rail routes generating approximately 68,000 (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.

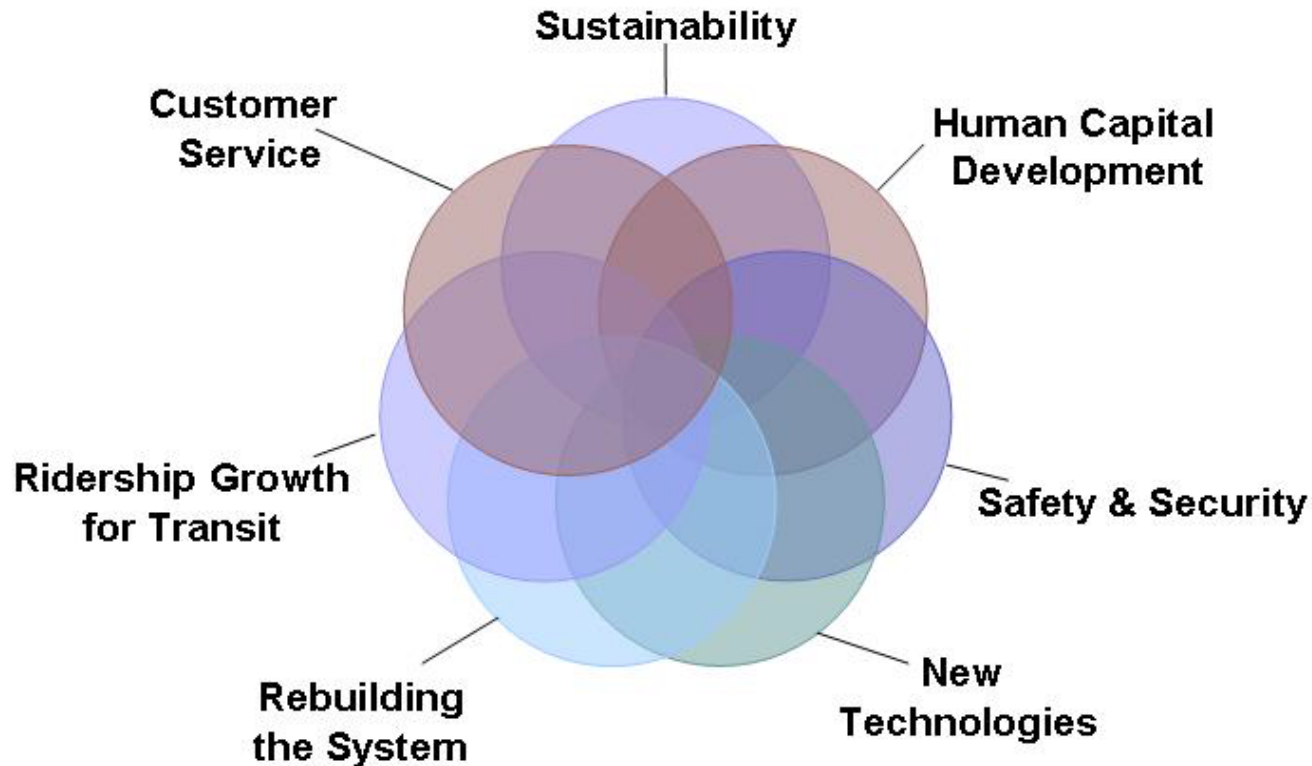
SEPTA's seven small bus circulator and shuttle services connect fixed route operations to business, health and educational centers, as well as to park and ride facilities. In Fiscal Year 2009, these services provided transportation for approximately 4,000 passengers per weekday.

# **STRATEGIC BUSINESS PLAN**

# STRATEGIC BUSINESS PLAN

SEPTA's Five-Year Strategic Business Plan describes SEPTA's vision, mission statement, strategic objectives and performance metrics for Fiscal Years 2011-2022. 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](http://www.septa.org).

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



# STRATEGIC BUSINESS PLAN

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.

# STRATEGIC BUSINESS PLAN

Below is a matrix showing the projects programmed for funding in Fiscal Year 2011 through Fiscal Year 2014 and the relationship of these projects with SEPTA's seven strategic objectives.

<u>Projects</u>	<i>Rebuilding the System</i>	<i>New Technology</i>	<i>Customer Service</i>	<i>Ridership Growth</i>	<i>Sustainability</i>	<i>Safety &amp; Security</i>	<i>Human Capital Development</i>
Bus Purchase Program		x	x	x	x	x	
Capital Asset Lease Program	x						
Congestion Relief				x	x		
Debt Service	x		x		x		
Infrastructure Safety Renewal Program	x	x	x		x	x	
New Payment Technologies		x	x	x			x
New Starts/Service Initiatives	x		x	x	x		
Paratransit Vehicle Acquisition			x		x	x	
Parking Expansion Program			x	x			
Regional Rail Signal System Modernization	x	x				x	
Regional Rail Substation Improvements	x	x				x	
Safety and Security Improvements		x				x	
State of Good Repair Initiatives	x					x	
Station Accessibility	x		x			x	
System Improvements Program		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	

# **INTRODUCTION**

# INTRODUCTION

## 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.



**Silverliner V Rail Car Acquisition**



**Lansdale – North Hills Bridge 13.04**



**Exton Station Parking Expansion**



**Wayne Station Improvements**



**Croydon Station Renovations**



**Hybrid (Diesel/Electric) Bus**

# INTRODUCTION

## 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 was 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 was 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 is as follows:

- 40 Hybrid (Diesel/Electric) Buses
- 69<sup>th</sup> Street Terminal Restroom Renovations
- Airport Line Right of Way Fencing
- Bridge Rehabilitation - Lansdale/Doylestown Line Bridge 13.04, 18.87, 20.25 and 8.38, and Norristown High Speed Line Bridge 12.81
- Chestnut Hill East Regional Railroad Station Amenities
- Chestnut Hill West Retaining Wall
- Chestnut Hill West Line Station Improvements
- Communications Based Train Control (CBTC) Upgrade for Trolley Tunnel
- Croydon Station Improvements, Trenton Line
- Darby Transit Center Renovation and Site Expansion
- Elwyn Station Additional Parking, Media/Elwyn Line



# INTRODUCTION

- Elwyn to Wawa Line Track Bed Stabilization
- Fern Rock Yard Track Work, Broad Street Line
- Fox Chase Station Building Reconstruction, Fox Chase Line
- Frazer Yard Catenary Poles Replacement
- Girard & Spring Garden Stations Rehabilitation, Broad Street Line
- Gwynedd Cut Stabilization, Lansdale/Doylestown Line
- Malvern Station Parking Lot and Related Improvements, Paoli/Thorndale Line
- Media Line Warning Device Replacement, Route 101
- Media-Sharon Hill Line Continuous Welded Rail, Routes 101/102
- Media-Sharon Hill Line Fiber Optic Cable for Power Control & Passenger Information System, Routes 101/102
- Media-Sharon Hill Line Painting of Steel Catenary Structures, Routes 101/102
- Media-Sharon Hill Line, Traction Power Sectionalization, Routes 101/102
- Media Sharon Hill Line, Trunk Line Grade Crossings, Routes 101/102
- North Wales Station Building Renovation, Lansdale/Doylestown Line
- Norristown High Speed Line Power Control Fiber Optics, Route 100
- Norristown Traction Power Substation
- Paoli/Thorndale Line Signage Upgrades for 17 Stations
- Philmont Station Rehabilitation, West Trenton Line
- Roof Replacement at Lansdale Substation, Warminster, and Glenside Stations
- Station Building Renovation, Clifton-Aldan, Folcroft, Langhorne, Morton
- Tulpehocken Station Building Improvements, Chestnut Hill West Line

## **Capital Investment Categories**

Each project in SEPTA's Capital Program is categorized into one of the following types of capital investments:

State of Good Repair - 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.

Normal Replacement of Assets - 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.

# INTRODUCTION

System Improvement - 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.

System Expansion - 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 2010 Capital Budget**

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

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

Normal Replacement - These projects totaled \$139.8 million, or 33.5% of the budget. Projects included the Bus Purchase Program, Paratransit Vehicle Purchase, the purchase of Utility Vehicles, and the Vehicle Overhaul Program.

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

System Expansion – These projects were programmed at \$8.7 million, or 2.1% 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.

# INTRODUCTION

## **Fiscal Year 2011 Capital Budget**

The Fiscal Year 2011 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 December 15, 2009 public meeting, the April 21, 2010 public hearing and throughout the year;
- Forecasted Federal, State and Local Funding Levels;
- Budgeting based on Annual Cashflow Projections and Financial Obligations.

## **Fiscal Year 2011 Projects**

The Fiscal Year 2011 Capital Budget consists of 15 capital projects totaling \$303.7 million. Project highlights by capital investment category are described below.

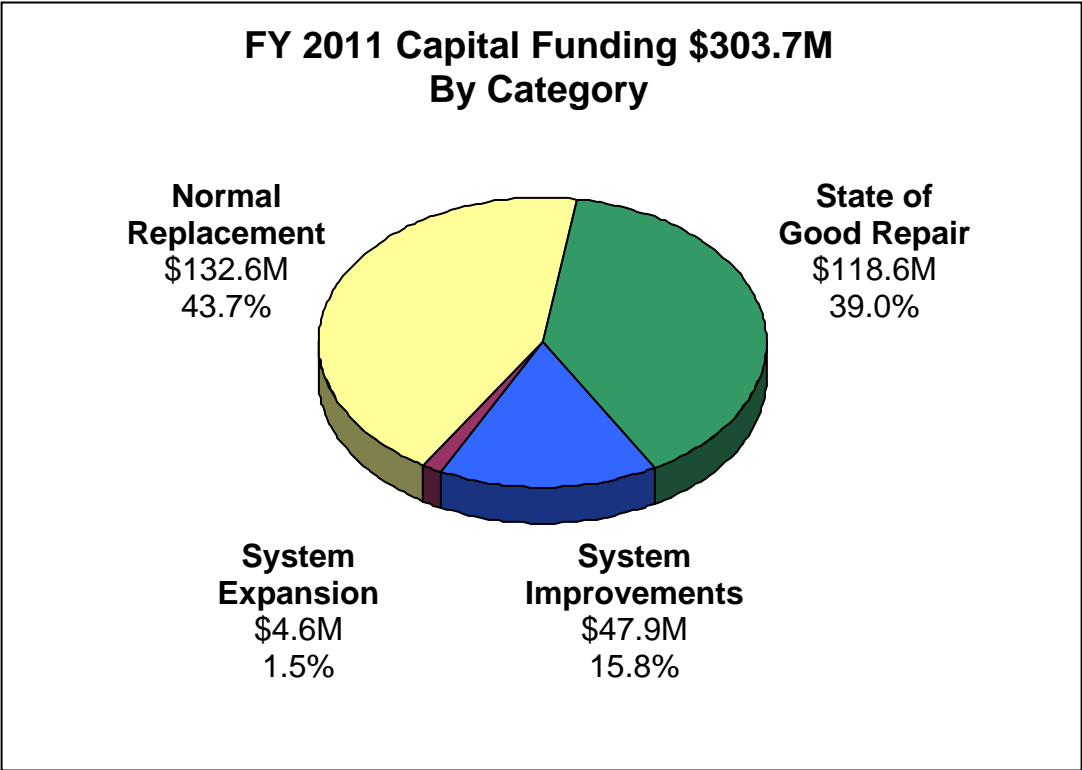
State of Good Repair projects total \$118.6 million, or 39% of the budget. Projects programmed include Regional Rail Substation Improvements, Infrastructure Safety Renewal Program, Transit and Regional Rail Station Program, State of Good Repair Initiatives, and Lease of Amtrak Trackage.

Normal Replacement projects are programmed at \$132.6 million, or 43.7% of the budget. Projects programmed include the Bus Purchase Program, Paratransit Vehicle Purchase, Silverliner V Rail Car Acquisition, the purchase of Utility Vehicles, and the Vehicle Overhaul Program.

System Improvement projects total \$47.9 million, or 15.8% of the budget. Projects programmed include Station Accessibility Improvements, Regional Rail Signal System Modernization, System Improvements Program, and Safety and Security Improvements.

System Expansion projects are programmed at \$4.6 million, or 1.5% of the budget. Projects programmed include U.S. Route 202 Congestion Mitigation Activities, and the continuation of the Parking Expansion Program.

# INTRODUCTION



# INTRODUCTION

## **Fiscal Year 2011 Capital Budget and Fiscal Years 2011 to 2022 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 29. 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 OUTLOOK**

# FUNDING OUTLOOK

## Funding Sources

### Federal

#### A Look Back at SAFETEA-LU

Fiscal Year 2009 was the final year of Safe, Accountable, Flexible, and Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU). As work on the reauthorization of a new Surface Transportation bill continues, Congress and the President have approved an extension of SAFETEA-LU through December 31, 2010. The American Public Transportation Association (APTA) and the transit industry are working with the Administration and members of Congress on reauthorization.

The following SAFETEA-LU programs continue to be in effect at this time:

Formula Programs – 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. Programs include:

- Urbanized Area Formula Program (Section 5307) – Formula funding allocations are 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) – Formula program apportionments include funds apportioned under a new Growing States and High Density States program. One-half of the funds made available under the Growing States formula are apportioned by a formula based on state population forecasts for 15 years beyond the most recent Census. The other half of the funds are available under the High Density States formula and are apportioned to states with population densities in excess of 370 persons per square mile. Seven states are identified in SAFETEA-LU to receive High Density States funds – Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York, and Rhode Island. These funds are apportioned only to urbanized areas within those states.
- Job Access and Reverse Commute (JARC) Program (Section 5316) - The JARC program is allocated by formula, rather than by a competitive discretionary grant program as was the case under TEA-21. The formula is based on ratios involving the number of eligible low income and welfare recipients for urban and rural areas. The program's objective is 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 is required between private, non-profit, and public transportation providers and other federal programs including the New Freedom program and the Elderly and Disabled program.

# FUNDING OUTLOOK

- New Freedom Program (Section 5317) - The New Freedom program provides 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 is apportioned using a formula based on the elderly and disabled population in a state. The program mandates coordination of transportation services with other federal human service programs.

Capital Investment Programs (Section 5309) – These programs provide funds for transit capital projects that meet specific criteria either by appropriation (earmarks) or by apportionment under a formula. Capital Investment categories include the Fixed Guideway Modernization, New Starts, and Bus and Bus Facilities programs and were authorized under Section 5309 of the law. Highlights of changes under the New Starts and Bus and Bus Facilities Programs include:

- New Starts – For this program, the federal New Starts share is 80 percent. The Federal Transit Administration gives preference to projects that over match the minimum 20 percent local share. This program includes a new Small Starts Program 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 can 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.
- Bus and Bus Facilities – Intercity terminals that were part of an intermodal facility are eligible for funding under this program, if the terminal serves as a connector to public transportation.

Other programs include:

- Planning – 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.



# FUNDING OUTLOOK

Transit continues 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.
- Intelligent Transportation Systems (ITS) Performance Incentive Program – 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 include enhancement of mobility and productivity, enhancement of safety and security, and facilitation of the integration of intelligent infrastructure, vehicle, and control technologies.
- Surface Transportation Program (STP) – This program provides for the flexing of STP funds for projects including transit capital projects, and intercity bus terminals and facilities.
- 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.

The following Competitive Sustainability Grant Programs are funded by the Department of Transportation (DOT) and are awarded through nationwide funding competitions:

- “Transportation Investments Generating Economic Recovery” (TIGER) / National Infrastructure Investment Grants - This grant program is for capital investments in surface transportation infrastructure. Grants are awarded on a competitive basis for projects that will have a significant impact on the nation, a metropolitan area or a region. Eligible projects include, but are not limited to, (1) highway or bridge projects eligible under Title 23, United States Code; (2) public transportation projects eligible under Chapter 53 of Title 49, United States Code; (3) passenger and freight rail transportation projects; and (4) port infrastructure investments.
- “Transit Investments for Greenhouse Gas and Energy Reduction” (TIGGER) – This grant program is for capital investments that will assist in reducing the energy consumption or the greenhouse gas emissions of a public transportation system.

## FUNDING OUTLOOK

- Clean Fuels Program – An opportunity for non-attainment and maintenance areas to achieve and maintain the National Ambient Air Quality Standards for ozone and carbon monoxide (CO) and to support emerging clean fuel and advanced propulsion technologies and markets for transit buses.
- Bus and Bus Facilities “State of Good Repair” Initiative – This initiative will make funds available to public transit providers to finance capital programs in order to replace, rehabilitate and purchase buses and related equipment and to construct/rehabilitate bus-related facilities, including programs of bus and bus-related projects.

# FUNDING OUTLOOK

## 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 established 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.

# FUNDING OUTLOOK

- 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. This program also includes a provision to distribute additional capital funds 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 are 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.
- Programs of Statewide Significance (Section 1516) – 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.
- Capital Improvement Program (Section 1517) – 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 OUTLOOK

## Loss of State Capital Funding Results in Deferral of Capital Projects

The Authority remains concerned about the long-term fiscal stability of Pennsylvania's Public Transportation Trust Fund, as established by Act 44 of 2007, and the uncertainty this creates for transit across the Commonwealth. Sales tax revenue, a key funding source for the Trust Fund, is 4.3% below Fiscal Year 2010 estimates, as of June 30, 2010. In addition, the Pennsylvania Turnpike Commission was unable to obtain the approval of the Federal Highway Administration to begin tolling Interstate 80. Without full funding of Act 44, SEPTA will realize a reduction of \$110 million in capital funds annually beginning in Fiscal Year 2011 (July 1, 2010). This equates to a cut in SEPTA's Capital Budget by 25 percent each year. Such a drastic reduction in capital funding forced SEPTA to make challenging decisions in the projects the Authority funds in the annual capital budget and twelve year capital program.

After years of making progress in our backlog of deferred capital improvements and achieving system enhancements, SEPTA was forced to defer the advancement of several projects in our capital program, due to this loss of funding. Projects for which contracts have not been awarded were selected for deferral. The deferral of these projects will increase SEPTA's operating expenses, thus putting additional strain on the Authority's operating budget. Deferral of projects will also undermine SEPTA's ability to rebuild the Authority's aging infrastructure. A list of deferred projects is provided on the following page.

# FUNDING OUTLOOK

<b>Deferred Projects</b>	<b>Total Project Budget</b>
69th Street Parking Garage	\$22,600,000
Ardmore Transportation Center, Paoli Line	15,831,000
Berridge Shop Roof Replacement	12,600,000
BSS Erie Station ADA	7,500,000
BSS Snyder Station ADA	5,000,000
Chestnut Hill West Bridge 0.35 Replacement	9,869,000
City Hall Station	100,000,000
Elwyn to Wawa Improvements	80,000,000
Exton Station, Paoli Line	5,000,000
Levittown Station, Trenton Line	34,300,000
Loop Program - 23rd & Venago, 33rd & Dauphin, 61st & Pine, Parkside & Wycombe	10,800,000
MSFE 5th Street Station	10,100,000
MFSE 40th Street Station ADA	6,000,000
MFSE Margaret-Orthodox Station ADA	32,500,000
New Payment Technologies	100,000,000
Paoli Line Amtrak Interlockings/Signals - Phase 2	44,000,000
Paoli Transportation Center	40,000,000
Parking Expansions / Improvements	62,600,000
RRD Substation Improvements - Jenkintown Substation and Static Frequency Converter	67,000,000
Vehicle Washer - Frazer and Frontier	5,090,000
Villanova Station, Paoli Line	22,900,000
Wayne Junction Station	29,000,000

# FUNDING OUTLOOK

## Fiscal Year 2011 Funding Plan

Total Fiscal Year 2011 funding for capital projects has been programmed at \$303.7 million. Projects programmed within this level of capital funding are those for which SEPTA has financial obligations to pay, have contracts currently awarded, are federally mandated/safety-related, or provide manpower stability.

The projected funding level consists of the following components:

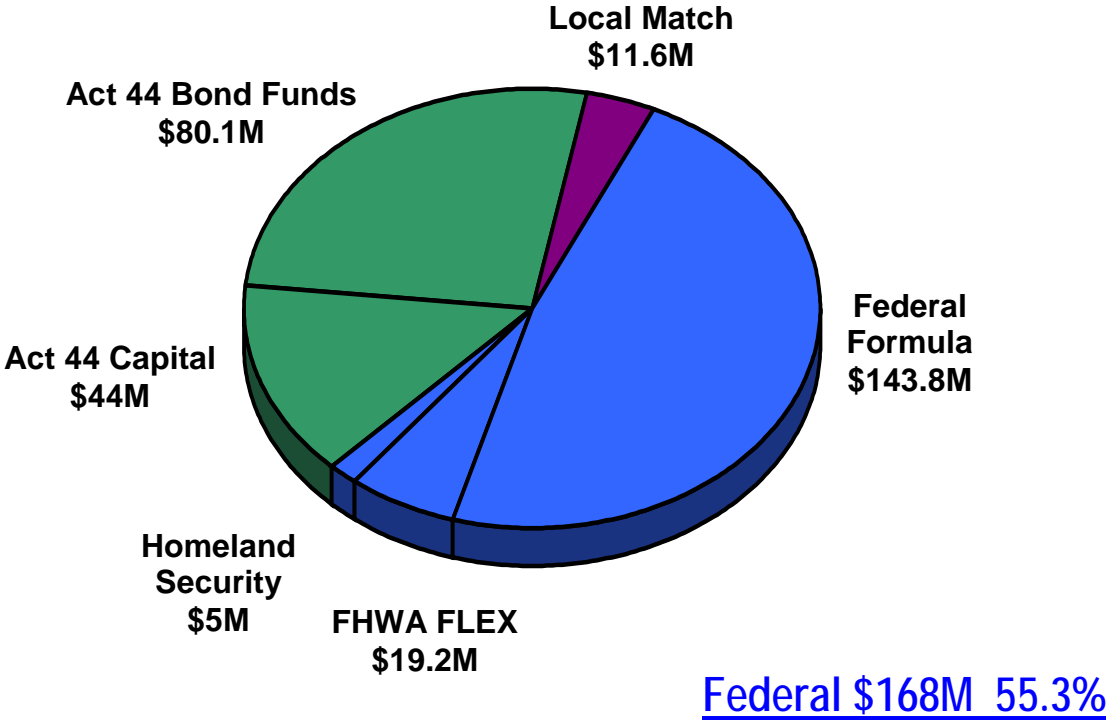
- 1) Estimated federal formula program totaling \$143.8 million is based on the President's budget proposal.
- 2) Federal Highway Flexible funding projection of \$19.2 million is based on an anticipated SEPTA share of regional flexible funds and additional Federal Highway Flex funds committed by the Commonwealth.
- 3) U.S. Department of Homeland Security funding of \$5 million is based on an anticipated SEPTA share of regional funds.
- 4) State funds from the Public Transportation Trust Fund have been programmed at \$124.1 million.
- 5) \$11.6 million from the City and Counties is programmed as local match on Federal and State funding.

# FUNDING OUTLOOK

## FY 2011 Capital Funding \$303.7M

State \$124.1M 40.9%

Local \$11.6M 3.8%





# FUNDING OUTLOOK

## **Fiscal Years 2012-2014 Funding Plan**

Federal formula funds for Fiscal Year 2012-2014 are programmed at Fiscal Year 2011 level of \$143.8 million. No increase is assumed. Federal Highway flexible funding is programmed at \$19.2 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 2012 through 2014. U.S. Department of Homeland Security funding is programmed at \$5 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 \$126.1 million each year for Fiscal Years 2012 through 2014.

# **TRANSIT PLANNING EFFORTS**

# TRANSIT PLANNING EFFORTS

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: The DVRPC board adopted the *Connections (2035)* Regional Long Range Plan in July 2009. Regional trends and forecasts were updated with respect to land use, environmental, economic and transportation indicators. DVRPC gathered public input via an online opinion survey followed by countywide workshops, conducted a series of ‘what if’ planning scenarios and developed a fiscally constrained transportation plan.

- **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, were established to define objectives and direct development of the master plan. The Phase I Project Development Report is complete. A Phase II Interim Report was presented to the NEC Master Plan Executive Committee in February 2009 and was completed in the spring of 2010.

- **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 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.

# TRANSIT PLANNING EFFORTS

- **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 was conducted. The study, which was completed in 2006, projected an additional 3,800 daily rides to the line. The cost of construction was estimated at \$277 million. In 2008, federal funding of \$500,000 was approved to advance the next stages of this project. Construction and operating costs need to be updated and an appropriate environmental study needs to be undertaken.

- **Delaware River Port Authority/Port Authority Transit Company Transit Expansion Alternatives Analysis Studies**

Lead Agency: Delaware River Port Authority (DRPA) / Port Authority Transit Company (PATCO)

Description: PATCO, a subsidiary of the DRPA, completed an Alternatives Analysis (AA) in April, 2010. This report evaluated light rail transit service expansion options along the Philadelphia Waterfront from Penn Treaty Park to Pier 70, including several spur options to Center City. PATCO held public input sessions for this Alternatives Analysis during 2008-09, and had regular consultation with the City of Philadelphia and SEPTA. In February 2010, the DRPA approved a \$6.5 million contract to advance the Philadelphia Waterfront Transit Expansion project into the next phase, which will include a finalization of alternatives, Environmental Assessment, Preliminary Engineering. This process is expected to take approximately two years.

# TRANSIT PLANNING EFFORTS

- **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. DVRPC 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.

- **Norristown Line Extension Study – Montgomery, Chester and Berks Counties**

Lead Agency: Montgomery County Planning Commission (MCPC)/Delaware Valley Regional Planning Commission (DVRPC)

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 second phase of the planning is underway to determine the feasibility of tolling the U.S. 422 Expressway. This effort will determine if there is adequate revenue for capital and operating costs for a Norristown Line extension. This study is planned for completion in September 2010.

- **Broad Street Line 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 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.

# TRANSIT PLANNING EFFORTS

- **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 is 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 be 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).

# TRANSIT PLANNING EFFORTS

## 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. 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:

- Germantown and Nicetown TOD Neighborhood Plan, City of Philadelphia
- City Avenue Corridor Overlay District, City of Philadelphia and Lower Merion Township
- Broad & Erie Transportation and Community Development Plan, City of Philadelphia
- Highland Avenue Station TOD Study, City of Chester
- Hunting Park West Industrial Area, City of Philadelphia
- Transit Revitalization Investment District (Phase II), Marcus Hook Borough
- Station Area TOD Planning, Millbourne Borough
- Willow Grove Station Feasibility Study, Upper Moreland Township
- Intermodal Connections, Norristown Borough

- **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, Bryn Mawr, Croydon, Marcus Hook, and Temple University Regional Rail Station, and 46<sup>th</sup> Street Station on the Market-Frankford Line. Final draft TRID agreements are in place for the Bryn Mawr, Croydon, Marcus Hook and Temple University plans.

# **FISCAL YEAR 2011 CAPITAL BUDGET (Year 1)**



# FISCAL YEAR 2011 CAPITAL BUDGET

<b>Project</b>	<b>FY 2011 Funding Requirement</b>
Bus Purchase Program	\$49,612,599
Capital Asset Lease Program	43,931,261
Congestion Relief	2,139,000
Debt Service	35,988,140
Infrastructure Safety Renewal Program	33,000,000
Paratransit Vehicle Acquisition	4,600,000
Parking Expansion Program	2,500,000
Regional Rail Signal System Modernization	24,600,000
Regional Rail Substation Improvements	5,000,000
Safety and Security Improvements	5,000,000
State of Good Repair Initiatives	21,215,000
Station Accessibility	1,250,000
System Improvements Program	6,520,000
Transit and Regional Rail Station Program	14,700,000
Vehicle Overhaul Program	<u>53,600,000</u>
<b>TOTAL FY 2011 Capital Budget</b>	<b>\$303,656,000</b>

**FISCAL YEARS 2011-2014 CAPITAL PROGRAM (Years 1-4)**

# FISCAL YEARS 2011-2014 CAPITAL PROGRAM (Years 1-4)

<u>Project</u>	<u>FY 2011</u>	<u>FY 2012</u>	<u>FY 2013</u>	<u>FY 2014</u>	<u>Total</u>
Bus Purchase Program	\$49,612,599	\$55,878,858	\$51,144,658	\$56,810,861	\$213,446,976
Capital Asset Lease Program	43,931,261	44,851,550	45,870,122	46,895,178	181,548,111
Congestion Relief	2,139,000	2,222,000	2,315,000	2,382,000	9,058,000
Debt Service	35,988,140	35,789,592	35,546,318	35,458,326	142,782,376
Infrastructure Safety Renewal Program	33,000,000	33,000,000	33,000,000	33,000,000	132,000,000
New Payment Technologies	0	0	12,396,902	8,035,635	20,432,537
Paratransit Vehicle Acquisition	4,600,000	4,800,000	4,400,000	4,700,000	18,500,000
Parking Expansion Program	2,500,000	0	0	0	2,500,000
Regional Rail Signal System Modernization	24,600,000	42,700,000	39,500,000	39,700,000	146,500,000
Regional Rail Substation Improvements	5,000,000	\$0	\$0	\$0	\$5,000,000
Station Accessibility	1,250,000	4,600,000	242,000	0	6,092,000
Utility Fleet Renewal	0	0	4,000,000	4,000,000	8,000,000
System Improvements Program	6,520,000	1,880,000	1,000,000	1,000,000	10,400,000
State of Good Repair Initiatives	21,215,000	3,600,000	4,700,000	500,000	30,015,000
Safety and Security Improvements	5,000,000	5,000,000	5,000,000	5,000,000	20,000,000
Transit & Regional Rail Station Program	14,700,000	16,700,000	10,300,000	10,300,000	52,000,000
Vehicle Overhaul Program	53,600,000	55,200,000	56,900,000	58,600,000	224,300,000
<b>Subtotal</b>	<b>\$303,656,000</b>	<b>\$306,222,000</b>	<b>\$306,315,000</b>	<b>\$306,382,000</b>	<b>\$1,222,575,000</b>
New Starts/Service Initiatives	0	25,000,000	50,000,000	100,000,000	175,000,000
<b>Grand Total - Capital Projects</b>	<b>\$303,656,000</b>	<b>\$331,222,000</b>	<b>\$356,315,000</b>	<b>\$406,382,000</b>	<b>\$1,397,575,000</b>

**FISCAL YEARS 2011-2014 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. As of July 2010, 290 buses have been delivered and placed in service. An additional 50 buses will be received through September 2010, with the remaining 100 buses scheduled to be received in Calendar Year 2011. With the delivery of these buses, the overall hybrid bus fleet will increase to 472 buses, making SEPTA 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 on-board 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.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  X  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  ___  </u> NORMAL REPLACEMENT <u>  X  </u> SYSTEM IMP. <u>  ___  </u> SYSTEM EXPANSION <u>  ___  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$210,358,000	\$49,612,599	\$163,834,377	\$520,000,000	\$943,804,976

# 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)**  
This lease provides for the right to use Amtrak tracks for SEPTA's Trenton, Wilmington/Newark and Paoli/Thorndale Regional Rail Service.
- **Communications Antennas and Radios (System Improvement Project)**  
This lease provides for the right to house voice and data transmission and receiving equipment on towers at the following locations: Y-100, Loews Hotel, Malvern, West Rockhill, Oxford Valley Mall, Newtown Square, and New Britain.
- **Copiers (System Improvement Project)**  
This lease provides for rental of 138 copiers, which are dispersed throughout SEPTA's headquarters and transportation and maintenance facilities.
- **Warehouse Facility (State of Good Repair Project)**  
This lease provides for rental of a storeroom facility at 2045 Wheatsheaf Lane in the City of Philadelphia.

# CAPITAL ASSET LEASE PROGRAM

## Silverliner V Regional Rail Cars (Normal Replacement of Asset)

SEPTA expects to finance the acquisition of 120 Silverliner V Regional Rail cars. These new electric multiple-unit (EMU) cars will replace the existing Silverliner II and III rail cars, which are currently 44 to 48 years old, and will provide additional cars to supplement the regional rail car fleet in response to current and projected ridership growth. Vehicles will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems. The cars will include recent technology and enhanced passenger amenities, such as larger windows, wider aisles, a state-of-the-art climate control system, and enhanced seating arrangement with more two-passenger seating. The new cars will have electronic exterior and interior destination signs, voice announcement of train destination and upcoming station stops, and provide the capability for SEPTA's Control Center to broadcast messages directly to customers on the trains. In addition, these cars will be equipped with on-board video surveillance and automatic passenger counting systems. These new railcars are scheduled for delivery starting in the 3<sup>rd</sup> quarter of Calendar Year 2010 through the 3<sup>rd</sup> quarter of Calendar Year 2011. The total cost for the Silverliner V car project (\$330 million) will be funded through a combination of grants and capital financing.



<b>FY 2011 FUNDING SOURCE:</b> FTA <input checked="" type="checkbox"/> FHWA <input type="checkbox"/> STATE ACT 44 <input checked="" type="checkbox"/> LOCAL <input checked="" type="checkbox"/>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <input checked="" type="checkbox"/> NORMAL REPLACEMENT <input checked="" type="checkbox"/> SYSTEM IMP. <input checked="" type="checkbox"/> SYSTEM EXPANSION <input type="checkbox"/>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$43,931,261	\$137,616,850	\$384,000,000	\$565,548,111

# CONGESTION RELIEF

The Delaware Valley Regional Planning Commission (DVRPC) has approved the Transportation Improvement Program (TIP) for Fiscal Years 2011-2014, which will take effect on October 1, 2010. The highway projects, for which the following congestion mitigation activities are planned, have been included in the TIP.

**U.S. Route 202 Reconstruction Congestion Mitigation Activities (\$1,627,000)** – 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 2011 in anticipation of continued funding for the following SEPTA strategies: 1) Paoli/Thorndale Regional Rail Line 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 service between Malvern and Thorndale Stations; 3) Bus Route 205 operating from the Paoli Station to Main Line Industrial Park, which serves 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 Main Line 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.

**I-95 Reconstruction Congestion Mitigation (\$512,000)** – In partnership with PennDOT, this project will support the I-95 Reconstruction Project. This project involves the operation of shuttle bus service between the 1,600-space park-and-ride lot off of Woodhaven Road and the adjacent Cornwells Heights Station on the Trenton Regional Rail Line for passengers of SEPTA and Amtrak train service to Center City Philadelphia and points south and to Trenton and points north.

<b>FY 2011 FUNDING SOURCE:</b> FTA <input type="checkbox"/> FHWA <input checked="" type="checkbox"/> STATE ACT 44 <input checked="" type="checkbox"/> LOCAL <input checked="" type="checkbox"/>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <input type="checkbox"/> NORMAL REPLACEMENT <input type="checkbox"/> SYSTEM IMP. <input checked="" type="checkbox"/> SYSTEM EXPANSION <input checked="" type="checkbox"/>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$2,139,000	\$6,919,000	\$0	\$9,058,000



# 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 project provides 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 Line cars, various capital improvement projects, and partial refunding of Series 1995A Bonds at favorable. (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 Line car acquisition, Broad Street Line cable replacement, Frazer Yard interlocking construction and Market-Frankford Line infrastructure improvements. (Normal Replacement and System Improvement)

<b>FY 2011 FUNDING SOURCE:</b> FTA <input type="checkbox"/> FHWA <input type="checkbox"/> STATE ACT 44 <input checked="" type="checkbox"/> LOCAL <input checked="" type="checkbox"/>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <input checked="" type="checkbox"/> NORMAL REPLACEMENT <input checked="" type="checkbox"/> SYSTEM IMP. <input checked="" type="checkbox"/> SYSTEM EXPANSION <input type="checkbox"/>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$35,988,140	\$106,794,236	\$280,000,000	\$422,782,376

# INFRASTRUCTURE SAFETY 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 2011 Program include:

## **Track and Right-of-Way**

- Renewal of special track work on the Broad Street Line at Fern Rock and Snyder Interlockings.
- Track renewal on Trolley Route 10 at 63<sup>rd</sup> Street from Lansdowne Avenue to Master Street.
- Grade crossing renewal on the Media/Elwyn Line at Amosland Road and Swarthmore Avenue.
- Tie replacement and track surfacing on the Chestnut Hill East Line between Wayne and Chestnut Hill East Stations, and on the Media/Elwyn Line between Schuylkill Interlocking and Elwyn Station.
- Timber renewal on the Lansdale/Doylestown Line at Bridges 7.34 (over Cook's Run) and 8.90 (New Britain Road).
- Replacement of curve worn rail along several City Transit Division, Suburban Transit Division and Regional Rail lines.

## **Station Facilities**

- Improvements to Eddystone, Crum Lynne, Ridley Park, Folcroft and Darby Stations on the Wilmington/Newark Line including platforms, shelters, stairs, lighting, parking and station buildings as required.
- Improvements to Temple University Station including new shelters, passenger amenities, and new tactile platform edges.
- Design of improvements to Fern Rock Regional Rail Station including new shelters, passenger amenities, and new tactile platform edges.
- Lighting improvements at Germantown and Wister Stations on the Chestnut Hill East Line, and reopening of a parking lot on the outbound side of Germantown Station.
- Platform improvements at Fern Rock Station on the Regional Rail Main Line and at Cornwells Heights Station on the Trenton Line.
- Construction of a high level platform with access ramps at Crestmont Station on the Warminster Line.
- Platform improvements to facilitate passenger boarding on and off of the new Silverliner V Regional Rail cars.
- Improvements to entrances at Margaret-Orthodox, Spring Garden, and 34<sup>th</sup> Street Stations on the Market-Frankford Line.
- Improvements to the Susquehanna-Dauphin Station on the Broad Street Line including lighting, entrances, signage and painting.
- Design of Norristown High Speed Line Ardmore Avenue Station improvements including new platforms and expanded parking.
- Replacement of public address system control units at stations on the Doylestown portion of the Lansdale/Doylestown Line.

# INFRASTRUCTURE SAFETY RENEWAL PROGRAM

## **Signals and Communications Systems**

- Installation of fiber optic communications infrastructure on the Media/Elwyn Line.
- Replacement of the existing copper-connected communications modems in all field Remote Terminal Units (RTU) with fiber optics units between 16<sup>th</sup> Street Interlocking and "K" Interlocking on the Regional Rail Main Line. These units control power sectionalizing switches.
- Upgrade of electric switch heaters at 16<sup>th</sup> Street Interlocking on the Regional Rail Main Line and at Arsenal Interlocking on the Media/Elwyn Line.
- Replacement of remote train control equipment for the Broad Street Line and signal system improvements between Walnut and Fern Rock Stations.
- Replacement of the existing copper-connected code line communications modems with fiber optics units for the Norristown High Speed Line Remote Train Control System.

## **Power Systems**

- Replacement of DC traction power feeder cables for Elmwood and Cumberland Substations.
- Replacement of AC cables on the Market-Frankford Line.
- Improvements to City and Suburban Transit substations including:
  - Replacement of power trip devices and breakers at several substations,
  - Replacement of the air filtering systems at Loudon and Park Substations,
  - Replacement of copper communications cable and associated equipment with fiber optics at Sansom, Market, Ranstead, 46<sup>th</sup>, and Allison Substations.
- Replacement of trolley wire on Trolley Route 11 along Woodland Avenue between 55<sup>th</sup> and 66<sup>th</sup> Streets, and on Main Street between Island Avenue and Darby Loop.
- Improvements to the power system for the Route 15 to allow for improved sectionalization of the power and remote control from SEPTA's control center.
- Power improvements for the Norristown High Speed Line Bridgeport Station.
- Catenary system upgrade on several Regional Rail lines as follows:
  - Lansdale/Doylestown Line at Carmel Interlocking and between North Wales and Gwynedd Cut,
  - Cynwyd Line between Amtrak's Valley Interlocking and Cynwyd Station,
  - Lansdale/Doylestown Line at Long Siding and Yard,
  - Media Elwyn Line between Cane and Swarthmore Interlockings,
  - West Trenton Line at Trent Interlocking and the West Trenton Station area.
- Overhead power system improvements on Trackless Trolley Route 75 along Frankford Avenue between the Frankford Transportation Center and the Arrott Street Terminal.

# INFRASTRUCTURE SAFETY RENEWAL PROGRAM

## **Power Systems (Continued)**

- Improvements to the Chestnut Hill West Line catenary power system at several locations to allow for improved sectionalization of the power and remote control from SEPTA's control center.
- Relocation of aerial feeder wires from Amtrak's Arsenal Substation to the new 30<sup>th</sup> Street Switching Station.
- Rehabilitation of regional rail catenary structures at several locations.

## **Maintenance/Support Facilities**

- Expansion of the Woodland Electrical Shop.
- Replacement of chillers at the 2<sup>nd</sup> & Wyoming Facility.
- Rehabilitation of the vehicle lift at Germantown Shop.
- Replace brick privacy wall at Southern Bus Garage.
- Replacement of shop lighting at Callowhill Bus Garage.
- Design of office and bathroom improvements for the Frankford Garage.
- Installation of a new fall arrest system at Roberts Regional Rail Shop.
- Installation of two new boilers for the Broad & Lehigh Shop and Office Facility.
- Installation of compressed air plant interconnection between 16<sup>th</sup> Street Interlocking on the Regional Rail Main line and the Broad Street Line, which will provide for redundancy of compress air for track switches.
- Sewer ejectors replacement of at 40<sup>th</sup> Street Station on the Market-Frankford Line and Pattison Station on the Broad Street Line.
- Manholes, emergency exit and vent well improvements on the Broad Street and Market-Frankford Lines.
- Installation of new tunnel lighting on the Broad Street Line.
- Replacement of the duct bank on Broad Street in the City of Philadelphia near Kerbaugh Street.
- Installation of a bulk salt dome at SEPTA's 69<sup>th</sup> Street facility.
- Rehabilitation of subway support columns in the tunnel used by Trolley Routes 10, 11, 13, 34, and 36.
- Retaining wall improvements at Walnut Interlocking on the Media-Elwyn Line and selected locations on the Norristown High Speed Line.

<b>FY 2011 FUNDING SOURCE:</b> FTA ___    FHWA ___    STATE ACT 44 <u>X</u> LOCAL <u>X</u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>X</u> NORMAL REPLACEMENT ___    SYSTEM IMP. ___    SYSTEM EXPANSION ___				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$33,000,000	\$99,000,000	\$264,000,000	\$396,000,000

# NEW PAYMENT TECHNOLOGIES

The New Payment Technologies 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 include improvements to the payment and collection procedures for SEPTA's Customized 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 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.

Proposals for the New Payment Technologies project were received on September 30, 2009 and are under review. Companion projects supporting this project include: Bus and trolley farebox upgrade, Market-Frankford and Broad Street Lines fiber optics improvements, and design of fare line and cashier booth modifications.

<b>FY 2011 FUNDING SOURCE:</b> FTA <input type="checkbox"/> FHWA <input type="checkbox"/> STATE ACT 44 <input type="checkbox"/> LOCAL <input type="checkbox"/>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <input type="checkbox"/> NORMAL REPLACEMENT <input type="checkbox"/> SYSTEM IMP. <input checked="" type="checkbox"/> SYSTEM EXPANSION <input type="checkbox"/>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$15,875,000	\$0	\$20,432,537	\$63,692,463	\$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 is working 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.

<b>FY 2011 FUNDING SOURCE:</b> FTA ___    FHWA ___    STATE ACT 44 ___    LOCAL ___				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR ___    NORMAL REPLACEMENT ___    SYSTEM IMP. ___    SYSTEM EXPANSION <u>X</u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$31,411,000	\$0	\$175,000,000	\$1,893,589,000	\$2,100,000,000

# 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 2011, 77 vehicles will be acquired consisting of 37 minibuses with wheelchair lifts and 40 12-passenger minibuses.



<b>FY 2011 FUNDING SOURCE:</b> FTA <input checked="" type="checkbox"/> FHWA <input type="checkbox"/> STATE ACT 44 <input checked="" type="checkbox"/> LOCAL <input checked="" type="checkbox"/>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <input type="checkbox"/> NORMAL REPLACEMENT <input checked="" type="checkbox"/> SYSTEM IMP. <input type="checkbox"/> SYSTEM EXPANSION <input type="checkbox"/>				
<b>SERVICE AREA:</b> SEPTA REGION				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$4,600,000	\$13,900,000	\$40,000,000	\$58,500,000

# 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 150 stations with a total of 28,600 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 2,450 parking spaces. SEPTA's latest parking expansion project, completed in the fall of 2009, added 186 new parking spaces at Exton Station on the Paoli/Thorndale Line. American Recovery and Reinvestment Act (ARRA) of 2009 funds are supporting expansion of parking facilities at Malvern Station on the Paoli/Thorndale Regional Rail Line (approximately 50 new spaces), at Elwyn Station on the Media/Elwyn Regional Rail Line (approximately 90 new spaces) and at Croydon Station (approximately 88 new spaces). 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.



**Exton Station Parking Expansion**

Programmed for FY 2011 are additional funds for the Malvern Station Parking Expansion project.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>   </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>   </u> NORMAL REPLACEMENT <u>   </u> SYSTEM IMP. <u>  X  </u> SYSTEM EXPANSION <u>  X  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$37,200,000	\$2,500,000	\$0	\$80,000,000	\$119,700,000



# REGIONAL RAIL SIGNAL SYSTEM MODERNIZATION

This project provides for the modernization of the signal system on SEPTA's Regional Rail system. The Automatic Block Signal System currently in use on the Warminster, Lansdale/Doylestown - Lansdale to Doylestown segment, Cynwyd, Norristown, Chestnut Hill East and Chestnut Hill West 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.

In addition, a Positive Train Control (PTC) System will be superimposed atop the ATC on all SEPTA-owned 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.

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, provide a more reliable and maintainable operation, and expand opportunities to increase overall travel speed and reduce travel time.

Implementation of new signal systems are underway on the Warminster and Lansdale-Doylestown Lines with completion scheduled for the 3<sup>rd</sup> quarter of Calendar Year 2010 and the 2nd quarter of Calendar Year 2011, respectively. The development and fabrication of new signal systems for the Norristown and Chestnut Hill East Lines have been initiated. The Positive Train Control (PTC) System is currently in the preliminary engineering phase, and advancement of improvements to the signal systems on the Chestnut Hill West and Cynwyd Lines will follow.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  </u> NORMAL REPLACEMENT <u>  </u> SYSTEM IMP. <u>  X  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$27,400,000	\$24,600,000	\$121,900,000	\$4,000,000	\$177,900,000

# 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) 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 for SEPTA train service at Zoo Interlocking, Arsenal Interlocking, Powelton Avenue Yard, Suburban Station, and the Center City Commuter Rail Tunnel. Electrical equipment and structural failures at this circa – 1920's facility cause train service delays. A new substation is being constructed within SEPTA's Powelton Yard. The construction phase commenced in the 1<sup>st</sup> quarter of Calendar Year 2009, with completion scheduled for the 3<sup>rd</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 was replaced by a new facility, Fairmount Substation, which is located near the intersection of Fairmount Avenue and 9th Street in the City of Philadelphia. Construction of the new Fairmount Substation was substantially completed in October 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. The planned demolition of the existing Jenkintown Substation facility will make room for the 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. The construction phase has been deferred until capital funding is identified.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  X  </u> NORMAL REPLACEMENT <u>  </u> SYSTEM IMP. <u>  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$52,400,000	\$5,000,000	\$0	\$177,600,000	\$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.

Major projects funded with TSGP funding include:

- Closed-Circuit Television (CCTV) Cameras on Buses
- Closed-Circuit Television (CCTV) Cameras on Broad Street and Market-Frankford Lines 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
- Hazardous Material Identification Kits for Special Operations and Response Teams (SORT)

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 and storage systems 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.

<b>FY 2011 FUNDING SOURCE:</b> FTA ___    FHWA ___    STATE ACT 44 ___    LOCAL ___    DHS <u>X</u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR ___    NORMAL REPLACEMENT ___    SYSTEM IMP. <u>X</u> SYSTEM EXPANSION ___				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
<b>\$42,000,000</b>	\$5,000,000	\$15,000,000	\$0	\$62,000,000

# 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 as follows:

- Installation of fire suppression systems at Frankford and Elmwood maintenance facilities.
- Mandated radio communications improvements and the replacement of radios that have exceeded their useful life.
- Purchase of steel wheel maintenance equipment.
- Improvements to escalators at Margaret-Orthodox, Allegheny, Erie-Torresdale, Spring Garden and 13th/Juniper Street Stations on the Market-Frankford Line; Olney, Erie, City Hall and Pattison Stations on the Broad Street Line; and 30<sup>th</sup> Street Regional Rail Station.
- Train access accommodations for the new Silverliner V railcars at stations on the Wilmington/Newark, Paoli/Thorndale and Trenton Regional Rail Lines.
- Design of Chestnut Hill West Line Bridge 0.35 improvements.
- Replacement of roofs at Roberts Yard and Wayne Junction.
- Rte 15 improvements along Richmond Avenue in conjunction with PennDOT's I-95 Girard Interchange Construction project.
- Replacement of Broad Street Line B-IV railcar control boxes.
- Environmental Clean Up and Protection activities including 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.
- Special trackwork renewal on trolley tracks at 49th Street and Woodland Avenue.
- Track renewal on Trolley Route 13 along Chester from 58th to 65th.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  X  </u> NORMAL REPLACEMENT <u>  </u> SYSTEM IMP. <u>  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$21,215,000	\$8,800,000	\$80,000,000	\$110,015,000

# 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 89 fully accessible stations and 3 partially accessible stations (one direction only).

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 Regional Rail 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 Line
- Margaret-Orthodox and 40<sup>th</sup> Street Stations on the Market-Frankford Line



**Allegheny Station Elevator Construction**

Allegheny Station improvements are underway and scheduled for completion in the 4<sup>th</sup> quarter of Calendar Year 2010. The design phase of the Margaret-Orthodox Station is progressing and scheduled for completion in the 3<sup>rd</sup> quarter of Calendar Year 2010. The design of Race-Vine improvements is scheduled to advance in the 3<sup>rd</sup> quarter of CY 2010. Due to reduced capital funding, the construction phase of the Margaret-Orthodox Station improvements and the advancement of the design phases for Erie, Snyder and 40<sup>th</sup> Street Stations are deferred until sufficient funds can be identified.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  </u> NORMAL REPLACEMENT <u>  </u> SYSTEM IMP. <u>  X  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$10,424,000	\$1,250,000	\$4,842,000	\$47,524,000	\$64,040,000

# 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. Projects included in this program are as follows:

- **Route 15 Turnback** – This project provides for the construction of a trolley turnback for SEPTA’s Trolley Route 15 at Frankford Avenue. This new routing will allow eastbound trolley service to continue through to the Market-Frankford Line during PennDOT’s reconstruction of the Interstate I-95 Girard Avenue Interchange. 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. The construction phase of the project will commence in Fiscal Year 2011.
- **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.
- **Route 101 & 102 Trolley Line Positive Train Control** – This project will provide for a new trolley control system for the Routes 101 and 102 Trolley Lines. The system will include automatic enforcement of safe trolley separation, and overspeed and roadway worker protection. A trolley control center will be constructed as part of the project. In addition, this new system will include a schedule-based control feature for schedule adherence and optimum trolley speed line operation, which will maximize trolley operation efficiency. This system will also provide automatic speed control for the new rail-highway at-grade crossing systems presently being installed. Initial design funds are programmed for Fiscal Year 2011.

# SYSTEM IMPROVEMENTS PROGRAM

- 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 4<sup>th</sup> quarter of Calendar Year 2010.

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  </u> NORMAL REPLACEMENT <u>  </u> SYSTEM IMP. <u>  X  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$6,520,000	\$3,880,000	\$20,000,000	\$30,400,000

# 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 improvements programmed for funding in Fiscal Year 2011 are as follows:

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>- Warminster Line</li> <li>- Media/Elwyn Line</li> <li>- Lansdale/Doylestown Line</li> <li>- West Trenton Line</li> <li>- Fox Chase Line</li> <li>- Norristown High Speed Line</li> <li>- Route 101 &amp; 102 Trolley Line</li> <li>- Broad Street Line</li> <li>- Bus Loop</li> </ul> | <ul style="list-style-type: none"> <li>Hatboro (design)</li> <li>Primos &amp; Secane (property acquisition)</li> <li>Ambler</li> <li>Noble (design)</li> <li>Ryers</li> <li>Ardmore Ave. (Accessible Path)</li> <li>Various Station Improvements</li> <li>8<sup>th</sup> &amp; Market (Spur) &amp; Olney</li> <li>Cheltenham &amp; Ogontz</li> </ul> |
|---|--|



**Completed Olney Station  
Fox Chase Line**

<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  X  </u> NORMAL REPLACEMENT <u>  </u> SYSTEM IMP. <u>  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$34,500,000	\$14,700,000	\$37,300,000	\$120,000,000	\$206,500,000



# 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, and paratransit support.
- 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.



**30-Ton Rough Terrain Crane**

<b>FY 2011 FUNDING SOURCE:</b> FTA ___    FHWA ___    STATE ACT 44 ___    LOCAL ___				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR ___    NORMAL REPLACEMENT <u>X</u> SYSTEM IMP. ___    SYSTEM EXPANSION ___				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$0	\$8,000,000	\$32,000,000	\$40,000,000

# 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 2011 program include the overhaul of 40-foot low-floor New Flyer buses, 30-foot Eldorado buses, Broad Street B-IV cars, City and Suburban Transit 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 2011 include Regional Rail Silverliner IV A/C condenser unit overhaul and rotating equipment change out, hybrid (diesel/electric) bus battery replacement, and replacement of trolley destination signs.



<b>FY 2011 FUNDING SOURCE:</b> FTA <u>  X  </u> FHWA <u>  </u> STATE ACT 44 <u>  X  </u> LOCAL <u>  X  </u>				
<b>CAPITAL INVESTMENT CATEGORY:</b> STATE OF GOOD REPAIR <u>  </u> NORMAL REPLACEMENT <u>  X  </u> SYSTEM IMP. <u>  </u> SYSTEM EXPANSION <u>  </u>				
<b>SERVICE AREA:</b> BUCKS, CHESTER, DELAWARE AND MONTGOMERY COUNTIES AND THE CITY OF PHILADELPHIA				
<b>PRIOR FUNDING</b>	<b>FY 2011 FUNDING</b>	<b>FY 2012-2014</b>	<b>FY 2015-2022</b>	<b>TOTAL COST</b>
\$0	\$53,600,000	\$170,700,000	\$468,800,000	\$693,100,000

**FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12)**

# FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12)

PROJECT	FY 2015-2022 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	384,000,000
City Hall Station/15 <sup>th</sup> Street Station Rehabilitation	90,500,000
Debt Service	280,000,000
Eastwick Transportation Center	7,230,000
Elwyn to Wawa Rail Service	57,370,000
Infrastructure Safety Renewal Program	264,000,000
New Payment Technologies	63,692,463
Paoli Line Improvements	130,482,000
Paoli Transportation Center	35,615,000
Paratransit Vehicle Acquisition	40,000,000
Parking Expansion Program	80,000,000
Rail Bridge Improvement Program	50,000,000
Regional Rail Car Acquisition (Silverliner IV Replacement)	750,000,000
Regional Rail Signal System Modernization	4,000,000

# FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12)

PROJECT	FY 2015-2022 BUDGET ALLOCATION
Regional Rail Substation Improvements	\$177,600,000
State of Good Repair Initiatives	80,000,000
Station Accessibility	47,524,000
System Improvements Program	20,000,000
Transit and Regional Rail Station Program	120,000,000
Trolley Routes 23 & 56 Infrastructure Improvements	189,000,000
Trolley Routes 23 & 56 Vehicle Purchase	130,000,000
Trolley Routes 10, 11, 13, 34, 36, 101 & 102 Vehicle Replacement	300,000,000
Utility Fleet Renewal	32,000,000
Vehicle Overhaul Program	<u>468,800,000</u>
<b>Subtotal</b>	<b>\$4,529,083,463</b>
 New Starts/Service Initiatives	 1,893,589,000
 <b>Grand Total FY 2015-2022 Capital Program</b>	 <b>\$6,422,672,463</b>

**FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12)  
PROJECT DESCRIPTIONS**

# FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12)

## PROJECT DESCRIPTIONS

### PROJECT TITLE (BUDGET ALLOCATION FY 2015-2022)

#### 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 97-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 (\$384,000,000)

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

# **FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12)**

## **PROJECT DESCRIPTIONS**

### City Hall Station/15<sup>th</sup> Street Station Rehabilitation (\$90,500,000)

This project will provide for the renovation of City Hall Station on the Broad Street Line and 15th Street Station on the Market-Frankford Line. These stations are part of a junction point between the Broad Street Line, Market-Frankford Line, Route 10, 11, 13, 34 & 36 Trolley 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 (\$280,000,000)

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 Line cars, several capital improvement projects, and partial refunding of Series 1995A bonds; and 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 Line cars, and several capital improvement projects.

### 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. The new transportation center will replace the existing rail station located 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 (\$57,370,000)

This project will provide for the restoration of rail service from the existing Media/Elwyn Regional Rail Line 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 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.



# **FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12) PROJECT DESCRIPTIONS**

## New Payment Technologies (\$63,692,463)

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 Customized 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 (\$1,893,589,000)

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

## Paoli Line Improvements (\$130,482,000)

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. 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.

## Paoli Transportation Center (\$35,615,000)

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 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.

# **FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12) PROJECT DESCRIPTIONS**

## Parking Expansion Program (\$80,000,000)

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.

## 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 (\$4,000,000)

This project provides for the modernization of the signal system on the Warminster, Lansdale/Doylestown (Lansdale to Doylestown segment) Cynwyd, Manayunk/Norristown, Chestnut Hill East, and Chestnut Hill West 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 (\$177,600,000)

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.

# **FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12) PROJECT DESCRIPTIONS**

## 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 (\$47,524,000)

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

## System Improvements Program (\$20,000,000)

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

## 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.

## Trolley Routes 23 & 56 Infrastructure Improvements (\$189,000,000)

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

## Trolley Routes 23 & 56 Vehicle Purchase (\$130,000,000)

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

## Trolley Routes 10, 11, 13, 34, 36, 101 & 102 Vehicle Replacement (\$300,000,000)

This project provides for the purchase of trolleys for SEPTA's Trolley Routes 10, 11, 13, 34, 36, 101 & 102. 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.

# **FISCAL YEARS 2015-2022 CAPITAL PROGRAM (Years 5-12) PROJECT DESCRIPTIONS**

## 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.

# **FISCAL YEARS 2011-2022 PROGRAMMING SCHEDULE**

**FY 2011-2022 CAPITAL PROGRAMMING SCHEDULE**

	<b>Prior Funding</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>	<b>FY 2014</b>	<b>FY 2015-2022</b>	<b>Total</b>
30th St. to Suburban Station Bridges	\$0	\$0	\$0	\$0	\$0	\$66,670,000	\$66,670,000
Bus Facilities Renovations	0	0	0	0	0	25,000,000	25,000,000
Bus Purchase Program	210,358,000	49,612,599	55,878,858	51,144,658	56,810,861	520,000,000	943,804,976
Callowhill Garage Replacement	4,400,000					115,600,000	120,000,000
Capital Asset Lease Program	0	43,931,261	44,851,550	45,870,122	46,895,178	384,000,000	565,548,111
City Hall Station/15th Street Station Rehabilitation	9,500,000	0	0	0	0	90,500,000	100,000,000
Congestion Relief & Railroad Grade Crossings	0	2,139,000	2,222,000	2,315,000	2,382,000	0	9,058,000
Debt Service	0	35,988,140	35,789,592	35,546,318	35,458,326	280,000,000	422,782,376
Eastwick Transportation Center	4,400,000	0	0	0	0	7,230,000	11,630,000
Elwyn to Wawa Rail Service	22,630,000	0	0	0	0	57,370,000	80,000,000
Infrastructure Safety Renewal Program	0	33,000,000	33,000,000	33,000,000	33,000,000	264,000,000	396,000,000
New Payment Technologies	15,875,000	0	0	12,396,902	8,035,635	63,692,463	100,000,000
Paoli Line Improvements	49,518,000	0	0	0	0	130,482,000	180,000,000
Paoli Transportation Center	4,385,000	0	0	0	0	35,615,000	40,000,000
Paratransit Vehicle Acquisition	0	4,600,000	4,800,000	4,400,000	4,700,000	40,000,000	58,500,000
Parking Expansion Program	37,200,000	2,500,000	0	0	0	80,000,000	119,700,000
Rail Bridge Improvement Program	0	0	0	0	0	50,000,000	50,000,000
Regional Rail Car Acquisition (Silverliner IV Replacement)	0	0	0	0	0	750,000,000	750,000,000
Regional Rail Signal System Modernization	27,400,000	24,600,000	42,700,000	39,500,000	39,700,000	4,000,000	177,900,000
Regional Rail Substation Improvements	52,400,000	5,000,000	0	0	0	177,600,000	235,000,000

## FY 2011-2022 CAPITAL PROGRAMMING SCHEDULE

	Prior Funding	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015-2022	Total
Safety and Security Improvements	42,000,000	5,000,000	5,000,000	5,000,000	5,000,000	0	62,000,000
State of Good Repair Initiatives	0	21,215,000	3,600,000	4,700,000	500,000	80,000,000	110,015,000
Station Accessibility	10,424,000	1,250,000	4,600,000	242,000	0	47,524,000	64,040,000
System Improvements Program	0	6,520,000	1,880,000	1,000,000	1,000,000	20,000,000	30,400,000
Trolley Routes 23 & 56 Infrastructure Improvements	0	0	0	0	0	189,000,000	189,000,000
Trolley Routes 23 & 56 Vehicle Purchase	0	0	0	0	0	130,000,000	130,000,000
Trolley Rts. 10, 11, 13, 34, 36, 101 & 102 Vehicle Replacement	0	0	0	0	0	300,000,000	300,000,000
Transit & Regional Rail Station Program	34,500,000	14,700,000	16,700,000	10,300,000	10,300,000	120,000,000	206,500,000
Utility Fleet Renewal	0	0	0	4,000,000	4,000,000	32,000,000	40,000,000
Vehicle Overhaul Program	0	53,600,000	55,200,000	56,900,000	58,600,000	468,800,000	693,100,000
<b>Subtotal</b>	<b>\$524,990,000</b>	<b>\$303,656,000</b>	<b>\$306,222,000</b>	<b>\$306,315,000</b>	<b>\$306,382,000</b>	<b>\$4,529,083,463</b>	<b>\$6,276,648,463</b>
New Starts/Service Initiatives	31,411,000	0	25,000,000	50,000,000	100,000,000	1,893,589,000	2,100,000,000
<b>Grand Total</b>	<b>\$556,401,000</b>	<b>\$303,656,000</b>	<b>\$331,222,000</b>	<b>\$356,315,000</b>	<b>\$406,382,000</b>	<b>\$6,422,672,463</b>	<b>\$8,376,648,463</b>