



Fiscal Year 2016 Capital Budget

Fiscal Years 2016-2027

Capital Program

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**FISCAL YEAR 2016 CAPITAL BUDGET
AND FISCAL YEARS 2016-2027 CAPITAL PROGRAM**

“REBUILDING SEPTA FOR THE FUTURE”



Approved by the SEPTA Board

May 28, 2015

FY 2016 CAPITAL BUDGET AND FY 2016-2027 CAPITAL PROGRAM

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FY 2016 CAPITAL BUDGET AND FY 2016-2027 CAPITAL PROGRAM

Overview and Summary

This document presents SEPTA's annual capital budget for Fiscal Year 2016 and the capital program for Fiscal Years 2016 through 2027. Developed annually, the budget describes the capital improvements SEPTA plans to undertake with an anticipated 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 2016 Capital Budget and FY 2016-2027 Capital Program Funding Table
- Description of capital programs and individual projects
- Appendices (Alignment with Strategic Plan and Long-Term Planning Efforts)

SEPTA's FY 2016 Capital Budget totals **\$534.54 million** and the 12-year Capital Program totals **\$6.8 billion**. In comparison, the amended FY 2015 Capital Budget totaled \$687.47 million and the 12-year Capital Program totaled \$6.9 billion, which was approved by the SEPTA Board on October 23, 2014. This amount included the addition of a competitive federal Hurricane Sandy program award of \$115.7 million to advance SEPTA's Resilience program.

In FY 2016, SEPTA will continue to pursue its "Rebuilding SEPTA for the Future" program (originally begun in FY 2015 as the "Catching Up" program). This program includes improvements to local infrastructure, such as substations, bridges and stations. The program also replaces 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improvements will protect regional transit service for current and future customers, improve reliability and modernize outdated equipment.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 2016 Capital Budget continues to fund the groundbreaking SEPTA Key (formerly known as New Payment Technologies), the Authority's fleet of hybrid buses, installation of federally mandated Positive Train Control (PTC) signal technology, vehicle overhauls, capital leases and debt service.

An interactive microsite containing information by project and infrastructure program is available at <http://www.SEPTA.org/rebuilding> (see microsite page representation at right).

FY 2016 Capital Budget Open House



"Rebuilding the SEPTA System" Link



FY 2016 CAPITAL BUDGET AND FY 2016-2027 CAPITAL PROGRAM

Introduction to SEPTA

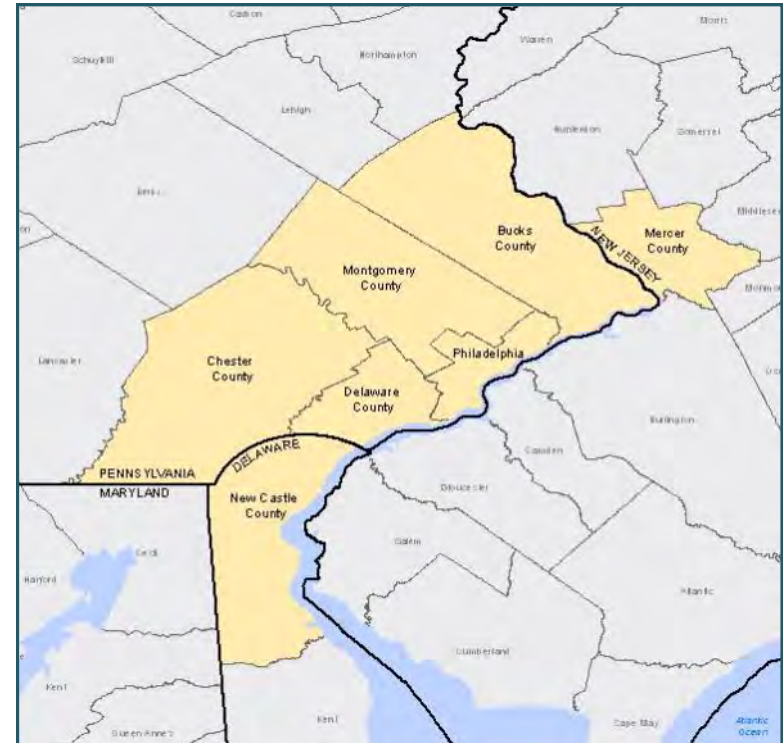
SEPTA is the nation's sixth-largest public transit agency and the primary public transit provider in the greater Philadelphia region. SEPTA was created by the Pennsylvania state legislature in 1964 and is an instrumentality of the Commonwealth of Pennsylvania. SEPTA's multimodal network serves a 2,200 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	157,968,145	1,390
Regional Rail	36,657,700	404
Trolley	31,879,509	159
Subway/Elevated	93,318,600	343
Norristown High Speed Line	3,147,209	26
Trackless Trolley	5,405,800	38
Demand Response	1,778,800	445
Total	330,155,763	2,770

Source: FY 2014 SEPTA Operations Statistics



In FY 2014, the Authority provided more than **330 million** passenger trips, with average weekday ridership of approximately **1.10 million** trips. Despite heavy snowfalls during the winter of 2013-2014, SEPTA's FY 2014 ridership remained near quarter-century highs, including an all-time record **36.7 million** passenger trips on Regional Rail.

SEPTA Regional Rail and Rail Transit Map



Recent Achievements

SEPTA's Board Chair Pasquale T. Deon, Sr. received the 2014 **Outstanding Public Transportation Board Member Award** from the American Public Transporta Associa (APT).

Women's Transporta Seminar (WTS) - Philadelphia Chapter presented SEPTA with the **2014 Philadelphia Award** for extraordinary e orts to promote the Transporta Industry in the Philadelphia area, and the **Innovative Transportation Solution Award** for SEPTA's "SEP-TAINABLE" Recycling Program.

SEPTA's Energy Op miza Project won the **Energy Storage North America (ESNA) 2014 Innovation Award**. SEPTA partnered with Philadelphia-based smart grid Viridity Energy to implement a storage system that u izes "regener e energy" created by braking trains.

SEPTA's 33rd & Dauphin Bus Loop rehabilita won the **Philadelphia Preservation Alliance 2014 Grand Jury Award**.

SEPTA, in partnership with the Archdiocese of Philadelphia and the City, will host the **World Meeting of Families and Pope Francis** in the Fall 2015.

This year marks the **30th anniversary** of SEPTA's Airport Regional Rail Line.

Naming Rights Partnership with Je erson University Hospitals renames Market East Regional Rail Sta n "Jefferson Station."

STRATEGIC PLANNING EFFORTS

Strategic Business Plan

As part of its Five-Year Strategic Business Plan, SEPTA establishes vision, mission, core values, strategies, and key performance indicators to measure progress toward business objectives. The strategic planning process is a management tool that unifies and guides SEPTA’s other major planning processes, including the Operational and Capital Budgets and the Annual Service Plan. The Strategic Business Plan for FY 2015-2019 uses eight corporate objectives to align these plans:

- ☒ Safety & Security
- ☒ The Customer Experience
- ☒ Sustainability
- ☒ Ridership Growth
- ☒ Emerging Technologies
- ☒ Rebuilding the System
- ☒ Human Capital Development
- ☒ Business Partnerships

SEPTA employs a balanced scorecard approach to measure quantitative progress. “Key Performance Indicators” reports are updated monthly and are available at: <http://www.septa.org/strategic-plan>.

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, support nearly **26,000 jobs** in Pennsylvania, and generate **\$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

A key program element of SEPTA’s Strategic Business Plan is “SEP-TAINABLE,” 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 <http://www.septa.org/sustain>. Examples of goals, performance indicators and results are shown in the table below.

SEP-TAINABLE Sustainability Plan Goals (Selection)			
Focus Area	Example Goal	Performance Indicator	Latest Results
Environmental	Reduce waste and increase recycling rates	Recycling rate (% Diverted from land fill)	Recycled 14% of municipal waste in FY 2014; progress towards a 20% goal system wide.
Social	Improve access to local food via transit	Farmers markets on SEPTA property	In 2014, five markets were hosted on SEPTA property, exceeding performance target of three markets.
Economic	Increase transit mode share	Commute-to-work mode share for public transportation	Increased to 12.68% regionally in 2013, 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 2016. 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. A new suite of software will help SEPTA maintain comprehensive asset inventories and maintenance information for rolling stock and assets such as bridges, stations, and rail. Initiatives currently underway include:

Vehicle Maintenance Information System (VMIS) • Upgrade to software used to manage and maintain SEPTA's revenue vehicles, including buses, Customized Community Transportation (CCT) vehicles, rail cars, and trolley vehicles.

Asset Maintenance Management System • Implementation of an infrastructure maintenance management system to maintain inventory; track inspection dates; and schedule preventive maintenance, for SEPTA's infrastructure and associated assets.

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.

One of SEPTA's strategic business goals is "Rebuilding the System." With the infusion of new State funding, the Authority continues to pursue the replacement and renewal of infrastructure and vehicles, such as substations, bridges, stations, maintenance facilities, and rail cars, in order to bring the system to a state of good repair. State of good repair projects require finding a balance between operational impacts and other strategic business initiatives.



STRATEGIC PLANNING EFFORTS

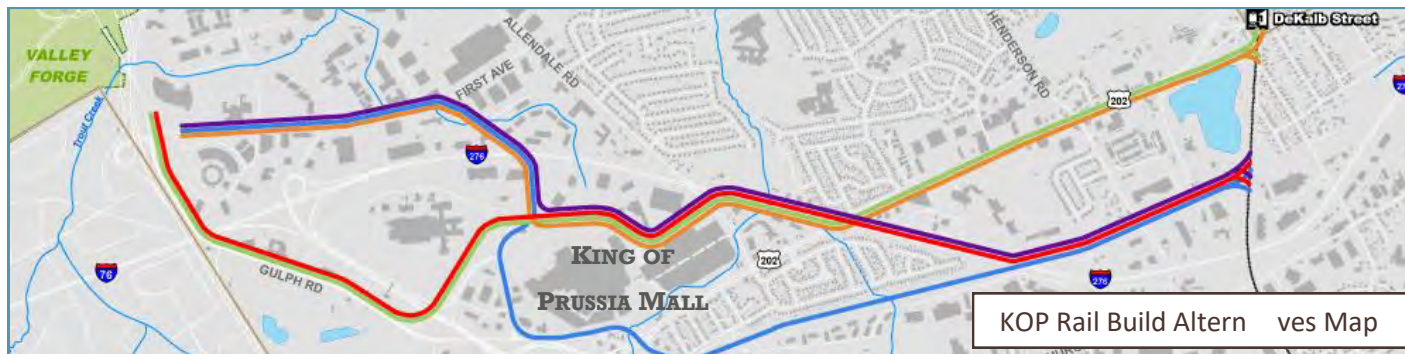
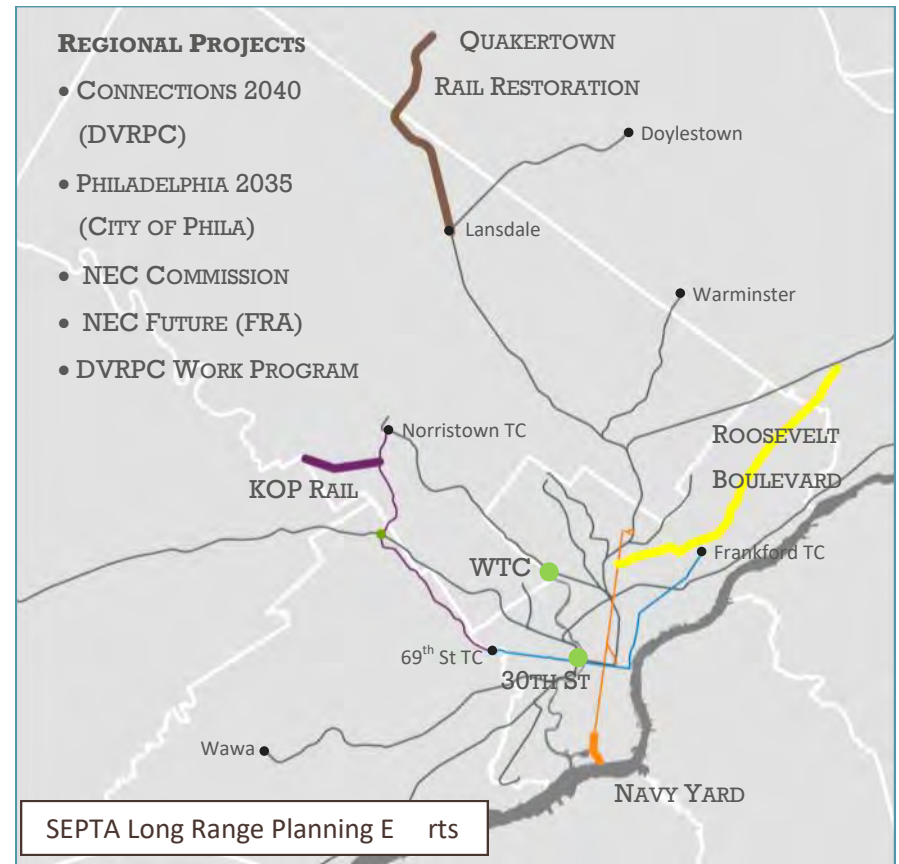
Long Range Planning

SEPTA plays a key role in a wide variety of transportation planning efforts within the region, ranging from involvement in the Delaware Valley Regional Planning Commission's (DVRPC) Connections 2040 Long Range Transportation Plan, to review and implementation of Philadelphia 2035 and County Plans, to local station area planning projects with Municipalities within the SEPTA service area. These planning efforts help to identify potential future transportation needs as well as inform the SEPTA capital planning process of recommended future investments.

Although SEPTA will remain focused for the foreseeable future on reducing the backlog of state of good repair projects, the Authority is able to advance planning efforts for a small number of potential future system expansion projects. SEPTA is currently involved in planning work for several of these potential future expansions: an extension of the Norristown High Speed Line to King of Prussia (the King of Prussia Rail Project), an extension of the Broad Street Subway to the Philadelphia Navy Yard, and the Quakertown Rail Restoration Analysis on the Bethlehem Branch from Lansdale to Perkasie.

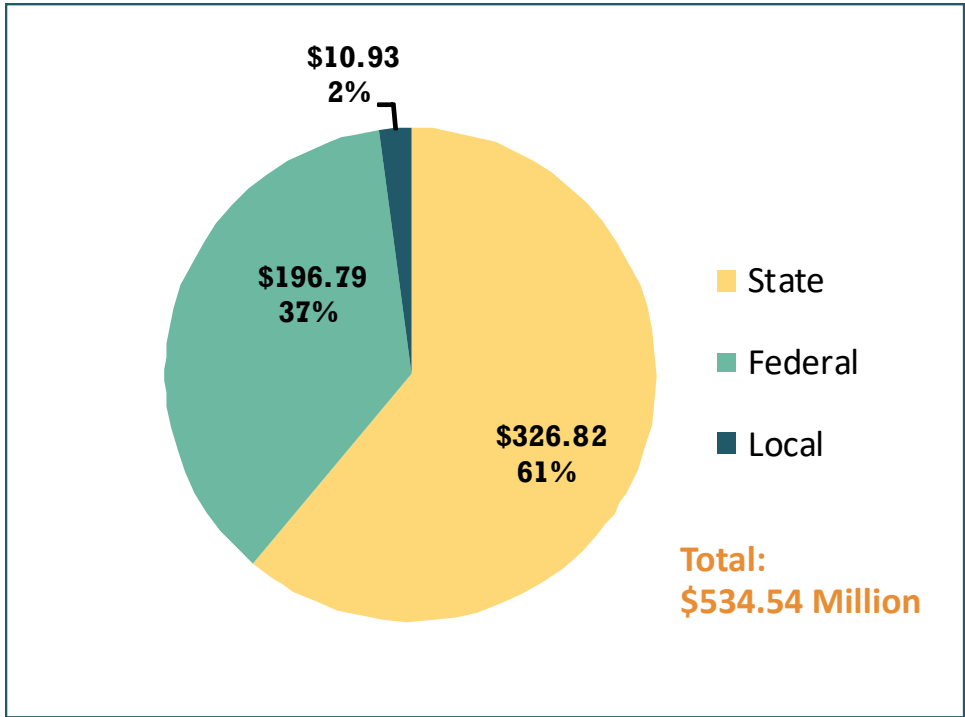
SEPTA also participates in complex and large scale planning efforts led by area stakeholders, including implementation and review of the Philadelphia 2035 plan, AMTRAK Northeast Corridor Planning, and participation in the DVRPC work program and associated studies.

Many of these long term planning efforts are identified on the adjacent map. For additional project details on these projects as well as SEPTA's framework for a Long Range Plan, please refer to Appendix B.



SOURCES OF CAPITAL FUNDING

FY 2016 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, fare 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. The passage of Act 89 of 2013 enables SEPTA to begin addressing these shortcomings.

State Funds: \$326.8 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 infrastructure, and surcharges on truckets. 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 by Fiscal Year 2018, as compared to FY 2014. This level of capital funds will permit SEPTA to address its State of Good Repair backlog, currently estimated at \$5 billion due to long-term funding shortfalls. In FY 2015, SEPTA embarked on its “Rebuilding for the Future” capital program to repair or replace assets that have long exceeded their useful life.

SEPTA’s FY 2016 Capital Budget includes **\$326.82 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; 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 when used in this manner. The remaining 0.645 percent is matched by the four regional counties and City of Philadelphia.

SOURCES OF CAPITAL FUNDING

Federal Funds: \$196.8 Million

SEPTA's FY 2016 Capital Budget includes an estimated **\$196.8 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) authorizes federal surface transportation programs. Congress is working on reauthorization of MAP-21, which has been extended through July 31, 2015. Federal funding sources and Fiscal Year 2016 estimates 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 "passes" (i.e., transfers) to transit agencies; SEPTA typically uses these funds for bus replacements. SEPTA's FY 2016 capital budget includes \$5.1 million in Congestion 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 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 September 2014, SEPTA received \$86.8 million in funding from the FTA's "Resilience Projects In Response to Hurricane Sandy" competitive grant program, which made funding available to transit agencies impacted by Hurricane Sandy to protect transit infrastructure against future natural disasters. This funding represents a 75 percent share of SEPTA's Resilience Program cost of \$115.7 million. The program consists of seven projects designed to harden priority areas of SEPTA's infrastructure.

FY 2016 Budget: Federal Funding Estimates		
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.	\$61.0
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.	\$3.0
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.	\$100.5
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 for providing a minimum amount per state.	\$7.6
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 expended annually to transit operators.	\$17.1
Congestion Mitigation	Federal Interstate Management funds that PennDOT is providing for congestion reduction on access, including transit capacity enhancements, related to the reconstruction of Interstate 95.	\$5.1
Transit Security Grant Program	Competitive grant program administered by Federal Emergency Management Agency (FEMA). Provides funds for anti-terrorism, safety and security improvements, and operational activities such as directed patrols.	\$2.5
Total Federal		\$196.8

SOURCES OF CAPITAL FUNDING

Local Funds: \$10.9 Million

SEPTA's FY 2016 Capital Budget includes **\$10.9 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 / Joint Development

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;
- Design-Build-Finance-Operate-Maintain; or
- Finance-Design-Build-Own-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 Substation on the Market-Frankford Line. 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 will be advertising a Request for Proposals for a joint development project in the Fall 2015 for advancing parking expansion improvements at the 69th Street Transportation Center in Delaware County. In addition, SEPTA is currently evaluating Proposals to Finance, Design, Build, Own, Operate and Maintain (FDBOOM) a combined heat and power (CHP) plant at the Midvale Facility to source Regional Rail power with Pennsylvania natural gas.

USES OF CAPITAL FUNDING

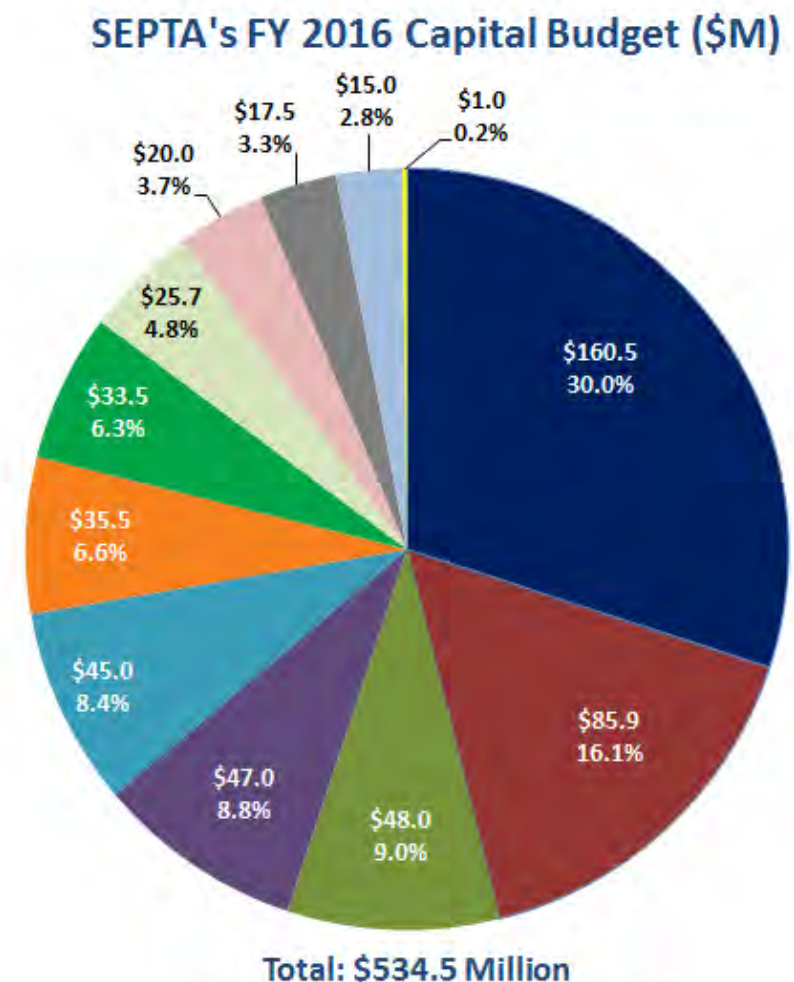
FY 2016 Capital Budget - Summary

SEPTA's FY 2016 Capital Budget totals **\$534.5 million**. Available 2016 funds are allocated among projects that will advance strategic objectives, bring assets to a state of good repair under the "Rebuilding for the Future" agenda, meet the Authority's financial obligations, and implement system improvements to enhance transit service. Capital investments are focused on the following areas:

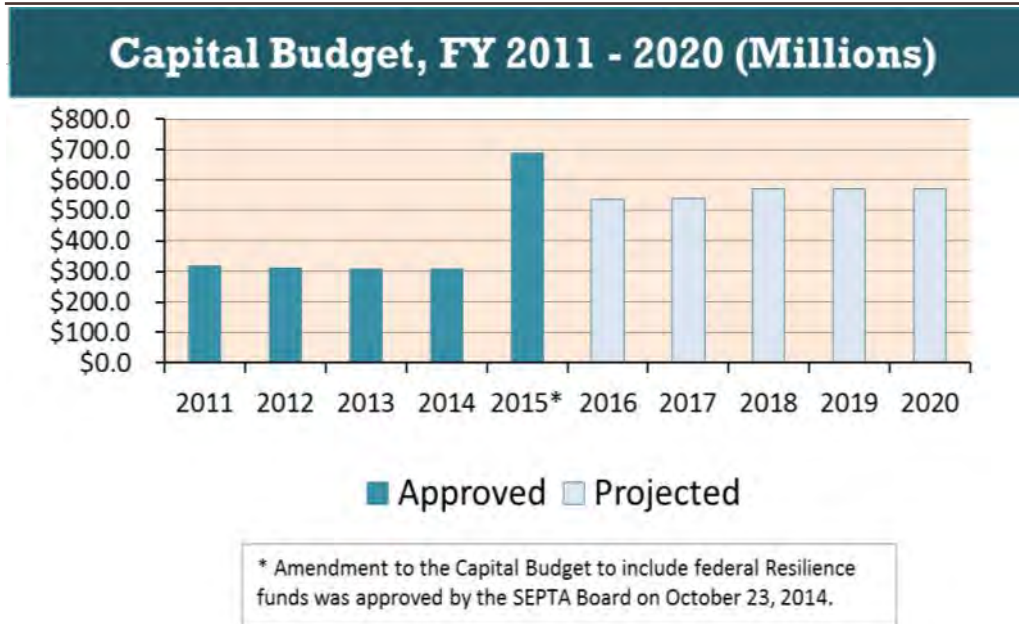
- **Bridge Program (\$48.0 M):** Including regional rail viaducts and stone arch bridges, and transit bridges on the Norristown High Speed Line and trolley lines.
- **Communications, Signal Systems and Technology Improvements (\$33.5 M):** Including Positive Train Control (PTC).
- **Financial Obligations (\$85.9 M):** Includes Capital Asset Lease Program and Debt service payments.
- **Infrastructure Safety Renewal Program (\$35.5 M):** Includes track replacement, station renewal, signals and communications equipment rehabilitation, traction and power systems renewal, and rehabilitation of maintenance facilities.
- **Maintenance/Transportation Shops & Offices (\$25.7 M):** Includes maintenance equipment/life-safety improvements at SEPTA bus and rail maintenance shops, facilities maintenance shops and other buildings.
- **New Payment Technologies - SEPTA Key (\$45.0 M):** To modernize SEPTA's automated fare payment system by offering riders a variety of payment choices to suit their travel needs.
- **Safety & Security (\$20.0 M):** This program includes life safety assessments, facility and vehicle security measures and interoperable communications improvement projects. This program also includes projects competitively funded through the U. S. Department of Homeland Security (DHS) to provide protection from terrorism, major disasters and other emergencies.
- **Service Restoration (\$1.0 M):** Elwyn to Wawa Rail Service Restoration.
- **Stations, Loops and Parking Improvements (\$47.0 M):** Provides for the reconstruction or rehabilitation of SEPTA stations and parking expansions and improvements with a focus on accessibility.
- **Substations and Power Improvements (\$17.5 M):** To modernize SEPTA's railroad and transit substations, originally built in the 1920's and 1930's, and replace catenary and feeder cables.

- **Track and Right-of-Way Improvements (\$15.0 M):** To return rail infrastructure to a state of good repair. SEPTA operates rail service over 359 one-way miles of track, including track owned by SEPTA, Amtrak, the City of Philadelphia and CSX.
- **Vehicle Replacements and Overhauls (\$160.5 M):** Replacing vehicles that have exceeded their useful life, and optimizing the performance of the existing fleet through targeted overhaul campaigns.

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 are expected to increase from \$120 million in 2014 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 assumes the level of federal funding will remain constant over the duration of the FY 2016 Capital Budget and FY 2016-2027 Capital Program. MAP-21 has authorized funding through July 31, 2015 and provided a modest increase over its three 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 2016 Capital Budget and FY 2016-2027 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 2016 CAPITAL BUDGET AND FY 2016-2027 CAPITAL PROGRAM

Capital Program and Project Descriptions



FY 2016 CAPITAL BUDGET AND FY 2016-2027 CAPITAL PROGRAM

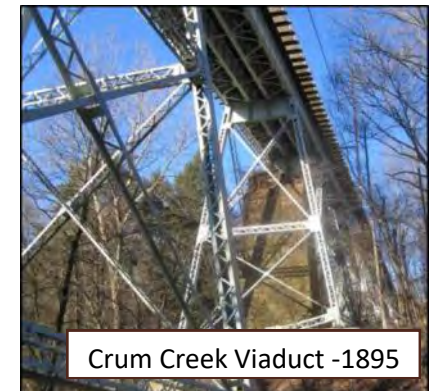
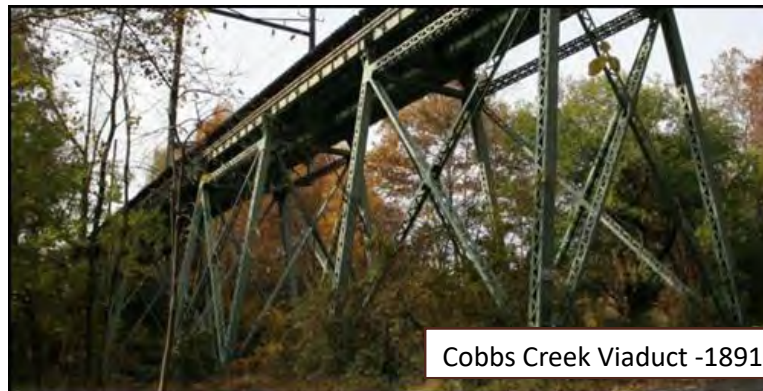
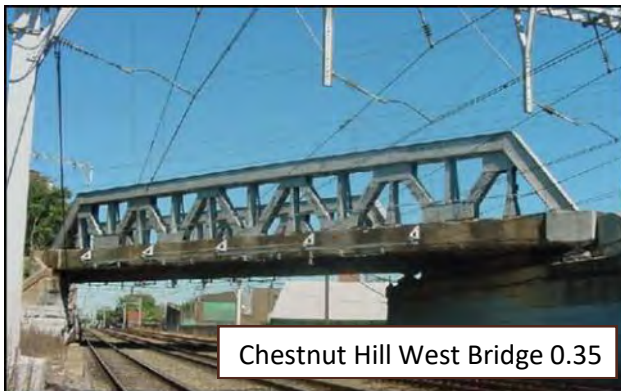
Capital Programs / Financial Obligations	Prior Funding	Budget	Program Years				FY 2021- 2027	12-Year	Beyond FY 2027	Total Budget
		Year						Program		
		FY 16	FY 17	FY 18	FY 19	FY 20		Total		
-----\$Millions-----										
<u>Capital Programs</u>										
Bridge Program	\$43.33	\$48.00	\$17.61	\$13.00	\$20.00	\$10.00	\$123.57	\$232.18	\$65.16	\$340.67
Communications, Signal Systems and Technology Improvements	\$40.56	\$33.54	\$17.12	\$16.15	\$24.66	\$19.78	\$119.35	\$230.60	\$14.39	\$285.55
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	\$34.60	\$25.66	\$10.00	\$9.00	\$15.00	\$10.00	\$95.00	\$164.66	\$104.13	\$303.39
New Payment Technologies - SEPTA Key	\$25.36	\$45.00	\$82.00	\$74.64	\$0.00	\$0.00	\$0.00	\$201.64	\$0.00	\$227.00
Safety and Security Improvements	\$0.00	\$20.00	\$12.00	\$10.00	\$10.00	\$10.00	\$100.00	\$162.00	\$0.00	\$162.00
Service Restorations	\$11.65	\$1.00	\$2.00	\$12.50	\$30.00	\$31.99	\$17.86	\$95.35	\$0.00	\$107.00
Stations, Loops and Parking Improvements	\$177.58	\$47.00	\$48.00	\$48.00	\$60.00	\$45.00	\$539.23	\$787.23	\$168.09	\$1,132.90
Substations and Power Improvements	\$36.50	\$17.50	\$15.00	\$13.50	\$20.00	\$15.00	\$134.95	\$215.95	\$129.63	\$382.08
Track and Right-of-Way Improvements	\$11.40	\$15.00	\$10.00	\$4.00	\$5.00	\$5.00	\$51.00	\$90.00	\$51.95	\$153.35
Vehicle Acquisitions and Overhauls	\$276.20	\$160.47	\$199.00	\$237.58	\$248.58	\$294.69	\$1,957.87	\$3,098.19	\$909.32	\$4,283.71
Subtotal Capital Programs	\$657.18	\$448.67	\$448.23	\$473.87	\$468.74	\$476.96	\$3,387.33	\$5,703.80	\$1,442.67	\$7,803.65
<u>Financial Obligations</u>										
Capital Leases	\$0.00	\$34.72	\$39.88	\$45.06	\$50.24	\$52.33	\$396.10	\$618.33	\$0.00	\$618.33
Debt Service	\$0.00	\$51.15	\$51.09	\$51.00	\$50.95	\$43.30	\$224.65	\$472.14	\$17.10	\$489.24
Total Capital Budget	\$657.18	\$534.54	\$539.20	\$569.93	\$569.93	\$572.59	\$4,008.08	\$6,794.27	\$1,459.77	\$8,911.22

BRIDGE PROGRAM

The SEPTA system includes over 350 bridges. Average age is in excess of 85 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 condition, 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	<u>287</u>
Total	352

Bridge Program	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021 - 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
	-----\$Millions-----									
Bridge Program	\$43.33	\$48.00	\$17.61	\$13.00	\$20.00	\$10.00	\$123.57	\$232.18	\$65.16	\$340.67
TOTAL	\$43.33	\$48.00	\$17.61	\$13.00	\$20.00	\$10.00	\$123.57	\$232.18	\$65.16	\$340.67



BRIDGE PROGRAM

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad Bridge Projects (FY 2016 - 2020)				
Chestnut Hill West Line Bridge 0.35 Rehabilitation				
Rehabilitate 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.	\$10.29 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.	\$89.86 M	Design/Build 2015 - 2017	Delaware	Delaware Philadelphia
Media/Elwyn Line Viaduct Improvements				
Replacement of bridge members, paint superstructure, substructure steel repairs and foundation reinforcement on three viaducts on the Media/Elwyn Regional Rail Line, including:	\$43.25 M	Design Complete Construction 2014 - 2016	Delaware Philadelphia	Delaware Philadelphia
• Cobbs Creek Viaduct (Mile Post 4.79), 377 foot span. Built 1891.				
• Darby Creek Viaduct (Mile Post 7.11), 339 foot span. Built 1900.				
• Ridley Creek Viaduct (Mile Post 14.41), 641 foot span. Built 1896.				
Stone Arch Bridge Program				
Rehabilitate of the following nine (9) Stone Arch Bridges on SEPTA’s Regional Railroad:	\$8.34 M	Design Complete Construction 2015	Bucks Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
• Lansdale/Doylestown Line 22.93 (15 foot span). Built 1903.				
• Lansdale/Doylestown Line 13.10 (8 foot span). Built 1902.				
• Manayunk/Norristown Line 16.88 (22 foot span). Built 1934.				
• Manayunk/Norristown Line 4.61 (10 foot span). Built 1934.				
• Manayunk/Norristown Line 9.41 (20 foot span). Built 1834.				
• Manayunk/Norristown Line 9.93 (10 foot span). Built 1834.				
• Media/Elwyn Line 12.12 (15 foot span). Built 1854.				
• West Trenton Line 12.38 (10 foot span). Built 1876.				
• West Trenton Line 20.21 (12 foot span). Built 1876.				

BRIDGE PROGRAM

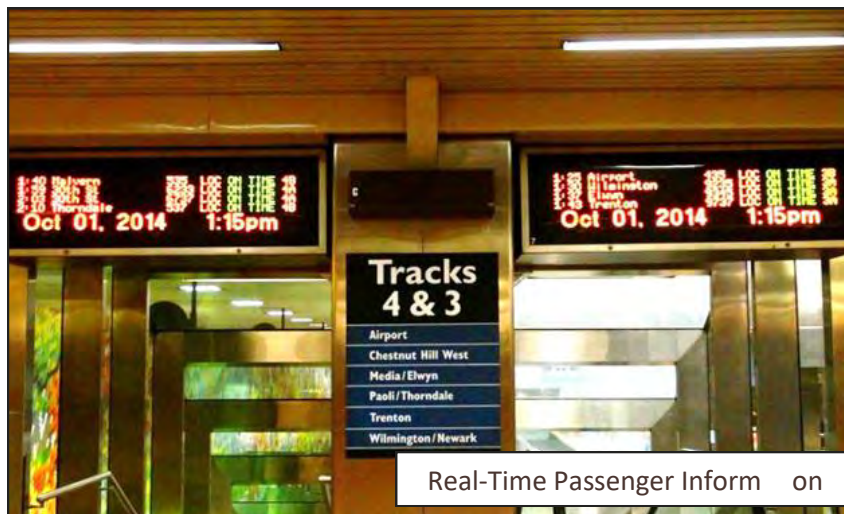
Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad Bridge Projects (FY 2021-2027)				
<i>Chestnut Hill East Line Bridge Rehab Program</i>				
Rehabilitate of the bridges on the Chestnut Hill East Regional Rail Line located at milepost 5.04, 5.72, 7.63, 8.90 & 9.59.	\$30.00 M	2021 - 2027 Project	Philadelphia	Philadelphia
<i>Chestnut Hill West Bridge Rehab Program</i>				
Rehabilitate 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	2021 - 2027 Project	Philadelphia	Philadelphia
<i>Mainline-Schuylkill Bridges (30th St. to Suburban Station)</i>				
Rehabilitate 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	2021 - 2027 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Transit Bridge Projects (FY 2016 - 2020)				
<i>MSHL Bridge 6.48 over Whiskey Run</i>				
Replacement of superstructure and repairs to substructure on Bridge 6.48 on the Media Trolley Line. This bridge was built circa 1912.	\$1.59 M	Design Complete Construction on 2015	Delaware	Delaware
<i>NHSL Bridge 0.15 over 69th St. Yard El Tracks</i>				
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 on 2018 - 2020	Delaware	Delaware Montgomery
<i>NHSL Viaduct over Schuylkill River</i>				
Rehabilitate 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 ties on the viaduct were replaced in 2013.	\$30.50 M	Design 2018 Construction on 2019 - 2020	Montgomery	Delaware Montgomery

COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

This program provides for improvements to SEPTA's communications 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 Capital Program, SEPTA will rehabilitate various grade crossings and interlockings, upgrade the Computer Aided Radio Dispatch (CARD) system, install 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 ability 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 Technology Improvements - Program Elements	Prior Funding	Budget						12-Year	Beyond FY 2027	Total Budget
		Year	Program Years				FY 2021-			
		FY 16	FY 17	FY 18	FY 19	FY 20	2027	Program Total		
-----\$Millions-----										
Communications & Signal Improvements	\$40.56	\$28.54	\$12.12	\$11.15	\$19.66	\$14.78	\$84.35	\$170.60	\$14.39	\$225.55
Technology Improvements	\$0.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	\$35.00	\$60.00	\$0.00	\$60.00
TOTAL	\$40.56	\$33.54	\$17.12	\$16.15	\$24.66	\$19.78	\$119.35	\$230.60	\$14.39	\$285.55



Real-Time Passenger Information



Positive Train Control (PTC)

COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Communications & Signal Improvements—Transit Projects (FY 2016 - 2020)				
<i>Broad Street Line Ridge-Spur Signals</i>				
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 - 2016 Construction 2016 - 2018	Philadelphia	Philadelphia
<i>Route 101/102 Signal / Interlocking Improvements</i>				
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 ability.	\$63.41 M	Design Complete Construction 2015 - 2018	Delaware	Delaware
<i>Route 102 Grade Crossings</i>				
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.	\$5.88 M	Design Complete Construction 2015 - 2016	Delaware	Delaware
Communications & Signal Improvements—Railroad Projects (FY 2016-2020)				
<i>Arsenal Interlocking</i>				
Improvements to Arsenal Interlocking (near University City Station), which serves the Airport, Media/Elwyn and Wilmington Regional Rail lines. The project will reconfigure the existing Walnut Interlocking and incorporate its functionality into a rebuilt and reconstructed Arsenal Interlocking. Includes installation of new track, catenary and signaling systems.	\$27.5 M	Design 2015 Construction 2016 - 2017	Philadelphia	Bucks Delaware Montgomery Philadelphia Delaware (state) New Jersey

COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Beth Interlocking / Signal Improvements</i>				
Installation of a new universal interlocking at Beth, to be located south of Bethayres Station on the West Trenton Line.	\$14.0 M	Design 2017 Construction 2018 - 2022	Bucks	Bucks
<i>Hunt/Wayne Interlocking</i>				
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.	\$14.0 M	Design 2018 - 2019 Construction 2020 - 2021	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Communications & Signal Improvements—Railroad Projects (FY 2021 - 2027)				
<i>Interlocking Improvement Program</i>				
The program provides for the rebuilding and reconstruction of railroad interlockings to improve the delivery of revenue service. Locations included in the program are Regional Rail Main Line: West Interlocking (on the west side of 30th Street Station); Schuylkill Interlocking (on the east side of 30th Street Station); Broad Interlocking (west of Suburban Station); Bartram Interlocking; and 16th Street Interlocking. The initial budget supports the start up of the program.	\$5.0 M	2021 - 2027 Project	Philadelphia	Philadelphia
Communications & Signal Improvements—System-Wide Projects (FY 2016 - 2020)				
<i>Computer Aided Radio Dispatch (CARD) System Replacement</i>				
Replacement of existing Computer Aided Radio Dispatch (CARD) system. Project will replace the existing 502MHz radio system and replace it with a new state-of-the-art Computer Aided Radio 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

COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Real-Time Information / Audio Visual Public Address (AVPA) System</i>				
Upgrades to public communications 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
Technology Improvements (FY 2016 - 2027)				
<i>Information Technology Program</i>				
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, digital video recorders and software licenses. The FY 2016 program will enhance data storage and management systems, upgrade the Organization's e-mail system, and implement Microsoft 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, printers, and digital video recorders.	\$5.0 M Annually	Ongoing Program	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey

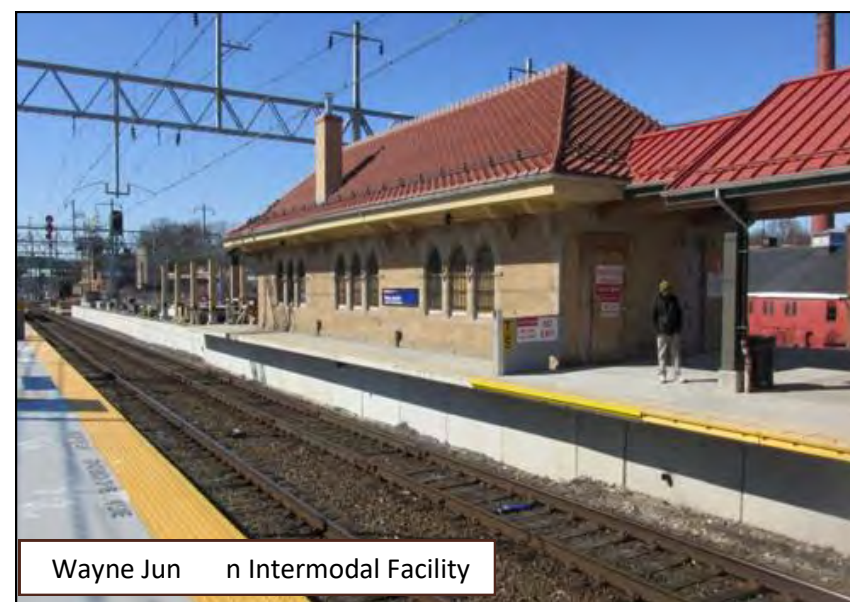
DEBT SERVICE AND CAPITAL ASSET LEASES

The Capital Asset Lease Program provides for payments attributable to capital leases. For Fiscal Year 2016, 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.



Debt Service & Leases Program Elements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021 - 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
-----\$Millions-----										
Capital Asset Lease Program	\$0.00	\$34.71	\$39.89	\$45.06	\$50.24	\$52.33	\$396.10	\$618.33	\$0.00	\$618.33
Debt Service	\$0.00	\$51.15	\$51.09	\$51.00	\$50.95	\$43.30	\$224.65	\$472.14	\$17.07	\$489.21
TOTAL	\$0.00	\$85.86	\$90.98	\$96.06	\$101.19	\$95.63	\$620.75	\$1,090.47	\$17.07	\$1,107.54



DEBT SERVICE AND CAPITAL ASSET LEASES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Capital Asset Leases (FY 2016 - 2027)				
<p><u>Amtrak Trackage</u> - 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.</p> <p><u>Communications Towers</u> - 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.</p> <p><u>Copiers</u> - This lease provides for rental of copiers, which are dispersed throughout SEPTA's headquarters and transportation/maintenance facilities.</p> <p><u>Warehouse Facility</u> - This lease provides for rental of a storeroom facility at 2045 Wheatshaf Lane in the City of Philadelphia.</p>	12 Year Total \$618.33M	Ongoing Program through 2027	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

DEBT SERVICE AND CAPITAL ASSET LEASES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Debt Service (FY 2016 - 2027)				
<i>Payments on Capital Grant Receipts Bonds, Series 2011</i>				
<p><u>Acquisition of 120 Silverliner V Regional Rail Cars</u> 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 announcements of train destinations and upcoming station stops, interior video display monitors and 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.</p> <p><u>Rehabilitation of the Wayne Junction Intermodal Facility</u> The Wayne Junction Intermodal Facility was constructed at the turn of the 20th Century. 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 systems (heating, ventilation, air conditioning), 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 Facility project (\$32 million) is funded through a Federal Transit Administration Bus and Buses Livability Grant and capital financing. The construction phase of the project is scheduled for completion in the summer of 2015.</p>	12 Year Debt Service Total for Series 2007, 2010 & 2011 Bonds \$472.14 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

DEBT SERVICE AND CAPITAL ASSET LEASES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Payments on Converted Indexed Rate Revenue Refunding Bonds, Series 2007</i>				
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 Loaves 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>Payments on Fixed Rate Refunding Bonds, Series 2010</i>				
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		

INFRASTRUCTURE SAFETY RENEWAL PROGRAM (ISRP)

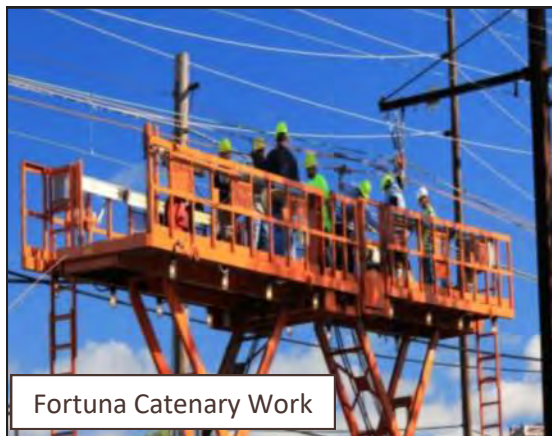
The annual Infrastructure Safety Renewal Program (ISRP) provides for the restoration by SEPTA forces of SEPTA's City and Suburban transit and railroad infrastructure to a state of good repair. Projects to be advanced include:

- **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; kitchenettes and waiting rooms; platforms; lighting; sanitary facilities; escalators; elevators; parking; and accessibility improvements.
- **Communications and Signals 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.



Track Work

Infrastructure Safety Renewal Program - Program Elements	Prior Funding	Budget	Program Years				FY 2021- 2027	12-Year	Beyond FY 2027	Total Budget
		Year						Program		
		FY 16	FY 17	FY 18	FY 19	FY 20		Total		
-----\$Millions-----										
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



Fortuna Catenary Work



Route 102 Grade Crossing Work

INFRASTRUCTURE SAFETY RENEWAL PROGRAM (ISRP)

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Fiscal Year 2016 ISRP Program	\$35.50 M	FY 2016 Program	System-wide	System-wide
<p><i>Track and Right-of-Way Program</i></p> <p><u>Regional Rail</u> - Curve Worn Rail Renewal Program (Warminster & Airport Lines); and Regional Rail Main Line and Powelton Yard Tie, Surface and Brushing Project.</p> <p><u>City/Suburban Transit</u> - Curve Worn Rail Renewal Program; Special Track Work Renewal Program; Suburban Transit Grade Crossing Renewal Program (Route 101 Wildell Avenue & Route 102 Turner Avenue); and Route 101 Open Deck Timber Renewal Program (Bridges 3.71 and 3.77).</p>	<p><i>Communications and Signals Program</i></p> <p><u>Regional Rail</u> - Communications Cable Installation Program at Chestnut Hill East, Chestnut Hill West and West Trenton Lines; Air Line Replacement at Vine, Schuylkill, Broad, West and 20th Streets; Temple Station Communication Improvements; Station Communications Equipment Technology Refresh; Code Track Circuit Refurbishment Program; Grade Crossing Flashing Light Upgrade Program; Stand-by Power Replacement Program - Center City Commuter Connection Interlockings.</p> <p><u>City/Suburban Transit</u> - Station Communications Equipment Tech Refresh Project - Broad Street Subway and Market-Frankford Lines; Erie Interlocking Microprocessor Tech Refresh.</p> <p><u>Regional Rail/City & Suburban Transit</u> - Video Storage, Event Recorder and Audio-Visual Public Address Tech Refresh and Improvements Programs.</p>			
<p><i>Station Facilities Program</i></p> <p><u>Regional Rail</u> - Form Improvements Program; Temple Station Improvements Program; Wilmington Line Station Improvements Program; Paoli Line Station Improvements Program; Retaining Wall Rehabilitation Program.</p> <p><u>City/Suburban Transit</u> - Station and Tunnel Lighting Program; Norristown High Speed Line Station Improvements; Station Entrance/Stair Improvements (Market-Frankford and Broad Street Subway Lines); Station Form Traffic Edge Replacement (Rt. 15); Station Renewal Programs: Broad Street Subway, Market-Frankford and Trolley Lines.</p>	<p><i>Power Systems Program</i></p> <p><u>Regional Rail</u> - Norristown Line Catenary Replacement; Substation Control Relay Replacement; Synchronizing Switch/Remote Terminal Unit (RTU)/Section Insulators (SI) Replacement Program; Control Center and Radio Room Uninterrupted Power Supply (UPS) Replacement; and Relay Protection Upgrade - Commuter Tunnel.</p> <p><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 Supervisory Control and Data Acquisition (SCADA) Control Upgrade; Substation Control Relay Replacement; and Bridgeport Motor-Operated Synchronizing Switch (MOSS) Installation.</p>			
<p><i>Maintenance/Support Facilities Program</i></p> <p><u>Regional Rail</u> - Retaining Wall Rehabilitation Program; Outlying Yard Safety Improvement Program; Employee Facilities Improvement Program; Bridge Floor Beam Connections Repair (Mainline Bridges 0.49/0.58).</p> <p><u>City/Suburban Transit</u> - Garage and Shop Improvements (City & Suburban Transit); Vent Well and Emergency Exit Program; Employee Facilities Improvement Program; Pump Room Overhaul Program; Sewage Ejector Replacement Program; V-tag System Upgrade; Subway Column Rehabilitation.</p>				

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

This project provides for improvements at SEPTA's bus and rail maintenance shops, facilities maintenance shops and office buildings. Program elements include replacement of suppression systems, vehicle washer systems, and boiler systems; wheel truing program; bus and steel wheel programs; underground storage tank replacement program; shop and yard upgrades; paving improvements; and office building improvements. This program will also address remediation and clean up issues at select facilities as well as issues 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.



Maintenance/Transportation Shops & Offices Program Elements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021 - 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
	-----\$Millions-----									
Maintenance/Transportation Facilities	\$14.42	\$16.68	\$5.60	\$5.85	\$9.75	\$6.50	\$61.75	\$106.13	\$67.68	\$188.23
Roof Program	\$20.18	\$8.98	\$4.40	\$3.15	\$5.25	\$3.50	\$33.25	\$58.53	\$36.45	\$115.16
TOTAL	\$34.60	\$25.66	\$10.00	\$9.00	\$15.00	\$10.00	\$95.00	\$164.66	\$104.13	\$303.39



MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Maintenance & Transportation Facilities (FY 2016 - 2020)				
<i>Allegheny Bus Washer</i>				
Replacement and upgrade of existing vehicle wash systems at Allegheny Bus Garage.	\$3.55 M	Design 2015 Construction on 2016 - 2017	Philadelphia	Philadelphia
<i>Allegheny Fire Suppression</i>				
Replacement and upgrade of fire sprinkler system at Allegheny Garage.	\$4.16 M	Design Complete Construction on 2015 - 2016	Philadelphia	Philadelphia
<i>Boiler Replacement Program</i>				
Replacement of boilers at eleven (11) SEPTA facilities including Callowhill Garage, Woodland Shop, Elmwood Shop, Bridge St. Carhouse, 5800 Bustleton, Roberts Ave. Shop, Wayne Junction Shop, Wayne Junction Line Maintenance, Roberts Ave. Train Wash Building, Allegheny Garage and 69th St. Terminal. Boiler replacement was previously completed at Southern Garage and is underway at Comly Garage.	\$11.62 M	Design / Construction 2015 - 2020	Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>Environmental Clean Up and Protection</i>				
Activities include remediation and tests 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, such as recycling containers, trash compactors and wayside energy storage.	\$5.00 M	Ongoing	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>Frankford Transportation Building</i>				
Construction of a new stand-alone transportation building at the Frankford Transportation Center. This consists of two components. The Transportation Building will accommodate SEPTA Operations personnel. The second component consists of the space for an Ancillary Control Center.	\$9.40 M	Design Complete Construction on 2015 - 2016	Philadelphia	Philadelphia

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Frazer Rail Shop and Yard Upgrade</i>				
This project consists of the upgrade of the Frazer Maintenance Facility and provision of additional yard track and storage to accommodate the expansion of SEPTA's railcar fleet and locomotives. This includes the extension to three existing storage tracks, addition of three new storage tracks and major upgrades to the repair shop, construction of a shop extension to accommodate the new multi-level trains, new cleaning track and utility upgrades. In addition, the roof will be upgraded, including replacement of mechanical equipment and electrical connections.	\$78.0 M	Design 2016 Construction 2017 - 2018	Chester	Bucks Chester Delaware Montgomery Philadelphia
<i>Frazer Rail Shop Vehicle Washer Building</i>				
Installation of a new vehicle washer 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.	\$3.35 M	Design 2016 Construction 2018 - 2019	Chester	Bucks Chester Delaware Montgomery Philadelphia
<i>Frontier Bus District/Shop STD LED Lighting Upgrade Program</i>				
This project includes the design and installation of new light control panels and distribution circuits at Frontier Bus Depot for lighting of the parking facilities and areas around the facility buildings; replacing the existing light fixtures with energy efficient LED fixtures; and adding fixtures to increase light levels to current standards.	\$0.50 M	Construction 2015 - 2016	Montgomery	Bucks Chester Delaware Montgomery Philadelphia
<i>Frontier Bus Washer</i>				
Replacement and upgrade of Frontier vehicle washer.	\$1.75 M	Design 2017 Construction 2019 - 2020	Montgomery	Bucks Chester Montgomery
<i>Frontier Paving</i>				
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

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Midvale Bus Washer				
Replacement and upgrade of existing vehicle wash systems at Midvale Bus Garage.	\$3.55 M	Design Complete Construction 2015 - 2016	Philadelphia	Philadelphia
On-Site Power for Major Facilities				
Installation of power upgrades at major maintenance and transportation facilities.	\$9.22 M	Design 2015 - 2016 Construction 2017 - 2020	TBD	TBD
Powelton Yard Employee Improvements				
Improvements to this SEPTA maintenance location at Powelton Yard will include building repairs, new windows, new bathrooms and replacement of the storeroom facility currently housed in a former railroad boxcar. Powelton Yard will be reconfigured to permit emergency vehicle access not currently available.	\$1.47 M	Design 2015 - 2016 Construction 2016 - 2017	Philadelphia	Philadelphia
Roberts Car Shop and Car Wash Catenary Replacement				
This project replaces the original overhead trolley wire with a new rigid overhead conductor rail system at the Shop and Vehicle Washer building. The overhead conductor rail system is extremely reliable and requires little maintenance. The overhead conductor rail can be directly combined with the contact wire, which enables it to be integrated into existing overhead contact line systems. The overhead contact systems in the Roberts Car Wash and Car Shop have been in continuous use since the shop was first built in the 1980's. The existing catenary system is past its useful life and has become difficult to maintain. The new conductor rail system will provide for a reliable and easy to maintain contact system throughout the Roberts Car Wash and Car Shop Building.	\$0.69 M	Design Complete Construction 2016 - 2017	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>SEPTA Headquarters Improvements</i>				
The SEPTA Office Building located at 1234 Market Street was built in 1973 and has served as SEPTA's Headquarters since June 1994. Much of the infrastructure equipment is original or was only partially upgraded at the time of purchase by SEPTA. Many mechanical components are now well past their useful service lives. Upgrades that will be advanced include rebuilding the cooling towers and roof fans, reglazing the building's southern façade to reduce solar gain, replacement of the hot water system and replacement of the water and fire pump systems.	\$5.25 M	Design 2015 - 2016 Construction 2015 - 2017	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>Southern Stormwater Management & Paving</i>				
Rehabilitate apron paving at Southern Bus Garage to correct settlement and paving condition issues. A new stormwater management system will be installed.	\$4.92 M	Design Complete Construction 2016 - 2017	Philadelphia	Philadelphia
<i>Steel Wheel Lift Program</i>				
Purchase and installation of Truck and Body hoist at 69th St. Shop and rebuilding and upgrading controls for truck and body hoists at Fern Rock Shop, Woodland Shop, 69th St. Shop, Media-Sharon Hill Shop, Overbrook Shop and Roberts Avenue Shop.	\$9.00 M	Design 2016 Construction 2017—2020	Philadelphia Delaware	Bucks Chester Delaware Montgomery Philadelphia
<i>Underground Storage Tank Replacement Program</i>				
Replacement of twenty-five (25) underground bulk liquid (heating oil, gasoline, diesel, antifreeze, motor oil, transmission fluid, etc.) storage tanks at seven locations, including Powelton, Wayne, Berridge, Front, Victory, Courtland and Southern facilities. The replacement of underground bulk storage tanks at the end of Original Equipment Manufacturer (O.E.M.) 30 year warranty terms is a common industry practice encouraged by the Pennsylvania Department of Environmental Protection (DEP). This project will take place in three phases over six years.	\$2.76 M	Construction 2016 - 2021	Delaware Montgomery Philadelphia	Delaware Montgomery Philadelphia

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Victory Avenue Facility Improvements</i>				
This project provides for construction to replace SEPTA workshop and offices located at 103 Victory Avenue in Upper Darby, PA. The station at this location supports the operation of SEPTA's Surface Transportation Division. This project will address the need for expanded work areas for greater efficiencies. In addition, improved stormwater strategies will be put into place.	\$13.24 M	Design 2015 - 2016 Construction 2016 - 2017	Delaware	Delaware Philadelphia
<i>Wheel Truing Program</i>				
Rebuilding and upgrading of controls for wheel truing machines at Fern Rock Shop, Woodland Shop, 69th St. Shop and Overbrook Shop.	\$21.00 M	Design 2015 Construction 2016 - 2027	Delaware Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>Woodland Fire Suppression</i>				
Replacement and upgrade of existing sprinkler system at Woodland Rail Shop.	\$1.86 M	Design Complete Construction 2014 - 2016	Philadelphia	Philadelphia
Maintenance & Transportation Facilities (FY 2021 - 2027)				
<i>Bus Lift Program</i>				
This project provides for the replacement of in-ground lifts and portable lifts at selected City Transit and Suburban Transit bus maintenance facilities.	\$10.00 M	2021 - 2027 Project	Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>Overbrook Washer</i>				
Construction of a new vehicle washer with enclosure at Overbrook Shop.	\$3.20 M	2021 - 2027 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Overhead and Fire Doors				
Replacement of overhead and fire doors at various facilities.	\$6.26 M	2021 - 2027 Project	Bucks Delaware Philadelphia	Bucks Delaware Philadelphia
Vehicle Washer Program				
Replacement and upgrade of vehicle washers at additional locations.	\$7.00 M	2021 - 2027 Project	TBD	TBD
Roof Program (FY 2016 - 2020)				
2nd & Wyoming/Berridge Roof Replacement				
Replacement of existing roof at SEPTA's 2nd & Wyoming 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 Building, and asbestos abatement.	\$15.84 M	Design Complete Construction 2015 - 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 2015 Construction 2016 - 2019	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.	\$8.80 M	Design Complete Construction 2014 - 2016	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

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Frontier Bus Garage Roof Replacement</i>				
Replacement of existing roof with new roofing system.	\$3.50 M	Design 2016 - 2017 Construction 2019 - 2020	Montgomery	Bucks Chester Delaware
<i>Overbrook Maintenance Facility Roof Replacement</i>				
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
<i>Sansom Substation Roof Replacement</i>				
Replacement of roof at Sansom Substation.	\$2.00 M	Design 2016 Construction 2017 - 2019	Philadelphia	Philadelphia
<i>Woodland Shop Roof Replacement</i>				
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 2021 - 2027)				
<i>5800 Bustleton Roof Replacement</i>				
Replacement of roof at SEPTA office building located at 5800 Bustleton Avenue.	\$1.75 M	2021 - 2027 Project	Philadelphia	Philadelphia
<i>Comly Roof Replacement</i>				
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	2021 - 2027 Project	Philadelphia	Philadelphia
<i>Norristown High Speed Line Car Shop Roof Replacement</i>				
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	2021 - 2027 Project	Delaware	Delaware Montgomery Philadelphia

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Regional Rail Stations Roof Program</i>				
Roof replacement at various small to medium stations. Locations to be determined.	\$7.00 M	2021 - 2027 Project	Various	Various
<i>Southern Garage Roof Replacement</i>				
Replacement and upgrade of existing roof system at Southern Garage.	\$7.70 M	2021 - 2027 Project	Philadelphia	Philadelphia

NEW PAYMENT TECHNOLOGIES - SEPTA KEY

The SEPTA “Key” New Payment Project will modernize SEPTA’s anticipated 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 kiosk kios; 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 SEPTA “Key” 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

SEPTA “Key” system. Phase 2 will include the installation of the system on Rail Transit, Trolley and Buses. Phase 3 includes the Regional Rail, Parking Operations and Customized Community Transportation (CCT) segments.

Companion projects supporting the SEPTA “Key” project include: bus and trolley farebox upgrade; Market-Frankford Line and Broad Street Line operations improvements; electrical support for new fare lines at the downtown Railroad stations (Temple University, Jefferson, Suburban Station, 30th Street Station and University City); Broad Street Subway, Market Frankford and Trolley station fare line improvements; zone kiosks 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 kiosk relocation. These SEPTA “Key” 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.

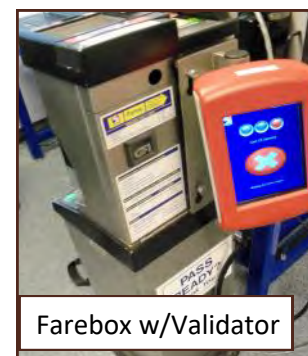
New Payment Technologies	Prior Funding	Budget	Program Years				FY 2021- 2027	12-Year	Beyond	Total
		Year						Program	FY 2027	Budget
		FY 16	FY 17	FY 18	FY 19	FY 20		Total		
-----\$Millions-----										
New Payment Technologies	\$25.36	\$45.00	\$82.00	\$74.64	\$0.00	\$0.00	\$0.00	\$201.64	\$0.00	\$227.00
TOTAL	\$25.36	\$45.00	\$82.00	\$74.64	\$0.00	\$0.00	\$0.00	\$201.64	\$0.00	\$227.00



SEPTA “Key” Kiosk



Turnstile with Validator



Farebox w/Validator

SAFETY & SECURITY IMPROVEMENTS

SEPTA’s mission is to provide our passengers with safe, reliable and efficient transportation. Safety is a key objective of SEPTA’s Strategic Business Plan. All projects advanced in the capital program have a safety focus from start to completion. This program includes life safety assessments, facility and vehicle security measures and interoperable communications improvement projects. This program also includes projects funded with competitive U. S. Department of Homeland Security grant funds. 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.



Transit Police Radio

Safety & Security Improvements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021- 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
			-----\$Millions-----							
Safety & Security Improvements	\$0.00	\$20.00	\$12.00	\$10.00	\$10.00	\$10.00	\$100.00	\$162.00	\$0.00	\$162.00
TOTAL	\$0.00	\$20.00	\$12.00	\$10.00	\$10.00	\$10.00	\$100.00	\$162.00	\$0.00	\$162.00



K-9 Team Patrol



Surveillance Camera on Bus



Tunnel

SAFETY & SECURITY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Safety & Security Projects (FY 2016 - 2020)				
<i>Fall Arrest - Frazer and Berridge</i>				
<p>This project will consist of the installation of fall arrest protection equipment at various work locations throughout SEPTA. SEPTA has developed a program to install fall arrest equipment at all SEPTA maintenance shops in support of employee maintenance of vehicles. All vehicle maintenance lanes will be equipped. This is a one year program and two locations will be completed each year. Locations in Year 1 include Berridge and Frazer Shops. Future facility locations include Courtland, Germantown, Comly, Fronter, Fern Rock, Allegheny, Callowhill, Frankford and Midvale.</p>	\$0.7 M	2016 - 2020 Project	Chester Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey
<i>Midvale Power Relocation and Security Enhancements</i>				
<p>This project provides for the construction of a new consolidated employee and storage facility at SEPTA's Midvale Complex. This facility is needed to provide a consolidated, accessible, secure and functional facility for SEPTA Power, Track, Bridges and Buildings, and Utilities personnel and protect high cost material used for SEPTA operations from theft and damage. As part of this project, Life Safety improvements including fire suppression, security elements, communications systems and perimeter fencing will be installed.</p>	\$26.7M	Design 2017 Construction 2018 - 2020	Philadelphia	Philadelphia
<i>Pedestrian Railroad Crossings</i>				
<p>This project will provide for the installation of rail crossing pedestrian warning systems for implementation at passenger stations and other locations. This is a multi-year program with three locations being completed each year. Priority regional rail line locations include the Airport Line, West Trenton Line, Media/Elwyn Line, Lansdale/Doylestown line and the Warminster Line.</p> <p>Phase 1 will include pedestrian crossing improvements at Bethayres, Rydal and Trevoise Stations.</p>	\$7.6 M	2016 - 2020 Project	Bucks Delaware Montgomery Philadelphia	Bucks Delaware Montgomery Philadelphia

SAFETY & SECURITY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Radio Interoperability				
<p>This project will complete the replacement of 40-year old radiax cable in the Market-Frankford Subway and Broad Street Subway, and also provide new radio equipment for the Market Street, Trolley and Railroad tunnels. This project will upgrade SEPTA's sub-surface commun s infrastructure with a new distributed communica system, which will provide the capability to communicate both above and below ground using two di erent frequencies: SEPTA's exis train dispatch and maintenance channels, and the City of Philadelphia's trunked radio commun channels for the City's police and emergency medical services.</p>	\$19.7 M	Design Complete Constru on 2015 - 2016	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Regional Rail Division Signal Overrun Indications				
<p>This project provides for the installa of new er units on the exis railroad track circuit detector devices that serve to indicate when a train has violated a Home Signal Displaying Stop Signal (overrun). The exis track circuit detector units are being unduly in ended by stray eman ns generated by the Silverliner V Propulsion System.</p>	\$2.1 M	Design Complete Constru on 2015 - 2016	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Tunnel Ventilation System Modifications				
<p>Following the recent tunnel incident on the Washington Area Metro Transporta Authority (WMATA), on February 11, 2015, the N nal Transporta Safety Board (NTSB) recommended a n nwide audit of transit agencies by the FTA to assess the state of ven on systems, w en emergency procedures for and smoke events, and training to ensure compliance with these procedures. Furthermore, the NTSB recommended that the FTA verify that agencies are applying the best industry standards in maintenance and emergency procedures. This project will provide for two engineering assessments for the modeling of exis ven n and ow through the regional railroad Center City Tunnel and the Market Subway and Broad Street Subway Tunnels. The assessments will provide SEPTA with present day life safety cond ons and recommend ns for improvements to the ven a in each tunnel.</p>	\$1.3 M (Assessment)	Assessment 2015 - 2016 Constru on schedule to be developed	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

SAFETY & SECURITY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Wayne Junction Security Improvements				
<p>This project provides for the design and installation of security measures for the Electric Train (ET) Wire Train while being stored on the Right-of-Way at the Wayne Junction Car Shop. The ET Wire Train consists of a gondola car, reel car and tower car. In the past, the loss of exposed new and scrap copper wire from the ET Wire Train has occurred at Wayne Junction Car Shop despite numerous attempts to improve security, including new fencing and improved lighting. This project brings new improvements that include a lockable lid for the gondola car and security features on the reel car, plus additional new lighting and security fencing along the SEPTA Right-of-Way between Germantown Avenue and North 18th Street.</p>	\$2.0 M	Design 2015 - 2016 Construction 2016 - 2017	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Transit Security Grant Projects (FY 2016 - 2020)				
<p>Through the U.S. Department of Homeland Security, the Transit Security Grant Program provides funds to operators of transit systems to protect critical infrastructure from acts of terrorism, major disasters and other emergencies. From this grant program, SEPTA has funded closed circuit television (CCTV) cameras on vehicles; 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. SEPTA will continue to fund eligible projects from this grant program.</p>	Comprehensive Annual Program \$2.5 M	2015 - 2016	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

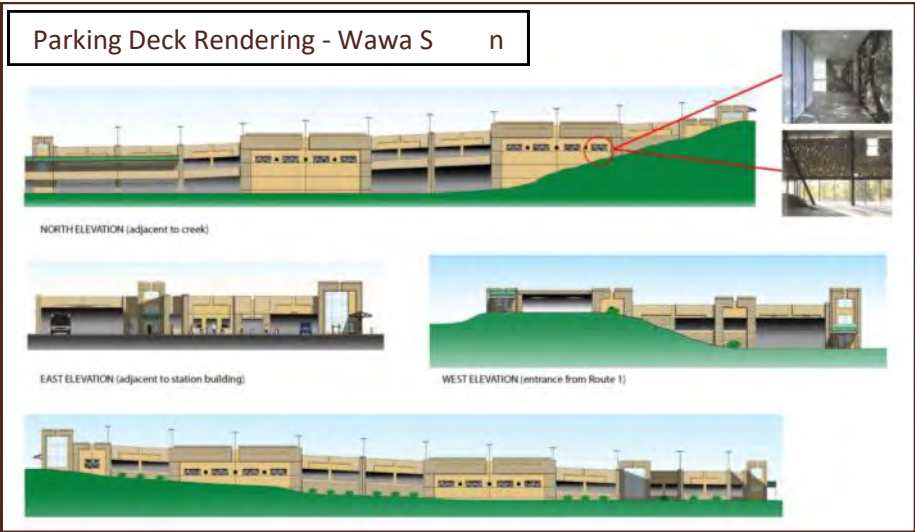
SERVICE RESTORATIONS

With the additional capital funds resulting from the passage of State Act 89 of 2013, SEPTA is now in a financial position to advance the Elwyn to Wawa Rail Restoration project. 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 year 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, the 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 in the region and with the development of funding strategies/options for advancing future expansions projects, including the Federal New Starts Program.

Service Restorations and Expansions - Project Elements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021- 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
-----\$Millions-----										
Elwyn to Wawa Rail Service	\$11.65	\$1.00	\$2.00	\$12.50	\$30.00	\$31.99	\$15.86	\$93.35	\$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	\$11.65	\$1.00	\$2.00	\$12.50	\$30.00	\$31.99	\$17.86	\$95.35	\$0.00	\$107.00



SERVICE RESTORATIONS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Elwyn to Wawa Rail Service (FY 2016 - 2020)				
<p>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 cross ties, 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.</p> <p>Add-on project elements include the replacement of three bridges; rehabilitation of one bridge and three culverts; and the construction of a railcar storage/layover yard and crew facility on SEPTA property in Lenni, Delaware County. A new transit intersection and access road connecting the station to U.S. Route 1, a major highway artery in the area, will be constructed. The new facility will be fully ADA compliant.</p> <p>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.</p>	\$105.00 M	<p>Bridges, Station and Parking Deck Design Complete</p> <p>Power, Signals and Track Design 2017 - 2018</p> <p>Construction 2017 - 2020</p>	Delaware	Chester Delaware
Trolley Routes 23 & 56 (FY 2021 - 2027)				
<p>In the later 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.</p>	\$2.00 M	2021 - 2027 Project	Philadelphia	Philadelphia

STATIONS, LOOPS AND PARKING IMPROVEMENTS

This program provides for the construction, reconstruction or rehabilitation of transit and regional rail stations and terminals, bus/trolley loop facilities, transportation centers, bicycle facilities, and parking expansions and improvements. Program elements include the replacement or rehabilitation of station and loop facility components, such as station buildings, ticket booths, and waiting rooms, passenger shelters, canopies, platforms, crosswalks and overpasses, escalators and elevators, lighting signage, and accessible paths. These projects potentially provide opportunities for partnership 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 101 passenger elevators.

SEPTA Station Inventory

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

Stations, Loops & Parking Program Elements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021 - 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
-----\$Millions-----										
City Hall & 15th Street Stations	\$26.47	\$5.00	\$10.00	\$20.00	\$20.00	\$15.00	\$50.00	\$120.00	\$0.00	\$146.47
Exton Station & Garage	\$14.96	\$0.00	\$2.70	\$2.00	\$5.80	\$11.50	\$20.26	\$42.26	\$0.00	\$57.22
Levittown Station	\$8.08	\$4.00	\$10.00	\$9.00	\$5.99	\$0.00	\$0.00	\$28.99	\$0.00	\$37.07
Paoli Transportation Center	\$31.61	\$5.50	\$6.50	\$0.00	\$0.00	\$3.00	\$50.51	\$65.51	\$0.00	\$97.12
Parking Improvements	\$16.66	\$5.68	\$3.78	\$5.25	\$9.17	\$3.89	\$144.19	\$171.95	\$58.83	\$247.44
Transit & Regional Rail Stations	\$71.90	\$22.72	\$11.33	\$9.75	\$17.04	\$7.22	\$267.78	\$335.82	\$109.26	\$516.98
Villanova Station	\$7.90	\$4.10	\$3.70	\$2.00	\$2.00	\$4.40	\$6.50	\$22.70	\$0.00	\$30.60
TOTAL	\$177.58	\$47.00	\$48.00	\$48.00	\$60.00	\$45.00	\$539.23	\$787.23	\$168.09	\$1,132.90



Lansdale Station Parking Garage Rendering



Paoli Transportation Center Rendering

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
City Hall & 15th Street Stations				
<p>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.</p> <p>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 Park, 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; and 11) Raising of platforms to car door entrance height. This project is being advanced in three phases: Dilworth Park "Early Construction", 15th Street Station and City Hall Station.</p>	\$146.47 M	<p>Dilworth Park Early Phase Construction Complete 2014</p> <p>15th Street & City Hall Stations Design 2014 - 2017</p> <p>Construction: 15th Street 2016 - 2018 City Hall 2017 - 2021</p>	Philadelphia	Philadelphia
Exton Station High-Level Platforms & Garage				
<p>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.</p> <p>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 number of parking spaces and garage levels will be determined as part of the Phase 3 design.</p>	<p>Phase 1: \$17.70 M</p> <p>Phase 2 & 3: \$39.52 M</p> <p>Total Project: \$57.22 M</p>	<p>Phase 1: Design Complete Construction 2015 - 2017</p> <p>Phase 2 & 3: Design 2017 - 2019 Construction 2021 - 2022</p>	Chester	Chester

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Levittown Station Reconstruction				
<p>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; ADA accessibility improvements, parking improvements, stormwater management, 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.</p>	\$37.07 M	Design Complete Construction 2015 - 2018	Bucks	Bucks
Paoli Intermodal Transportation Center				
<p>This project provides for the engineering and construction of a new multi-modal 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.</p>		Design Underway		
<p>The project will be advanced in two phases. Phase 1 will make the existing station ADA accessible. This phase includes construction of a pedestrian 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, such as sidewalks and crosswalks, will be provided throughout the station area. Phase II includes an intermodal station complex complete with an additional high-level platform on the outbound side, waiting area, ticket offices, passenger amenities; enhanced bus facilities and a 600-plus space commuter parking garage.</p>	Phase 1: \$36.00 M	Phase 1: Design 2014-2015 Construction 2016 - 2018	Chester	Chester
	Phase 2: \$61.12 M	Phase 2: FY 2021 - 2027 Project Construction Schedule to be Developed		
<p>A companion PennDOT project will consist of the extension of Darby Road over the railroad, including a new bridge connecting to the station and the removal of the North Valley Road bridge.</p>				

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Parking Improvements/Expansions (FY 2016 - 2020)				
<i>69th Street Transportation Center Parking Garage</i>				
<p>This project will provide for the construction of a 500-space, fully accessible parking garage including pedestrian connections to the 69th Street Transportation Center. SEPTA is evaluating partnership opportunities for advancing this project. The 69th 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 progress as a joint development/P3 project, and will include a parking garage and bus terminal, and pathways to the transportation center for SEPTA as well as private development on the site. The new garage facility would also provide parking for 69th Street Historic Shopping District customers, patrons of the Tower Theater and the AMC Theater on 69th Street during evenings and weekends.</p>	\$31.00 M	<p>Design Complete</p> <p>Phase 1: Construction 2015 - 2016</p> <p>Phase 2: Joint Development Project Construction 2016 - 2018</p>	Delaware	Chester Delaware Montgomery Philadelphia
<i>Lansdale Parking Garage and Area Improvements on the Lansdale/Doylestown Regional Rail Line</i>				
The project provides for the construction of a fully accessible parking garage at the Lansdale Regional Rail Station. In addition, the following Lansdale area companion improvements will be advanced: improvements to the Main Street entrance to the station, construction of a bus laydown area south of Main Street adjacent to the tracks and construction of a new station at 9th Street.	<p>\$38.4 M Garage</p> <p>\$3.6 M 9th Street Sta</p> <p>\$4.8 M Bus Layover</p>	<p>Design Complete</p> <p>Construction 2015 - 2017</p>	Montgomery	Montgomery
<i>Noble Station Parking Garage and Storage Track on the West Trenton Rail Line</i>				
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, light security cameras; stormwater management systems and landscaping.	\$53.00 M	<p>Design 2016 - 2018</p> <p>Construction 2021 - 2027</p>	Montgomery	Bucks Montgomery Philadelphia

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Railroad Parking Expansion at Gwynedd Valley, North Wales and Philmont Stations</i>				
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 light 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	Gwynedd Valley & North Wales Design 2014 - 2015 Construction 2015 - 2016 Philmont Design TBD	Montgomery	Montgomery
Parking Improvements/Expansions (FY 2021 - 2027)				
<i>Fern Rock Complex</i>				
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	2021 - 2027 Project	Philadelphia	Bucks Montgomery Philadelphia
<i>Manayunk/Norristown Regional Rail Line Parking Expansion</i>				
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	2021 - 2027 Project	Montgomery Philadelphia	Montgomery Philadelphia
Transit & Regional Rail Stations Program— <i>Regional Rail</i> (FY 2016 - 2020)				
<i>Bicycle Transit Access Program</i>				
Installation of new bicycle parking shelters at select Regional Rail stations across the SEPTA service area. Installation will consist of constructing a concrete foundation and slab for a pre-cast fabricated structure and bicycle parking racks. This project will initially be advanced as a three-year, phased program providing bicycle parking shelters at 15 Regional Rail stations per year. The addition of bicycle parking shelters will improve bicycle access and security at SEPTA Regional Rail stations, encouraging more customers to bike rather than drive. This will increase the size of the car-free commuter-shed for the selected stations, allowing more customers to use SEPTA without a personal car or additional bus ride.	\$3.00 M	Design Complete Construction 2016 - 2018	Bucks Chester Delaware Montgomery Philadelphia New Castle, DE	Bucks Chester Delaware Montgomery Philadelphia Delaware (State)

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Ardmore Station and Parking Garage</i>				
This project, which will be advanced in phases, will provide for the construction of a fully accessible station with high level platforms, a new station building, multi-level parking garage and bus circulation improvements at the Ardmore Transit Center on the Paoli/Thorndale Regional Rail Line. Connecting services include SEPTA Bus Routes 44, 103, 105 and 106. This station is also served by Amtrak's Keystone Line.		Design 2015 - 2016		
Phase 1 will include a new inbound station building and outbound shelters, high and low level platforms, canopies, passenger amenities, tunnel accessibility improvements, elevators and accessible stairs and ramps, improved lighting, new signage, landscaping and site improvements including storm water management and construction of foundations for a future parking garage.	Phase 1: \$29.88 M	Phase 1: Construction 2017 - 2019	Montgomery	Delaware Montgomery
Phase 2 will provide for the construction of an accessible multi-level parking garage with approximately 500 spaces, landscaping, site improvements, bus berthing area inside the garage, and improved vehicle and pedestrian access to Lancaster Avenue. Phase 2 will be advanced upon identification of all funding partners.	Phase 2: \$28.00 M	Phase 2: Construction Schedule to be Developed		
<i>Conshohocken Station on the Manayunk/Norristown Regional Rail Line</i>				
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
<i>East Falls Station on the Manayunk/Norristown Regional Rail Line</i>				
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

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Jenkintown-Wyncote Station on the Regional Rail Mainline</i>				
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; a new roof and stormwater management systems and landscaping.	Early Phase: \$1.97 M	Early Phase: Design Complete Construction 2015	Montgomery	Bucks Montgomery Philadelphia
The Early Access Phase of this project will include repair/improvements to station lighting roof and canopies; rehabilitation of plumbing; replacement of the sewage ejector system; and rehabilitation of the pedestrian tunnel and station platforms.	Main Phase: \$20.00 M	Main Phase: Design 2015 - 2016 Construction 2019 - 2020		
<i>Secane Station on the Media/Elwyn Regional Rail Line</i>				
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.	\$21.25 M	Design 2014 - 2015 Construction 2015 - 2017	Delaware	Delaware Philadelphia
<i>Suburban Station Passenger and Crew Amenities</i>				
Construction of new and renovation of existing public rest rooms at Suburban Station to address the proposed fare lines to be installed as part of the SEPTA Key (New Payment Technology) Initiative. The renovated rest rooms will become the new "paid area" rest rooms. In addition, SEPTA's train crew quarters at Suburban Station will be expanded to include new bathrooms, crew work areas, entrances, mechanical rooms, expanded sprinkler and fire alarm systems for the existing and new spaces. This project will provide amenities to both rail passengers and the non-riding public. The expansion of the crew quarters to address high-demand use of this area is part of SEPTA's objective to invest in its employees' health and wellness.	\$4.15 M	Design Complete Construction 2015 - 2016	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia To Trenton, NJ To Newark, DE

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service
<i>Willow Grove Station on the Warminster Regional Rail Line</i>				
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
<i>Yardley Station on the West Trenton Regional Rail Line</i>				
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 2015 - 2016 Construction 2017 - 2018	Bucks	Bucks Montgomery Philadelphia
Transit & Regional Rail Stations Program — <i>Regional Rail</i> (FY 2021 - 2027)				
Stations programmed in FY 2021 - 2027 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	2021 - 2027 Project	Chester	
• Hatboro Station on the Warminster Regional Rail Line	\$6.50 M	2021 - 2027 Project	Montgomery	Bucks
• Lawndale Station on the Fox Chase Regional Rail Line	\$11.50 M	2021 - 2027 Project	Philadelphia	Chester
• Marcus Hook Station on the Wilmington/Newark Regional Rail Line	\$22.50 M	2021 - 2027 Project	Delaware	Delaware
• Roslyn Station on the Warminster Regional Rail Line	\$6.50 M	2021 - 2027 Project	Montgomery	Montgomery
• Wyndmoor Station on the Chestnut Hill East Regional Rail Line	\$19.50 M	2021 - 2027 Project	Philadelphia	Philadelphia
• Wynnewood Station on the Paoli/Thorndale Regional Rail Line	\$20.00 M	2021 - 2027 Project	Montgomery	
Transit & Regional Rail Stations Program — <i>Rail Transit</i> (FY 2016 - 2020)				
<i>5th Street Station on the Market-Frankford Line</i>				
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; drainage improvements and waterproofing.	\$13.00 M	Design 2015 - 2016 Construction 2016 - 2018	Philadelphia	Philadelphia

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service
40th Street Station on the Market-Frankford Line				
This 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.	\$9.62 M	Design 2014 - 2015 Construction 2015 - 2017	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 lights will be installed to increase natural light and reduce energy use. Improvements to bus and trolley operations and pedestrian safety are included.	\$19.05 M	Design complete Construction 2014 - 2015	Delaware	Chester Delaware Montgomery Philadelphia
Arrott Transportation Center (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 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/reconstruction of elements of selected stairs; repair/replacement of structural steel; replacement of roofing materials; repair/replacement of metal panel and eave wall finishes; painting; new amenities (benches, trash receptacles, etc.); new life safety, security and communications systems (Smart Station elements); and new transformers and an emergency generator.	\$38.50 M	Design Complete Construction 2015 - 2017	Philadelphia	Philadelphia

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service
Center City Concourses				
This project provides for multi-phase improvements to Center City Concourses.				
Stage 1 includes :				
<ul style="list-style-type: none"> • Vertical transportation elements including replacement of the two escalators at 15th St., replacement of an escalator and an elevator at 8th Street. • Early design & construction to mitigate water infiltration & structural repairs at seven locations. • Early improvements for South Broad concourse: Floors & Stairways. • Emergency call box replacement for entire concourse. • Master Plan for the entire concourse. • Design for signage in the concourse. 				
	\$54.50 M	All Phases: Design 2014 - 2018 Construction 2015 - 2021	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Stage 2 includes Design and Construction according to the following phases:				
<ul style="list-style-type: none"> • Phase 1: East Market Concourse (South) from 11th St. to 13th, the corridor under South Penn to the Oculus, and City Hall to the Municipal Services Building (MSB) Loop (Security & Loading Only). • Phase 2: East Market Concourse (North) from 11th St. to 13th, 15th Street from Dilworth trolley access to 15th Street Escalators, and 8th Street to the Broad Ridge Spur Station. • Phase 3: City Hall to the Municipal Services Building (MSB) Loop terminating at east entrance to Suburban Station, two corridors under City Hall, and 17th Street to 16th Street south of Suburban Station adjacent to Commerce Street loading dock. • Phase 4: South Broad Concourse. 				

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Erie Station on the Broad Street Line</i>				
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
<i>Wyoming Avenue Station on the Broad Street Line</i>				
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 and waterproofing improvements.	\$5.00 M	Design 2016 Construction 2017 - 2019	Philadelphia	Philadelphia

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Transit & Regional Rail Stations Program— <i>Rail Transit</i> (FY 2021 - 2027)				
Rehabilitation of stations, 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 high security cameras; and drainage and waterproofing improvements.				
• 11th Street Station on the Market-Frankford Line	\$9.50 M	2021 - 2027 Project	Philadelphia	Philadelphia
• 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.	\$22.50 M	2021 - 2027 Project	Philadelphia	Philadelphia
• Elevator/Escalator Improvements (system-wide)	\$4.75 M	2021 - 2027 Project	Delaware Montgomery Philadelphia	Delaware Montgomery Philadelphia
• Fairmount Station on the Broad Street Line	\$18.00 M	2021 - 2027 Project	Philadelphia	Philadelphia
• Hunley Park on the Broad Street Line	\$5.50 M	2021 - 2027 Project	Philadelphia	Philadelphia
• Snyder or Tasker-Morris Station (South portion of Broad Street Line)	\$7.00 M	2021 - 2027 Project	Philadelphia	Philadelphia
• Susquehanna-Dauphin Station on the Broad Street Line	\$9.50 M	2021 - 2027 Project	Philadelphia	Philadelphia
• Villanova Station on the Norristown High Speed Line	\$6.00 M	2021 - 2027 Project	Delaware	Delaware

STATIONS, LOOPS AND PARKING IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Transit & Regional Rail Stations Program— Bus & Trolley Loops (FY 2016 - 2020)</i>				
Modernization of the bus and trolley loops including accessibility improvements and improvements to operator bathroom facilities, shelters, loading platforms, lighting and landscaping. Loops include:	\$11.50 M			
• City Avenue Loop		Design 2016 Construction 2016 - 2017	Philadelphia	Philadelphia
• 61st & Pine		Design 2015 Construction 2015 - 2016	Philadelphia	Philadelphia
• Ridge & Summit		Design 2017 Construction 2017-2018	Philadelphia	Philadelphia
• Bethlehem Pike		Design 2018 Construction 2018 - 2019	Philadelphia	Philadelphia
• Rising Sun & Olney		Design 2020 Construction 2020 - 2021	Philadelphia	Philadelphia
• Wycombe		Design 2020 Construction 2020 - 2021	Delaware	Delaware
Villanova Station				
This 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.	\$30.60 M	Phase 1 Design Complete Construction 2015 - 2017	Delaware	Delaware Montgomery
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, canopies, and station building restoration.		Phase 2 Design Complete Construction 2019 - 2021		

SUBSTATIONS AND POWER IMPROVEMENTS

SEPTA's railroad and transit substations 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-the-art 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 seasonalizing at interlockings; and uninterrupted power supply (UPS) at SEPTA's Control Center and Radio Room.

SEPTA Traction Power and Signal Power Substations Inventory

City	25
Suburban	8
<u>Railroad</u>	<u>44</u>
Total	77

Substations and Power Program Elements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021 - 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
-----\$Millions-----										
Substations	\$26.21	\$14.88	\$12.00	\$9.45	\$12.00	\$7.50	\$107.96	\$163.79	\$103.70	\$293.70
Power Improvements	\$10.29	\$2.63	\$3.00	\$4.05	\$8.00	\$7.50	\$26.99	\$52.17	\$25.93	\$88.38
TOTAL	\$36.50	\$17.50	\$15.00	\$13.50	\$20.00	\$15.00	\$134.95	\$215.95	\$129.63	\$382.08



Jenkintown - Built in 1931



Morton – Built in 1928

SUBSTATIONS AND POWER IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad Substations (FY 2016 - 2020)				
<i>Ambler Substation</i>				
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
<i>Bethayres Substation</i>				
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 2016 Construction 2017 - 2018	Montgomery	Bucks Montgomery
<i>Chestnut Hill East Substation</i>				
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 - 2019	Philadelphia	Philadelphia
<i>Hatboro Substation</i>				
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 2019 - 2021	Montgomery	Bucks Montgomery
<i>Jenkintown Substation</i>				
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

SUBSTATIONS AND POWER IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	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 2016 - 2017 Construction 2017 - 2019	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 Complete 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 Complete Construction 2015 - 2017	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 - 2016 Construction 2016 - 2019	Philadelphia	Bucks Montgomery Philadelphia

SUBSTATIONS AND POWER IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	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. As 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 Track Power and Signal Power Substation on the West Trenton Regional Rail Line.	\$27.50 M	Design 2017 - 2018 Construction 2019 - 2020	Bucks	Bucks Montgomery
Railroad Substations (FY 2021 - 2027)				
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	2021 - 2027 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	2021 - 2027 Project	Philadelphia	Philadelphia
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 few years.	\$10.75 M	2021 - 2027 Project	Bucks	Bucks Montgomery Philadelphia

SUBSTATIONS AND POWER IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
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. For SFC #4 is replaced with a new converter, SFC #1 will be overhauled, followed by SFC #2 & #3.	\$21.50 M	2021 - 2027 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	2021 - 2027 Project	Bucks	Bucks Montgomery
Transit Substations (FY 2016 - 2020)				
Castor Substation				
Replacement and upgrade of existing breakers, relays, transformers, relays and switch gear at Castor Substation on Castor Avenue serving the Route 59 Trackless Trolley.	\$2.15 M	Design 2017 Construction 2020 - 2021	Philadelphia	Philadelphia
Clifton Substation				
Routes 101/102 (Media-Sharon Hill Line) Substation at Clifton – Replacement of three (3) existing single phase reactor-transformers and reactor with a single new 3-phase reactor-transformer and solid state diode reactor 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 - 2015	Delaware	Delaware
Market Substation				
Replacement and upgrade of existing breakers, relays, transformers, relays and switch gear at Market Substation (City Transit).	\$9.30 M	Design 2016 - 2017 Construction 2018 - 2019	Philadelphia	Philadelphia

SUBSTATIONS AND POWER IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Transit Substation Projects (FY 2021 - 2027)				
<p>The following Transit Substation projects are programmed in Fiscal Years 2021 - 2027 for replacement. Work includes replacement and upgrade of existing breakers, relays, transformer, relays and switch gears. Design will be done during the first five years.</p> <ul style="list-style-type: none"> Broad Substation on Mt. Vernon Street serving the Broad Street Line Ellen Substation at Front & Ellen Streets serving the Market-Frankford Line and a portion of the Rt. 15 Trolley Louden Substation at Carlisle & Loudon Streets serving the Broad Street Line and Rt. 75 Trackless Trolley Park Substation at Cumberland & Park Streets serving the Broad Street Line Ranstead Substation on Ranstead Street serving the Market-Frankford Line and a portion of the Trolley Lines 	\$29.10 M	2021 - 2027 Project	Philadelphia	Philadelphia
Power Improvements (FY 2016 - 2020)				
<i>30th Street to Arsenal Catenary Replacement</i>				
Replacement and upgrade of overhead catenary system from 30th Street Station to Arsenal Interlocking.	\$4.30 M	Design 2017 Construction 2018 - 2019	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>30th Street West Catenary Replacement</i>				
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 - 2017 Construction 2018 - 2020	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

SUBSTATIONS AND POWER IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Fox Chase Line Catenary Replacement</i>				
Replacement and upgrade of the overhead catenary system for Fox Chase Regional Rail Line.	\$2.75 M	Design 2018 Construction on 2019 - 2020	Philadelphia	Philadelphia
<i>Media/Elwyn Line Catenary Replacement</i>				
Replacement of 17 miles of 80+ year old catenary between Walnut Interlocking, Philadelphia, and Lenni, Delaware County.	\$10.70 M	Design Complete Construction on 2014 - 2017	Delaware Philadelphia	Delaware Philadelphia
<i>Wayne Junction Yard Catenary Replacement</i>				
Replacement and upgrade of overhead catenary system for the Regional Rail Wayne Junction Yard.	\$1.25 M	Design 2018 Construction on 2019 - 2020	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Power Improvements (FY 2021 - 2027)				
<i>Airport Line Catenary Replacement</i>				
Replacement and upgrade of the overhead catenary system for the Airport Regional Rail Line.	\$1.00 M	2021 - 2027 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<i>Chestnut Hill East Catenary Replacement</i>				
Replacement and upgrade of the overhead catenary system for the Chestnut Hill East Regional Rail Line.	\$5.50 M	2021 - 2027 Project	Philadelphia	Philadelphia
<i>Regional Rail Power Feeder Cable Improvements</i>				
Provides for power feeder cable replacement on Regional Rail lines.	\$1.00 M	2021 - 2027 Project	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia

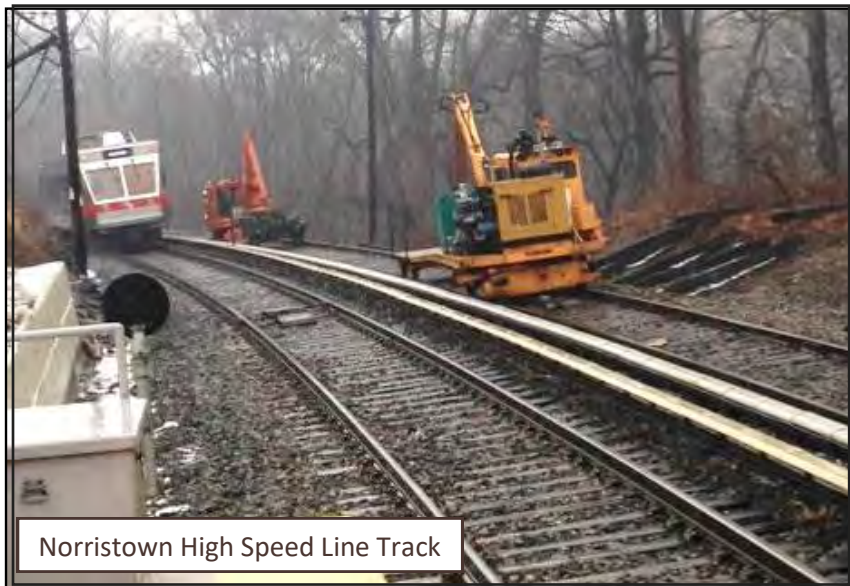
TRACK AND RIGHT-OF-WAY IMPROVEMENTS

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. SEPTA's Rebuilding for the Future capital program includes projects across the transit and Regional Rail systems that will renew street track and special work, replace continuous welded rail (CWR), and renew ties and sleepers.

One-Way Route Miles in SEPTA's Rail Network

Broad Street Line	11
Market-Frankford Line	13
Norristown High Speed Line	13
Regional Rail	280
Trolley	42
TOTAL	359

Track & Right-of-Way - Program Elements	Prior Funding	Budget						12-Year		
		Year	Program Years				FY 2021-	Program	Beyond	Total
		FY 16	FY 17	FY 18	FY 19	FY 20	2027	Total	FY 2027	Budget
-----\$Millions-----										
Track and Right-of-Way	\$11.40	\$15.00	\$10.00	\$4.00	\$5.00	\$5.00	\$51.00	\$90.00	\$51.95	\$153.35
TOTAL	\$11.40	\$15.00	\$10.00	\$4.00	\$5.00	\$5.00	\$51.00	\$90.00	\$51.95	\$153.35



TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Transit Projects (FY 2016 - 2020)				
Market-Frankford Line Bridge Street Yard Program				
Renewal of yard tracks for the Market-Frankford Line at the Bridge Street Yard.	\$3.00 M	Constru on 2018 - 2019	Philadelphia	Philadelphia
Norristown High Speed Line Tie Replacement and Continuous Welded Rail				
Renewal of es and mbers 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 handler, inserter/extractor, tamper, spiker and spike puller.	\$26.00 M	Design complete Constru on 2015 - 2021	Delaware Montgomery	Delaware Montgomery
Route 10, 11, 13 and 36 Track Improvements				
Renewal of street track on Trolley Route 11 along Woodland Avenue from 58th to 60th Street.	\$11.67 M	Route 11 Constru on 2018	Philadelphia	Philadelphia
Renewal of Trolley Route 36 along Elmwood Avenue from 59th to 65th Street. Also includes special track work replacement at Elmwood Yard.		Route 36 Constru on 2018		
Renewal of street track on Trolley Route 10 along Lancaster Avenue from Girard Avenue to 52nd Street, and along Lansdowne Avenue from 52nd Street to 63rd Street.		Route 10 Constru on 2019 - 2020		
Renewal of street track on Trolley Route 13 along Chester Avenue from 65th Street to “S” curves.		Route 13 Constru on 2021		
Route 15 Girard Avenue Street Track Renewal				
Renewal of street track on Trolley Route 15 at selected areas along Girard Avenue from Corinthian Avenue to Frankford Avenue.	\$10.20 M	Constru on 2015 - 2017	Philadelphia	Philadelphia

TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
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
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	Construction 2014 - 2017	Philadelphia	Philadelphia
Transit Projects (FY 2021 - 2027)				
Trolley Diversion Routes and Revenue/Non-Revenue Tracks Improvements				
Renewal of street track and special track work on City Transit Division trolley diversion routes and non-revenue routes. Trolley diversion routes are used to transport customers to 40th Station on the Market Frankford Line when the tunnel portion of the trolley line for Routes 10, 11, 13, 34 and 36 is out of service for maintenance. Non-revenue tracks are used by trolleys heading to and from Elmwood and Callowhill Shops/Yards. The project also includes renewal of track on additional segments of Trolley Routes 10, 11, 13, 34 and 36.	\$22.90 M	2021 - 2027 Project	Philadelphia	Philadelphia
Railroad Projects (FY 2016 - 2020)				
Powelton Yard Switch Heaters				
Installation of remote controlled electric switch heaters at Regional Rail Powellton Yard for improved access to the yard during winter storms.	\$4.25 M	Design Complete Construction 2015 - 2016	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia

TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Regional Rail Interlocking Rehabilitation Program</i>				
SEPTA has many interlockings, some of which are very complex and are at or near the end of their useful life cycle. The most complex track configuration in an interlocking is an arrangement of turnouts and crossings called a "Double Slip Switch." Five interlockings on the SEPTA Regional Rail System have double slip switches in them which are critical to operations.				
The first phase of the program will renew critical components of "Wayne Interlocking" on the Regional Rail system, which is located on the Mainline near Wayne Junction, and is critical to operations on the Chestnut Hill East Branch. This rehabilitation will improve operational reliability, reduce in-service failures and passenger delays, and extend the useful life of this critical interlocking until the entire facility is replaced as part of the major Interlocking Renewal Program.	Phase 1 \$1.66 M	Phase 1 Construction 2015 - 2016	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Future phases include rehabilitation of 16th Street, Broad, Schuylkill and West Interlockings.	Future Phases \$7.20 M	Future Phases TBD		

TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Regional Rail Open Deck Bridge Timber Renewal Program</i>				
A three-year program which provides for the renewal of open deck bridge members at various locations throughout the regional rail system. There are a total of eight locations in the program, including eleven tracks. Year one of this program includes the following four locations on the Regional Rail System:				
<ul style="list-style-type: none"> Chestnut Hill East Line Under Grade Bridge, UGB 5.18 Doylestown Line UGB 2.76 Doylestown Line UGB 4.42 Fox Chase Line UGB 6.68 				
Years two and three will include:	\$3.31 M	Construction 2015 - 2018	Bucks Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
<ul style="list-style-type: none"> Main Line UGB 4.50 Ivy Ridge Line UGB 4.37 Ivy Ridge Line UGB 5.29 Norristown Line UGB 17.77 				
The locations in this program have reached or are near the end of their expected useful life cycle, which is 25 years. Upon completion of this program, all 31 open deck bridges on the regional rail system will have renewed bridge members in the last ten years.				
Railroad Projects (FY 2021 - 2027)				
<i>Norristown Station 3rd Track</i>				
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 Regional Rail Line. The Norristown Regional Rail Station will be reconstructed and made fully ADA accessible as part of this project.	\$34.5 M	2021 - 2027 Project	Montgomery	Montgomery

TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
<i>Railroad Yard Storage Expansion - Barracks</i>				
The Rail Yard will be used to relocate railcars currently stored at the Trenton Transit Center. With nowhere else to store these railcars in the Trenton area, SEPTA now moves them more than 30 miles to the next closest remote storage location in advance of heavy rain events, such as Hurricane Sandy. The most cost-effective means to mitigate the risk of damage is to restore Barracks Yard, which will serve a dual purpose of also increasing SEPTA's overall railcar storage capacity on the Trenton Line. Increased railcar storage capacity, in turn, will allow SEPTA to increase passenger capacity on the Trenton Line, which has experienced rapid ridership growth due to corridor congestion from the reconstruction of Interstate 95 north of Center City Philadelphia. An early construction phase of this project is to verify the existence of the Assunpink Creek and develop options for constructing the yard.	\$34.5 M	Assessment - 2015 Design/Construction Schedule - TBD	New Jersey	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey

VEHICLE ACQUISITIONS AND OVERHAULS

SEPTA's revenue vehicle fleet consists of 1,417 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 construction, 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, or, in the case of the trolley and Silverliner IV's, have far exceeded their design 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 options, such as the issuance of bonds, to assist in the advancement of the rail vehicle procurements included in this program. In addition, to accommodate new vehicles, SEPTA will be conducting cross disciplinary systems analyses for both trolleys and Regional Rail vehicles to determine potential costs associated with infrastructure needs and as well as operational impacts.

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

Vehicle Acquisitions and Overhaul - Program Elements	Budget						12-Year			
	Prior Funding	Year FY 16	Program Years				FY 2021- 2027	Program Total	Beyond FY 2027	Total Budget
			FY 17	FY 18	FY 19	FY 20				
-----\$Millions-----										
Bus Purchase Program	\$237.65	\$60.00	\$60.00	\$60.00	\$65.00	\$70.00	\$499.00	\$814.00	\$0.00	\$1,051.65
Paratransit Vehicle Acquisition	\$0.00	\$5.47	\$7.00	\$8.00	\$7.00	\$7.00	\$49.00	\$83.47	\$0.00	\$83.47
Regional Rail Bi-Level Car & Locomotive Acq.	\$38.05	\$15.00	\$44.00	\$68.00	\$74.00	\$58.00	\$48.54	\$307.54	\$0.00	\$345.59
Regional Rail Silverliner IV Replacement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.00	\$397.50	\$423.50	\$676.50	\$1,100.00
Trolley Acquisition	\$0.50	\$3.00	\$10.00	\$22.58	\$22.58	\$52.69	\$368.83	\$479.68	\$232.82	\$713.00
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	\$71.00	\$72.00	\$73.00	\$74.00	\$75.00	\$553.00	\$918.00	\$0.00	\$918.00
TOTAL	\$276.20	\$160.47	\$199.00	\$237.58	\$248.58	\$294.69	\$1,957.87	\$3,098.19	\$909.32	\$4,283.71



Push-Pull Locomotive



30-Ft. Clean Diesel Bus



Mu Bi-Level Railcar

VEHICLE ACQUISITIONS AND OVERHAULS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Bus Purchase Program (FY 2016 - 2027)				
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.	\$814.00 M (12 Year Total)	1) Current Contract: \$235.00 M 275 Buses Complete 2016	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
SEPTA’s bus fleet includes 472 hybrid buses. SEPTA’s current 275 Bus Purchase contract includes 90 40-foot hybrid buses and 185 60-foot articulated hybrid buses. Upon delivery of all 275 buses, SEPTA will have a total of 747 hybrid buses in its fleet: over half of SEPTA’s bus fleet. This quantity of hybrid buses makes SEPTA one of the largest public transit operators of hybrid buses in the country.		2) 30-Ft. Bus Contract: \$16.60 M 28 buses Delivery 2016		
Beginning in FY 2016 the following bus replacement orders will commence: 525 40-foot hybrid buses to be delivered over a five year period (2016 - 2020) and 28 30-foot clean diesel buses to be delivered in Calendar Year 2016.		3) 40-Ft. Contract: \$415.00 M 525 Buses Delivery 2016 - 2020		
		4) Balance of Program \$147.40 M Delivery 2021 - 2027		
Paratransit Vehicle Purchase (FY 2016 - 2027)				
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.	\$83.47 M	Annual delivery to replace vehicles beyond their useful life	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
SEPTA ownership of these vehicles provides the following benefits: <ul style="list-style-type: none">• The ability to rapidly exchange vehicles between carrier networks should the need arise.• Creates an economic incentive for carriers to provide quality service.• More control over fleet composition and standardization of the fleet.• More control over vehicle design features. In Fiscal Year 2016, up to 63 vehicles will be acquired, consisting of 32 minibuses with wheelchair lift, and 31 twelve-passenger minibuses without wheelchair lifts.				

VEHICLE ACQUISITIONS AND OVERHAULS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Regional Rail Multi-Level Car & Locomotive Acquisition (FY 2016 - 2020)				
To accommodate increased ridership and service capacity needs on the Regional Rail System, this project will provide for the acquisition of multi-level push-pull coaches and thirteen electric locomotives. The multi-level coaches are additions to SEPTA's push-pull railcar fleet. The new locomotives will replace existing ones and provide expansion of service opportunities with the new multi-level cars. Railcars acquired will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems.	\$154.40 M	1) Electric Locomotives Delivery 2018	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
Work is 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; vehicle technical specification development; and consultant work on railroad service.	\$191.19 M	2) Multi-Level Railcars Delivery 2019 - 2021		
Regional Rail Silverliner IV Replacement (FY 2021 - 2027)				
This project provides for the purchase of new railcars to replace SEPTA's Silverliner IV railcar fleet. The Silverliner IV railcars 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.	\$1,100.00 M	2021 - 2027 Project and beyond	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey

VEHICLE ACQUISITIONS AND OVERHAULS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Trolley Acquisition (FY 2016 - 2027)				
<p>This project provides for the purchase of new light rail vehicles (trolleys) for City Transit Routes 10, 11, 13, 15, 34, 36 and Suburban Transit Routes 101 & 102. These rail transit lines currently operate with 141 light rail vehicles that were built in 1981, as well as 18 “Presiden Conference Comm ee” (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.</p> <p>SEPTA will be advancing a Trolley Infrastructure and System Modernization program in support of the new trolleys. A systems integration Engineering Phase will initially take place. Replacement of City and Suburban trolley fleets will require a complex and closely interrelated series of infrastructure upgrades to accommodate modern technological advancements and mandated code requirements. Existing conditions and new vehicle impacts will be evaluated as they relate to communications and signals, power, track, maintenance facilities, ADA interface, fare payment interface and overall transit strategy. A fully integrated approach will be crucial to the achievement of the modernization program’s desired outcomes. Investments in infrastructure and system modernization will ultimately support the following outcomes: provide an accessible system; an improved customer experience; reduced vehicle acquisition costs; and reduced annual operating costs.</p>	\$713.00 M	Delivery schedule to be developed	Delaware Philadelphia	Delaware Philadelphia

VEHICLE ACQUISITIONS AND OVERHAULS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Utility Vehicle Renewal (FY 2016 - 2027)				
<p>The Utility Fleet Renewal Program is a comprehensive effort to upgrade and replace the Authority's utility 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.</p> <p>The utility fleet is comprised of the following types of vehicles:</p> <ul style="list-style-type: none"> Utility vehicles and equipment for transit and paratransit supervisors, and SEPTA police officers; 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; 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; Service vehicles used for vehicle maintenance including wreckers, tow tractors, man lifts and pick-up trucks; Miscellaneous equipment such as generators, compressors, trailers, floor scrubbers and welding units. 				
	\$72.00 M	Annual delivery to replace vehicles beyond their useful life	System-Wide	Bucks Chester Delaware Montgomery Philadelphia

VEHICLE ACQUISITIONS AND OVERHAULS

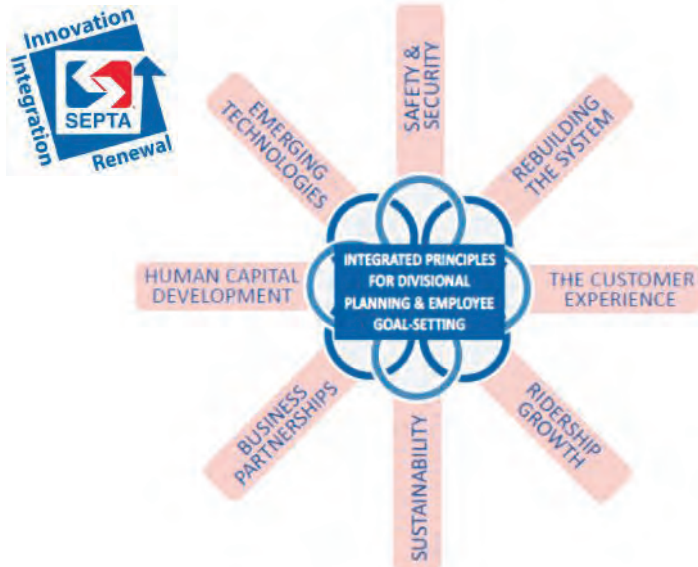
Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Vehicle Overhaul Program (FY 2016 - 2027)				
<p>SEPTA's Vehicle Overhaul Program (VOH) provides for the system replacement or upgrade of systems on SEPTA's rolling stock. Vehicles are scheduled for overhauls during their 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.</p> <p>Highlights of the Fiscal Year 2016 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 2016 include N-5 car seat replacement, M-4 lighting improvements and floor replacement, and B-IV truck and propulsion system improvements. 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.</p>	\$918.00 M	Annual program to overhaul a portion of each vehicle fleet	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey

FY 2016 CAPITAL BUDGET AND FY 2016-2027 CAPITAL PROGRAM

Appendices



APPENDIX A: STRATEGIC BUSINESS PLAN AND THE CAPITAL PROGRAM



VISION: To be the region's preferred choice for transportation.

SEPTA's Strategic Business Plan for Fiscal Years 2015 through 2019 is the organization's framework for decision-making. The plan outlines a vision, mission, core values, and strategic objectives as guiding principles for all programs and initiatives. It also establishes a series of key performance indicators to measure progress towards goals over time. For more information on SEPTA's Strategic Business Plan, please visit: www.septa.org/strategic-plan.

The Capital Program is a key tool for implementing SEPTA's Strategic Business Plan. The matrix below illustrates the relationship between SEPTA's FY 2015-2019 Strategic Business Plan objectives and the FY 2016-2027 Capital Program.

Capital Programs	Strategic Business Plan Objectives (FY2015-2019)							
	<u>Safety & Security</u>	<u>Rebuilding the System</u>	Emerging Technology	The Customer Experience	Ridership Growth	<u>Sustainability</u>	Human Capital Development	Business Partnerships
Bridge Program	✓	✓				✓		
Communications, Signal Systems & Technology Improvements	✓	✓	✓	✓	✓		✓	✓
Debt Service and Capital Leases		✓		✓	✓	✓		
Infrastructure Safety Renewal Program	✓	✓	✓	✓		✓	✓	
Maintenance / Transportation Shops and Offices	✓	✓		✓		✓	✓	
<u>New Payment Technologies</u> - SEPTA Key	✓	✓	✓	✓	✓	✓	✓	
Safety & Security Improvements	✓	✓	✓					✓
Service Restorations		✓			✓	✓		
Stations, Loops and Parking Improvements	✓	✓		✓	✓	✓		✓
Substations and Power Improvements	✓	✓	✓			✓		
Track and Right-of-Way Improvements	✓	✓			✓	✓		
Vehicle Acquisitions and Overhauls	✓	✓	✓	✓	✓	✓		

APPENDIX B: LONG-TERM PLANNING EFFORTS

SEPTA's current Strategic Business Plan has identified the need for SEPTA to adopt a Long-Range Plan for Capacity Enhancements and Service Expansion as one of the Business Initiatives under the Infrastructure and State of Good Repair Category. A SEPTA Long Range Plan would provide a connected framework for decision making within SEPTA, as well as a crucial link between the planning efforts of key regional stakeholders and SEPTA's long term vision and goals.

The descriptions below provide more detailed information on 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 – An Extension of the Norristown High Speed Line (NHSL)

- Lead Agency: Southeastern Pennsylvania Transportation Authority (SEPTA)

An Alternatives Analysis and Environmental Impact Statement (AA/DEIS) planning study for the 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 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 long 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). Completion of the Alternatives Analysis and Environmental Impact Statement is anticipated by the end of 2015.

Broad Street Line Extension – Pattison Avenue to the Philadelphia Navy Yard

- Lead Agency: Pennsylvania Department of Transportation (PennDOT) Bureau of Public Transportation and Philadelphia Industrial Development Corporation (PIDC)

PIDC received a DVRPC FY 2007 Transportation and Community Development Initiative (TCDI) grant to evaluate transit needs and alternatives for enhancing public transportation connections to Navy Yard redevelopment sites in South Philadelphia, including the extension of the Broad Street Line from its current terminus at AT&T Station. A final feasibility study report was issued in September 2008. In 2014, PennDOT's Bureau of Public Transportation provided funding to update that feasibility study with a Phase 2 Feasibility study which will update the original findings based upon the new 2013 Navy Yard Master Plan and examine the potential to move the extension forward within the FTA New Starts guidance that is associated with MAP-21. The expected duration of the study is approximately 2 years.

APPENDIX B: LONG-TERM PLANNING EFFORTS

Project Descriptions

Quakertown Rail Restoration – Alternatives Analysis

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

A 2011 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. 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 that study recommended 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. This project was placed on hold in 2012 pending the FTA analysis of new evaluation criteria for federal transit projects under MAP-21. DVRPC included a project within its FY 2015 Work Program to update ridership projections for rail restoration within the corridor, this effort extending to Perkasie. Results of the study are expected in 2015. These results will determine the future direction of project.

Long Range Planning

30th Street Station District Plan

- **Lead agencies and project partners:** Amtrak, Brandywine Realty Trust, Drexel University, PennDOT, and SEPTA

The Philadelphia 30th Street Station District Plan will create a single, integrated vision for both the station and its surrounding area. The final vision will contain opportunities for community development, economic growth and improved transportation connections. The master planning process involves three main elements of analysis: transportation, the station and associated facilities, and commercial opportunities. Each of these elements will be integrated into a final comprehensive plan for the District.

This process will be guided by the project partners, including SEPTA, with input from the community at public meetings held throughout the two-year timeframe. The final District Plan will be completed in spring 2016.

Regional Long Range Plan – Connections 2040 Plan for Greater Philadelphia

- **Lead agency:** Delaware Valley Regional Planning Commission (DVRPC)

DVRPC is required to update the regional Long Range Plan every four years. The plan addresses transportation, land use, environmental and economic competitiveness and includes a fiscally constrained list of transportation projects. The plan was adopted by the DVRPC Board in July 2013 and published in November 2013. With the passage of Act 89, a supplemental amendment to the plan was approved to include projects that previously had been deferred due to fiscal constraints. That supplement was released in 2014.

APPENDIX B: LONG-TERM PLANNING EFFORTS

Project Descriptions

City of Philadelphia: “Philadelphia2035” Plan

- Lead agency: Philadelphia City Planning Commission

Philadelphia2035: The Citywide Vision was the first phase of a large scale comprehensive planning effort for the City of Philadelphia completed in 2012. Recommendations include 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. The Planning Commission is currently in the second phase of Philadelphia2035, which provides for the establishment of 18 individual District Plans to develop specific recommendations for each area of the City. Other products resulting from Philadelphia2035: The Citywide Vision include The Complete Streets Manual (the balanced use of streets between pedestrians, bicyclists, transit, and vehicles) and The Philadelphia Master Trails Plan.

The following District Plans are underway or completed:

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

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

Northeast Corridor Commission Actions

- Lead agency: Northeast Corridor Infrastructure and Operations Advisory Commission

Under the Passenger Rail Investment and Improvement Act (PRIIA) of 2008, the Northeast Corridor Infrastructure and Operations Advisory Commission (NECC) represents states, Amtrak, and the Federal Government was established to guide various planning efforts throughout the Corridor. The NECC implements plans and policies to govern the NEC most notably with its recently adopted Cost Allocation Policy and Five-Year Capital Plan. Both SEPTA and PennDOT have roles in these efforts. The implementation of bilateral access agreements between commuter rail carriers and Amtrak which implement cost allocation for operating and capital costs while creating a stronger decision-

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 human and natural environment; 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.

APPENDIX B: LONG-TERM PLANNING EFFORTS

Project Descriptions

Other Planning Activities

Roosevelt Boulevard

- **Lead agency:** Pennsylvania Department of Transportation, City of Philadelphia (Mayor's Office of Transportation and Utilities and Philadelphia Streets Department), SEPTA, DVRPC

The Delaware Valley Regional Planning Commission (DVRPC) recently completed the Alternatives Development for the Roosevelt Boulevard Transit Enhancements study. The purpose of this project was to take a fresh look at transit needs and develop strategies that could be achieved at grade within the existing cross section, at comparably lower cost and in a shorter timeframe than the fixed guideway service that has historically been the focus of planning efforts. The resulting recommendation was for a modified form or a new bus rapid transit (BRT) service along the Boulevard.

The dedicated transit right-of-way/guideway service along the Roosevelt Boulevard remains a long-term ambition. To this end, the City of Philadelphia was awarded a \$2.5 million TIGER (Transportation Investment Generators Economic Recovery) grant in 2014 to develop long-range plans for the Roosevelt Boulevard. Work on this study will begin in 2015, with PennDOT and SEPTA being core stakeholders.

Wissahickon Transportation Center Planning

- **Lead agency:** SEPTA, partners include Philadelphia City Planning Commission, Philadelphia Parks & Recreation, Mayor's Office of Transportation and Utilities, Philadelphia Streets Department

Wissahickon Transportation Center (WTC) is one of SEPTA's busiest bus transfer centers, serving an average of 5,780 people, 780 trips, and 2,905 passenger boards every weekday across eleven bus routes. It provides access to destinations such as King of Prussia, Plymouth Meeting City Avenue, and Northeast Philadelphia, as well as Center City.

Bus operations at WTC have outgrown the existing physical facilities, and expansion plans have been explored collaboratively between SEPTA and other related agencies as a part of the Lower Northwest District Plan, in the Philadelphia2035 Plan. WTC expansion will significantly improve the customer experience, allow for new service and extension of existing bus service, reduce multimodal congestion, enhance safety, and allow for the completion of a major portion of the Schuylkill River Trail.

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 list 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 Fiscal Year 2016 DVRPC Work Program projects that SEPTA will directly contribute to include:

- Delaware Avenue Waterfront Trolley Feasibility Study
- Paoli-Thorndale Regional Rail Extension Ridership Study
- Radnor Station Connectivity Study
- Ivy Ridge Station: Ivy Ridge Intermodal Study

End of Budget Document