## Fiscal Year 2015 Capital Budget

Fiscal Years 2015-2026 Capital Program

"Rebuilding SEPTA For The Future"



Cobbs Creek Viaduct 1891



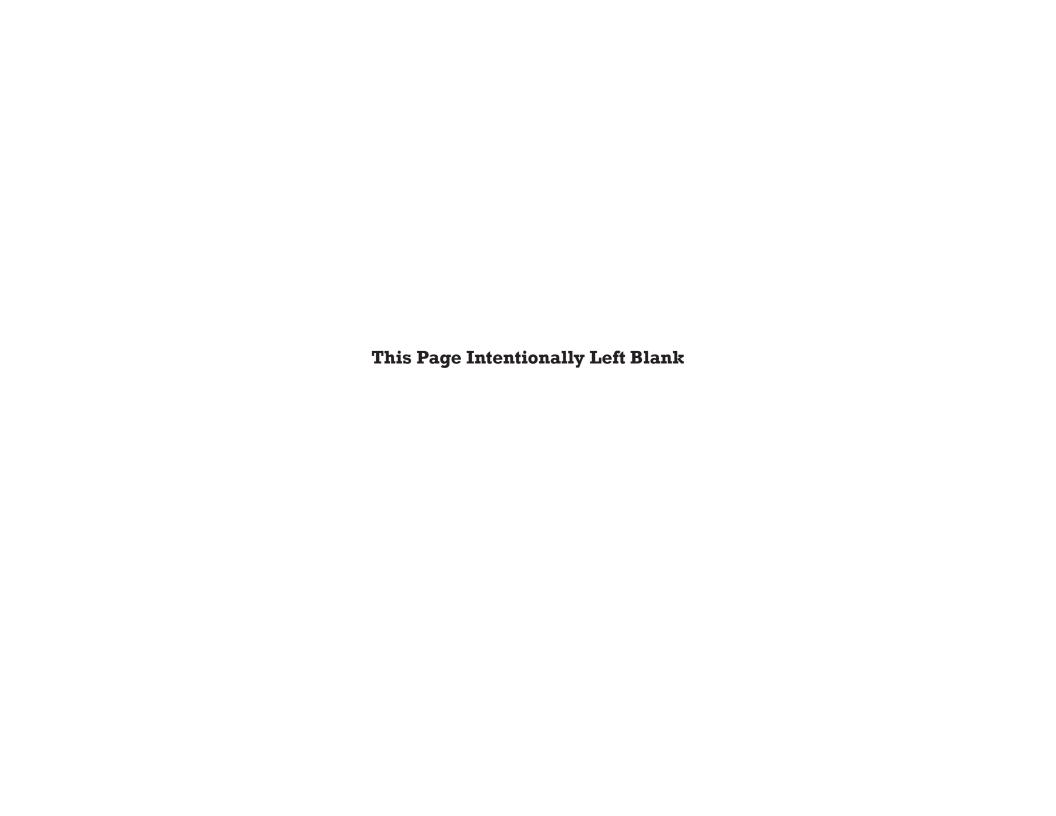












# FISCAL YEAR 2015 CAPITAL BUDGET AND FISCAL YEARS 2015-2026 CAPITAL PROGRAM

## "REBUILDING SEPTA FOR THE FUTURE"



Approved by the SEPTA Board May 22, 2014

### **Table of Contents**

Overview and Summary
Introduction to SEPTA
Strategic Planning Efforts
Sources of Capital Funding6
Uses of Capital Funding9
Funding Projections and Assumptions9
FY 2015 Capital Budget and FY 2015-2026 Capital Program
Capital Program and Project Descriptions
Bridge Program12
Communica. ons, Signal Systems and Technology Improvements
Debt Service and Capital Leases
I-95 Congestion Mitigation Strategies
Infrastructure Safety Renewal Program
Maintenance/Transportation Shops and Offices27
New Payment Technologies
Safety and Security Improvements
Service Restorations
Stations, Loops and Parking Improvements
Substations and Power Improvements
Track and Right-of-Way Improvements57
Vehicle Acquisitions and Overhauls60
Appendices66
Appendix A: Strategic Plan Objectives and the Capital Program67
Appendix B: Long-Term Planning Efforts
Appendix C: Hurricane Sandy Resiliency Program Candidates



#### **Overview and Summary**

This document presents SEPTA's annual capital budget for Fiscal Year 2015 and the capital program for Fiscal Years 2015 through 2026. Developed annually, the budget describes the capital improvements SEPTA plans to undertake with an. cipated funding. The budget is adopted by SEPTA's Board, and is reflected in the regional Transportation Improvement Program (TIP). SEPTA's capital budget document is organized as follows:

- Introduction to SEPTA
- Strategic planning efforts
- Sources of funds
- Uses of funds, with program highlights
- Financial assumptions
- The FY 2015 Capital Budget and FY 2015-2026 Capital Program Funding Table
- Description of capital programs and individual projects
- Appendices (Alignment with Strategic Plan, Long-Term Planning Efforts and Hurricane Sandy Resiliency Program Application)

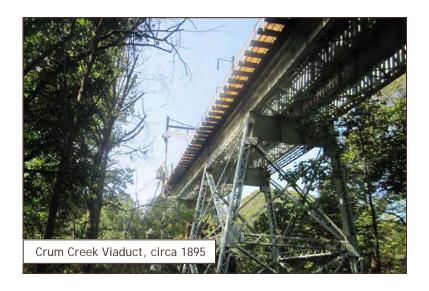
SEPTA's FY 2015 Capital Budget totals **\$571.8** million and the 12-year Capital Program totals **\$6.8** billion. In comparison, the FY 2014 Capital Budget totaled \$308 million and the 12-year Capital Program totaled \$3.7 billion. This increase is the result of the passage of Act 89 of 2013, which provides a dedicated, long-term funding source for transportation in Pennsylvania. Act 89 provides funding for public transportation as well as roads, bridges and multimodal transportation. The passage of Act 89 enables SEPTA to begin addressing its State of Good Repair backlog. This backlog has grown as a result of years of funding shortfalls.

In FY 2015, SEPTA will embark on the "Catching Up" capital program. This program includes improvements to critical infrastructure such as substations, bridges and stations. The program also initiates the replacement of rail vehicles that have far exceeded their useful life, while expanding capacity to address ridership growth and improving accessibility. These improvements will protect regional transit service for current and future customers, improve reliability and modernize outdated equipment.

The FY 2015 Capital Budget continues to fund the groundbreaking New Payment Technologies project, expansion of the Authority's fleet of hybrid buses, installation of federally mandated Positive Train Control (PTC) signal technology, vehicle overhauls, capital leases and debt service.

## Act 89 of 2013 Provides New Transportation Funding in Pennsylvania

- Provides state Capital funding for public transportation, highways, bridges, bicycles, pedestrians, and multimodal transportation in Pennsylvania
- Long-term funding source has no legislative sunset
- Funding is predictable, bondable, and inflation-indexed
- State capital funds for SEPTA will increase from \$120 million to more than \$350 million annually
- Will nearly double SEPTA's annual capital budget by Fiscal Year 2018



#### **Introduction to SEPTA**

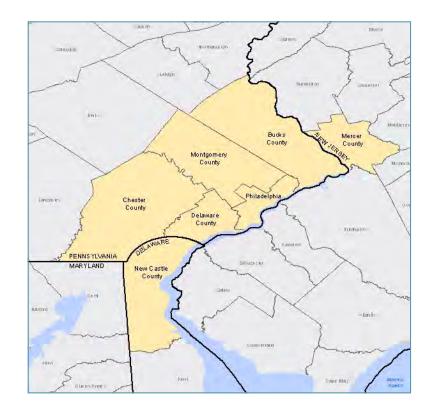
SEPTA is the nation's sixth-largest public transit agency and the primary public transit provider in the greater Philadelphia region. SEPTA was created by the Pennsylvania state legislature in 1964 and is an instrumentality of the Commonwealth of Pennsylvania. SEPTA's multimodal network serves a 2,200 square-mile region with a population exceeding four million. The SEPTA service area includes the five counties of southeastern Pennsylvania – Bucks, Chester, Delaware, Montgomery, and the City of Philadelphia – and also extends to Trenton and West Trenton in New Jersey, and Wilmington and Newark in Delaware.

SEPTA operates the following services:

- 118 bus routes
- 13 Regional Rail lines
- 8 Trolley lines
- Broad Street Line and the Market-Frankford Line (subway/elevated)
- Norristown High Speed Line (an interurban heavy rail line)
- 3 Trackless Trolley routes
- Customized Community Transportation (CCT), demand response services for seniors and individuals with disabilities
- Four small bus circulator and shuttle services

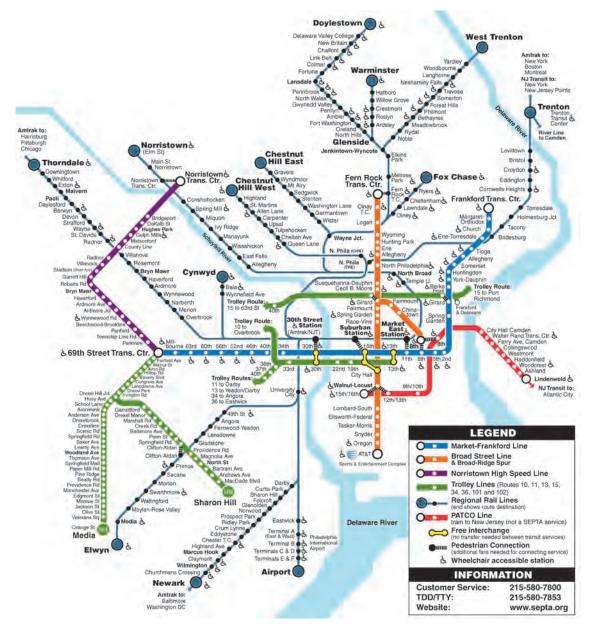
Service / Mode	Ridership *	Revenue Vehicles
Bus	162,433,480	1,355
Regional Rail	36,022,500	396
Trolley	33,264,500	159
Subway/Elevated	95,824,000	343
Norristown High Speed Line	2,419,500	26
Trackless Trolley	5,635,900	38
Demand Response	1,713,680	455
Total	337,313,560	2,772

<sup>\*</sup> FY 2013 annual unlinked passenger trips.



In FY 2013, the Authority provided more than **337 million** passenger trips, with average weekday ridership of approximately **1.15 million** trips. Despite losing two weekdays of revenue service due to Hurricane Sandy in October 2012, SEPTA's FY 2013 ridership remained near quarter-century highs, including an all-time record **36 million** passenger trips on Regional Rail.

#### **SEPTA Regional Rail and Rail Transit Map**



#### **Recent Achievements**

SEPTA is celebra its **50th anniversary** in 2014, kicking o a year-long campaign to celebrate the future of SEPTA with great stories from the past.

The passage of **Act 89** in November 2013 by Governor Tom Corbe and the state legislature will provide a long-term, dedicated funding source for transit in Pennsylvania.

SEPTA's Environmental and Sustainability

Management System (ESMS) received a

ce under the pres ious Intern nal

Organiza for Standardiza (ISO) 14001:2004

standard for environmental management systems
in September 2013.

SEPTA captured top honors at the **2013**International Rail Rodeo and also earned the top prize at the **2013** International Bus Rodeo. Teams demonstrated their skills in vehicle opera and maintenance, compe against other transit agencies from across North America.

SEPTA's customers and employees donated a record **25 tons of food** to the Philabundance food banks during the Authority's 2013 "Stop Hunger at Your Sta" food drive.

In 2012, SEPTA received the **Outstanding Public Transportation System Achievement Award** from the American Public Transporta Associa (APTA).

#### **Strategic Business Plan**

As part of its Five-Year Strategic Business Plan, SEPTA establishes its corporate vision, mission statement, goals, strategies, and key performance indicators used to measure progress toward the Authority's business goals. The strategic planning process is a management tool that unifies and guides SEPTA's major planning processes, including the Operating and Capital Budgets and the Annual Service Plan. The Strategic Business Plan for FY 2015-2019 includes eight corporate objectives:

- ☑ Safety & Security
- ☑ The Customer Experience
- ✓ Sustainability
- ☑ Ridership Growth
- ✓ New Technologies
- ☑ Rebuilding the System
- ☑ Human Capital Development
- ☑ Business Partnerships

SEPTA sets distinct targets for each objective and measures annual progress using quantitative metrics, such as customer service feedback, ridership and on-time performance. "Key Performance Indicators" reports will be available at: <a href="http://www.septa.org/strategic-plan">http://www.septa.org/strategic-plan</a>.

A matrix of how the Capital Budget aligns with the FY 2010-2014 Strategic Business Plan is included in Appendix A. This matrix will be updated for FY 2015-2019 in the coming fiscal years.

Economic Impact · SEPTA is a catalyst for economic activity in Southeastern Pennsylvania and the State as a whole. SEPTA's capital and operational expenditures contribute \$3.21 billion in economic output, supporting nearly 26,000 jobs in Pennsylvania, and generating \$62.5 million in state tax revenues, according to a 2013 report published by the Economy League of Greater Philadelphia and Econsult Solutions, Inc.

#### **Sustainability Program Plan**

In January 2011 the SEPTA Board adopted the "SEP-TAINABLE" sustainability program plan, which outlines the Authority's triple bottom line approach to sustainability: accounting for environmental, social and economic organizational needs and regional opportunities. The program sets 12 sustainability goals with specific, measurable performance targets for each goal. SEPTA releases annual reports tracking progress toward these goals. The program plan and annual reports are available at <a href="http://www.septa.org/sustain">http://www.septa.org/sustain</a>. Examples of goals, performance indicators and results are shown in the table below.

#### SEP-TAINABLE Sustainability Plan Goals (Selection)

Focus Area	Goal	Performance Indicator	Results
Environmental	Improve energy intensity performance	Energy consumption per passenger mile	Improved by 8.8 percent compared to plan baseline year 2009. Ahead of pace to achieve SEPTA's performance target of a 10 percent improvement by 2015.
Social	Improve access to local food via transit	Farmers markets on SEPTA property	In 2013, four markets were hosted on SEPTA property, exceeding performance target of three markets.
Economic	Commute-to- Increase transit work mode share for public transportation		Increased to 11.96 percent in FY 2012, the highest level in over a decade.

#### STRATEGIC PLANNING EFFORTS



#### **Transit Asset Management**

SEPTA is implementing a new Transit Asset Management (TAM) program, to be fully functional in 2015. A new suite of software will help SEPTA maintain comprehensive asset inventories and maintenance information for rolling stock and fixed assets such as bridges, stations, and rail. The TAM Program will guide SEPTA's capital investments, and will allow the Authority to produce State of Good Repair performance indicators in accordance with new federal requirements. Initiatives currently underway include:

**Asset Maintenance Management System** · Implementation of an automated system to identify assets; track inventory, inspections and conditions; and schedule preventive maintenance for SEPTA's infrastructure.

**State of Good Repair Database** • Development of a capital planning and decision-making tool that will evaluate the Authority's ability to achieve a state of good repair based on available funding.

**Vehicle Maintenance Information System (VMIS)** · Upgrades for software used to manage and maintain SEPTA's revenue vehicles, including buses, Customized Community Transportation (CCT) vehicles, rail cars, and utility vehicles.

SEPTA's State of Good Repair backlog is currently estimated at \$5 billion due to sustained capital funding shortfalls. With the infusion of new State funding, the Authority is prioritizing replacement and renewal of infrastructure and vehicles that are part of the backlog, such as substations, bridges, stations, maintenance facilities, and rail cars.

#### **Long-Term Planning Efforts**

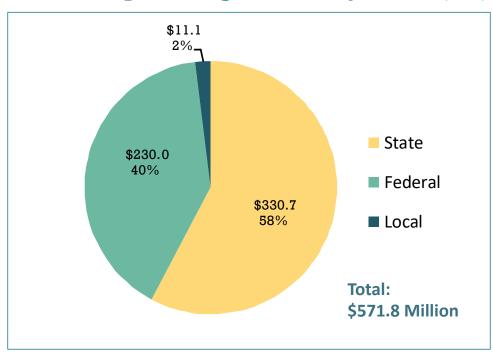
SEPTA participates in long-term planning and capital programming together with the Delaware Valley Regional Planning Commission (DVRPC), the City of Philadelphia, Bucks, Chester, Delaware and Montgomery counties, PennDOT, Amtrak and other regional transportation agencies and associations. Highlights include:

King of Prussia Rail Project · SEPTA is currently conducting an Alternatives Analysis and Draft Environmental Impact Statement, which proposes to extend the Norristown High Speed Line (NHSL) to King of Prussia in Montgomery County. To date, the project team has launched an extensive public outreach campaign, developed a list of potential alternative alignments, performed a preliminary screening of the alternatives, and initiated the required Scoping Process for the National Environmental Protection Act (NEPA). The study will determine a locally preferred alternative for the alignment, and will be completed by late 2015.

Connections 2040 Plan for Greater Philadelphia · In concert with regional stakeholders, DVRPC produces a regional long-range plan every four years. The plan includes land use, environmental, economic competitiveness, and transportation strategies, and presents a vision for investing in the transportation system according to known fiscal constraints. The plan was adopted by DVRPC in July 2013, and updated in July 2014 to reflect funding levels in Act 89 of 2013.

For additional long-term planning efforts, refer to Appendix B.

#### FY 2015 Capital Budget: Funds by Source (\$M)



**State Funding for Transit: A Recent History** • Act 44, enacted in 2007, established the Public Transportation Trust Fund, which restructured public transit funding in Pennsylvania. The previous General Fund sources were replaced with dedicated funding, including a portion of Sales Tax, Lottery proceeds, Pennsylvania Turnpike Commission funding, funds from Act 3 of 1997, and funds from the Public Transportation Assistance Fund (PTAF; tire fees, vehicle lease fees and vehicle rental fees). However, in 2010, the Pennsylvania Turnpike Commission was unable to obtain federal approval to begin tolling Interstate 80. As a result, Act 44 funds were significantly impacted, reducing SEPTA's annual capital program by approximately \$110 million annually — or 25 percent of the annual budget. Between FY 2011 and FY 2014, SEPTA's capital program shrunk to about \$300 million annually, the lowest level since 1997. This sustained drop in funding severely hampered the Authority's ability to advance new projects or address the State of Good Repair backlog.

#### **State Funds: \$330.7 Million**

On November 25, 2013, Governor Corbett signed into law Act 89, a comprehensive transportation funding bill for the Commonwealth of Pennsylvania. This historic legislation provides long-term, dedicated funding for public transit as well as roads, bridges and multimodal transportation. Following on the recommendations of the Governor's Transportation Funding Advisory Commission, new revenues are generated through uncapping the Oil Company Franchise Tax (OCFT), adjusting various fees for inflation, and surcharges on traffic tickets. For SEPTA, Act 89 will provide a predictable, growing source of funds to make critical infrastructure repairs and improvements.

Projected growth in Act 89 funding is anticipated to nearly double SEPTA's annual capital program over the next four years. The increase in capital funds will permit SEPTA to begin addressing its State of Good Repair backlog, currently estimated at \$5 billion due to long-term funding shortfalls. In FY 2015, SEPTA will embark on its "Catching Up" capital program to repair or replace assets that have long exceeded their useful life.

SEPTA's FY 2015 Capital Budget includes \$330.7 million in state funds. SEPTA will receive state capital funds primarily via Section 1514, the Asset Improvement Program. Sources of funding for Section 1514 will be generated by various sources: proceeds of capital bonds; tire, vehicle lease and vehicle rental fees; traffic violation fines; motor license fund fees; and turnpike transfer funds, which will eventually be replaced with sales and use tax revenues. SEPTA will receive 69.4 percent of the statewide capital funds allocated to transit authorities.

The Section 1514 program supports up to 96.775 percent of the total cost of capital projects. The remaining 3.225 percent is matched by Bucks, Chester, Delaware and Montgomery Counties and the City of Philadelphia. SEPTA also uses state transit funds to match federal grants, with the state share being 19.355 percent of the total project cost.

#### Federal Funds: \$230 Million

SEPTA's FY 2015 Capital Budget includes **\$230** million in federal funds. Federal funds typically support 80 percent of the total cost of a capital project; the remaining 20 percent local match is provided by the Commonwealth of Pennsylvania, the City of Philadelphia, and Bucks, Chester, Delaware and Montgomery counties. SEPTA receives most of its federal funding from the Federal Transit Administration (FTA). "Moving Ahead for Progress in the 21st Century" (MAP-21) reauthorized federal surface transportation programs from October 2012 through September 2014. Federal funding sources are shown in the adjacent table.

Most federal funding is provided via the FTA's formula programs. SEPTA also receives federal highway funds that PennDOT "flexes" (e.g. transfers) to transit agencies; SEPTA typically uses flex funds for bus replacements. SEPTA's FY 2015 capital budget includes \$35.8 million in Congestion Mitigation funds that PennDOT is providing for transit capacity enhancements related to the reconstruction of Interstate 95. The budget also includes \$2.5 million in projected Transit Security Grant Program (TSGP) funds, which are allocated through competitive grants administered by the Federal Emergency Management Agency (FEMA).

The Authority applies for competitive federal grants when available. In 2013, SEPTA was awarded discretionary funding through the TIGER V grant program (U.S. Department of Transportation) for the \$38.8 million SEPTA-CSX West Trenton Separation project. In recent years, SEPTA has received Congestion Mitigation and Air Quality (CMAQ) funds through a regional competitive process administered by the Delaware Valley Regional Planning Commission. To help regions meet the requirements of the Clean Air Act, the CMAQ program funds projects that will improve air quality and/or relieve congestion, such as engine retrofits. SEPTA has requested funding from the FTA's "Resilience Projects In Response to Hurricane Sandy" competitive grant program, which will make available \$3 billion to transit agencies impacted by Hurricane Sandy to protect transit infrastructure against future natural disasters. Additional information about SEPTA's application is included in Appendix C.

FY 2015 Budget: Federal Funding Sources								
Program	Description	Amount (Millions)						
FTA Section 5307	Urbanized Area Formula Program. Funds transit capital projects. Allocations based on population, density, operating expenses, revenue miles and route miles.	\$63.0						
FTA Section 5340	Growing States and High Density States Formula Program. Allocations based on population forecasts and population density. SEPTA receives funding through the Growing States program.	\$3.1						
FTA Section 5337	State of Good Repair Program. Funds High Intensity Fixed Guideway (rail) and High Intensity Motorbus capital projects. Allocations based on vehicle revenue miles and route miles.	\$101.0						
FTA Section 5339	Bus and Bus Facilities Formula Program. Funds capital projects to replace, rehabilitate or purchase buses and related facilities. Allocations based on population and service factors after providing a minimum amount per state.	\$7.5						
Highway Flex	Federal highway program funds that PennDOT provides to transit agencies for capital improvement projects. Based on the Governor's commitment, \$25 million per year is flexed annually to transit operators.	\$17.1						
Congestion Mitigation	Federal Interstate Management funds that PennDOT is providing for congestion mitigation activities, including transit capacity enhancements, related to the reconstruction of Interstate 95.	\$35.8						
Transit Security Grant Program (TSGP)	Competitive grant program administered by FEMA. Provides funds for anti-terrorism safety and security improvements and operational activities such as directed patrols.	\$2.5						
Total Federal		\$230.0						

#### Local Funds: \$11.1 Million

SEPTA's FY 2015 Capital Budget includes \$11.1 million in local matching funds. The required local match for federal and state funds is provided by Bucks, Chester, Delaware and Montgomery counties and the City of Philadelphia. SEPTA requests matching funds from the Counties along with its annual operating budget request; capital funds required for the City of Philadelphia's local share are requested as part of the City's capital budget process.



#### **Public-Private Partnerships**

Public—Private Partnerships (P3s or PPPs) are contractual agreements between a public agency and a private entity that allow for greater private participation in the delivery of transportation projects. In P3s, the private sector assumes more risk in exchange for the opportunity to earn a financial return, while the public sponsor benefits from access to private capital. P3s require a revenue stream that can be used to repay the project financing. Where allowable, P3s can improve project feasibility, shorten project schedules and improve the quality of the finished project.

Most transit projects employ the Design-Bid-Build model, wherein the design and construction phases of a project are procured by a transit agency using multiple, separate contracts, and there is little or no overlap between these phases. P3s may be structured as follows:

- Design-Build:
- Design-Build-Operate-Maintain; or.
- Design-Build-Finance-Operate-Maintain.

Federal and state agencies are working to pave the way for P3s in the transportation industry. The Federal Transit Administration (FTA) conducted a Public-Private Partnership Pilot Program (Penta-P) and recently released Joint Development guidelines. In 2012, Pennsylvania lawmakers passed legislation approving the use of public-private partnerships for transportation projects.

SEPTA successfully used a public-private partnership approach to implement a Wayside Energy Storage project at Letterly Substation on the Market-Frankford Line. State grant funds from the Pennsylvania Energy Development Authority (PEDA) were contributed toward the installation of a wayside energy storage device that could capture energy generated by braking trains. SEPTA's private partners - Viridity, ABB and Saft America contributed to the design and implementation of the system. The equipment reduces SEPTA's energy use and also generates revenue by allowing SEPTA to participate in the frequency regulation market. SEPTA's energy storage equipment is used to help compensate for short-term grid instability caused by events such as extreme weather. SEPTA receives compensation for helping to maintain the power grid at a stable frequency.

SEPTA is evaluating opportunities for advancing parking expansion improvements at the 69th Street Transportation Center in Delaware County, and for constructing a proposed natural gas-powered combined heat and power (CHP) plant that will provide electricity to the Regional Rail system.

#### FY 2015 Capital Budget - Summary

SEPTA's FY 2015 Capital Budget totals **\$571.8 million**, an **86 percent increase** over the FY 2014 Capital Budget. Available funds are allocated among projects that will advance strategic objectives, bring assets to a state of good repair, meet the Authority's financial obligations, and implement system improvements to enhance transit service. Capital investments are focused on the following areas:

- Catching Up: Returning the system to a state of good repair via restoration or replacement of transit infrastructure that has exceeded its useful life. Projects will address the State of Good Repair backlog and preserve transit service for current and future customers. Projects include substations, bridges, stations, parking, maintenance and transportation facilities, track, communication and signal systems, and other essential infrastructure.
- **Congestion Mitigation Strategies:** In partnership with PennDOT, this program will support the reconstruction of Interstate 95 through congestion mitigation strategies.
- **Financial Obligations:** Payments for capital leases, Amtrak trackage rights, and debt service on SEPTA's bonds.
- New Payment Technologies: Installing cutting-edge fare payment and collection systems to improve customer convenience and replace antiquated equipment.
- **Positive Train Control:** Upgrading Regional Rail signal systems to enhance service quality, ensure compatibility with other rail operators, and meet federal requirements.
- Vehicle Replacements and Overhauls: Replacing vehicles that have exceeded their useful life, and optimizing the performance of the existing fleet through targeted overhaul campaigns. In 2015, SEPTA will take steps for acquiring new locomotives, trolleys and Regional Rail cars.

Projects are described in more detail in the Program Descriptions starting on page 12.



#### **Funding Projections and Assumptions**

State funding is expected to grow steadily over the next four years. Act 89 is projected to nearly double SEPTA's annual capital budget by FY 2018. State capital funds for SEPTA will increase from \$120 million to more than \$350 million annually.

Act 89 also provides new bondable revenue sources for transit. In the future, SEPTA anticipates issuing bonds for certain capital projects, such as rail car acquisitions, to assist in financing the capital program.

SEPTA is assuming the level of federal funding will remain constant over the duration of the FY 2015 Capital Budget and FY 2015-2026 Capital Program. MAP-21 authorizes funding through September 30, 2014 and provided a modest increase over its two year duration. The future of federal funding may be impacted by the solvency of the Highway Trust Fund, which supports both highway and transit programs. SEPTA is working diligently with industry partners and its Congressional delegation to encourage the passage of a long-term federal funding reauthorization for transportation.

SEPTA's FY 2015 Capital Budget and FY 2015-2026 Capital Program totals \$6.8 billion and is fiscally constrained, so that the program of projects reflects anticipated funding levels. In order to advance additional projects, additional funding must be secured through competitive grants or local sources, or through the use of capital financing to distribute project costs over a longer period of time.

#### FY 2015 CAPITAL BUDGET AND FY 2015-2026 CAPITAL PROGRAM

**Capital Program and Project Descriptions** 



#### FY 2015 CAPITAL BUDGET AND FY 2015-2026 CAPITAL PROGRAM

		Budget						12-Year		
Capital Programs /	Prior	Year _	ar Program Years				FY 2020-	Program	Beyond	Total
Financial Obligations	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
	·····				\$Millic	ns				
<u>Capital Programs</u>										
Bridge Program	\$4.91	\$43.43	\$35.03	\$22.42	\$17.18	\$18.36	\$113.78	\$250.20	\$49.78	\$304.89
Communications, Signal Systems and Technology Improvements	\$167.11	\$58.39	\$17.54	\$18.29	\$14.91	\$14.80	\$121.32	\$245.25	\$0.00	\$412.36
I-95 Congestion Mitigation Strategies	\$0.00	\$35.80	\$5.10	\$0.00	\$0.00	\$0.00	\$0.00	\$40.90	\$0.00	\$40.90
Infrastructure Safety Renewal Program	\$0.00	\$35.50	\$35.50	\$35.50	\$35.50	\$35.50	\$248.50	\$426.00	\$0.00	\$426.00
Maintenance/Transportation Shops and Offices	\$3.14	\$22.85	\$20.99	\$19.40	\$16.10	\$18.40	\$108.15	\$205.89	\$29.99	\$239.02
New Payment Technologies	\$23.66	\$21.34	\$38.00	\$67.50	\$76.50	\$0.00	\$0.00	\$203.34	\$0.00	\$227.00
Safety and Security Improvements	\$0.00	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$0.00	\$12.50	\$0.00	\$12.50
Service Restorations	\$10.79	\$0.00	\$0.00	\$2.00	\$5.50	\$34.25	\$54.46	\$96.21	\$0.00	\$107.00
Stations, Loops and Parking Improvements	\$76.97	\$68.33	\$55.47	\$57.00	\$55.53	\$79.42	\$454.26	\$770.01	\$116.18	\$963.16
Substations and Power Improvements	\$9.64	\$60.99	\$53.74	\$34.60	\$24.58	\$30.23	\$184.94	\$389.08	\$0.00	\$398.72
Track and Right-of-Way Improvements	\$1.93	\$10.76	\$7.72	\$4.00	\$4.00	\$4.00	\$30.49	\$60.97	\$25.70	\$88.60
Vehicle Acquisitions and Overhauls	\$184.03	\$116.89	\$171.50	\$174.00	\$215.00	\$227.57	\$2,016.49	\$2,921.45	\$962.50	\$4,067.98
Subtotal Capital Programs	\$482.18	\$476.78	\$443.09	\$437.21	\$467.30	\$465.03	\$3,332.39	\$5,621.80	\$1,184.15	\$7,288.13
Financial Obligations										
Debt Service and Capital Leases	\$0.00	\$94.99	\$100.54	\$101.99	\$102.64	\$104.91	\$663.96	\$1,169.03	\$46.26	\$1,215.29
Total Capital Budget	\$482.18	\$571.77	\$543.63	\$539.20	\$569.94	\$569.94	\$3,996.35	\$6,790.83	\$1,230.41	\$8,503.42

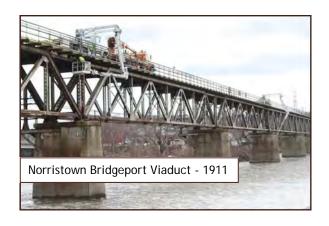
#### **BRIDGE PROGRAM**

The SEPTA system includes over 350 bridges. Average age is in excess of 84 years, with 155 bridges over 100 years old. This program will restore SEPTA's bridges to a state of good repair. Bridges will be repaired or replaced based on their condi. on, and new bridges will be constructed where required. Rehabilitation/ replacement of bridges on rail lines and SEPTA right-of-ways will include culverts, pedestrian bridges and associated bridge support structures.

#### **SEPTA Bridges**

City Transit 20
Suburban Transit 45
Regional Rail 287
Total 352

		Budget						12-Year		
	Prior	Year _		Program	Years		FY 2020 -	Program	Beyond	Total
Bridge Program	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Milli	ions				
Bridge Program	\$4.91	\$43.43	\$35.03	\$22.42	\$17.18	\$18.36	\$113.78	\$250.20	\$49.78	\$304.89
TOTAL	\$4.91	\$43.43	\$35.03	\$22.42	\$17.18	\$18.36	\$113.78	\$250.20	\$49.78	\$304.89







#### **BRIDGE PROGRAM**

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Railroad Bridge Projects (FY 2015 - 2019)				
Chestnut Hill West Line Bridge 0.35 Rehabilitation				
Rehabilitation of Bridge 0.35 over the Chestnut Hill West Regional Rail Line. The bridge crosses over SEPTA's Four Track Regional Rail Main Line. The bridge was constructed in 1916.	\$7.60 M	Design Complete Construction 2014 - 2016	Philadelphia	Philadelphia
Crum Creek Viaduct				
The viaduct on the Media/Elwyn Regional Rail Line spans 925 feet and at its greatest height, is over 100 feet above grade. The viaduct, constructed circa 1895, will be replaced.	\$77.50 M	Design 2014 Construction 2015 - 2017	Delaware	Delaware
Media/Elwyn Line Viaduct Improvements				
Replacement of bridge timbers, painting, superstructure, substructure steel repairs and foundation reinforcement on three viaducts on the Media/Elwyn Regional Rail Line, including:	440.05.44	Design 2014	Delaware	
<ul> <li>Cobbs Creek Viaduct (Mile Post 4.79), 377 foot span. Built 1891.</li> <li>Darby Creek Viaduct (Mile Post 7.11), 339 foot span. Built 1900.</li> <li>Ridley Creek Viaduct (Mile Post 14.41), 641 foot span. Built 1896.</li> </ul>	\$43.25 IVI	543.25 M Construction 2014 - 2016		Delaware
Stone Arch Bridge Program				
Rehabilitation of the following nine (9) Stone Arch Bridges on SEPTA's Regional Railroad:				
<ul> <li>Lansdale/Doylestown Line 22.93 (15 foot span). Built 1903.</li> <li>Lansdale/Doylestown Line13.10 (8 foot span). Built 1902.</li> <li>Manayunk/Norristown Line 16.88 (22 foot span). Built 1934.</li> <li>Manayunk/Norristown Line 4.61 (10 foot span). Built 1934.</li> <li>Manayunk/Norristown Line 9.41 (20 foot span). Built 1834.</li> <li>Manayunk/Norristown Line 9.93 (10 foot span). Built 1834.</li> <li>Media/Elwyn Line 12.12 (15 foot span). Built 1854.</li> <li>West Trenton Line 20.21 (12 foot span). Built 1876.</li> <li>West Trenton Line 20.21 (12 foot span). Built 1876.</li> </ul>	\$8.84 M	Design 2014 Construction 2014 - 2016	Bucks Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

#### **BRIDGE PROGRAM**

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Rail Bridge Projects (FY 2020-2026)				
Chestnut Hill East Line Bridge Rehab Program				
Rehabilitation of five bridges on the Chestnut Hill East Regional Rail Line located at milepost 5.04, 5.72, 7.63, 8.90 & 9.59.	\$30.00 M	2020 - 2026 Project	Philadelphia	Philadelphia
Chestnut Hill West Bridge Rehab Program				
Rehabilitation of seven bridges on the Chestnut Hill West Regional Rail Line located at milepost 0.06, 0.83, 1.17, 1.26, 2.98, 4.42 & 5.67.	\$35.00 M	2020 - 2026 Project	Philadelphia	Philadelphia
Mainline -Schuylkill Bridges (30th St. to Suburban Station)				
Rehabilitation of nine bridges between 30th Street Station and Suburban Station located at milepost 0.49, 0.58, 0.61, 0.64, 0.68, 0.72, 1.25, 5.68 & 11.62. These bridges were built in 1929.	\$56.00 M	2020 - 2026 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Transit Bridge Projects (FY 2015 - 2019)				
NHSL Bridge 0.15 over 69th St. Yard El Tracks				
Replacement or rehabilitation of existing four (4) span steel structure of Bridge 0.15 on the Norristown High Speed Line. This bridge was built in 1906.	\$15.50 M	Design 2016 - 2017 Construction 2018 - 2020	Delaware	Delaware Montgomery
NHSL Viaduct over Schuylkill River				
Rehabilitation of the Viaduct (Mile Post 12.81) on the Norristown High Speed Line, including steel, concrete and bearing repairs and painting. The viaduct, constructed in 1911, is 3,165 feet long and runs from Bridgeport Station to the Norristown Transportation Center. The timbers on the viaduct were replaced in 2013.	\$30.50 M	Design 2018 Construction 2019 - 2020	Montgomery	Delaware Montgomery

This program provides for improvements to SEPTA's communica. ons systems, signal systems, and information technology infrastructure. Projects will upgrade hardware and software, replace equipment that has reached or exceeded its useful life, and bring systems to a state of good repair. As part of its Catching Up program, SEPTA will rehabilitate various grade crossings and interlockings, upgrade the Computer Aided Radio Dispatch (CARD) system, begin installing real-time passenger information systems at railroad and transit stations, and upgrade real-time service information for

bus and trolley passengers. Rail signal modernization projects will improve operational flexibility and enhance service quality. This program includes installation of Positive Train Control (PTC) technology on all Regional Rail lines, which is required by the federal Rail Safety Improvement Act of 2008. The annual Information Technology program provides replacement and upgrades of the Authority's computer hardware, software and network equipment.

Communications, Signal Systems and	Prior	Budget Year		Program	Years		FY 2020-	12-Year Program	Beyond	Total
Technology Improvements - Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Millio	ns				
Communications & Signal Improvements	\$2.15	\$13.35	\$12.54	\$13.29	\$9.91	\$9.80	\$86.32	\$145.21	\$0.00	\$147.36
Regional Rail Signal System Modernization	\$131.96	\$34.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.24	\$0.00	\$166.20
SEPTA/CSX West Trenton Separation	\$33.00	\$5.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5.80	\$0.00	\$38.80
Technology Improvements	\$0.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$35.00	\$60.00	\$0.00	\$60.00
TOTAL	\$167.11	\$58.39	\$17.54	\$18.29	\$14.91	\$14.80	\$121.32	\$245.25	\$0.00	\$412.36







Project Descriptions	Budget	Schedule / Status	Location	Service Area
Communications & Signal Improvements—Transit Pr	rojects (FY	2015 - 2019)		
Broad Street Line Ridge-Spur Signals				
Modernization of the signal system on the Broad Street Line's Broad-Ridge Spur. Project will upgrade and modernize the train control system between Fairmount Interlocking and the 8th and Ridge Terminal Interlocking.	\$6.5 M	Design 2015 Construction 2016 - 2018	Philadelphia	Philadelphia
Route 101/102 Signal / Interlocking Improvements				
Installation of a new trolley control system for the Route 101/102 (Media/Sharon Hill) trolley lines. The new Communications Based Train Control (CBTC) system will automatically enforce trolley separation and provide overspeed and roadway worker protection. New power switching will improve operational flexibility.	\$35.15 M	Design 2013 - 2014 Construction 2016 - 2020	Delaware	Delaware
Route 102 Grade Crossings				
Upgrade seven (7) grade crossing locations on the Route 102 (Sharon Hill) portion of the Route 101/102 (Media/Sharon Hill) trolley lines. The project will install new traffic control devices including new vehicular traffic signals, trolley bar signals, pedestrian crossing signals, and detection and actuation control systems. Locations include McDade Boulevard, Andrews Avenue, Bartram Avenue, Chestnut Street, Walnut Street, Broad Street, and Spruce Street.	\$3.4 M	Design Complete Construction 2015 - 2016	Delaware	Delaware
Communications & Signal Improvements—Railroad	Projects (F	Y 2015-2019)		
Arsenal Interlocking				
Improvements to Arsenal Interlocking (near University City Station), which serves the Airport, Media/Elwyn and Wilmington Regional Rail lines. The project will retire the existing Walnut Interlocking and incorporate its functionality into a rebuilt and reconfigured Arsenal Interlocking. Includes installation of new track, catenary and signaling systems.	\$27.5 M	Design 2015 - 2017 Construction 2018 - 2020	Philadelphia	Bucks Delaware Montgomery Philadelphia Delaware (state) New Jersey

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Beth Interlocking / Signal Improvements				
Installation of a new universal interlocking at Beth, to be located south of Bethayres Station on the West Trenton Line.	\$14 M	Design 2017 Construction 2018 - 2023	Bucks	Bucks
Communications & Signal Improvements—Railroad I	Projects (FY	<b>( 2020 - 2026)</b>		
Hunt/Wayne Interlocking				
Improvements to the Hunt/Wayne Interlocking on SEPTA's Regional Rail Main Line, including: installation of a new high-speed crossover between No. 2 and No. 3 tracks; installation of an independent microprocessor-based interlocking controller; and replacement of electric switches on the north end of the Wayne Interlocking.	\$14 M	Design 2018 - 2019 Construction 2020 - 2021	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Communications & Signal Improvements—System-W	ide Project	s (FY 2015 - 2019)		
Computer Aided Radio Dispatch (CARD) System Replacement				
Replacement of existing Computer Aided Radio Dispatch (CARD) system. Project will retire the existing 502MHz radio system and replace with a new state-of-the-art Computer Aided Dispatch and communications network. The new CARD system will be used to dispatch SEPTA buses and trolleys. In addition, the new system will provide real-time train arrival information to be displayed on existing and new Audio Visual Public Address (AVPA) signs, as well as the SEPTA website. The project will modernize and improve reliability of vehicle, AVPA and website data.	\$32.5 M	Design 2016 - 2017 Construction 2018 - 2021	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
Real-Time Information / Audio Visual Public Address (AVPA) Sy	stem			
Upgrades to public communication systems at railroad and transit stations, including new Audio Visual Public Address (AVPA) equipment and provision of real-time arrival information for customers. This project will also upgrade real-time service information for bus and trolley passengers.	\$26.5 M	Design 2015 - 2016 Construction 2016 - 2019	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Regional Rail Signal System Modernization (FY 2015	- 2019)			
Cynwyd Line Signals, Specialwork & ROW				
Installation of a new Automatic Train Control (ATC) system on the Cynwyd Regional Rail Line, a necessary precursor to the installation of Positive Train Control (PTC) technology. The ATC system ensures effective train separation, and provides train overspeed protection with automatic braking. The system will enable bi-directional train movements with full signaling, thus enhancing flexibility when portions of the track are out of service. Project includes improvement of track interlockings, switches and right-of-way (ROW).	\$9.2 M	Design Complete Construction 2014 - 2015	Montgomery Philadelphia	Montgomery Philadelphia
Positive Train Control (PTC)				
Installation of federally mandated signal system technology required by the Rail Safety Improvement Act of 2008 (RSIA). SEPTA is installing an Advanced Civil Speed Enforcement System (ACSES) on all Regional Rail lines. Working in unison with the recently installed Automatic Train Control (ATC) technology, these two systems will provide the functionality of the mandated Positive Train Control (PTC) system. The PTC system can enforce permanent and temporary civil speed restrictions and train stops through a network of transponders, while maintaining the continuous track monitoring advantages of the ATC system. The system must be operational by December 31, 2015.	\$157 M	Design Complete Construction 2012 - 2015	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
SEPTA/CSX West Trenton Separation (FY 2015 - 2019	9)			
SEPTA / CSX West Trenton Separation				
Separation of SEPTA's West Trenton Regional Rail Line service from CSX freight rail service via construction of a third track and other infrastructure improvements. SEPTA operates passenger rail service along a six-mile portion of track owned by CSX between the Woodbourne and West Trenton Stations. By upgrading this six mile stretch, SEPTA and CSX will be able to relieve corridor congestion and allow for efficient operations. The project will also permit SEPTA to fully implement Positive Train Control (PTC) by December 31, 2015. SEPTA and CSX are partnering in the funding of the project (CSX \$7.2M; SEPTA \$31.6M). \$10 million of federal Transportation Investment Generating Economic Recovery (TIGER) funds were awarded to SEPTA for the project.	\$38.8 M	Design 2014 Construction 2014 - 2015	Bucks	Bucks Montgomery Philadelphia New Jersey

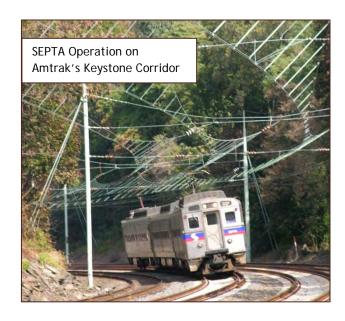
Project Descriptions	Budget	Schedule / Status	Location	Service Area
Technology Improvements (FY 2015 - 2026)				
Information Technology Program				
Enhancements to SEPTA's information technology infrastructure and applications. Includes new and replacement computer hardware and software such as desktop computers, laptops, servers, network devices, and software licenses. The FY 2015 program will enhance data storage and management systems, including SharePoint and Electronic Content Management applications, along with data warehouse, remote access and virtual server infrastructure. The program also includes replacement of network switches, wireless systems, computers and printers. \$5 million annually.	\$60 M	Ongoing Program	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

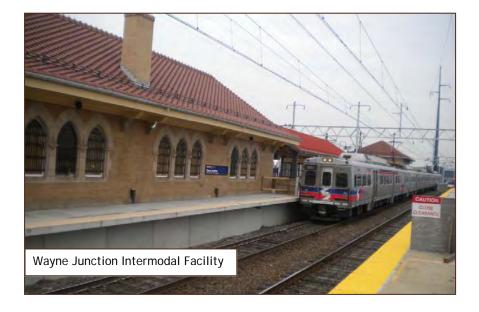
The Capital Asset Lease Program provides for lease payments a. ributable to the acquisition of selected capital assets through financial leasing arrangements. For Fiscal Year 2015, leases covered by this program include Amtrak trackage leases, a warehouse lease, copier machines throughout the Authority and communications towers.

State and federal capital funds provide for debt service and the cost of issuance of bonds, notes and other indebtedness incurred by SEPTA.



		Budget						12-Year		
Debt Service & Leases	Prior	Year	Program Years			FY 2020 -	Program	Beyond	Total	
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Millions	;				
Capital Asset Lease Program	\$0.00	\$43.76	\$49.39	\$50.90	\$51.64	\$53.96	\$425.20	\$674.85	\$0.00	\$674.85
Debt Service	\$0.00	\$51.23	\$51.15	\$51.09	\$51.00	\$50.95	\$238.76	\$494.18	\$46.26	\$540.44
TOTAL	\$0.00	\$94.99	\$100.54	\$101.99	\$102.64	\$104.91	\$663.96	\$1,169.03	\$46.26	\$1,215.29





Project Descriptions	Budget	Schedule / Status	Location	Service Area
Capital Asset Leases (FY 2015 - 2026)				
Amtrak Trackage - This lease provides for the right to use Amtrak tracks for SEPTA's Trenton, Wilmington/Newark and Paoli/Thorndale Regional Rail service, and portions of the Chestnut Hill West, Media/Elwyn, Airport and Cynwyd Regional Rail Lines.  Communications Towers - 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 - This lease provides for rental of copiers, which are dispersed throughout SEPTA's headquarters and transportation/maintenance facilities.  Warehouse Facility - This lease provides for rental of a storeroom facility at 2045 Wheatsheaf Lane in the City of Philadelphia.	12 Year Total \$674.85 M	Ongoing Program through 2026	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

Project Descriptions  Debt Service (FY 2015 - 2026)	Budget	Schedule / Status	Location	Service Area
Payments on Capital Grant Receipts Bonds, Series 2011				
Acquisition of 120 Silverliner V Regional Rail Cars—These new electric multiple-unit (EMU) cars have replaced the Silverliner II and III rail cars, and provided additional cars to supplement the regional rail car fleet in response to ridership growth. Vehicles fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems. The cars include enhanced passenger amenities, such as larger windows, wider aisles, a state-of-the-art climate control system, and an enhanced seating arrangement with more two-passenger seating. The new cars have electronic exterior and interior destination signs, voice annunciation of train destination and upcoming station stops, interior video display monitors and provide the capability for SEPTA's Control Center to broadcast messages directly to customers on the trains. In addition, these cars are equipped with on-board video surveillance and automatic passenger counting systems. The total cost for the Silverliner V Rail Car Acquisition Project (\$324 million) is funded through a combination of grants and capital financing.  Rehabilitation of the Wayne Junction Intermodal Facility The Wayne Junction Intermodal Facility was constructed at the turn of the 20th Century and is in need of major rehabilitation. This project provides for restoring the station's historic integrity while modernizing its structure to provide a more accessible and environmentally friendly facility for local residents. The project provides for the enhancement of passenger amenities such as lighting, signage, shelters, audio and visual public announcement system, windscreens, benches, HVAC (heating, ventilation, air conditioning) systems, and sanitary systems. Structural improvements include station building rehabilitation and ADA accessibility modifications, such as high level platforms, elevators, stairway renovations, passenger tunnel improvements, new canopies and shelter improvements. The total cost of the Wayne Junction Intermodal Faci	12 Year Debt Service Total for Series 2007, 2010 & 2011 Bonds \$494.18 M	Final year of debt service funding for Series 2011 Bonds - 2028	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Payments on Fixed Rate Refunding Bonds, Series 2010				
Proceeds from the Fixed Rate Refunding Bonds were used to refund the Special Revenue Bonds, Series 1999, which provided funds for the Market-Frankford Line cars, various capital improvement projects, and partial refunding of Series 1995A Bonds.		Final year of debt service funding for Series 2010 Bonds - 2027		
Payments on Converted Indexed Rate Revenue Refunding Bond	ls, Series 2007			
On December 18, 2012, the Authority converted the Variable Rate Refunding Bonds, Series 2007, from the Daily Rate Mode to the Indexed Rate Mode. Proceeds from the Variable Rate Revenue Refunding Bonds, Series 2007 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.		Final year of debt service funding for Series 2007 Bonds - 2021		

#### **I-95 CONGESTION MITIGATION STRATEGIES**

In partnership with PennDOT, this program will support the reconstruction of I-95 through congestion mitigation strategies. PennDOT estimates that its I-95 Section A reconstruction project will result in 1,800 new peak-period transit riders due to increased highway congestion. Under the I-95 Congestion Management Plan, federal Interstate Management Program funds will be flexed to SEPTA to implement capacity enhancements for the Trenton and West Trenton Regional Rail Lines.

These Regional Rail lines have experienced significant ridership growth in recent years, and are already operating at or near capacity. Improvements may include:

- Purchase of additional rolling stock;
- Improvements for additional parking at regional rail stations; and
- Yard, interlocking and storage improvements.

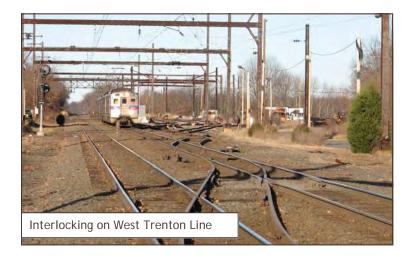
Average Weekday Ridership on the Trenton and West Trenton Regional Rail Lines

**Trenton:** 11,392

West Trenton: 12,478

TOTAL: 23,870

		Budget						12-Year		
I-95 Congestion Mitigation - Program	Prior	Year		Program	Years		FY 2020-	Program	Beyond	Total
Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Millio	ns				
I-95 Congestion Mitigation Strategies	\$0.00	\$35.80	\$5.10	\$0.00	\$0.00	\$0.00	\$0.00	\$40.90	\$0.00	\$40.90
TOTAL	\$0.00	\$35.80	\$5.10	\$0.00	\$0.00	\$0.00	\$0.00	\$40.90	\$0.00	\$40.90





#### **INFRASTRUCTURE SAFETY RENEWAL PROGRAM (ISRP)**

The annual Infrastructure Safety Renewal Program (ISRP) provides for the restora. on of SEPTA's transit and railroad infrastructure to a state of good repair. Projects to be advanced include:

- **Track and Right-of-Way** Renewal or replacement of track, switches, and special work including yard and shop areas; track surfacing; fencing; and grade crossing improvements.
- **Station Facilities** Rehabilitation of station buildings and associated facilities including roofs and canopies; ticket offices and waiting rooms; platforms; lighting; sanitary facilities; escalators; elevators; parking; and accessibility improvements.
- Signals and Communications Systems Rehabilitation of signal systems and select communications equipment.
- **Power Systems** Rehabilitation of electric traction and power systems and associated components including catenary and support structures; feeders and transmission lines; and localized and centralized control facilities.
- Maintenance/Support Facilities Rehabilitation of shops, maintenance/storage yards, and associated
  maintenance and support facilities, including improvements or replacement of air compressors, sump pumps,
  sprinkler systems, tunnel lighting, duct banks, vehicle servicing equipment, bridges and other support
  functions.



		Budget						12-Year		
Infrastructure Safety Renewal Program -	Prior	Year _		Program	Years		FY 2020-	Program	Beyond	Total
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Millio	ns				
Infrastructure Safety Renewal Program	\$0.00	\$35.50	\$35.50	\$35.50	\$35.50	\$35.50	\$248.50	\$426.00	\$0.00	\$426.00
TOTAL	\$0.00	\$35.50	\$35.50	\$35.50	\$35.50	\$35.50	\$248.50	\$426.00	\$0.00	\$426.00





#### **INFRASTRUCTURE SAFETY RENEWAL PROGRAM (ISRP)**

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Infrastructure Safety Renewal Program (ISRP)				
Fiscal Year 2015 ISRP Program	\$35.50 M	FY 2015 Program	System-wide	System-wide

#### Track and Right-of-Way Program

<u>Regional Rail</u> - Curve Worn Rail Renewal Program; Norristown Regional Rail Line Tie, Surface, and Brush Cutting Project; and Regional Rail Main Line Tie, Surface and Brush Cutting Project.

<u>City/Suburban Transit</u> - Curve Worn Rail Renewal Program; City Transit High Speed Special Track Work Renewal Program; Suburban Transit Grade Crossing Renewal Program; and Suburban Transit Open Deck Timber Renewal Program.

#### Signals and Communications Program

<u>Regional Rail</u> - Communication Cable Installation Program - Chestnut Hill East and Chestnut Hill West Lines; and Air Line Replacement - Broad Interlocking.

<u>City/Suburban Transit</u> - Broad Street Line Signal Improvements Project; Communications Station Equipment Tech Refresh Project - Broad Street Line; and Electric Switch Heater Upgrade Project (Routes 101/102).

#### Maintenance/Support Facilities Program

<u>Regional Rail</u> - Bridge Floor Beam Repair Program; Retaining Wall Rehabilitation Program; Yard Safety Improvement Program; Facilities Improvement Program; and Critical Catenary Structural Improvement Program.

<u>City/Suburban Transit</u> - Garage and Shop Improvements; Vent Well and Emergency Exit Program; Facilities Improvement Program; Pump Room Overhaul Program; Sewage Ejector Replacement Program; V-tag System Upgrade; Water Leak Remediation (tunnels); and Fern Rock Transfer Table.

#### Station Facilities Program

**Regional Rail** - Platform Improvements Program; Temple Station Improvements Program; Wilmington Line Station Improvements Program; and Paoli Line Station Improvements Program.

<u>City/Suburban Transit</u> - Subway Column Rehabilitation; Station and Tunnel Lighting; NHSL Station Improvements; Station Entrance Improvements (Fern Rock & Juniper stairs); Station Platform Tactile Edge Replacement (Rt. 15); and Market-Frankford Spring Garden Station Improvements (Design).

#### **Power Systems Program**

Regional Rail - Norristown Line Catenary Replacement; Substation Control Battery Replacement; High Voltage Bushings Replacement Program; Sectionalizing Improvement Program; Static Frequency Converter Refurbishment Program; Control Center and Radio Room Uninterrupted Power Supply (UPS) Replacement; and North Philadelphia Substation Modernization.

<u>City/Suburban Transit</u> - DC Traction Power Cable Replacement Program; Manhole Rehabilitation Program; Duct Bank Replacement Program; Trolley Wire Replacement Program; Trackless Trolley Power System Upgrade Program; Substation Improvement Program; Substation SCADA Control Upgrade; and LED Lighting Upgrade Program.

This project provides for improvements at SEPTA's bus and rail maintenance shops, facili. es maintenance shops and office buildings. Program elements include replacement of fire suppression systems, vehicle washer systems, and boiler systems; wheel truing program; bus and steel wheel lift programs; underground storage tank replacement program; construction of a new transportation building; and paving improvements. This program will also address remediation and clean up activities at select facilities as well as activities that will reduce SEPTA's carbon footprint. In addition, SEPTA will advance a roof rehabilitation and replacement program, which will be conducted at several vehicle maintenance, support facilities, shops, substations, and office buildings.



		Budget						12-Year		
Maintenance/Transportation Shops & Offices	Prior	Year		Program	1 Years		FY 2020 -	Program	Beyond	Total
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
						\$Millions				
Maintenance/Transportation Facilities	\$0.45	\$11.74	\$10.54	\$6.44	\$5.50	\$6.00	\$65.90	\$106.12	\$26.19	\$132.76
Roof Program	\$2.69	\$11.11	\$10.45	\$12.96	\$10.60	\$12.40	\$42.25	\$99.77	\$3.80	\$106.26
TOTAL	\$3.14	\$22.85	\$20.99	\$19.40	\$16.10	\$18.40	\$108.15	\$205.89	\$29.99	\$239.02







Project Descriptions	Budget	Schedule / Status	Location	Service Area
Maintenance & Transportation Facilities (FY 2015 - 2	019)			
69th St. Terminal Bus Road				
Rehabilitation of 69th St. Terminal Bus Road to improve vehicle ride quality through the 69th St. Terminal Complex.	\$1.00 M	Design 2014 Construction 2014 - 2015	Delaware	Delaware Montgomery Philadelphia
Allegheny Bus Washer				
Replacement and upgrade of existing vehicle wash systems at Allegheny Bus Garage.	\$3.55 M	Design 2015 Construction 2016 - 2017	Philadelphia	Philadelphia
Allegheny Fire Suppression				
Replacement and upgrade of fire sprinkler system at Allegheny Garage.	\$5.12 M	Design Complete Construction 2014 - 2016	Philadelphia	Philadelphia
Boiler Program				
Replacement of boilers at various SEPTA facilities including Southern Garage, Comly Garage, Callowhill Garage, Woodland Shop, Elmwood Shop, Bridge St. Carhouse, 5800 Bustleton, Roberts Ave. Shop, Wayne Junction Shop, Wayne Line Maintenance, Roberts Ave. Train Wash Building, Allegheny Garage and 69th St. Motor Shop.	\$16.50 M	Ongoing	Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Environmental Clean Up and Protection				
Activities include remediation and testing 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 under this program. The program also includes activities that will reduce SEPTA's environmental footprint.	\$5.00 M	Ongoing	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Frankford Transportation Building				
Construction of new stand-alone transportation building at the Frankford Transportation Center.	\$2.65 M	Design 2014 - 2015 Construction 2015 - 2016	Philadelphia	Philadelphia
Frazer Rail Shop Vehicle Washer				
Installation of a new vehicle washer with enclosure at Frazer Rail Shop, located along the Paoli/Thorndale Regional Rail Line. Existing washer has exceeded useful life and is no longer capable of performing at an acceptable level. This project will include a structure to house the new washer which will allow for year-round vehicle washing.	\$3.35 M	Design 2016 Construction 2018 - 2019	Chester	Bucks Chester Delaware Montgomery Philadelphia
Frontier Bus Washer				
Replacement and upgrade of Frontier vehicle washer.	\$1.75 M	Design 2017 Construction 2019 - 2020	Montgomery	Bucks Chester Montgomery
Frontier Paving				
Rehabilitate apron paving at Frontier Bus Garage to correct settlement and paving condition issues.	\$1.30 M	Design Complete Construction 2019 - 2020	Montgomery	Bucks Chester Montgomery
Midvale Bus Washer				
Replacement and upgrade of existing vehicle wash systems at Midvale Bus Garage.	\$3.55 M	Design 2014 Construction 2015 - 2016	Philadelphia	Philadelphia
Southern Paving				
Rehabilitate apron paving at Southern Bus Garage to correct settlement and paving condition issues.	\$3.00 M	Design Complete Construction 2016	Philadelphia	Philadelphia
Steel Wheel Lift Program				
Purchase and installation of Truck and Body hoist at 69th St. Shop and rebuilding and updating controls for truck and body hoists at Fern Rock Shop, Woodland Shop, 69th St. Shop, Media-Sharon Hill Shop, Overbrook Shop and Roberts Ave. Shop.	\$18.00 M	Ongoing	Philadelphia Delaware	Bucks Chester Delaware Montgomery Philadelphia

Project Descriptions	Budget	Budget Schedule / Status		Service Area
Tank Replacement Program				
Replacement of storage tanks at various SEPTA facilities including Courtland Shop, Southern Garage, Frankford Garage, Callowhill Garage, Frontier Garage and Victory Garage.	\$20.00 M	Ongoing	Delaware Montgomery Philadelphia	Delaware Montgomery Philadelphia
Wheel Truing Program				
Rebuilding and updating of controls for wheel truing machines at Fern Rock Shop, Woodland Shop, 69th St. Shop and Overbrook Shop.	\$15.00 M	Ongoing	Delaware Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Woodland Fire Suppression				
Replacement and upgrade of existing fire sprinkler system at Woodland Rail Shop.	\$2.80 M	Design Complete Construction 2014 - 2016	Philadelphia	Philadelphia
Maintenance & Transportation Facilities (FY 2020 - 2	2026)			
Bus Lift Program				
This project provides for the replacement of in-ground lifts and portable lifts at selected City Transit and Suburban Transit bus maintenance facilities.	\$2.00 M	2020 - 2026 Project	Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
New Washers				
Replacement and upgrade of vehicle washers at additional locations.	\$2.00 M	2020 - 2026 Project	TBD	TBD
Overbrook Washer				
Construction of new vehicle washer with enclosure at Overbrook Shop.	\$3.20 M	2020 - 2026 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Overhead and Fire Doors				
Replacement of overhead and fire doors at various facilities.	\$2.00 M	2020 - 2026 Project	Bucks Delaware Philadelphia	Bucks Delaware Philadelphia
Pump Rooms				
Improvements to pump rooms, which control water levels in SEPTA's transit and railroad tunnels.	\$5.00 M	2020 - 2026 Project	Philadelphia	Philadelphia
Roof Program (FY 2015 - 2019)				
2nd & Wyoming/Berridge Roof Replacement				
Replacement of existing roof at SEPTA's 2nd & Wyoming Office and Berridge Bus Maintenance Facility with new 5-ply coal tar build-up roofing system. Includes replacement of mechanical equipment, electrical connections for the Bus Maintenance Facility and 2nd & Wyoming Avenue Office Building and asbestos abatement.	\$15.84 M	Design complete Construction 2014 - 2016	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
69th St. Terminal/MSHL Shop Roof Replacement				
Replacement and upgrade of existing roofs with new 5-ply coal tar build-up roofing system. Includes replacement of mechanical equipment, electrical connections; and terra cotta and brick repairs.	\$14.10 M	Design 2014 - 2015 Construction 2016 - 2018	Delaware	Delaware Montgomery Philadelphia
Broad Substation Roof Replacement				
Replacement of roof at Broad Substation located on Mt. Vernon Street and serving the Broad Street Line.	\$2.00 M	Design 2016 Construction 2017 - 2018	Philadelphia	Philadelphia
Callowhill Roof Replacement				
Replacement and upgrade of existing roof at Callowhill Garage with new 5 Ply Coal Tar Build-up Roofing System including drainage and downspout repairs.	\$11.83 M	Design complete Construction 2014 - 2015	Philadelphia	Philadelphia
Courtland Shop Roof Replacement				
Replacement of Courtland Shop Roof including asbestos abatement.	\$7.15 M	Design 2016 - 2017 Construction 2019 - 2020	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Frazer Rail Shop Roof Replacement				
Replacement and upgrade of the existing Frazer Rail Shop roof. Includes replacement of mechanical equipment and electrical connections.	\$6.75 M	Design 2016 - 2017 Construction 2018 - 2019	Chester	Bucks Chester Delaware Montgomery Philadelphia
Frontier Bus Garage Roof Replacement				
Replacement of existing roof with new roofing system.	\$3.50 M	Design 2016 - 2017 Construction 2019 - 2020	Montgomery	Bucks Chester Delaware
Overbrook Maintenance Facility Roof Replacement				
Replacement and upgrade of existing roof with new 5-ply coal tar build-up roofing system. Includes replacement of mechanical equipment and electrical connections.	\$7.55 M	Design 2016 - 2017 Construction 2018 - 2019	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Roberts Carhouse & Car Wash Roof Replacements				
Roof replacement at Roberts Avenue Complex.	\$1.66 M	Design complete Construction 2014 - 2015	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Sansom Substation Roof Replacement				
Replacement of roof at Sansom Substation.	\$2.00 M	Design 2016 Construction 2017 - 2018	Philadelphia	Philadelphia

## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Temple Station Roof Replacement				
Replacement of Temple Station Roofs – Platform Tracks 1 and 2 and Platform Tracks 3 and 4.	\$1.50 M	Design Complete Construction 2014 - 2015	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Woodland Shop Roof Replacement				
Replacement and upgrade of existing roof with new 5 Ply Coal Tar Build-up Roofing System. Includes replacement of roof-mounted HVAC equipment; and re-caulking and painting of the exterior walls of the building.	\$6.11 M	Design complete Construction 2015 - 2016	Philadelphia	Delaware Philadelphia
Roof Program (FY 2020 - 2026)				
5800 Bustleton Roof Replacement				
Replacement of roof at SEPTA office building located at 5800 Bustleton Avenue.	\$1.75 M	2020 - 2026 Project	Philadelphia	Philadelphia
Comly Roof Replacement				
Replacement and upgrade of existing roof at Comly Garage with new 5-ply coal tar build-up roofing system. Includes replacement of mechanical equipment and electrical connections.	\$7.70 M	2020 - 2026 Project	Philadelphia	Philadelphia
Norristown High Speed Line Car Shop Roof Replacement				
Replacement of existing roof at the Norristown High Speed Line Rail Car Shop with new 5-ply coal tar build-up roofing system. Includes replacement of mechanical equipment and electrical connections.	\$7.00 M	2020 - 2026 Project	Delaware	Delaware Montgomery Philadelphia
Regional Rail Stations Roof Program				
Roof replacement at various small to medium stations. Locations to be determined.	\$7.00 M	2020 - 2026 Project	Various	Various
Southern Garage Roof Replacement				
Replacement and upgrade of existing roof system at Southern Garage.	\$7.70 M	2020 - 2026 Project	Philadelphia	Philadelphia

#### **NEW PAYMENT TECHNOLOGIES**

The New Payment Technologies (NPT) Project will modernize SEPTA's an. quated 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 for fare instrument purchases. Electronic media will also be widely available in retail establishments throughout the SEPTA service area and will be reloadable: 1) at vending machines or ticket offices; 2) automatically through an account with SEPTA; or 3) through an on-line transaction.

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 SEPTA's parking operations. Computer equipment and software systems will support the enhanced system-wide fare collection system.

A contract was awarded to ACS Transport Solutions, Inc. (now a subsidiary of Xerox Corporation) in November 2011. The NPT system will be implemented in phases. Phase 1 of the project will include the complete design, deployment of the data network backbone of the rail transit system, and advance pilot testing of the NPT

system. Phase 2 will include the installation of the system on Rail Transit, Trolley and Bus fleets. Phase 3 includes the Regional Rail, Parking Operations and Customized Community Transportation (CCT) segments.

Companion projects supporting the NPT project include: bus and trolley farebox upgrade; Market-Frankford Line and Broad Street Line fiber optics improvements; electrical support for new fare lines at five downtown Railroad stations (Temple University, Market East, Suburban Station, 30th Street Station and University City); Broad Street Subway, Market Frankford and Trolley station fare line improvements; zone offices to monitor fare lines and assist passengers; control modifications for elevators; remote Railroad station waiting room security; provide power to Railroad Parking Payment Stations; and 30th Street Railroad station ticket office/vendor relocations. These NPT companion projects are necessary to provide enhanced customer service and achieve cost efficiencies and revenue enhancements.

The SEPTA Board approved a loan agreement with the Philadelphia Industrial Development Corporation (PIDC), Limited Partnership (LP) XXVIII, to finance this project. The total project cost includes the loan repayment, interest on the loan and companion project costs.

		Budget						12-Year		
New Payment Technologies	Prior	Year _		Program '	Years		FY 2020-	Program	Beyond	Total
New Fayment Technologies	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Millio	ns				
New Payment Technologies	\$23.66	\$21.34	\$38.00	\$67.50	\$76.50	\$0.00	\$0.00	\$203.34	\$0.00	\$227.00
TOTAL	\$23.66	\$21.34	\$38.00	\$67.50	\$76.50	\$0.00	\$0.00	\$203.34	\$0.00	\$227.00







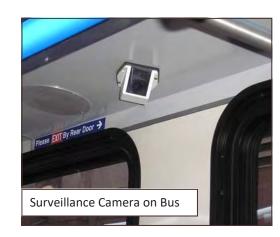
#### **SAFETY & SECURITY IMPROVEMENTS**

The Transit Security Grant Program (TSGP) provides funds to operators of transit systems to protect cri. cal surface transportation and the traveling public from acts of terrorism, major disasters, and other emergencies. The U.S. Department of Homeland Security's (DHS) funding priorities have included: 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 submits an annual grant application to this competitive national program. The Authority 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 and the surrounding area.

SEPTA-funded projects include closed-circuit television (CCTV) cameras on buses and Broad Street Line, Market-Frankford Line, Norristown High Speed Line and Trolley Line rail cars; 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 and anti-terrorism teams; hazardous material Identification kits for Special Operations and Response Teams (SORT); purchase of explosive detection devices, intrusion detection and surveillance equipment, and bulletproof vests; Special Operations and Response Teams (SORT) and K-9 patrol teams; upgraded mobile communications and Control Center monitoring equipment; implementation of video surveillance cameras at transit facilities; and implementation of a radio interoperability system (RIOS) for the Philadelphia region.

Safety & Security Improvements -	Prior	Budget Year		Program	Years		FY 2020-	12-Year Program	Beyond	Total
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
Safety & Security Improvements	\$0.00	\$2.50	\$2.50	\$2.50	\$2.50		\$0.00	\$12.50	\$0.00	\$12.50
TOTAL	\$0.00	\$2.50	\$2.50	\$2.50	\$2.50	\$2.50	\$0.00	\$12.50	\$0.00	\$12.50







#### **SERVICE RESTORATIONS**

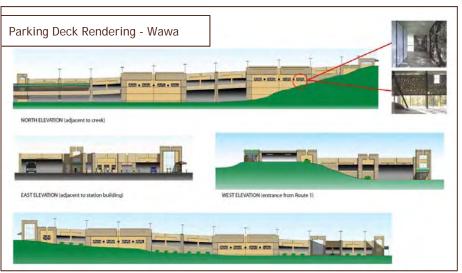
With the addi. onal capital funds resulting from the passage of State Act 89 of 2013, SEPTA is now in the financial position to advance the Elwyn to Wawa Rail Restoration project. The design phase of this rail extension project was previously funded and completed. Except for some right-of-way improvements funded with federal stimulus money, this service restoration project was previously on hold due to funding limitations.

In the latter part of the twelve year capital program, SEPTA will review the feasibility of restoring trolley service to Routes 23 and 56. Funds in the twelve capital program are needed to address: 1) the replacement or rehabilitation of assets that have

exceeded their useful life; 2) the demands upon the transit and regional rail systems resulting from increased ridership; and 3) enhanced accessibility of the system. SEPTA will continue to work with its partners, Delaware Valley Regional Planning Commission (DVRPC), the City of Philadelphia, the Counties of Bucks, Chester, Delaware and Montgomery, and other regional partners, in seeking regional consensus on future rail service expansion initiatives and with the development of funding strategies/options for advancing future expansions projects, including the Federal New Starts Program.

		Budget						12-Year		
Service Restorations and Expansions -	Prior	Year _		Progran	n Years		FY 2020-	Program	Beyond	Total
Project Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$Milli	ons				
Elwyn to Wawa Rail Service	\$10.79	\$0.00	\$0.00	\$2.00	\$5.50	\$34.25	\$52.46	\$94.21	\$0.00	\$105.00
Trolley Routes 23 & 56	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.00	\$2.00	\$0.00	\$2.00
TOTAL	\$10.79	\$0.00	\$0.00	\$2.00	\$5.50	\$34.25	\$54.46	\$96.21	\$0.00	\$107.00





### **SERVICE RESTORATIONS**

Project Descriptions	Budget	Schedule / Status	Location	Service Area	
Elwyn to Wawa Rail Service (FY 2015 - 2019)					
This project will provide for a three mile restoration of rail service from the existing Media/Elwyn Regional Rail Line terminus at Elwyn, Delaware County, to a new terminus in Wawa, Delaware County. The scope of work for this project consists of track bed reconstruction including crossties, continuous welded rail and track interlockings; catenary system rehabilitation; a bi-directional signal system with automated train controls and positive train control; and communications system improvements. The new terminus at Wawa will include a station building with a passenger waiting area and restroom facilities; a high level island platform with canopy and windscreens; a pedestrian underpass with accessible ramps and stairways; and a 500+ car parking deck.	\$105.00 M	Construction 2017 - 2020	Delaware	Chester Delaware	
Additional project elements include the replacement of three bridges, rehabilitation of one bridge and three culverts, the construction of a railcar storage/layover yard and crew facility on SEPTA property in Lenni, Delaware County. A new traffic intersection and access road connecting U.S Route 1, a major highway artery in the area, to the station will be constructed. The new facility will be fully ADA compliant.					
A companion project addressed critical track bed stabilization improvements along the route. Catenary/Signal/Track Improvements, Bridge Replacements/ Rehabilitation, and the new Station and Parking Deck will advance in concurrent construction phases beginning in 2017.					

### **SERVICE RESTORATIONS**

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Trolley Routes 23 & 56 (FY 2020 - 2026)				
In the latter part of the twelve year capital program, SEPTA will review the feasibility of restoring trolley service to Routes 23 and 56. These routes, which are located in the City of Philadelphia, are currently served by buses.	\$2.00 M	2020 - 2026 Project	Philadelphia	Philadelphia

This program provides for the reconstruc. on or rehabilitation of transit and regional rail stations and terminals, bus/trolley loop facilities, transportation centers and parking expansions and improvements. 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. These projects potentially provide opportunities for participation with SEPTA by private developers and municipalities. All improvements fully comply with requirements of the Americans with Disabilities Act of 1990. To date, SEPTA has 104 accessible stations and operates 95 passenger elevators.

#### **SEPTA Station Inventory**

Loops	38
Parking Spaces	28,913
<b>Rail Transit Stations</b>	128
Regional Rail Stations	153
<b>Transportation Centers</b>	11

Stations, Loops & Parking	Prior	Year _		Program	Years		FY 2020 -	Program	Beyond	Total
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
				\$Millio	ns					
ADA Station Improvements	\$0.00	\$6.23	\$1.72	\$2.05	\$3.00	\$3.25	\$30.75	\$47.00	\$10.00	\$57.00
City Hall & 15th Street Stations	\$24.41	\$8.85	\$4.48	\$5.41	\$17.56	\$34.50	\$51.26	\$122.06	\$0.00	\$146.47
Exton Station & Garage	\$0.92	\$5.36	\$5.72	\$5.72	\$2.00	\$5.77	\$31.73	\$56.30	\$0.00	\$57.22
Levittown Station	\$7.07	\$8.00	\$8.00	\$8.00	\$6.00	\$0.00	\$0.00	\$30.00	\$0.00	\$37.07
Paoli Transportation Center	\$7.61	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$55.69	\$55.69	\$0.00	\$63.30
Parking Improvements	\$7.76	\$9.30	\$10.70	\$10.32	\$8.58	\$10.00	\$112.78	\$161.68	\$37.34	\$206.78
Transit & Regional Rail Stations	\$22.45	\$28.59	\$20.71	\$21.78	\$16.44	\$23.90	\$162.06	\$273.48	\$68.83	\$364.76
Villanova Station	\$6.75	\$2.00	\$4.14	\$3.72	\$1.95	\$2.00	\$10.00	\$23.81	\$0.00	\$30.56
TOTAL	\$76.97	\$68.33	\$55.47	\$57.00	\$55.53	\$79.42	\$454.26	\$770.01	\$116.18	\$963.16





Project Descriptions	Budget	Schedule / Status	Location	Service Area
ADA Station Improvements (FY 2015 - 2019)				
40th Street Station on the Market-Frankford Line				
This Market-Frankford Line station will be improved and made fully ADA accessible. The scope of work will consist of improvements to platforms and stairways; installation of elevators; construction of head-houses for the elevators and station entrances at street level; new lighting, signage, security features and passenger amenities; and drainage and waterproofing improvements.	\$9.00 M	Design 2014 Construction 2015 - 2016	Philadelphia	Philadelphia
Erie Station on the Broad Street Line				
At Erie Station on the Broad Street Line, three (3) ADA compliant elevators will be installed. One elevator will move customers between the street level and the mezzanine level of the station. The other two elevators will be located within the paid areas of the mezzanine level and will serve the north and south platforms. The project will also provide for the construction of head-houses for the elevator and station entrances at street level; new signage, security features and passenger amenities; and drainage and waterproofing improvements.	\$9.00 M	Design 2016 - 2017 Construction 2018 - 2019	Philadelphia	Philadelphia
ADA Station Improvements (FY 2020 - 2026)				
The following transit stations are programmed in FY 2020 - 2026 for ADA Improvements:				
<ul> <li>33rd and 36th Street Stations (City Transit Division Trolley Lines 10, 11, 13, 34 and 36). These two City Transit Division trolley stations will be improved and made fully ADA accessible.</li> </ul>	\$22.50 M	2020 - 2026 Project	Philadelphia	Philadelphia
Snyder or Tasker-Morris Station (South portion of Broad Street Line)	\$7.00 M	2020 - 2026 Project	Philadelphia	Philadelphia
Susquehanna-Dauphin Station on the Broad Street Line	\$9.50 M	2020 - 2026 Project	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
City Hall & 15th Street Stations				
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 among the Broad Street Line, the Market-Frankford Line, Trolley Routes 10, 11, 13, 34 and 36, and the Regional Rail Lines.  The project will include the following elements: 1) New entrance to the Broad Street Line, Market-Frankford Line and eastbound trolley Line station in Dilworth Plaza, west of City Hall; 2) Accessible improvements including elevators from street level to the platforms of all three stations; 3) Modification of fare collection facilities; 4) More open space at the platform level of City Hall Station; 5) Straightening, widening and ramping of inter-station corridors; 6) New architectural finishes, lighting and signage; 7) Art-In-Transit; 8) Mechanical and natural ventilation in re-opened air shafts; 9) Structural repairs; 10) Prevention / interception of water infiltration/inflow; and 11) raising of platforms to car door entrance height. This project is being advanced in three phases: Dilworth Plaza "Early Action", 15th Street Station and City Hall Station.	\$146.47 M	Dilworth Plaza Early Action Phase Construction: Complete 2014  15th Street & City Hall Stations Design: 2014 - 2017  Construction: 15th Street 2016 - 2017 City Hall 2018 - 2020	Philadelphia	Philadelphia
<b>Exton Station High-Level Platforms &amp; Garage</b>				
This project, which will be advanced in phases, will provide for the construction of high-level platforms, a station building, bus circulation loops, and a multi-level parking garage at Exton Station on the Paoli-Thorndale Regional Rail Line.  Phase I will include the construction of high-level platforms with canopies and wind screens, and a new station building. The platforms, stairs, ramps, sidewalks and pathways will be fully ADA compliant. New lighting, signage, security features, and passenger amenities will also be provided as part of the project. Phase 2 will provide for the construction of bus circulation loops with bus shelters. The planned bus circulator loops will promote intermodal access to the station. Phase 3 will provide for a fully accessible, multi-level parking garage with pathways to the station platforms. The quantity of parking spaces and garage levels will be determined as part of the Phase 3 design.	Phase 1: \$17.70 M Phase 2 & 3: \$39.50 M Total Project: \$57.20 M	Phase 1:	Chester	Chester

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Levittown Station Reconstruction				
This project provides for improvements to Levittown Station on the Trenton Regional Rail Line. Levittown Station improvements consist of new high level platforms with canopies, replacement of the station building, parking improvements, stormwater management, ADA accessibility improvements, and new signage, lighting and passenger amenities. A new pedestrian overpass complete with elevators will be constructed to replace the old tunnel. Bus loops will be constructed and bus shelters installed to promote intermodal access. Improved traffic flow through the station and parking areas will improve safety for motorists and pedestrians.	\$37.1 M	Design 2014 Construction 2015 - 2017	Bucks	Bucks
Paoli Intermodal Transportation Center (FY 2020 - 2	2026)			
This project provides for the engineering and construction of a new multimodal transportation center in Paoli, Chester County. The new facility will be located on the Paoli/Thorndale Regional Rail Line at the approximate location of the existing station. Connecting services include Bus Routes 92, 105, 106, 204, 205 and 206. SEPTA is partnering with PennDOT and Amtrak to advance this project.  The project will be advanced in two phases. Phase 1 will make the existing station ADA accessible. This phase includes construction of a pedestrian		Design: Underway Phase 1:		
overpass with a total of three elevators linking inbound and outbound station parking lots as well as a new high level center platform. The outbound parking areas will be reconfigured and pedestrian linkages will be provided throughout the station area such as sidewalks and crosswalks. The total construction cost for Phase 1 is \$36 million. Phase II includes an intermodal station complex complete with an additional high-level platform on the outbound side, waiting area, ticket offices and passenger amenities; enhanced bus facilities; and a 600-plus space commuter parking garage.	\$63.30 M	Phase 1: Construction 2015 - 2017  Phase 2: Construction schedule to be developed	Chester	Chester
A companion PennDOT project will consist of the extension of Darby Road over the railroad, including a new bridge and the removal of the North Valley Road bridge.				

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Parking Improvements/Expansions (FY 2015 - 2019)	)			
69th Street Transportation Center Parking Garage				
This project will provide for the construction of a 500-space, fully accessible parking garage including pedestrian connections to the 69 <sup>th</sup> Street Transportation Center. SEPTA will be evaluating partnership opportunities for advancing this project. The 69 <sup>th</sup> Street Transportation Center is an intermodal transportation facility which serves as a terminus for SEPTA customers using the Market-Frankford Line, the Norristown High Speed Line, Trolley Routes 101 & 102 and 17 SEPTA bus routes. Phase 1 of the project will address site and utility work within the project perimeter, as well as electrical facilities upgrade. Phase 2 will include the parking garage and pathways to the transportation center. The new garage facility would also provide parking for 69 <sup>th</sup> Street Historic Shopping District customers, patrons of the Tower Theater and the AMC Theater on 69 <sup>th</sup> Street during evenings and weekends.	\$22.76 M	Design complete Construction 2015 - 2017	Delaware	Chester Delaware Montgomery Philadelphia
Lansdale Parking Garage on the Lansdale/Doylestown Regiona	l Rail Line			
The project provides for the construction of a fully accessible +/- 700 space parking garage and a 120 space surface lot at the Lansdale Regional Rail Station. The net increase in parking capacity at the station will total approximately 309 spaces. In addition, the following Lansdale area companion improvements will be advanced: improvements to the Main Street entrance to the station and construction of a bus laydown area south of Main Street adjacent to the tracks.	\$20.00 M	Design 2014 - 2015 Construction 2015 - 2017	Montgomery	Montgomery
Railroad Parking Expansion at Gwynedd Valley, North Wales ar	nd Philmont S	Stations		
This project provides for parking expansion and improvements at three SEPTA stations. Work will include construction of new parking spaces, improvements to the existing parking lot, new curbing, accessible pathways, signage, new lighting, stormwater management system improvements and landscaping. Locations include Gwynedd Valley and North Wales Stations on the Lansdale/Doylestown Regional Rail Line and Philmont Station on the West Trenton Regional Rail Line.	\$9.00 M	Design 2014 Construction 2015 - 2016	Montgomery	Montgomery

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Parking Improvements/Expansions (FY 2020 - 2026)	)			
Fern Rock Complex				
This project provides for station improvements and ADA accessibility including stairs and ramps; new structured parking deck and surface lot; improved access between the Regional Rail and Broad Street lines; new bus shelters; and signage, lighting, and drainage improvements.	\$77.50 M	2020 - 2026 Project	Philadelphia	Bucks Montgomery Philadelphia
Manayunk/Norristown Regional Rail Line Parking Expansion				
The project will provide for the design and construction of a parking garage at Conshohocken Station and parking expansions at other stations along the line.	\$27.50 M	2020 - 2026 Project	Montgomery Philadelphia	Montgomery Philadelphia
Noble Station Parking Garage and Storage Track on the West T	renton Rail L	ine		
Construction of station improvements, new parking garage and storage track. Noble Station will receive a new station building with ADA improvements, including high-level platforms with tactile edging; new passenger shelters; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage, lighting, security cameras; stormwater management systems and landscaping.	\$53.00 M	2020 - 2026 Project	Montgomery	Bucks Montgomery Philadelphia
Transit & Regional Rail Stations Program— Regional	Rail (FY 20	)15 - 2019)		
Conshohocken Station on the Manayunk/Norristown Rail Line				
Modernization of Conshohocken Station including a new station building and accessibility improvements. This station will receive new ADA compliant high-level platforms; new passenger shelters; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; stormwater management systems and landscaping.	\$15.00 M	Design 2017 - 2018 Construction 2019 - 2020	Montgomery	Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
East Falls Station on the Manayunk/Norristown Regional Rail I	Line			
Modernization of East Falls Station including a new station building and accessibility improvements. This station will receive new ADA compliant high-level platforms; new passenger shelters; elevators; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage and lighting; stormwater management systems and landscaping.	\$19.50 M	Design 2017 - 2018 Construction 2019 - 2021	Philadelphia	Philadelphia
Jenkintown Station on the Regional Rail Mainline				
Improvements to the existing station building, and accessibility improvements. This station will receive new ADA compliant high-level platforms; new passenger shelters; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; stormwater management systems and landscaping.	\$25.32 M	Design 2015 Construction 2019 - 2020	Montgomery	Bucks Montgomery Philadelphia
Secane Station on the Media/Elwyn Regional Rail Line				
Complete renewal of station facilities including new high-level platforms, pedestrian tunnel and a new station building. The project will include accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; security cameras; and drainage improvements.	\$23.11 M	Design 2014 Construction 2015 - 2017	Delaware	Delaware Philadelphia
Willow Grove Station on the Warminster Regional Rail Line				
Modernization of Willow Grove Station including a new ADA compliant high-level platform; new passenger shelters; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; stormwater management systems and landscaping.	\$6.50 M	Design 2018 Construction 2018 - 2019	Montgomery	Bucks Montgomery Philadelphia
Yardley Station on the West Trenton Regional Rail Line				
Modernization of Yardley Station with accessibility improvements. This station will receive a new ADA compliant high-level platform; new passenger shelters; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; stormwater management systems and landscaping.	\$5.50 M	Design 2014 - 2015 Construction 2017 - 2018	Bucks	Bucks Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Transit & Regional Rail Stations Program— Regional	Rail (FY 20	20 - 2026)		
Stations programmed in FY 2020 - 2026 will be modernized and made accessible. A detailed scope of work will be developed for these stations as they are designed:				
Devon Station on the Paoli/Thorndale Regional Rail Line	\$20.00 M	2020 - 2026 Project	Chester	
Hatboro Station on the Warminster Regional Rail Line	\$6.50 M	2020 - 2026 Project	Montgomery	
Lawndale Station on the Fox Chase Regional Rail Line	\$11.50 M	2020 - 2026 Project	Philadelphia	Bucks Chester
Marcus Hook Station on the Wilmington/Newark Regional Rail Line	\$22.50 M	2020 - 2026 Project	Delaware	Delaware
Roslyn Station on the Warminster Regional Rail Line	\$6.50 M	2020 - 2026 Project	Montgomery	Montgomery Philadelphia
Wyndmoor Station on the Chestnut Hill East Regional Rail Line	\$19.50 M	2020 - 2026 Project	Philadelphia	rillaueipilla
Wynnewood Station on the Paoli/Thorndale Regional Rail Line	\$20.00 M	2020 - 2026 Project	Montgomery	
Transit & Regional Rail Stations Program— Rail Tran	sit (FY 201	5 - 2019)		
5th Street Station on the Market-Frankford Line				
Rehabilitation of station facilities, including improvements to existing platforms; improvements to the station building; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; security cameras; and drainage improvements and waterproofing.	\$13.00 M	Design 2015 - 2016 Construction 2018 - 2020	Philadelphia	Philadelphia
69th Street Terminal West				
This project provides for the rehabilitation of the Bus Terminal and Trolley Loop to provide an ADA compliant station with focus on energy efficiency. The project includes the installation of two "green roofs" and a "green" wall. The central passenger waiting area will be raised and light control shelves and fins will be installed to increase natural light and reduce energy use. Improvements to bus and trolley operations and pedestrian safety are included.	\$12.99 M	Design complete Construction 2014 - 2016	Delaware	Chester Delaware Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Center City Concourses				
<ul> <li>This project provides for multi-phase improvements to Center City</li> <li>Concourses. Phases include:</li> <li>Phase I, vertical transportation elements including replacement of the two escalators at 15th St., replacement of an escalator and renovation of an elevator at 8th St.</li> <li>Phase IA, concourse signage and repairs.</li> <li>Phase II, consists of the narrow corridors that encircle City Hall, as well as several larger connecting corridors adjacent to Suburban Station.</li> <li>Phase III, is defined as the Walnut-Locust Concourse extending from Chestnut St. to Locust St., and the connecting corridors on Locust St.</li> <li>Phase IV, is several smaller areas extending from 8th and Market St. to the Broad Ridge Spur Station.</li> <li>Phase V, is the Market St. Station Concourses, including the two corridors connecting City Hall Station to the Market East Station.</li> </ul>	\$53.50 M	All Phases: Design 2014 - 2018 Construction 2014 - 2021	Philadelphia	Philadelphia
Margaret/Orthodox Station on the Market-Frankford Line				
Primarily ADA accessibility improvements and rehabilitation. Installation of a new elevator from street level to platform level of the elevated station and two elevators from the platform level to the east overpass in the elevated station; replacement and raising of the elevated platforms; provision of tactile tile platform edges; and new signage, curb ramps, handrails/guardrails, and lighting. Additionally, there will be replacement of sidewalk paving at the elevated station building; repair/replacement/reconfiguration of elements of selected stairs; repair/replacement of structural steel; replacement of roofing materials; repair/replacement of metal panel and tile wall finishes; painting; new amenities (benches, trash receptacles, etc.); new life safety, security and communications systems (Smart Stations elements); and new transformers and an emergency generator.	\$32.33 M	Design Complete Construction 2014 - 2016	Philadelphia	Philadelphia
Wyoming Avenue Station on the Broad Street Line				
Rehabilitation of station facilities, including improvements to existing platforms; improvements to the station building; accessible stairs, ramps, sidewalks and handrails/guardrails; new signage; new lighting; security cameras; and drainage improvements and waterproofing.	\$5.00 M	Design 2016 Construction 2017 - 2019	Philadelphia	Philadelphia

				<b>~</b>
Project Descriptions	Budget	Schedule / Status	Location	Service
	4- (TV 0.00	0.0000		Area
Transit & Regional Rail Stations Program— Rail Tran	isit (FY 202	0 - 2026)		
Rehabilitation of station facilities, including improvements to existing platforms and station building; accessible stairs, ramps, sidewalks and handrails/guardrails; replacement or modernization of elevators and escalators; new signage; new lighting; security cameras; and drainage improvements and waterproofing.				
• 19th Street Trolley Station	\$9.50 M	2020 - 2026	Philadelphia	Philadelphia
Elevator/Escalator Improvements (system-wide)	\$4.75 M	2020 - 2026	Delaware Montgomery Philadelphia	Delaware Montgomery Philadelphia
Fairmount Station on the Broad Street Line	\$18.00 M	2020 - 2026	Philadelphia	Philadelphia
Hunting Park on the Broad Street Line	\$5.50 M	2020 - 2026	Philadelphia	Philadelphia
Transit & Regional Rail Stations Program— Bus & Tra	olley Loops (	FY 2015 - 2019)		
Modernization of the bus and trolley loops including accessibility improvements and improvements to operator bathroom facilities, shelters, loading platforms, lighting and landscaping. Locations include:	\$8.75M			
Ridge & Summit (replace at new location)		Design 2015 Construction 2015-2016	Philadelphia	Philadelphia
• 61st & Pine		Design 2016 Construction 2016 - 2017	Philadelphia	Philadelphia
Bethlehem Pike		Design 2017 Construction 2017 - 2018	Philadelphia	Philadelphia
Rising Sun & Olney		Design 2018 Construction 2018 - 2019	Philadelphia	Philadelphia
Wycombe		Design 2019 Construction 2019 - 2020	Delaware	Delaware

Project Descriptions	Budget	Schedule / Status	Location	Service
Villanova Station (FY 2015 - 2019)				
The project will modernize Villanova Station on the Paoli/Thorndale Regional Rail Line. The scope of work includes high-level platforms with canopies, a new pedestrian underpass with ramps and stairs, station building exterior improvements, parking lot modifications, stormwater management, and new signage, lighting, passenger amenities and landscaping. The improvements will make the station fully ADA accessible.  The project will be advanced in phases. Phase I activities will improve station accessibility through the construction of a new pedestrian tunnel with access ramps and stairs. This phase will also address parking lot modifications and associated stormwater management improvements. Phase II will address the high-level platforms, station building improvements and the balance of the planned work.	\$30.56 M	Phase 1 Design 2012 - 2014 Construction 2015 - 2017  Phase 2 Design 2012 - 2014 Construction 2019 - 2020	Delaware	Delaware Montgomery

SEPTA's railroad and transit substa. ons were built in the 1920s and 1930s. In order to bring these substations up to modern standards of reliability and performance, they must be overhauled or replaced. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. These projects will replace existing equipment with modern indoor switchgear and state-of-theart industry safety systems, communications and relay protection systems, and will provide additional power and reliability.

Power subsystems must also be brought to a state of good repair. These include DC traction power feeder cables; catenary wire on the Broad Street Line, Routes 101/102, regional rail and trackless trolley lines; substation power control upgrades; high speed trip devices; breakers; high voltage bushings; battery control systems, static frequency converters at Wayne Junction; power sectionalizing at interlockings; and uninterrupted power supply (UPS) at SEPTA's Control Center and Radio Room.

SEPTA Traction Power and					
<b>Signal Power Substations Inventory</b>					
City	25				
Suburban	8				
Railroad	44				

**Total** 

77

		Budget						12-Year		
Substations and Power	Prior	Year		Progran	n Years		FY 2020 -	Program	Beyond	Total
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
				\$	Millions					
Substations	\$3.24	\$39.61	\$39.50	\$27.93	\$19.14	\$23.81	\$132.48	\$282.47	\$0.00	\$285.71
Power Improvements	\$6.40	\$21.38	\$14.24	\$6.67	\$5.44	\$6.42	\$52.46	\$106.61	\$0.00	\$113.01
TOTAL	\$9.64	\$60.99	\$53.74	\$34.60	\$24.58	\$30.23	\$184.94	\$389.08	\$0.00	\$398.72





Project Descriptions	Budget	Schedule / Status	Location	Service Area
Railroad Substations (FY 2015 - 2019)				
Ambler Substation				
Overhaul of Ambler Substation on the Lansdale/Doylestown Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. This project will replace the major power components of the substation that are 80+ years old.	\$10.02 M	Design Complete Construction 2014 - 2016	Montgomery	Bucks Montgomery
Bethayres Substation				
Overhaul of Bethayres Substation on the West Trenton Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. This project will replace the major power components of the substation that are 80+ years old.	\$12.96 M	Design 2015 - 2016 Construction 2016 - 2018	Montgomery	Bucks Montgomery
Chestnut Hill East Substation				
Overhaul of Chestnut Hill East Substation on the Chestnut Hill East Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. This project will replace the major power components of the substation that are 80+ years old.	\$7.65 M	Design 2016 - 2017 Construction 2018 - 2020	Philadelphia	Philadelphia
Hatboro Substation				
Overhaul of Hatboro Substation on the Warminster Regional Rail Line. Work includes a new transformer, a new transformer breaker, and protective relaying. This project will replace the major power components of the substation that are 80+ years old.	\$7.65 M	Design 2016 - 2017 Construction 2018 - 2020	Montgomery	Bucks Montgomery
Jenkintown Substation				
Construction of a new Traction Power Substation to replace the Jenkintown Substation of the former Reading Railroad System, which was built in 1931. The new substation will include new transformers, indoor switchgear, state-of-the-art industry standard safety systems, communication systems, relay protection systems and a new road for access to the site.	\$42.24 M	Design Complete Construction 2014 - 2016	Montgomery	Bucks Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Lansdale Substation				
Overhaul of Lansdale Substation on the Lansdale/Doylestown Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. This project will replace the major power components of the substation that are 80+ years old.	\$11.05 M	Design 2015 Construction 2016 - 2018	Montgomery	Bucks Montgomery
Lenni Substation				
Overhaul of Lenni Substation on the Media/Elwyn Regional Rail Line. Work includes new transformers, transformer breakers, trolley breakers, feeder switches, substation switchgear and protective relaying. This project will replace the major power components of the substation that was originally built in the 1920s.	\$10.55 M	Design 2014 Construction 2015 - 2016	Delaware	Delaware
Morton Substation				
Overhaul of Morton Substation on the Media/Elwyn Regional Rail Line. Work includes new transformers, transformer breakers, trolley breakers, trolley and feeder switches, substation switchgear and protective relaying. This project will replace the major power components of the substation that was originally built in the 1920s.	\$10.55 M	Design 2014 Construction 2015 - 2016	Delaware	Delaware
Wayne Junction Static Frequency Converter (SFC) #4				
The major components of the four existing static frequency converters, located adjacent to Wayne Junction Substation, are past their useful lives. SFCs are necessary to convert 230 kv 60 Hz power provided from PECO into a one-of-a-kind 24/12 kv 25 Hz auto transformer system. Total cost of these four rehabilitation/replacement efforts is \$50 million. The construction of a new No. 4 converter must be completed before the overhauls of the three others in order to keep service at 100% during all phases of construction.	\$17.75 M	Design 2015 Construction 2016 - 2018	Philadelphia	Bucks Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Wayne Junction Static Frequency Converter (SFC) #1				
The major components of the four static frequency converters, located adjacent to Wayne Junction Substation, are past their useful lives. SFCs are necessary to convert 230 kv 60 Hz power provided from PECO into a one-of-a-kind 24/12 kv 25 Hz auto transformer system. Total cost of these four efforts is \$50 million. The addition of the No. 4 converter must be completed before the overhauls of the three others in order to keep service at 100% during all phases of construction. After SFC #4 is added, SFC #1 will be the first overhauled converter.	\$10.75 M	Design 2016 - 2017 Construction 2018 - 2020	Philadelphia	Bucks Montgomery Philadelphia
Wood Substation				
Construction of new Traction Power and Signal Power Substation on the West Trenton Regional Rail Line.	\$27.50 M	Design 2017 Construction 2018 - 2020	Bucks	Bucks Montgomery
Railroad Substations (FY 2020-2026 )				
18th St./12th St. Portal Substations				
Overhaul of Center City Tunnel Substations. Work includes new trolley breakers, trolley and feeder switches, substation switchgear and protective relaying. This project will replace the major power components of the 18th St. substation that was originally built in the 1920s and the 12th St. and Portal Substations which were built in 1984.	\$7.00 M	2020 - 2026 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Brill Substation Overhaul				
Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. This project will replace the major power components of the substation that was originally built in 1985.	\$12.75 M	2020 - 2026 Project	Philadelphia	Philadelphia
Doylestown Substation				
Overhaul the Lansdale/Doylestown Traction Power Substation and construct a new Signal Power Facility on the Doylestown Regional Rail Line. Work includes new transformer, transformer breaker, and protective relaying for the traction substation and a new signal power generator and protective relaying in an outdoor enclosure for the new Signal Power Facility.	\$8.80 M	2020 - 2026 Project	Bucks	Bucks Montgomery

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Neshaminy Substation				
Overhaul of Neshaminy Substation on the West Trenton Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. Design will be done in the first five years.	\$10.75 M	2020 - 2026 Project	Bucks	Bucks Montgomery Philadelphia
Wayne Junction Static Frequency Converter (SFC) #2 & #3				
The major components of the four static frequency converters, located adjacent to Wayne Junction Substation, are past their useful lives. SFCs are necessary to convert 230 kv 60 Hz power provided from PECO into a one-of-a-kind 24/12 kv 25 Hz auto transformer system. After SFC #4 is replaced with a new converter, SFC #1 will be overhauled, followed by SFC #2 & #3.	\$21.50 M	2020 - 2026 Project	Philadelphia	Bucks Montgomery Philadelphia
Yardley Substation				
Overhaul of Yardley Substation on the West Trenton Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying.	\$10.75 M	2020 - 2026 Project	Bucks	Bucks Montgomery
Transit Substations (FY 2015 - 2019)				
Castor Substation				
Replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gear at Castor Substation on Castor Avenue serving the Route 59 Trackless Trolley.	\$2.15 M	Design 2017 Construction 2018 - 2020	Philadelphia	Philadelphia
Clifton Substation				
Routes 101/102 (Media-Sharon Hill Line) Substation at Clifton – Replacement of three (3) existing single phase rectifier-transformers and rectifier with a single new 3-phase rectifier-transformer and solid state diode rectifier with DC output of 650 Volts. Work includes new DC & AC switchgear, relay protection, new batteries and battery charging system.	\$3.40 M	Design Complete Construction 2014 - 2016	Delaware	Delaware
Market Substation				
Replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gear at Market Substation (City Transit).	\$9.30 M	Design 2016 Construction 2017 - 2019	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Transit Substation Projects (FY 2020 - 2026)				
The following Transit Substation projects are programmed in Fiscal Years 2020 - 2026 for replacement. Work includes replacement and upgrade of existing breakers, rectifiers, transformer, relays and switch gears. Design will be done during the first five years.	\$29.10 M	2020 - 2026 Project	Philadelphia	Philadelphia
Broad Substation on Mt. Vernon Street serving the Broad Street Line				
<ul> <li>Ellen Substation at Front &amp; Ellen Streets serving the Market-Frankford Line and a portion of the Rt. 15 Trolley</li> </ul>				
<ul> <li>Louden Substation at Carlisle &amp; Louden Streets serving the Broad Street Line and Rt. 75 Trackless Trolley</li> </ul>				
<ul> <li>Park Substation at Cumberland &amp; Park Streets serving the Broad Street Line</li> </ul>				
<ul> <li>Ranstead Substation on Ranstead Street serving the Market-Frankford Line and a portion of the Trolley Lines</li> </ul>				
Power Improvements (FY 2015 - 2019)				
30th Street to Arsenal Catenary Replacement				
Replacement and upgrade of overhead catenary system from 30th Street Station to Arsenal Interlocking.	\$4.30 M	Design 2016 - 2017 Construction 2018 - 2019	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
30th Street West Catenary Replacement				
Replacement and upgrade of overhead catenary system including catenary structures from 30th Street Station to 'K' Interlocking and the Powelton Yard Complex.	\$77.00 M	Design 2015 - 2016 Construction 2018 - 2020	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

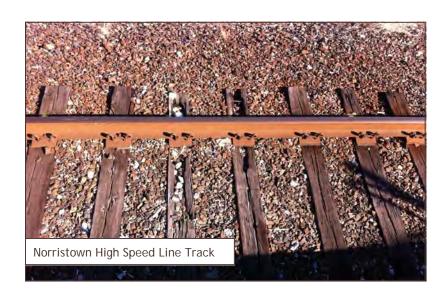
Project Descriptions	Budget	Schedule / Status	Location	Service Area
Fox Chase Line Catenary Replacement				
Replacement and upgrade of the overhead catenary system for Fox Chase Line.	\$2.75 M	Design 2018 Construction 2019 - 2020	Philadelphia	Philadelphia
Media/Elwyn Line Catenary Replacement				
Replacement of 17 miles of 80+ year old catenary between Walnut Interlocking, Philadelphia, and Lenni, Delaware County.	\$10.70 M	Design 2014 - 2015 Construction 2014 - 2017	Delaware Philadelphia	Delaware Philadelphia
Wayne Junction Yard Catenary Replacement				
Replacement and upgrade of overhead catenary system for the Regional Rail Wayne Junction Yard.	\$1.25 M	Design 2018 Construction 2019 - 2020	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Power Improvements (FY 2020 - 2026)				
Airport Line Catenary Replacement				
Replacement and upgrade of the overhead catenary system for the Airport Line.	\$7.00 M	2020 - 2026 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Chestnut Hill East Catenary Replacement				
Replacement and upgrade of the overhead catenary system for Chestnut Hill Line.	\$5.50 M	2020 - 2026 Project	Philadelphia	Philadelphia
Regional Rail Power Feeder Cable Improvements				
Provides for power feeder cable replacement on Regional Rail lines.	\$7.00 M	2020 - 2026 Project	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia

### TRACK AND RIGHT-OF-WAY IMPROVEMENTS

This program will provide for improvements to SEPTA's track and right-of-way. SEPTA operates rail service over 359 one-way route miles of track (including track owned by SEPTA, Amtrak, the City of Philadelphia, and CSX). Projects will return rail infrastructure to a state of good repair and help preserve rail transit service for current and future customers. The "Catching Up" capital program includes projects across the transit and Regional Rail systems that will renew street track and special work, replace con. nuous welded rail (CWR), and renew ties and timbers.

One-Way Route Miles in SEPTA's Rail Networ  Broad Street Line 11  Market-Frankford Line 13  Norristown High Speed Line 13  Regional Rail 280  Trolley 42  TOTAL 359	il Network	١	
	<b>Broad Street Line</b>	11	
	Market-Frankford Line	13	
	Norristown High Speed Line	13	
	Regional Rail	280	
	Trolley	42	
	TOTAL	359	
/			1

		Budget						12-Year		
Track & Right-of-Way -	Prior	Year		Progra	m Years		FY 2020-	Program	Beyond	Total
Program Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
				-\$Millions						
Track and Right-of-Way	\$1.93	\$10.76	\$7.72	\$4.00	\$4.00	\$4.00	\$30.49	\$60.97	\$25.70	\$88.60
TOTAL	\$1.93	\$10.76	\$7.72	\$4.00	\$4.00	\$4.00	\$30.49	\$60.97	\$25.70	\$88.60





## TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Transit Projects (FY 2015 - 2019)				
Market-Frankford Line Bridge Street Yard Program				
Renewal of yard tracks for the Market-Frankford Line at the Bridge Street Yard.	\$3.00 M	Construction 2018 - 2019	Philadelphia	Philadelphia
Norristown High Speed Line Tie Replacement and Continuous W	elded Rail			
Renewal of ties and timbers for the Norristown High Speed Line (NHSL), including track surfacing, subgrade work, new third rail coverboard, and new special work. Project includes the use of special rail equipment including a tie handler, tie inserter/extractor, tamper, spiker and spike puller.	\$26.00 M	Design complete Construction 2014 - 2021	Delaware Montgomery	Delaware Montgomery
Route 15 Girard Avenue & Richmond Street Track Renewal				
Renewal of street track on trolley Route 15 along Girard Avenue from Corinthian Avenue to Frankford Avenue.	\$4.20 M	Design Complete Construction 2016 - 2018	Philadelphia	Philadelphia
Route 101/102 Yard Tracks				
Renewal of yard tracks for the Route 101/102 Trolley (Media/Sharon Hill Lines) at the 69th Street maintenance complex.	\$3.00 M	Construction 2018 - 2019	Delaware	Delaware
Route 102 Woodlawn Avenue Track Renewal				
Renewal of street track on the Route 102 (Sharon Hill) Trolley Line along Woodlawn Avenue from Springfield Road to North Street.	\$3.87 M	Design Complete Construction 2015 - 2016	Delaware	Delaware

## TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Trolley Tunnel Track Improvements				
Replacement of continuous welded rail (CWR) in the City Transit Division Trolley Tunnel. The tunnel serves Trolley Routes 10, 11, 13, 34 and 36.	\$6.60 M	Design Complete Construction 2014 - 2016	Philadelphia	Philadelphia
Transit Projects (FY 2020 - 2026)				
Route 11 and 36 Track Improvements				
Renewal of street track on trolley Route 11 along Woodland Avenue from 58th to 60th Street, and trolley Route 36 along Elmwood Avenue from 56th to 59th Street. Also includes special track work replacement at Elmwood Yard.	\$5.7 M	2020 - 2026 Project	Philadelphia	Philadelphia
Railroad Projects (FY 2020 - 2026)				
Norristown Station 3rd Track				
Construction of a third track at Norristown Station to separate freight rail service from passenger rail service and facilitate the opportunity for increased frequency on SEPTA's Manayunk / Norristown Line. The Regional Rail Norristown Station will be reconstructed and made fully ADA accessible as part of this project.	\$34.5 M	2020 - 2026 Project	Montgomery	Montgomery
Railroad Special Work Program				
Renewal of special work along various Regional Rail lines. Project includes improvements to the following interlockings on the Regional Rail Main Line: West Interlocking (on the west side of 30th Street Station); Schuylkill Interlocking (on the east side of 30th Street Station); and Broad Interlocking (west of Suburban Station).	\$2.0 M	2020 - 2026 Project	Philadelphia	Philadelphia

SEPTA's revenue vehicle fleet consists of 1,390 buses, 932 rail vehicles, 38 trackless trolleys and 455 paratransit vehicles. SEPTA also operates a fleet of non-revenue vehicles and equipment which are used for construct on, vehicle and facility maintenance and service supervision. Revenue vehicles are overhauled on a planned schedule to maintain a quality state of good repair throughout a vehicle's service life. This program will replace vehicles and equipment that have exceeded their useful life, and in the case of some of the rail vehicles (trolleys and regional rail cars) far exceeded the typical service life. This program will also provide for fleet expansion to meet present and projected increases in ridership demand. Regional Rail ridership has increased by 50% in the last 15 years. Overall ridership is at its highest levels in history. SEPTA will be reviewing financial opi ons, such as the issuance of bonds, to assist in the advancement of the rail vehicles included in this program.

	Revenue Vehicle Inventory	/	
	Regional Rail Locomotives	8	
	Push/Pull Cars	45	
	Silverliner IV's	231	
	Silverliner V's	120	
	MFSE Cars	218	
	BSS Cars	125	
	NHSL Cars	26	
	City LRV Trolleys	112	
	City PCC Trolleys	18	
	Suburban Trolleys	29	
	Buses	1,390	
	Trackless Trolleys	38	
	Paratransit Vehicles	455	
/			,

		Budget						12-Year		
Vehicle Acquisitions and Overhaul - Program	Prior	Year _		Program	n Years		FY 2020-	Program	Beyond	Total
Elements	Funding	FY 15	FY 16	FY 17	FY 18	FY 19	2026	Total	FY 2026	Budget
					\$N	lillions				
Bus Purchase Program	\$184.03	\$33.29	\$60.00	\$60.00	\$60.00	\$71.57	\$498.99	\$783.85	\$0.00	\$967.88
Paratransit Vehicle Acquisition	\$0.00	\$6.00	\$4.50	\$6.00	\$6.00	\$6.00	\$42.00	\$70.50	\$0.00	\$70.50
Regional Rail Bi-Level Car & Locomotive Acq.	\$0.00	\$1.10	\$7.42	\$7.42	\$17.31	\$17.31	\$121.15	\$171.70	\$63.54	\$235.25
Regional Rail Silverliner IV Replacement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$397.50	\$397.50	\$705.50	\$1,103.00
Trolley Acquisition	\$0.00	\$0.50	\$22.58	\$22.58	\$52.69	\$52.69	\$368.85	\$519.90	\$193.46	\$713.35
Utility Vehicle Renewal	\$0.00	\$6.00	\$6.00	\$6.00	\$6.00	\$6.00	\$42.00	\$72.00	\$0.00	\$72.00
Vehicle Overhaul Program	\$0.00	\$70.00	\$71.00	\$72.00	\$73.00	\$74.00	\$546.00	\$906.00	\$0.00	\$906.00
TOTAL	\$184.03	\$116.89	\$171.50	\$174.00	\$215.00	\$227.57	\$2,016.49	\$2,921.45	\$962.50	\$4,067.98







Project Descriptions	Budget	Schedule / Status	Location	Service Area
Bus Purchase Program (FY 2015 - 2026)				
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-foot and 30-foot buses for suburban circulator and contracted service routes. SEPTA's current bus fleet includes 472 hybrid buses, which represents approximately one-third of the total fleet. This quantity of hybrid buses makes SEPTA one of the largest public transit operators of hybrid buses in the country.				
SEPTA awarded a contract to NOVA Bus, Inc. in March 2012 for the procurement of 245 low-floor buses. A contract option was executed that increased the quantity to 275 buses. The order consists of 185 60-foot buses and 90 40-foot buses. The 90 40-foot hybrid buses and 70 of the 185 60-foot articulated hybrid buses are scheduled for delivery July 2014 to December 2014. The remaining 115 60-foot articulated buses are scheduled to be delivered in calendar years 2015 and 2016.	\$783.85 M	Current Contract Delivery 2014-2016	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
SEPTA was successful in receiving federal discretionary grants and other supplemental funding sources to assist in the funding of 235 buses as hybrids, and is currently seeking additional funding for the final 40 of the 185 60-foot buses as hybrids.				
Planning is underway for the next order of buses. The goal of this program is to fund the replacement of approximately 100 buses a year to maintain an average age of 6 years for the bus fleet.				

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Paratransit Vehicle Purchase (FY 2015 - 2026)				
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.				
<ul> <li>SEPTA ownership of these vehicles provides the following benefits:</li> <li>The flexibility to rapidly exchange vehicles between carrier networks</li> </ul>		Annual delivery to replace	Bucks Chester	Bucks Chester
should the need arise.	\$70.50 M	vehicles beyond their useful life	Delaware Montgomery Philadelphia	Delaware Montgomery
Creates an economic incentive for carriers to provide quality service.				Philadelphia
More control over fleet composition and standardization of the fleet.				
More control over vehicle design features.				
In Fiscal Year 2015, up to 80 vehicles will be acquired, consisting of 60 minibuses with wheelchair lifts, 2 twelve-passenger minibuses without wheelchair lifts and 18 Hi-Capacity minibuses with wheelchair lifts.				
Regional Rail Bi-Level Car & Locomotive Acquisition (	(FY 2015 - 2	2019)		
To accommodate increased ridership and service capacity needs on the Regional Rail System, this project will provide for the acquisition of bi-level push-pull coaches and electric locomotives. The bi-level coaches are additions to SEPTA's push-pull railcar fleet. The new locomotives will replace existing locomotives and haul new bi-level rail coaches. Railcars acquired will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems. Activities underway in support of this acquisition include studies to review yard storage and shop modifications needed at Frazer Shop, overhead catenary and bridge clearance requirements and vehicle technical specification development. The feasibility and exact quantities and types of vehicles/locomotives will be determined after completion of these studies.	\$235.25 M	Delivery schedule to be developed	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Regional Rail Silverliner IV Replacement (FY 2020 -	2026)			
This project provides for the purchase of new railcars to replace SEPTA's Silverliner IV railcar fleet. The Silverliner IV rail cars were built between 1974 and 1976, and by the time of replacement, the cars will be well past their expected useful life. Vehicles acquired will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems.	\$1,103.00 M	2020 - 2026 Project and beyond	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
Trolley Acquisition (FY 2015 - 2019)				
This project provides for the purchase of new light rail vehicles (trolleys) for Routes 10, 11, 13, 15, 34, 36, 101 & 102. These rail transit lines currently operate with 141 light rail vehicles that were built in 1981, as well as 18 "Presidential Conference Committee" (PCC-II) cars originally manufactured in 1947 and rebuilt by Brookville Equipment Company in 2003-2004. Vehicles to be acquired will fully comply with Americans with Disabilities Act (ADA) requirements.	\$713.35 M	Delivery schedule to be developed	Delaware Philadelphia	Delaware Philadelphia
A study is underway to determine the feasibility of using articulated light rail vehicles on some or all of the lines to increase passenger and service capacity. The exact quantity and type (articulated/non-articulated) will be determined after completion of the study.				

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Utility Vehicle Renewal (FY 2015 - 2026)				
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. 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 upon the vehicle's age, condition and usage within the Authority.				
<ul><li>The utility fleet is comprised of the following types of vehicles:</li><li>Utility vehicles and equipment for transit and paratransit supervisors, and</li></ul>				
SEPTA police officers.				Bucks
<ul> <li>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.</li> </ul>	\$72.00 M	Annual delivery to replace vehicles beyond their useful life	System-Wide	Chester Delaware Montgomery Philadelphia
<ul> <li>Transporter 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.</li> </ul>				
Service vehicles used for vehicle maintenance including wreckers, tow tractors, man lifts and pick-up trucks.				
<ul> <li>Miscellaneous equipment such as generators, compressors, trailers, floor scrubbers and welding units.</li> </ul>				

Project Descriptions	Budget	Schedule / Status	Location	Service Area
Vehicle Overhaul Program (FY 2015 - 2026)				
SEPTA's Vehicle Overhaul Program (VOH) provides for the systematic replacement or upgrade of systems on SEPTA's rolling stock. Vehicles are scheduled for overhauls during their service lives based on vehicle type and age. A vehicle must receive periodic overhauls if it is to optimize performance throughout its useful service life. Prudent fleet management requires a program of preventive maintenance for optimal fleet reliability, service quality, efficient performance, and passenger comfort. Advanced scheduling of vehicle preventive maintenance 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. 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 2015 program include the overhaul of 40-foot low floor New Flyer diesel buses, a prototype 40-foot hybrid (diesel-electric) bus, Broad Street B-IV cars, City and Suburban trolleys, Regional Rail Silverliner IV cars, Market Frankford M-4 cars, Norristown High Speed Line N-5 cars, and support vehicles and equipment. Highlights of campaigns for Fiscal Year 2015 include N-5 car seat replacement and M-4 car truck work. Regional Rail Silverliner IV campaigns include the A/C condenser unit overhaul, rotating equipment change out, trap door and double-ended blower overhauls, rebuilding of pantographs, and main transformer conversion.	\$906.00 M	Annual program to overhaul a portion of each vehicle fleet	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

## FY 2015 CAPITAL BUDGET AND FY 2015-2026 CAPITAL PROGRAM

**Appendices** 



### APPENDIX A: STRATEGIC BUSINESS PLAN OBJECTIVES AND THE CAPITAL PROGRAM

SEPTA's Strategic Business Plan is designed to unify and guide management decision-making and major planning processes at SEPTA, including the Opera. ng and Capital Budgets as well as the Annual Service Plan. SEPTA sets targets for each objective and measures annual progress using quantitative metrics.

The matrix below illustrates the relationship between SEPTA's FY 2010-2014 Strategic Business Plan objectives and the FY 2015-2026 Capital Program. The Strategic Business Plan for FY 2015-2019 will update these objectives and will be available at http://www.septa.org/strategic-plan.



	Strategic Business Plan Objectives						
Capital Programs	Safety & Security	Rebuilding the System	New Technology	Customer Service	Ridership Growth	Sustainability	Human Capital Development
Bridge Program	✓	✓				✓	
Communications, Signal Systems and Technology Improvements	✓	✓	✓	✓	✓		✓
Debt Service and Capital Leases		✓		✓	✓	✓	
I-95 Congestion Mitigation Strategies		✓		✓	✓	✓	
Infrastructure Safety Renewal Program	✓	✓	✓	✓		✓	✓
Maintenance / Transportation Shops and Offices	✓	✓		✓		✓	✓
New Payment Technologies		✓	✓	✓	✓	✓	✓
Safety & Security Improvements	✓	✓	✓				
Service Restorations		✓			✓	✓	
Stations, Loops and Parking Improvements	✓	✓		✓	✓	✓	
Substations and Power Improvements	✓	✓	✓			✓	
Track and Right-of-Way Improvements	✓	✓			✓	✓	
Vehicle Acquisitions and Overhauls	✓	✓	✓	✓	✓	✓	

This Appendix describes various transit expansion, community, and regional planning projects. These projects are included to provide information on long-term capital programming and strategic planning conducted by the Commonwealth of

Pennsylvania, the Delaware Valley Regional Planning Commission (DVRPC), SEPTA, the City of Philadelphia, Bucks, Chester, Delaware and Montgomery Counties, and other transportation agencies and associations in the region.

## **Project Descriptions**

## **Expansion Project Planning**

#### King of Prussia Rail Project

Lead Agency: Southeastern Pennsylvania Transporta. on Authority (SEPTA)

An Alternatives Analysis and Draft Environmental Impact Statement (AA/DEIS) planning study for the King of Prussia Rail Project, an extension of the Norristown High Speed Line to the King of Prussia area, began in 2012. This planning effort is critical given the changes in the King of Prussia area over the past decade in land use, population growth, the expansion of the King of Prussia Mall (the largest Mall complex in the United States), the formation of a Business Improvement District (BID), and the growing number of SEPTA bus passengers who currently endure unpredictable and longer than desired bus travel times to the area as a result of traffic congestion on area roadways. The goal of the study is to determine a locally preferred alternative for an extension of the existing Norristown High Speed line to the King of Prussia area, providing access to areas such as the King of Prussia Mall, the business park area north of the mall, the Valley Forge National Historical Park and the Valley Forge Casino Resort. The study will utilize a tiered screening process to narrow down the alternatives from an initial list of 30 potential alternatives to a single recommended locally preferred alternative. The study will include development of capital and operating costs, a simulation of service operations, appropriate environmental review steps as required by the National Environmental Policy Act (NEPA), 3D modeling of the locally preferred alternative, and significant outreach to the public as well as area stakeholders. Ridership modeling for each of the alternatives will also be developed by the Delaware Valley Regional Planning Commission (DVRPC). The Alternatives Analysis and Draft Environmental Impact Statement will be completed by the end of 2015.

#### Broad Street Line Extension - AT&T Station to the Philadelphia Navy Yard

Lead Agency: Southeastern Pennsylvania Transportation Authority (SEPTA)

A phase of planning efforts is soon to begin that builds on the alternative analysis initially developed in the Broad Street Line Extension Feasibility Study completed in 2008, which focused on the feasibility of an extension of this subway line into the Navy Yard. This next phase of planning will further refine the transportation alternatives, identify a preferred rail alignment and prepare the necessary environmental work required.

## **Project Descriptions**

#### Quakertown Rail Restoration - Alternatives Analysis

Lead Agencies: Delaware Valley Regional Planning Commission (DVRPC) / Montgomery and Bucks County Planning Commissions

The Alternatives Analysis (AA) study investigated the feasibility of restoring passenger rail service linking Bucks County and North Penn communities with Center City Philadelphia, via Lansdale. The AA examined transit options that would mitigate highway congestion in the Route 309 corridor. The AA also identified cost-effective, productive and affordable means to use transit capital investments and service improvements to strengthen mobility connections between Bucks County and Montgomery County, along with key activity centers. Service alternatives were refined and ridership modeling forecasts were prepared, in addition to the development of operating and capital cost estimates and user benefit estimates for the new alternatives. This effort was managed by DVRPC, and coordinated with Bucks and Montgomery County Planning Commissions, the TMA of Bucks County and SEPTA. The preliminary findings of this study reflect an approach to restoring service in the Route 309 corridor by recommending electrification of the SEPTA-owned branch line to a terminus point at Pennridge in West Rockhill Township, with some degree of phasing. Additional work is pending the FTA finalization of new evaluation criteria for federal transit projects under MAP-21. At that time, stakeholders, including SEPTA, agreed to re-examine the project to determine its potential for advancement and funding.

#### **Long Range Planning**

#### Pennsylvania Passenger and Freight Rail Plan

Lead Agency: PennDOT

This plan sets the priorities for the Commonwealth's passenger and freight rail. To ensure that Pennsylvania continues to benefit from a robust network of rail that supports economic and environmental benefits, this plan was designed to provide a framework for necessary investments such that the rail system supports sustainable and livable, thriving communities. The long-term priority of the plan is to bring the rail systems within the Commonwealth to a state of good repair and maintain that level of future investment. This project was completed in Fiscal Year 2012.

#### Long Range Regional Transportation Plan - Connections 2040 Plan for Greater Philadelphia

Lead agency: Delaware Valley Regional Planning Commission (DVRPC)

DVRPC is required to update the Long Range Regional Transportation Plan every five years. The plan addresses transportation, land use, environmental and economic competitiveness policies and includes fiscally constrained transportation projects. The plan was adopted by the DVRPC Board in July 2013 and published in November 2013. With the passage of Act 89, the regional long range plan requires a supplemental amendment to include longer range projects that previously had been deferred due to fiscal constraints.

## **Project Descriptions**

#### City of Philadelphia: Philadelphia 2035 Plan

Lead agency: Philadelphia City Planning Commission

A large scale Citywide planning effort with three themes – Thrive, Connect and Renew - includes new and extended transit lines to serve the Roosevelt Boulevard Corridor, access to the Navy Yard, connections to the Central Delaware Waterfront and the Centennial District; and the development of the Market East Station and 30th Street Station areas. This phase was completed in Fiscal Year 2012. Further elements include adoption of The Complete Streets Manual – the balanced use of streets between pedestrians, bicyclists, transit, and vehicles; and The Philadelphia Master Trails Plan. The City is preparing 18 individual District Plans to develop specific recommendations for each neighborhood to implement the broad goals of the Citywide Plan. The following District Plans are underway or completed:

- Underway: Lower Northwest
- Completed: Lower South, West Park, Lower Northeast, Central, University Southwest, Lower North and Central Northeast

SEPTA participates in the development process by providing review, analysis and input into the District Plans to ensure consistency and integration of planning efforts by all stakeholders.

#### Amtrak Northeast Corridor Infrastructure 2030 Master Plan

Lead agency: Amtrak

A comprehensive Master Plan for the Northeast Rail Corridor. The plan was undertaken using a strategic approach 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. A final Report was adopted by the NEC Master Plan Executive Committee in the spring 2010.

#### Amtrak Northeast Corridor Infrastructure 2030 Master Plan - Phase II

Lead agency: Amtrak

A subsequent Phase has been initiated to update the original plan, and further refine and prioritize capital projects and programs that need to occur in order to reach a State of Good Repair as well as introduce improvements to the Northeast Corridor (NEC) that are beneficial to all rail carriers. SEPTA's role has been to ensure that current operations on the NEC, including the Keystone branch can be sustained through appropriate investments. There are several station planning improvement projects underway as part of PennDOT's continuing agenda to improve stations on the Keystone branch (Harrisburg Line), including work at Coatesville, Parkesburg and Downingtown. This Phase II effort is anticipated for completion by the Fall of 2014.

## **Project Descriptions**

#### Northeast Corridor Commission Actions

Lead agency: NEC Infrastructure and Operations Advisory Commission

Under the Passenger Rail Investment and Improvement Act (PRIIA) of 2008, the NEC Infrastructure and Operations Advisory Commission was established to guide and lead the various planning efforts throughout the Corridor. The NEC Commission directs efforts to redefine the use of the NEC with the development of a comprehensive cost-allocation methodology that is to be eventually adopted by the Northeast Corridor States. Both SEPTA and PennDOT have roles in these efforts, which are scheduled to be complete in 2014. The application of a full cost allocation by the States and Commuter rail carriers for all aspects of future operating costs and capital investments on the NEC in addition to a more pronounced partnering approach with Amtrak on the key decision-making is scheduled to become effective in October 2014.

#### NEC Future: A Rail Investment Plan for the Northeast Corridor

Lead agency: Federal Railroad Administration

This study began in 2012 and includes several components: the development of a service plan for the NEC, with consideration of both current and future markets for improved rail service and capacity; a corridor-level environmental impact statement (Tier 1) that considers the impacts to the environment and supports reduction in energy use; and an investment plan for passenger rail on the NEC that can be approached incrementally. Primary among the plan goals is to consider high-speed rail alignments and improve connectivity among rail services and between rail and other modes. SEPTA is participating in the process and providing information to the project team about capital improvements that would enhance high-speed commuter rail operations on the NEC. The FRA is scheduled to complete this comprehensive environmental impact assessment in the fall of 2015.

### **Other Planning Activities**

#### DVRPC Transportation and Community Development Initiative (TCDI) Studies

Lead agencies: Selected Municipalities/Delaware Valley Regional Planning Commission (DVRPC)

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 (primarily awarded in FY12):

- Intermodal Connections, Norristown Borough
- Malvern TOD Plan, Malvern Borough
- Noble Station TRID Plan, Abington Township
- Chester Transportation Center and Economic Development, City of Chester
- East Kensington Community Development Plan, Philadelphia
- Various Implementation Plans for Philadelphia 2035, Philadelphia

## **Project Descriptions**

#### **DVRPC** Work Program Studies

Lead agencies: Delaware Valley Regional Planning Commission (DVRPC), member governments, transit organizations

This document outlines all of the federally funded planning projects slated for the nine-county region from July 1, 2014 to June 30, 2015. The listing includes DVRPC projects, as well as projects planned by member governments and transit organizations. The Work Program is developed annually by the DVRPC Board with its planning partners to reflect the region's short-range planning needs. The latest DVRPC work program projects that SEPTA has directly contributed to include:

- Neshaminy Mall Transit Center Evaluation and Concept Plan
- Alternatives Development for Roosevelt Boulevard Transit Investments
- City Branch Transit Feasibility Study
- Trenton Line Access Study

#### APPENDIX C: HURRICANE SANDY RESILIENCY PROGRAM APPLICATION

Under the "Resilience Projects In Response to Hurricane Sandy" grant program (49 U.S.C. 5324), the Federal Transit Administra. on (FTA) has made available \$3 billion in discretionary funds for transit agencies that were impacted by Hurricane Sandy. This competitive program will help address vulnerabilities to public transportation infrastructure due to natural disasters, emergencies, or projected changes in development patterns, demographics, or climate change and extreme weather. The program prioritizes cost-effective projects that will harden assets against future natural disasters and reduce the risk of associated service disruptions. The grant program may provide up to 75 percent of total project costs.



In consultation with regional stakeholders, SEPTA has developed a strategic Infrastructure Resilience Program that reflects the Authority's overarching goal to improve resilience against costly damage and delays, and to ensure ongoing continuity of operations in the event of extreme weather. This coordinated planning effort has informed the selection of a package of projects designed to strengthen Regional Rail, transit, and communications infrastructure. SEPTA has submitted an application to the FTA's "Resilience Projects In Response to Hurricane Sandy" grant program to advance as many of these projects as possible with available funds. Candidates include a variety of projects such as flood monitoring and mitigation, right of way hardening, power system resiliency and emergency communications.

Hurricane Sandy Resiliency Program Application - Program Elements	Total Cost (Millions)	Federal Request (Millions)
Railroad Resilience	\$131.7	\$98.8
Transit Resilience	\$44.2	\$33.2
Emergency Communications	\$72.9	\$54.7
TOTAL	\$248.9	\$186.6



