



FISCAL YEAR 2019 CAPITAL BUDGET

Fiscal Years 2019–2030 Capital Program









FISCAL YEAR 2019 CAPITAL BUDGET

AND FISCAL YEARS 2019-2030 CAPITAL PROGRAM

"REBUILDING THE SYSTEM"



Approved by the SEPTA Board

May 24, 2018

FY 2019 CAPITAL BUDGET AND FY 2019-2030 CAPITAL PROGRAM



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Overview and Summary

This document presents SEPTA's annual capital budget for Fiscal Year 2019 and the capital program for Fiscal Years 2019 through 2030. The annual capital budget and 12-year capital program describes the capital improvements SEPTA plans to undertake with 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 Capital Funding
- Uses of Capital Funding
- Funding projections and assumptions
- Rebuilding the System Program Progress
- The FY 2019 Capital Budget and FY 2019-2030 Capital Program (Table)
- Descriptions of capital programs and individual projects
- Appendices

SEPTA's FY 2019 capital budget totals **\$749.62** million and the 12-year capital program totals **\$7.4** billion. By comparison, the Board-approved FY 2018 capital budget totaled **\$727.23** million and the FY 2018-2029 program totaled **\$7.3** billion. The FY 2019 capital budget and 12-year capital program takes into account Federal funding authorized under the Fixing America's Surface Transportation (FAST) Act; funding from the Commonwealth of Pennsylvania generated by Act 89 legislation; as well as anticipated capital financing.

Following the passage of Act 89 in 2013, which provided a long-term transportation funding solution for the Commonwealth, SEPTA initiated the "Rebuilding the System" program to help bring transit assets into a state of good repair. SEPTA will replace buses and rail vehicles that are past their useful lives, expanding capacity on the Regional Rail network to accommodate ridership growth, and perform regular vehicle overhauls to optimize vehicle performance. Critical infrastructure such as bridges, signal systems, track, substations and maintenance facilities will be rehabilitated and modernized. Station facilities throughout the transit network are being renovated to improve accessibility and provide new passenger amenities, such as real time travel information. The Authority will continue to advance the SEPTA Key project to improve fare payment and collection technology, and will begin infrastructure improvements needed to restore Regional Rail service between Elwyn and a new station in Wawa, Delaware County. The capital program also includes financial obligations such as annual debt service and capital lease payments.

Additional project status updates and photos for the Rebuilding the System program are available online at <u>http://www.SEPTA.org/rebuilding</u>.





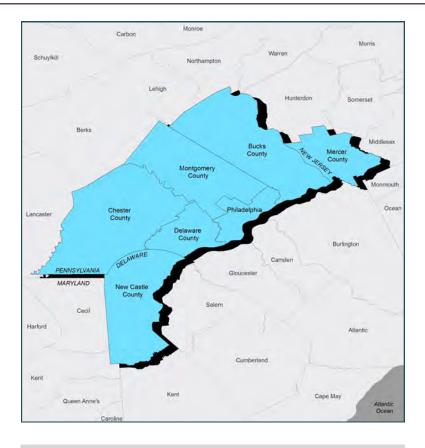
Introduction to SEPTA

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
- Five small bus circulator and shuttle services

Service / Mode	Ridership	Revenue Vehicles
Bus	150,481,400	1,416
Regional Rail	34,652,800	396
Trolley	24,060,400	159
Subway/Elevated	88,616,900	343
Norristown High Speed Line	3,106,300	26
Trackless Trolley	5,677,500	38
Demand Response	1,704,500	456
Total	308,299,800	2,834



In FY 2017, the Authority provided more than **308 million** passenger trips, operating in a region of 2,202 square miles, and serving a total population of over 4 million people. Average weekday ridership was approximately **1.03 million** trips.

SEPTA's Regional Rail ridership has **increased by more than 50 percent** over the last 20 years, from 23 million trips in 1997 to **34.7 million trips** in FY 2017.

Source: FY 2017 SEPTA Operating Statistics

Doylestown West Trenton Amtrak to Woodba New York Warminster Boaton Landhor NJ Transit to: alcheng (New York New Jersey Points North We Gwymerid \ Trenton Transit & Fort Washing River Line to Camden Amtrak to Glenside Norristowna n-Wynco Chestnut Hill East Bristo Thorndale Croyan Norristown & Trans. Ctr. Fern Rock Fox Chase & Eddington Nornis Chestnut Hill West vell's Heights Frankford Trans. Ctr. shington Lane 60 ng Miles antown Arrott Trans Ct achung. im A Church Wayne Jct. Radni N. Phila Kine ast Falls N. Phila Stadura (man Ave) Villanova Allemeny Trilagelohia Cynwyd In Broad Gamint Hill rk-Dauphir Roberts Rd in de Trolley Route Bryn Mav noticid A vie Trolley Route Arcin pre Station Trolley Route: trak/MJ and Trans Cark od 46th 40 & 69th Street Trans. Ctr. è. Ġ ć. 3 Trolley Routes: City O Lindenwold & & Walnut-Locu NJ Transit to **Univer** &15th/temO Lombard South m Side Ellsworth-Federal Tester-Morris LEGEND Shyder Market-Frankford Line dam & Oregon Broad Street Line & Broad-Ridge Spur STATA S Oncome Norristown High Speed Line Trolley Lines (Routes 10, 11, 13, 15, 34, 36, 101 and 102) 102 Edgmont St Monroe St Jackson St Olive St Veterans Sq **Regional Rail Lines** Sharon Hill PATCO Line ain to New Jersey (not a SEPTA service) Eastwic **Delaware River** Bidle Free interchange Criangé SI (0) Media East & W Pedestrian Connection Terminal 8 A boald Elwy dditional fare needed for connecting service Marcus Hool & Wheelchair accessible station inals E & F Wilmington INFORMATION Airport Newark Customer Service: 215-580-7800 TDD/TTY: 215-580-7853 Amtrak to Website: www.septa.org Weshington DC

SEPTA Regional Rail and Rail Transit Map

Recent Achievements

The SEPTA Board approved a Locally Preferred Alternative route (from over 30 possible routes) for the 4.5 mile Norristown High Speed Line King of Prussia Rail Extension, connecting Philadelphia's three largest economic hubs: King of Prussia, Center City and University City. For this project, SEPTA received the Greater Valley Forge Transportation Management Association (GVFTMA) "Planning Leadership Award" in 2017.

SEPTA recently took delivery of the first of 15 new Siemens ACS-64 electric locomotives. These will allow for faster service and increased ridership by providing more working locomotives and the ability to pull the planned fleet of new multi-level rail cars.

SEPTA received the 2017 "Preservation Achievement Award" from the Preservation Alliance for Greater Philadelphia for the restoration of historic viaducts along the Media-Elwyn Regional Rail Line, and for rehabilitation of various stone arch bridges.

SEPTA's Lansdale Parking Garage was selected as a winner of the annual Montgomery Awards for 2017. The garage, which opened in April 2017, provides parking for 680 motor vehicles. Winners were selected by Montgomery County for promoting sustainability in planning, design, or advocacy.

The 30th Street Station District Plan—a joint project of Amtrak, SEPTA, PennDOT and the City of Philadelphia—received the 2017 American Institute of Architects (AIA) Award for Regional and Urban Design.

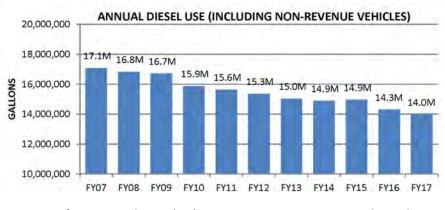
In January 2017, SEPTA was recognized by 10,000 Friends of Pennsylvania with the "Community Transportation Excellence Award" for various initiatives including reconstruction and modernization projects to improve infrastructure, safety and reliability; a sustainability program that promotes environmental responsibility; service expansion proposals to bring public transportation to more areas of the southeastern Pennsylvania region; and community partnerships.

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 Operating 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 quantifiable progress. "Key Performance Indicators" reports are updated monthly and are available at: http://www.septa.org/strategic-plan/reports.html.



Key Performance Indicator (KPI), Resource Management: Annual Diesel Use

Sustainability Program Plan

A key programmatic 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. In 2017 SEPTA released SEP-TAINABLE 2020, the Authority's second generation sustainability plan. Because one of the guiding principles of the sustainability program is to develop financially sound investments and programs, a new economic goal was added to track and report the grants, revenue and savings SEPTA receives from sustainability initiatives. By tracking the positive financial impacts of sustainability initiatives at SEPTA, the Authority knows which investments and programs provide the greatest financial yield. Having this information allows SEPTA to make financially informed decisions on whether to continue or expand programs, helping SEPTA to grow its environmental and social impact while simultaneously improving its economic position. The total positive financial impact of sustainability initiatives exceeds \$124 million as shown in the table below. For more information about SEPTA's sustainability program visit: http://www.septa.org/sustain.

Fiscal Year	GRANTS	REVENUE	SAVINGS	
FY2009	\$-	\$-	\$-	
FY2010	\$-	\$70,207	\$-	
FY2011	\$27,640,000	\$123,780	\$-	
FY2012	\$-	\$179,675	\$-	TOTAL POSITIVE
FY2013	\$1,280,000	\$273,312	\$726,650	FINANCIAL IMPACT
FY2014	\$-	\$322,263	\$583,501	\$124,632,200
FY2015	\$86,800,000 *	\$418,696	\$73,449	
FY2016	\$2,600,000	\$278,675	\$1,061,124	
FY2017	\$-	\$1,761,475	\$439,392	
TOTAL	\$118,320,000	\$3,428,083	\$2,884,116	

*FTA's Resilience Gran

Alternative Funding Strategies for Advancing Capital Projects

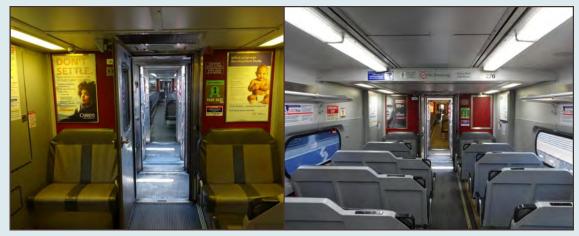
When available, SEPTA pursues alternative project financing mechanisms to help advance capital projects.

The Authority has recently been employing the Pennsylvania Guaranteed Energy Savings Act (GESA) to advance capital construction projects without using capital grant funds. Projects are designed and built by a certified energy savings company (ESCO) that specializes in energy efficient technologies. SEPTA arranges for private financing for the capital construction, and the ESCOs guarantee the energy savings. If the savings do not materialize, the ESCOs will be responsible for covering the difference in repayment. SEPTA is able to use the self-funding approach to improve its environmental performance without utilizing the Authority's own capital resources.

To date, ESCO projects have been completed at five facilities and in three rail car fleets to implement capital projects incorporating utility conservation measures. Typical projects include Heating, Ventilation and Air Conditioning (HVAC) system upgrades; building envelope and window replacements; conversion to energy-saving Light Emitting Diode (LED) light fixtures; and water conservation measures. The Authority is also using ESCO funding to finance a natural gas fired Combined Heat and Power Plant at Midvale Yard. Most recently, SEPTA conducted an energy audit at the Headquarters Building at 1234 Market Street and is evaluating the feasibility of an energy efficiency retrofit through an ESCO. SEPTA will continue to evaluate potential ESCO projects in the coming years, including improvements to additional shops and depots, substations, stations and tunnels.



Southern Garage LED Retrofit - Before and After



Regional Rail Car LED Retrofit - Before and After

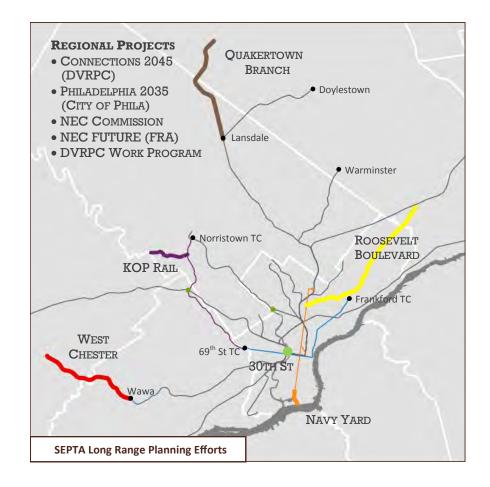
Long Range Planning

SEPTA plays a key role in a wide variety of transportation planning efforts within the region, ranging from involvement in DVRPC's Connections 2045 Long Range Transportation Plan, to review and implementation of Philadelphia 2035 and County Plans, to local station area planning projects with Municipalities within our 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 some time to come on reducing our 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. These projects would allow SEPTA to see the potential for new riders to the system, as well as provide more efficient and reliable service to existing customers. 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 Line to the Philadelphia Navy Yard, restoration of rail service on the Bethlehem Branch from Lansdale to Perkasie, restoration of rail service between Wawa and West Chester, and improved transit along Roosevelt Boulevard.

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, 30th Street Station District Plan, 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 details on these projects, as well as SEPTA's framework for a Long Range Plan, please refer to the following page and Appendix B.



Highlighted Expansion Projects

King of Prussia Rail

The King of Prussia Rail Project is a rail expansion study evaluating different alignments for an extension of the Norristown High Speed Line (NHSL) to King of Prussia. With almost 60,000 employees, King of Prussia is the largest employment center outside of the City of Philadelphia, and as a result of key assets like the King of Prussia Mall and the Valley Forge National Historical Park, serves as a popular destination for tourism within Montgomery County. The rail extension would offer improved regional transit connections to King of Prussia from communities along the existing NHSL, Norristown, and Philadelphia; improve connectivity between major destinations; better serve existing and new transit riders; and offer a reliable way to connect people to opportunities.



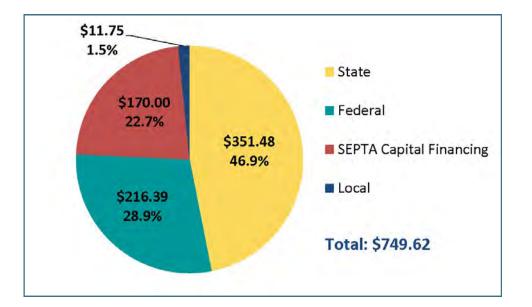
King of Prussia Rail completed the Draft Environmental Impact Study (DEIS) in Fall 2017. The DEIS assesses each alternative's impact to the natural, cultural and social environment, and addresses ways to minimize any impacts that cannot be avoided. The DEIS process included an extensive public outreach process, including public hearings, community working groups, stakeholder meetings, and backyard visits to local homes. The DEIS and Alternatives Analysis recommended the PECO/1st Ave alignment as the Locally Preferred Alternative (LPA), which was adopted by the SEPTA Board in January 2018. SEPTA initiated the Final Environmental Impact Statement (FEIS) in Spring 2018, which is anticipated to take approximately 18 months to complete. A Request for Proposals for the Project Development Phase (preliminary engineering) was released in July 2018. Funding for planning and some design work is being provided under an existing Federal Transit Administration (FTA) grant.

Recent and Upcoming Milestones

- Release of Draft Environmental Impact Statement: October 2017
- Board Adoption of the LPA: January 2018
- Initiation of Final Environmental Impact Statement: April 2018
- Consultant selection for Project Development Phase (preliminary engineering): Fall 2018

Additional project information can be found at www.kingofprussiarail.com





FY 2019 Capital Budget: Funds by Source (\$M)

State Transportation Funding: The Passage of Act 89 • Act 44 of 2007 established the Public Transportation Trust Fund, which restructured state funding for public transit and replaced the previous General Fund sources with dedicated sources. 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 reduced. Between FY 2011 and FY 2014, SEPTA's capital program was reduced to about \$300 million annually, the lowest level since 1997. The state legislature recognized the need for continued investment in transportation infrastructure. Following on the recommendations of the Governor's Transportation Funding Advisory Commission, lawmakers crafted a comprehensive transportation funding bill to provide long-term, dedicated funding for public transit as well as roads, bridges and multimodal transportation. State Act 89 of 2013 (House Bill 1060) was signed into law on November 25, 2013.

State Funds: \$351.48 Million

Act 89 of 2013 provided a comprehensive transportation funding solution for the Commonwealth of Pennsylvania. The funding is indexed to inflation and has no legislative sunset. New revenues for transportation were generated through uncapping the Oil Company Franchise Tax (OCFT), adjusting various fees for inflation, and surcharges on traffic tickets. This long-term, dedicated source of state funding for transit means that SEPTA can begin to address its State of Good Repair backlog, resulting from years of capital funding shortfalls, while modernizing equipment and laying the groundwork for future improvements. Following the passage of Act 89, SEPTA presented the "Rebuilding for the Future" initiative in its FY 2015 capital program.

SEPTA's FY 2019 Capital Budget includes **\$351.48 million** in state funds. SEPTA receives state capital funds primarily via Section 1514, the Asset Improvement Program. Sources of funding for Section 1514 are generated by various sources: proceeds of capital bonds; tire, vehicle lease and vehicle rental fees; traffic violation fines; motor license fund fees; and turnpike transfer funds, which are scheduled to be replaced with sales and use tax revenues. SEPTA receives 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.

Federal Funds: \$216.39 Million

On December 4, 2015, President Obama signed into law the Fixing America's Surface Transportation (FAST) Act. The FAST Act was the first passage of a long-term surface transportation authorization since 2005. Over its five year lifespan, the FAST Act authorizes \$305 billion for surface transportation funding, including \$61 billion dedicated for public transportation. This created a steady and predictable funding stream that also modestly increased national public transportation investment. The FAST Act maintains most program structures established in the Moving Ahead for Progress in the 21st Century (MAP-21) Act of 2012. Funding increases were targeted toward improving state of good repair and the bus program.

SEPTA's FY 2019 Capital Budget includes an estimated **\$216.39 million** in federal funds. Federal funding sources and FY 2019 estimates are shown in the adjacent table.

Most of SEPTA's federal funding is provided by grants from the Federal Transit Administration (FTA) via the formula funding programs. SEPTA also receives federal highway funds that PennDOT "flexes" (i.e., transfers) to transit agencies in the Commonwealth. SEPTA typically uses flex funds for bus replacements. The FY 2019 budget also includes \$1 million in projected Transit Security Grant Program (TSGP) funds allocated through competitive grants administered by the Federal Emergency Management Agency (FEMA).

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.

The Authority applies for competitive federal grants when available. In recent years, SEPTA has received a variety of discretionary grant awards to support capital projects, such as expansion of the Wissahickon Transportation Center, purchase of 25 electric buses, and improvements at Lawndale Station.

FY 2019 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.	¢60.40							
FTA Section 5340	Growing States and High Density States Formula Program. Allocations based on population forecasts and population density. SEPTA receives Growing States program funding.	\$69.43							
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.	\$121.38							
FTA Section 5339	Bus and Bus Facilities Formula Program. Funds capital projects to replace, rehabilitate or purchase buses and related facilities. Allocations based on population and service factors after providing a minimum amount per state.	\$7.50							
Highway Flex	Federal highway program funds that PennDOT provides to state transit agencies for capital improvement projects. Based on the Governor's commitment, \$25 million per year is flexed annually to transit operators.	\$17.08							
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.	\$1.00							
Total Federal		\$216.39							

Local Funds: \$11.75 Million

SEPTA's FY 2019 Capital Budget includes **\$11.75 million** in local matching funds. The required local match for federal and state grant 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.

Capital Financing: \$170 Million

The FY 2019 Capital Budget includes **\$170 million** in capital financing. SEPTA anticipates using a loan provided through the Employment Based Immigration - 5th Preference (EB-5) program to fund certain capital projects. The loan may provide up to \$300 million over the course of several years. The actual amount of borrowings under this agreement is subject to change. SEPTA also anticipates using a combination of other short- and long-term financing tools in FY 2019 to advance capital projects. Refer to the "Financial Obligations" section for more information about capital financing.

Transit Asset Management

The FAST Act mandated that the Federal Transit Administration (FTA) develop an overall Transit Asset Management (TAM) system to manage public transportation assets. In a July 2016 final rule, the FTA issued asset management requirements for public transportation providers. SEPTA's Transit Asset Management Program will be in full alignment with the provisions of the FAST Act. Moreover, the TAM Program will improve SEPTA's asset management practices and guide SEPTA's capital investments. The TAM program will provide a framework for developing the data required to support investment decisions that will allow SEPTA to achieve corporate goals, especially the goals of Rebuilding the System and Resource Management. The Authority continues to prioritize the replacement and renewal of infrastructure and vehicles; however, state of good repair projects require attaining a balance between operational impacts and other strategic business initiatives.



FY 2019 Capital Budget - Summary

SEPTA's FY 2019 Capital Budget totals **\$749.6 million.** Projected FY 2019 funding is allocated among projects that will bring assets to a state of good repair, meet the Authority's financial obligations, advance strategic objectives, and implement system improvements to enhance transit service. Capital investments are focused on the following areas:

- **Bridge Program (\$5.2 M)**: Includes Regional Rail Stone Arch Bridges Phase 2, a bridge on the Norristown High Speed Line, and other bridge repairs.
- **Communications, Signal Systems and Technology Improvements (\$42.0 M)**: Includes a variety of improvements to signals, interlockings, dispatching and operations management systems, real-time information and other technology.

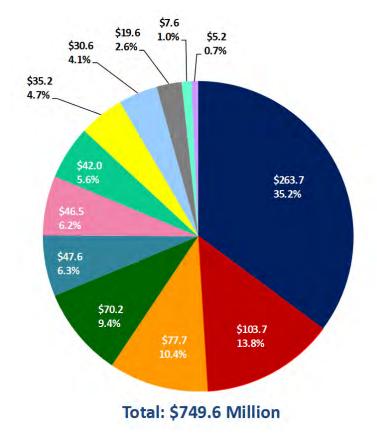
Financial Obligations (\$103.7 M): Includes SEPTA's Amtrak trackage lease, other capital asset leases and debt service payments.

- Infrastructure Safety Renewal Program (\$46.5 M): Includes track replacement; station renewal; rehabilitation of signals, communications equipment, traction and power systems; and rehabilitation of maintenance facilities.
- Maintenance/Transportation Shops, Offices & Roofs (\$47.6 M): Rehabilitation of bus and rail maintenance shops, facilities maintenance shops, and offices to bring infrastructure and equipment to a state of good repair. Includes expansion of Frazer Yard to accommodate planned additions to the Regional Rail fleet.
- **Safety & Security (\$19.6 M):** Includes safety and security measures for vehicles and facilities, and interoperable communications. Also includes projects competitively funded through the U.S. Department of Homeland Security (DHS) to provide protection from terrorism, major disasters and other emergencies.
- SEPTA Key (\$70.2 M): Includes modernization of SEPTA's fare payment system and companion projects.
- Service Restoration (\$35.2 M): Elwyn to Wawa Rail Service Restoration.
- **Stations, Loops and Parking Improvements (\$77.7 M):** Reconstruction or rehabilitation of SEPTA stations and parking expansions and improvements with a focus on accessibility.

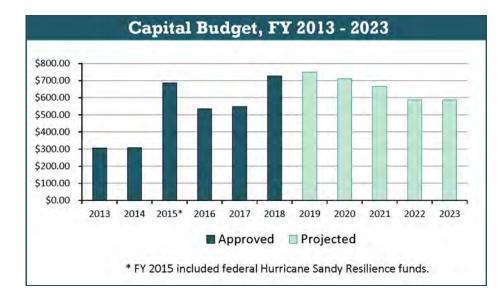
Substations and Power Improvements (\$30.6 M): Modernization of SEPTA's railroad and transit substations, originally built in the 1920s and 1930s, and catenary replacement.

- **Track and Right-of-Way Improvements (\$7.6 M):** To return rail infrastructure to a state of good repair. Includes tie replacement and continuous welded rail (CWR).
- **Vehicle Acquisitions and Overhauls (\$263.7 M):** Replacing vehicles that have exceeded their useful life, acquisition of additional locomotives, multi-level rail cars and utility vehicles, and optimizing the performance of the existing fleet through targeted overhaul campaigns.

Projects are described in more detail in the Program Descriptions.



FUNDING PROJECTIONS AND ASSUMPTIONS



Annual capital funding for SEPTA is illustrated in the chart above. The FAST Act authorizes federal funding for surface transportation programs through Federal Fiscal Year 2020. SEPTA's funding projections reflect the authorized growth of programs funded from the Mass Transit Account. SEPTA's federal formula funding level for FY 2019 is programmed at approximately 1 percent higher than the level that was programmed in FY 2018. Following some modest growth in FY 2020, federal funding is projected to remain flat in subsequent years.

While the FAST Act provided predictability in the short term, it did not include a long-term solution for ensuring solvency of the Federal Highway Trust Fund, which supports both highway and transit programs. SEPTA is working with its industry partners to support sustainable funding for transportation infrastructure that will address State of Good Repair needs, while fostering job growth and economic development.

State funding levels are based on current financial guidance from PennDOT. Funding provided under Act 89 is forecasted to increase slightly, to \$352.97 million, through FY 2021. Starting in FY 2023, funding for the Public Transportation Trust Fund currently provided by the Pennsylvania Turnpike Commission is scheduled to be replaced by new, bondable revenue sources, including sales and use tax.



The FY 2019-2030 Capital Program includes anticipated capital financing pursuant to the Employment Based Immigration - 5th preference (EB-5) program administered by United States Citizenship and Immigration Services (USCIS). The loan will be made available to SEPTA over a period of several years and may provide up to \$300 million to partially fund certain capital projects. The capital program also includes \$225 million in additional short- and long-term financing to manage cash flow obligations for active capital projects. Refer to the "Financial Obligations" section for more information about capital financing.

SEPTA's FY 2019 Capital Budget and FY 2019-2030 Capital Program is fiscally constrained, so that the program of projects reflects anticipated funding levels. In order to advance additional projects, other funding must be secured through competitive grants or local sources, or through the use of additional capital financing tools to distribute project costs over a longer period of time.

Highlighted Accomplishments

Since the passage of Act 89 in November 2013, SEPTA has completed a significant number of capital improvement projects and vehicle replacements. Examples of recently completed capital projects include:

- 30-Foot Bus Purchase (35 Vehicles Delivered)
- 40-Foot and 60-Foot Hybrid Diesel-Electric Bus Purchase (275 Vehicles Delivered)
- 40th Street Station ADA Improvements
- 61st & Pine Bus Loop Improvements
- 69th Street Transportation Center Roof Replacement
- Allegheny Bus Washer Replacement
- Ambler Substation Overhaul
- Boiler Replacements at Callowhill Garage, Elmwood Shop, and Wayne Junction Shop and Line Maintenance Facility
- Paratransit Vehicle Purchase, FY 2015-17 (232 Vehicles Delivered)
- Roof Replacements at 2nd & Wyoming / Berridge Shop, and Media / Sharon Hill Line (MSHL) and Norristown High Speed Line (NHSL) Maintenance Facilities
- Suburban Station Accessible Travel Center (ATC) Expansion
- Wayne Junction Substation Overhaul

For the period of January 1, 2014 through May 31, 2018, SEPTA issued Notices to Proceed for 143 major third-party construction contracts. Of those contracts, 70 have been completed and closed. Project status updates and photos for the Rebuilding the System program are available online at http://www.SEPTA.org/rebuilding.









FY 2019 CAPITAL BUDGET AND FY 2019-2030 CAPITAL PROGRAM

Capital Program and Project Descriptions



FY 2019 CAPITAL BUDGET AND FY 2019-2030 CAPITAL PROGRAM

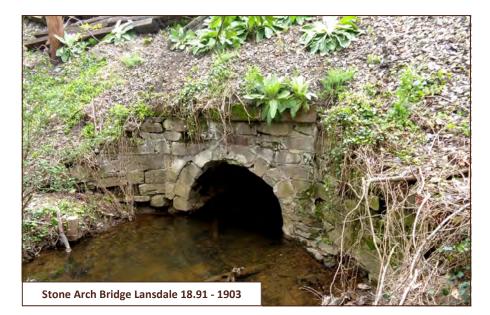
		Budget						12-Year		
Capital Programs /	Prior	Year	Program Years			FY 2024-	Program	Beyond	Total	
Financial Obligations	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
<u>Capital Programs</u>					\$IVII	llions				
Bridge Program	\$3.50	\$5.24	\$5.56	\$7.25	\$11.08	\$21.93	\$172.54	\$223.60	\$0.00	\$227.10
Communications, Signal Systems and Technology Improvements	\$79.74	\$42.01	\$50.69	\$36.82	\$27.70	\$27.26	\$89.25	\$273.73	\$0.00	\$353.47
Infrastructure Safety Renewal Program	\$0.00	\$46.50	\$47.50	\$47.50	\$48.50	\$49.50	\$374.50	\$614.00	\$0.00	\$614.00
Maintenance/Transportation Shops and Offices	\$100.46	\$47.55	\$48.15	\$27.34	\$26.63	\$26.53	\$189.70	\$365.90	\$79.44	\$545.80
Safety and Security Improvements	\$25.54	\$19.58	\$20.35	\$14.03	\$11.35	\$12.01	\$64.28	\$141.60	\$0.00	\$167.14
SEPTA Кеу	\$199.81	\$70.22	\$27.74	\$0.00	\$0.00	\$0.00	\$0.00	\$97.96	\$0.00	\$297.77
Service Restorations	\$26.81	\$35.20	\$47.59	\$36.48	\$31.78	\$0.00	\$0.00	\$151.05	\$0.00	\$177.86
Stations, Loops and Parking Improvements	\$266.77	\$77.69	\$77.71	\$43.81	\$45.10	\$81.42	\$477.37	\$803.10	\$53.50	\$1,123.37
Substations and Power Improvements	\$22.73	\$30.59	\$46.14	\$48.12	\$40.12	\$54.77	\$82.50	\$302.24	\$25.00	\$349.97
Track and Right-of-Way Improvements	\$17.70	\$7.60	\$11.74	\$12.05	\$7.00	\$7.34	\$44.00	\$89.73	\$23.44	\$130.87
Vehicle Acquisitions and Overhauls	\$296.63	\$263.74	\$220.35	\$244.10	\$224.83	\$175.15	\$1,731.73	\$2,859.90	\$1,453.87	\$4,610.40
Subtotal Capital Programs	\$1,039.69	\$645.92	\$603.52	\$517.50	\$474.09	\$455.91	\$3,225.87	\$5,922.81	\$1,635.25	\$8,597.75
Financial Obligations										
Capital Leases	\$0.00	\$48.32	\$56.31	\$57.44	\$58.59	\$59.76	\$453.43	\$733.85	\$0.00	\$733.85
Debt Service	\$0.00	\$55.38	\$51.14	\$91.19	\$53.44	\$70.45	\$423.50	\$745.10	\$338.23	\$1,083.33
Total Capital Budget	\$1,039.69	\$749.62	\$710.97	\$666.13	\$586.12	\$586.12	\$4,102.80	\$7,401.76	\$1,973.48	\$10,414.93

BRIDGE PROGRAM

The SEPTA system includes more than 350 bridges. The average age is in excess of 85 years, with 155 bridges over 100 years old. The majority of structures were constructed in the early 1900s. This program will restore SEPTA's bridges to a state of good repair. Bridges will be repaired or replaced based on their condition.



		Budget						12-Year		
Bridge Program	Prior	Year		Program	Years		FY 2024 -	Program	Beyond	Total
	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Millio	ns				
Bridge Program	\$3.50	\$5.24	\$5.56	\$7.25	\$11.08	\$21.93	\$172.54	\$223.60	\$0.00	\$227.10
TOTAL	\$3.50	\$5.24	\$5.56	\$7.25	\$11.08	\$21.93	\$172.54	\$223.60	\$0.00	\$227.10





BRIDGE PROGRAM

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad Bridge Projects (FY 2019 - 2023)				
Mainline–Schuylkill Bridges (30th St. to Suburban Station)				
Rehabilitation of seven bridges between 30th Street Station and Suburban Station located at Mile Post 0.49, 0.58, 0.61, 0.64, 0.68, 0.72 and 0.76. These bridges were built in 1929. The first phase of this project will include critical repairs to Bridges 0.49 and 0.58 with repairs at deteriorated locations. The second phase will include complete rehabilitation of all seven bridges.	Phase 1 \$2.00 M Phase 2 \$56.00 M	Phase 1 Design Complete Construction 2018 - 2019 Phase 2 Design 2023 Construction 2023 - 2027	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey
Stone Arch Bridge Program - Phase 2				
 Rehabilitation of the following seven (7) Stone Arch Bridges on SEPTA's Regional Railroad: Doylestown Line Mile Post 4.87. Built 1915. Lansdale Line Mile Post 18.91. Built 1903. Media/Elwyn Line Mile Post 12.68. Built 1854. West Trenton Line Mile Post 13.70. Built 1912. West Trenton Line Mile Post 15.95. Built 1876. West Trenton Line Mile Post 18.52. Built 1948. West Trenton Line Mile Post 22.65. Built 1876. 	\$10.00 M	Design 2017 - 2018 Construction 2018 - 2020	Bucks Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia New Jersey
Railroad Bridge Projects (FY 2024-2030)				
Chestnut Hill East Line Bridge Rehab Program				
Rehabilitation of five bridges on the Chestnut Hill East Regional Rail Line located at Mile Post 5.04, 5.72, 7.63, 8.90, and 9.59.	\$30.00 M	2024 - 2030 Project	Philadelphia	Philadelphia
Chestnut Hill West Line Bridge Rehab Program				
Rehabilitation of seven bridges on the Chestnut Hill West Regional Rail Line located at Mile Post 0.06, 0.83, 1.17, 1.26, 2.98, 4.42, and 5.67.	\$35.00 M	2024 - 2030 Project	Philadelphia	Philadelphia

BRIDGE PROGRAM

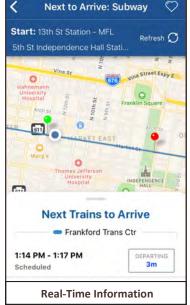
Project Descriptions	Budget	Budget Schedule / Status (Calendar Year)		Service Area
Transit and Railroad Bridge Projects (FY 2019 - 202	3)			
Critical Bridge Program				
Annual program to rehabilitate or replace bridges throughout the system to maintain infrastructure in a state of good repair.	\$45.00 M	Ongoing	System-wide	System-wide
NHSL Bridge 0.15 over 69th St. Yard Tracks				
Replacement of the existing four (4) span steel structure of Bridge 0.15 on the Norristown High Speed Line. This bridge was built in 1906. Phase 1 includes critical repairs to the superstructure. Phase 2 includes complete rehabilitation of the substructure and superstructure.	Phase 1 \$1.70 M Phase 2 \$13.80 M	Design 2016 - 2018 Phase 1 Construction 2018 - 2019 Phase 2 2024 - 2030 Project	Delaware	Delaware Montgomery
NHSL Viaduct over Schuylkill River				
Rehabilitation of the Bridgeport Viaduct at Mile Post 12.81 on the Norristown High Speed Line. The project includes steel, concrete and bearing repairs and painting. The viaduct was constructed in 1911 and is 3,165 feet long.	\$35.00 M	Design 2021 Construction 2021 - 2024	Montgomery	Delaware Montgomery

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 install Positive Train Control on the Route 101/102 Trolley lines, rehabilitate signals

and interlockings, and upgrade dispatching and scheduling systems. Rail signal modernization projects and interlocking improvements will enhance operational reliability and service quality. The annual Information Technology program provides replacement and upgrades of the Authority's computer hardware, software and network equipment, such as servers, digital signage, and Enterprise applications.

		Budget			-	-	-	12-Year	-	
Communications, Signal Systems and	Prior	Year		Program	Years		FY 2024-	Program	Beyond	Total
Technology Improvements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Millio	ns				
Communications, Signals & Technology	\$79.74	\$42.01	\$50.69	\$36.82	\$27.70	\$27.26	\$89.25	\$273.73	\$0.00	\$353.47
TOTAL	\$79.74	\$42.01	\$50.69	\$36.82	\$27.70	\$27.26	\$89.25	\$273.73	\$0.00	\$353.47







Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Communications & Signal Improvements—Railroad	Projects (F	Y 2019-2030)		
30th to Phil Signals, Catenary, and ROW Improvements				
Reconfiguration and rebuilding of Regional Rail signals, track, catenary, and interlockings from 30th Street Station to Phil Interlocking (in University City). Work includes new track special work, Overhead Contact Systems (OCS), and switch and lock mechanisms, as well as the addition of new Positive Train Control (PTC) systems. The existing signal block layout will be modified.	\$45.90 M	Design 2014 - 2018 Construction 2017 - 2019	Philadelphia	Delaware Philadelphia Delaware (State
Interlocking Improvement Program				
Rebuilding, reconfiguration and construction of railroad interlockings to improve the delivery of revenue service. Regional Rail locations include but are not limited to: Beth and York Interlockings on the West Trenton Line; and Hunt/Wayne Interlocking, 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 on the Regional Rail Main Line.	\$75.00 M	Ongoing	Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State New Jersey
Media/Elwyn Automatic Train Control (ATC) Upgrade				
This project will retire the existing and unreliable wayside signals, AC track circuits and traffic signal cabling from Arsenal to Elwyn Interlocking on the Media/Elwyn Line. New pre-wired wayside cases outfitted with digital track circuits will be procured and installed at each existing wayside block location, the existing wayside signal equipment retired and Cab No-Wayside (NORAC Rule 562) instituted.	\$4.00 M	Design Complete Construction 2015 - 2018	Delaware Philadelphia	Delaware Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Communications & Signal Improvements - Transit Pi	rojects (FY 2	2019 - 2023)		
Broad Street Line Ridge-Spur Signals				
Modernization of the signal system on the Broad Street Line's Broad-Ridge Spur. Work includes signal upgrades to improve operational reliability for the train control systems on the portion of track between Fairmount Interlocking and the 8th and Ridge Terminal Interlocking.	\$8.66 M	Design Complete Construction 2015 - 2019	Philadelphia	Philadelphia
Route 101/102 Positive Train Control				
nstallation of a new state-of-the art Communications Based Train Control (CBTC) system for the Route 101/102 trolley lines. The new system will automatically enforce trolley separation and provide overspeed and roadway worker protection. New power switching will be installed to facilitate operational flexibility.	\$76.40 M	Design Complete Construction 2015 - 2019	Delaware	Delaware
Communications & Signal Improvements - System-W	ide Project	s (FY 2019 - 2023)		
Computer Aided Radio Dispatch (CARD) System Replacement				
Replacement of existing Computer Aided Radio Dispatch (CARD) system. Project will retire the existing 502MHz radio system and replace it with a new state-of-the-art Computer Aided Dispatch and communications network. The new CARD system will be used to dispatch SEPTA buses, trolleys and paratransit vehicles. 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.	\$32.50 M	Design 2017 - 2018 Construction 2019 - 2022	Philadelphia	System-wide
Real-Time Information / Audio Visual Public Address (AVPA) S	ystem			
Upgrades and modernization of SEPTA's real-time arrival information for customers on all modes of transit. Includes installation of a Real Time Vehicle Locating system on all SEPTA vehicles, providing vehicle location information that will be accessible to the public via smartphone applications and the web. In addition, SEPTA will upgrade Audio Visual Public Address (AVPA) equipment at all railroad and transit stations.	\$34.73 M	Design 2015 - 2018 Construction 2017 - 2021	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey	System-wide

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Technology Improvements (FY 2019 - 2030)				
Information Technology Program				
Enhancements to SEPTA's information technology infrastructure and applications. Includes new and replacement computer hardware and software such as desktop computers, laptops, virtual server deployment for energy efficiency and redundancy, upgraded enterprise network systems, digital video recorders and software licenses. The FY 2019 program will include an initiative to upgrade Enterprise applications, including a replacement of the Materials Management application and upgrade of the Sharepoint application. A Cyber Security upgrade is also planned for proactive threat detection and prevention. Operational System improvements will support the Real-Time Communication and Audio Visual Public Address (AVPA) systems, digital signage, upgrades to servers, and web/mobile applications. The program also includes replacement of network switches, wireless systems and other hardware/software.	\$60.00 M	Ongoing	Philadelphia	System-wide
Scheduling System Enhancements				
SEPTA currently uses the Trapeze Scheduling System, which is an integrated operations management system that streamlines tasks such as scheduling and bus stop management. The Authority needs to enhance the system's operational capabilities and time record management. This project will build upon SEPTA's current system by adding several enhancements: bidding, dispatch, timekeeping and Yard and Workforce Management. Includes a railroad train scheduling system upgrade to optimize scheduling and dispatching.	\$9.80 M	Implementation 2017 - 2020	Philadelphia	System-wide
Video Systems Refreshment Program				
Replacement of existing Mobile Video System components and installation of equipment on SEPTA's vehicle fleets including, but not limited to: Inward Facing cameras within Regional Rail Cars; and Digital Video Recording devices on board vehicles.	\$6.46 M	Implementation 2017 - 2023	Bucks Chester Delaware Montgomery Philadelphia	System-wide

The Capital Asset Lease Program provides for payments attributable to capital leases. For Fiscal Year 2019, 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. In addition to the three series of bonds previously issued, SEPTA entered into a loan agreement with the Delaware Valley Regional Center (DVRC) under the Employment Based Immigration - 5th Preference (EB-5) Program for up to \$300 million in capital financing. SEPTA anticipates using additional short and long-term financing tools to advance capital projects as described below.



		Budget						12-Year		
Financial Obligations -	Prior	Year		Program	Years		FY 2024 -	Program	Beyond	Total
Program Elements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Million	s				
Capital Asset Lease Program	\$0.00	\$48.32	\$56.31	\$57.44	\$58.59	\$59.76	\$453.43	\$733.85	\$0.00	\$733.85
Debt Service	\$0.00	\$55.38	\$51.14	\$91.19	\$53.44	\$70.45	\$423.50	\$745.10	\$338.23	\$1 <i>,</i> 083.33
TOTAL	\$0.00	\$103.70	\$107.45	\$148.63	\$112.03	\$130.21	\$876.93	\$1,478.95	\$338.23	\$1,817.18





Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Capital Asset Leases (FY 2019 - 2030)				
Amtrak Trackage - This lease provides for the right to use Amtrak tracks for SEPTA's Trenton, Wilmington/Newark and Paoli/Thorndale Regional Rail service, and portions of the Chestnut Hill West, Media/Elwyn, Airport and Cynwyd Regional Rail Lines. With the enactment of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA), Congress mandated that a standardized methodology be developed to allocate costs among the Northeast Corridor (NEC) owners and operators that ensures each agency take the full financial responsibility for its use of shared NEC infrastructure and related facilities. Payments made to Amtrak under this lease are SEPTA's costs based on methodologies and policies established by the Northeast Corridor (NEC) Infrastructure and Operations Advisory Commission for all NEC users pursuant to PRIIA. Communications Towers - This lease provides for the right to house voice and data transmission and receiving equipment on towers at the following locations: Y-100, Loews Hotel, Malvern, West Rockhill, Lincoln Plaza Center, Newtown Square, and New Britain.	12 Year Total \$733.85 M	Ongoing Program through 2030	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
<u>Copiers</u> - This lease provides for rental of copiers, which are dispersed throughout SEPTA's headquarters and transportation/maintenance facilities.				
Warehouse Facility - This lease provides for rental of a storeroom facility at 2045 Wheatsheaf Lane in the City of Philadelphia.				

Project Descriptions

Budget Schedule / Status Location Service (Calendar Year) Area

Debt Service (FY 2019 - 2030)

Payments on Capital Grant Receipts Bonds, Series 2011/2017

Acquisition of 120 Silverliner V Regional Rail Cars These 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 have 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 cars have electronic exterior and interior destination signs, voice annunciation of train destination 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 (\$325.7 M) is funded through a combination of grants and capital financing.

Rehabilitation of the Wayne Junction Intermodal Facility The Wayne Junction Intermodal Facility was originally constructed at the turn of the 20th Century. This project provided 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 provided 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 included 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 (\$31.5 M) is funded through a Federal Transit Administration Bus and Bus Facilities Livability Grant and capital financing. The construction phase of the project achieved substantial completion in September 2015.

In October 2017, the Authority advance refunded a portion of Capital Grant Receipts Bonds, Series 2011 ("Series 2011 Bonds"), to reduce future debt service payments. The final maturity date of the newly issued Series 2017 Bonds was unchanged from the Series 2011 Bonds.

12 Year Debt Service Total for Series 2007, 2010/2017 & 2011/2017 Bonds and EB-5 Loan	Final year of debt service funding for Series 2011/2017 Bonds - 2028	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware
\$745.10 M		Delaware (State) New Jersey	(State) New Jersey

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Payments on Converted Indexed Rate Revenue Refunding Bonds,	Series 2007			
On December 18, 2012, the Authority converted the Variable Rate Revenue Refunding Bonds, Series 2007, from the Daily Rate Mode to the Indexed Rate Mode. Proceeds from the Variable Rate Revenue Refunding Bonds, Series 2007 were used to refund the Special Revenue Bonds, Series 1997, which provided funds for the buyout of leases on Bombardier Rail Cars, General Motors Locomotives and Frazer Rail Car Maintenance Shop and for other capital improvement projects, including the Market-Frankford Line car acquisition, Broad Street Line cable replacement, Frazer Yard interlocking construction and Market-Frankford Line infrastructure improvements.		Final year of debt service funding for Series 2007 Bonds - 2021		
Payments on Fixed Rate Revenue Refunding Bonds, Series 2010/	2017			
Proceeds from the Fixed Rate Revenue Refunding Bonds ("Series 2010 Bonds") were used to refund the Special Revenue Bonds, Series 1999, which provided funds for the Market-Frankford Line cars, various capital		Final year of debt		

provided funds for the Market-Frankford Line cars, various capital improvement projects, and partial refunding of Series 1995A Bonds. In October 2017, the Authority advance refunded a portion of the Series 2010 Bonds to reduce future debt service payments. The final maturity date of the newly issued Series 2017 Bonds was unchanged from the Series 2010 Bonds.

Capital Financing - EB-5 Loan

In January 2016, SEPTA entered into a loan agreement with the Delaware Valley Regional Center (DVRC), pursuant to the Employment Based Immigration-5th Preference (EB-5) Program administered by United States Citizenship and Immigration Services (USCIS). The loan will be made available to SEPTA over a period of several years and may provide up to \$300 million to partially fund certain capital projects such as the acquisition of locomotives, expansion of Frazer Yard, and substation rehabilitation projects. The loan comprises a 5-year interest-only period with an option that provides SEPTA the ability to extend the loan for an additional period of 20 years.

Final year of debt service funding for Series 2010/2017 Bonds - 2027

> Final year of debt service funding for EB-5 loan - 2044

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Capital Financing - Other				
SEPTA anticipates utilizing short and/or long-term borrowings to advance various capital projects during Fiscal Year 2019 through 2021. The other financing may take the form of additional borrowings under the EB-5 Loan Program, Grant Anticipation Notes (GANs), or other short term financing tools.		Final year of debt service funding for		
Projects to be funded under this program may include vehicle purchases and infrastructure improvements, depending upon cash flow requirements.		other Capital Financing - 2034		

There are currently no outstanding obligations under this program and the actual amount of borrowing is subject to change.

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, culverts, bridges, retaining wall, and grade crossing improvements.
- Station Facilities Rehabilitation of station buildings and associated facilities including roofs and canopies, ticket offices and waiting rooms, platforms, lighting, sanitary facilities, 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, tunnel lighting, duct banks, vehicle servicing equipment, and other support functions.



		Budget						12-Year		
Infrastructure Safety Renewal Program -	Prior Year Program Years					FY 2024-	Program	Beyond	Total	
Program Elements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Millio	ns				
Infrastructure Safety Renewal Program	\$0.00	\$46.50	\$47.50	\$47.50	\$48.50	\$49.50	\$374.50	\$614.00	\$0.00	\$614.00
TOTAL	\$0.00	\$46.50	\$47.50	\$47.50	\$48.50	\$49.50	\$374.50	\$614.00	\$0.00	\$614.00





This program provides for improvements to SEPTA's bus, rail, and facilities maintenance shops, and office buildings. Program elements include replacement of fire suppression systems, vehicle washer systems, and boiler systems. This program also supports ongoing programs, including the wheel truing program, bus and steel wheel lift programs, underground storage tank replacement program, shop and yard upgrades, and paving improvements. In addition, this program addresses remediation and clean up activities at select facilities as well as activities that will reduce SEPTA's carbon footprint and enhance SEPTA's commitment to sustainability. This program also includes a roof rehabilitation and replacement program, which involves replacing and upgrading roof structures at numerous facilities to include new mechanical equipment, electrical connections, brick repairs, roof-mounted HVAC equipment, and the replacement of old roofing systems.



		Budget	-	-				12-Year		
Maintenance/Transportation Shops & Offices	Prior	Year		Program	Years		FY 2024 -	Program	Beyond	Total
Program Elements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$N	Aillions				
Maintenance/Transportation Facilities	\$86.76	\$33.73	\$31.86	\$20.84	\$25.02	\$23.79	\$133.52	\$268.76	\$79.44	\$434.96
Roof Program	\$13.70	\$13.82	\$16.29	\$6.50	\$1.61	\$2.74	\$56.18	\$97.14	\$0.00	\$110.84
TOTAL	\$100.46	\$47.55	\$48.15	\$27.34	\$26.63	\$26.53	\$189.70	\$365.90	\$79.44	\$545.80



Frontier Garage Roof, Washer and Paving





Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Maintenance & Transportation Facilities (FY 2019 -	2023)			
103 Victory Avenue Facility Improvements				
Improvements to shops and offices located at 103 Victory Avenue. Work includes replacing the existing deteriorated facilities that have exceeded their useful life with an accessible building, replacing the existing shop areas with a new shop complex, improvements to parking and vehicle circulation, and installation of a stormwater management system. Phase 1 will replace the building complex and Phase 2 will replace the shop areas and includes replacement of the salt dome.	Phase 1 \$12.31 M Phase 2 \$7.50 M	Design Complete Phase 1 Construction 2017 - 2018 Phase 2 2024 - 2030 Project	Delaware	Delaware Montgomery Philadelphia
Boiler Replacement Program				
Replacement of boilers at various SEPTA facilities. The boilers have exceeded their useful life and will be replaced with new energy efficient boilers.	Phase 1 \$1.18 M Phase 2 \$3.50 M	Phase 1 Design / Construction 2016 - 2018 Phase 2 FY 2024 - 2030 Project	Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Environmental Clean Up and Protection				
Activities include remediation associated with underground storage tanks, lead-based paint, asbestos, contaminated soil and groundwater. Site assessments to determine environmental exposure prior to acquiring properties are included under this program. The program also includes activities that will reduce SEPTA's environmental footprint, such as recycling containers and trash compactors.	\$5.64 M	Ongoing	Bucks Chester Delaware Montgomery Philadelphia	System-wide
Frankford Transportation Building				
Phased construction of a stand-alone transportation building at the Frankford Transportation Center and Depot. Phase 1 provided for a new building with operator welfare facilities, dispatching areas, administrative offices and training rooms to accommodate SEPTA personnel. Phase 1 construction was completed in 2017. Phase 2 will provide the space for an Ancillary Control Center and is currently in construction.	\$17.60 M	Phase 1 Construction 2015 - 2017 Phase 2 Construction 2017 - 2019	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Frazer Rail Shop and Yard Upgrade				
Phased upgrade of the Frazer Maintenance Facility to accommodate the expansion of SEPTA's railcar and locomotive fleets including multi-level cars. Work includes extending existing storage tracks and adding new storage tracks; major upgrades to the repair shop and equipment, including the wheel truing machine and drop table; construction of a shop extension, new cleaning track, train washer building, storage building and yardmaster building; utility upgrades and stormwater improvements. In addition, the roof will be replaced and mechanical equipment will be replaced.	\$139.00 M	Design 2016 - 2018 Construction 2017 - 2022	Chester	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
Frontier Garage Roof, Washer and Paving				
Improvements at Frontier Garage including replacement of the existing roof; replacement and upgrade of the vehicle washer; drainage, stormwater management system, and site improvements; and replacement of apron paving to correct settlement and paving condition issues.	\$14.67 M	Design Complete Construction 2017 - 2019	Montgomery	Bucks Chester Montgomery
Powelton Yard Facility Improvements				
Improvements to the Powelton Yard Facility including building repairs, new windows, new bathrooms, and replacement of the storeroom facility currently housed in a former railroad boxcar.	\$3.92 M	Design 2017 - 2018 Construction 2020 - 2021	Philadelphia	Philadelphia
Southern Garage Stormwater Management & Pavement Impro	ovements			
Rehabilitation of apron paving at Southern Bus Garage to correct settlement and paving condition issues. A new stormwater management system will be installed. This is a joint effort working with the Philadelphia Water Department.	\$5.88 M	Design Complete Construction 2017 - 2018	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area	
Steel Wheel Lift Program				Bucks	
Rebuilding/modernization or replacement of truck and body hoist systems at various SEPTA steel wheel shops. These hoists are used to facilitate body and truck separation	Phase 1 \$2.11 M	Phase 1 Construction 2015 - 2018	Bucks Chester Delaware	Chester Delaware Montgomery Philadelphia	
and to elevate railcars to safe heights and hold them as required to perform inspections and repairs under the rail vehicles.	Phase 2 \$6.00 M	Phase 2 2024 - 2030 Project	Montgomery Philadelphia	Delaware (state) New Jersey	
Tasker-Morris Stormwater					
Construction of an off-site stormwater management system associated with the Broad Street Subway Tunnel drainage near the Tasker-Morris Station.	\$8.0 M	Design 2023 Construction 2024	Philadelphia	Philadelphia	
Underground Storage Tank Relining / Replacement Program			Bucks		
Replacement or relining of storage tanks, which have exceeded their useful life, at	Phase 1 \$1.93 M	Phase 1 Construction 2015 - 2020	Chester Delaware	System-wide	
various SEPTA facilities.	Phase 2 \$9.00 M	Phase 2 2024 - 2030 Project	Montgomery Philadelphia	System wide	
Wayne Junction Shop Improvements				Bucks	
Upgrade of the Wayne Junction Shop to allow for improved maintenance functions and future expansion of SEPTA's railcar and locomotive fleets. This project will be advanced in phases, and will ultimately expand the existing shop by approximately 117,000	Phase 1 \$25.29 M	Phase 1 Design 2017 - 2018 Construction 2018 - 2020	Philadelphia	Chester Delaware Montgomery Philadelphia	
square feet. The first phase includes the addition of a 3-car capacity blowdown building, along with a remote storage building. The second phase will begin in the outer years of the project and will expand the existing facility.	Phase 2 \$124.71 M	Phase 2 2024 - 2030 Project	, maacipina	Delaware (state) New Jersey	
Wheel Truing Program	Phase 1 \$2.40 M	Phase 1 Construction 2016 - 2019	Delaware	Bucks Chester Delaware	
Reconditioning and rebuilding wheel truing machines at Overbrook Shop, 69th Street Shop, and Fern Rock Shop, and replacing the wheel truing machine at Woodland Shop.	Phase 2 \$6.00 M	Phase 2 2024 - 2030 Project	Philadelphia	Montgomery Philadelphia Delaware (state) New Jersey	

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Wyoming Complex Stormwater Retrofits				
Reconfigure stormwater management and improve pavement conditions in the existing parking lot at SEPTA's Wyoming Complex which includes Wyoming, Berridge and Courtland shops. This is a joint effort working with the Philadelphia Water Department.	\$2.92 M	Design 2019 Construction 2020 - 2021	Philadelphia	Philadelphia
Maintenance & Transportation Facilities (FY 2024 - 2030)				
Bus Lift Program Replacement of in-ground and portable lifts that have exceeded their useful life at select SEPTA City Transit and Suburban Transit bus maintenance facilities.	\$6.00 M	2024 - 2030 Project	Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey
Garage / Shop Overhead Doors				
Replacement of overhead and fire doors, which have exceeded their useful life, at various SEPTA facilities.	\$7.50 M	2024 - 2030 Project	Delaware Philadelphia	Bucks Delaware Philadelphia
On-Site Power for Major Facilities				
Installation of emergency back-up power and power system upgrades and at major SEPTA maintenance and transportation facilities.	\$6.00 M	2024 - 2030 Project	Bucks Chester Delaware Montgomery Philadelphia	System-wide
Vehicle Washer Program				
Replacement and upgrading of the vehicle washers, which have exceeded their useful life, at various SEPTA facilities.	\$14.00 M	2024 - 2030 Project	Delaware Montgomery Philadelphia	System-wide

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Roof Program (FY 2019 - 2023)				
69th St. Transportation Center Shop Complex Roofs Replaceme	ent			
Replacement of existing roofs. Includes replacement of mechanical equipment.	\$14.10 M	Design Complete Construction 2016 - 2019	Delaware	Delaware Montgomery Philadelphia
Broad Substation Roof Replacement				
Replacement of the roof at Broad Substation, located on Mt. Vernon Street and serving the Broad Street Line.	\$2.00 M	Design Complete Construction 2018	Philadelphia	Philadelphia
Comly Roof Replacement				
Replacement of existing roof at Comly Garage with a new roofing system. Includes replacement of mechanical equipment.	\$7.50 M	Design 2018 Construction 2018 - 2020	Philadelphia	Philadelphia
Courtland Shop Roof Replacement				
Replacement of the Courtland Shop roof with a new roofing system. Includes replacement of mechanical equipment.	\$8.80 M	Design 2018 Construction 2019 - 2020	Philadelphia	Philadelphia
Frankford Depot Roof Replacement				
Replacement of the Frankford Depot roof with a new roofing system. Includes replacement of mechanical equipment. Phase 1 will address critical repair	Phase 1 \$0.66 M	Phase 1 Design/Construction 2018 - 2019	Philadelphia	Philadelphia
work and Phase 2 will include complete roof replacement.	Phase 2 \$8.14 M	Phase 2 2024 - 2030 Project		

MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area	
Midvale Bus Garage Roof Replacement					
Replacement of existing roofs with a new roofing system. Includes replacement of mechanical equipment.	\$30.03 M	Design 2018 - 2019 Construction 2020 - 2023	Philadelphia	Philadelphia	
Overbrook Maintenance Facility Roof Replacement				Bucks	
Replacement of existing roof with a new roofing system. Includes replacement of mechanical equipment.	\$7.55 M	Design 2016 - 2017 Construction 2017 - 2018	Philadelphia	Chester Delaware Montgomery Philadelphia	
Southern Garage Roof Replacement					
Replacement and upgrade of existing roof system at Southern Garage.	Phase 1 \$3.25 M	Phase 1 Design/Construction 2018 - 2019			
Phase 1 will address critical repair work and Phase 2 will include complete roof replacement.	Phase 2 \$4.45 M	Phase 2 2024 - 2030 Project	Philadelphia	Philadelphia	
Roof Program (FY 2024 - 2030)					
5800 Bustleton Roof Replacement					
Replacement of roof at SEPTA office building located at 5800 Bustleton Avenue.	\$1.75 M	2024 - 2030 Project	Philadelphia	Philadelphia	
Maintenance, Stations and Substations Roof Program			Bucks		
Replacement and upgrade of the existing roofs at maintenance facilities, stations and substations throughout the SEPTA system. Work may include replacement of mechanical equipment.	\$21.00 M	2024 - 2030 Project	Chester Delaware Montgomery Philadelphia	System-wide	
Sansom Substation Roof					
Replacement of the roof at Sansom Substation, located on Sansom Street and serving the Market-Frankford Line.	\$2.00 M	2024 - 2030 Project	Philadelphia	Philadelphia	

Safety is a key objective of SEPTA's Strategic Business Plan. All projects advanced in the capital program have a safety-first focus throughout. Having a comprehensive safety plan and program is part of SEPTA's goal to provide passengers with safe, reliable, and efficient transportation. 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.



		Budget				-		12-Year	-	
Safety & Security Improvements	Prior	Year	ear Program Years			FY 2024-	Program	Beyond	Total	
Salety & Security improvements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Mil	lions				
Safety & Security Improvements	\$25.54	\$19.58	\$20.35	\$14.03	\$11.35	\$12.01	\$64.28	\$141.60	\$0.00	\$167.14
TOTAL	\$25.54	\$19.58	\$20.35	\$14.03	\$11.35	\$12.01	\$64.28	\$141.60	\$0.00	\$167.14





Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Safety & Security Projects (FY 2019 - 2023)				
Bus Operator Shields				
Installation of operator safety shields on SEPTA buses and trackless trolleys to increase transit operator safety. The operator enclosure system will help protect the operator in the event of an emergency.	\$6.26 M	Installation 2018 - 2020	System-wide	System-wide
Bus Turn Alerting System				
Installation of a bus turn alerting system on SEPTA buses. The system will serve as a secondary warning system to alert customers, bicyclists and pedestrians, both audibly and visually, that a bus is making a turn.	\$4.85 M	Installation 2016 - 2019	System-wide	System-wide
Elmwood Safety & Security				
Installation of security cameras, access control measures, fencing, and gates at Elmwood Carhouse.	\$0.40 M	Design 2017 - 2018 Construction 2018 - 2019	Philadelphia	Philadelphia
Escalator / Elevator Improvement Program				
Modernization and upgrades to the escalators and elevators throughout the SEPTA system, including design, construction, and integration of an escalator remote monitoring system.	\$25.43 M	2019 - 2030	Philadelphia	System-wide
Fern Rock Transportation Center Safety Improvements				
Safety improvements at Fern Rock Transportation Center Railroad Station, which serves the Lansdale/Doylestown, Warminster and West Trenton Regional Rail Lines and provides connecting service to the Broad Street Line. Includes construction of a grade separated pedestrian crossing, replacement of elevator entrances and hoist equipment and related station modifications.	\$19.52 M	Design 2018 - 2019 Construction 2019 - 2022	Philadelphia	Bucks Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Lawndale Station Pedestrian Underpass & High Level Platform				
Construction of a grade separated pedestrian access to Lawndale Station on the Fox Chase Regional Rail Line. This project also includes the installation of a high-level platform and passenger shelters on the SEPTA platform.	\$9.59 M	Design 2016 - 2018 Construction 2019 - 2020	Philadelphia Montgomery	Philadelphia Montgomery
Midvale Facility and Security Enhancements				
Construction of a new consolidated employee and storage facility at SEPTA's Midvale Complex. This facility is needed to provide an accessible, secure and functional facility for SEPTA Power, Track, Bridges and Buildings, and Utilities personnel, and to 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.	Phase 1 \$3.50 M Phase 2 \$23.20 M	Phase 1 Design 2017- 2018 Construction 2018 - 2020 Phase 2 2024 - 2030 Project	Philadelphia	System-wide
Radio Interoperability				
Replacement of the existing 40-year old radiax cable in the Market-Frankford Subway and Broad Street Subway, and procurement of new radio equipment for the Market Street, Trolley, and Railroad tunnels. This project will upgrade SEPTA's sub-surface communications infrastructure with a new distributed communication system. This will provide the capability to communicate both above and below ground using two different frequencies: SEPTA's existing train dispatch and maintenance channels, and the City of Philadelphia's channels for fire, police, and emergency medical services.	\$24.89 M	Design Complete Construction 2016 - 2019	Philadelphia	Philadelphia
Safety and Security Infrastructure Hardening Program Infrastructure improvements and modifications throughout the SEPTA system that will improve safety and security of both assets and passengers. This program will allow SEPTA to perform analysis and conceptual design of key safety and security initiatives.	\$3.00 M	Ongoing	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Station Ventilation Improvements at Suburban and AT&T Stati	ons			
Replacement and upgrade of the existing ventilation systems at Suburban Station and AT&T Station. Suburban Station work (Phase 1) includes replacement of platform level exhaust fans and the installation of vane axial exhaust/supply fans for the concourse level. AT&T Station work (Phase 2) includes replacement of the ventilation system and installation of a smoke abatement system. The work at both stations includes all related ductwork, sound attenuators, structural supports, and electrical power/controls.	Phase 1 \$10.00 M Phase 2 \$10.00 M	Design 2015 - 2017 Phase 1 Construction 2016 - 2019 Phase 2 2024 - 2030 Project	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey
Wayne Junction Security Improvements, Phase 2 Security improvements at Wayne Junction Yard in the City of Philadelphia and provision of secure storage facilities. Includes installation of a secure fence, cameras and improved lighting.	\$2.50 M	Design 2017 Construction 2021	Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey
Safety & Security Projects (FY 2024 - 2030)				
Pump Rooms				
Improvements to pump rooms, which control water levels in SEPTA's transit and railroad tunnels.	\$ 10.00 M	2024 - 2030 Project	Philadelphia	Philadelphia

Budget Schedule / Status Location Service

(Calendar Year)

Area

Transit Security Grant Projects (FY 2019 - 2023)

Through the U.S. Department of Homeland Security, the Transit Security Grant Program provides funds to operators of public transportation systems to protect critical surface transportation assets and the traveling public from acts of terrorism, and to increase the resilience of transit infrastructure. 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 using specially trained 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; installation of video surveillance cameras at transit facilities; implementation of a radio interoperability system (RIOS); and maintenance of a computer aided dispatch and records management system (CAD/RMS) for the Philadelphia region. SEPTA will continue to fund eligible projects from this grant program.

Competitive Annual Program \$1 M		Bucks Chester	
	2018 - 2019	Delaware	System-wide
		Montgomery	
		Philadelphia	

The SEPTA Key (New Payment Technologies) Project is modernizing SEPTA's antiquated fare payment and collection system by replacing it with a system that utilizes contactless payment devices and readers. New Fare Kiosks located in stations and other terminal locations will improve customer convenience for fare instrument purchases. Key Cards will also be widely available in retail establishments throughout the SEPTA service area and will be reloadable: 1) at Fare Kiosks or ticket offices; 2) automatically through an account with SEPTA; or 3) through an on-line transaction or the Call Center.

SEPTA Key is unique because it will include all of SEPTA's service modes. 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.

SEPTA introduced the SEPTA Key Early Adopters Program in June 2016 which deployed City Transit (Bus, Trolley, Trackless Trolley and High Speed Lines) but limited the products available for purchase to TransPasses, Convenience Passes, Travel Wallet and Quick Trips. Full deployment of the remaining City Transit related products is

projected to be completed in 2018. Deployment of Regional Rail and CCT Connect Paratransit Services is scheduled to be underway in 2018.

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

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

Project status updates are available online at <u>http://www.septa.org/key/</u>.

		Budget						12-Year		
SEPTA Key	Prior	Year	Year Program Years				FY 2024-	Program	Beyond	Total
SEFTAREY	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Millions					
SEPTA Key	\$199.81	\$70.22	\$27.74	\$0.00	\$0.00	\$0.00	\$0.00	\$97.96	\$0.00	\$297.77
TOTAL	\$199.81	\$70.22	\$27.74	\$0.00	\$0.00	\$0.00	\$0.00	\$97.96	\$0.00	\$297.77



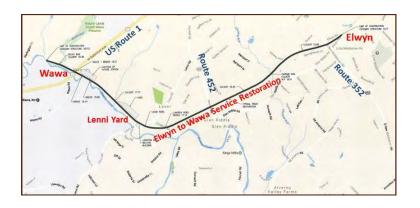






SERVICE RESTORATIONS

This program provides for the Elwyn to Wawa Rail Service Restoration project. This project will restore rail service on the Media/Elwyn Regional Rail Line from its existing terminus at Elwyn, Delaware County, to a new terminus in Wawa, Delaware County. Regional Rail service beyond Elwyn was discontinued in the early 1980s. The project includes renewal of infrastructure, including bridges, track, signals and catenary systems, as well as construction of a new station building and parking deck at Wawa and crew facilities at Lenni.



		Budget	-	-				12-Year		
Service Restorations and Expansions -	Prior	Year		Program	n Years		FY 2024-	Program	Beyond	Total
Project Elements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Milli	ons				
Elwyn to Wawa Rail Service	\$26.81	\$35.20	\$47.59	\$36.48	\$31.78	\$0.00	\$0.00	\$151.05	\$0.00	\$177.86
TOTAL	\$26.81	\$35.20	\$47.59	\$36.48	\$31.78	\$0.00	\$0.00	\$151.05	\$0.00	\$177.86





SERVICE RESTORATIONS

SEPTA property in Lenni, Delaware County.

railcar storage/maintenance yard and crew facility will be constructed on

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Elwyn to Wawa Rail Service (FY 2019 - 2023)				
This project will provide 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 along the existing line referred to as the West Chester Branch. The scope of work for this project consists of track bed reconstruction including crossties, continuous welded rail and track interlockings; catenary system rehabilitation; a bi-directional signal system with automated train controls and positive train control; communications system improvements; and the replacement and rehabilitation of bridges and culverts.	\$177.86 M	Design Complete Construction 2018 - 2021	Delaware	Chester Delaware
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 600+ car parking deck. The new facility will be fully ADA compliant. The project also includes the construction of a new traffic intersection and access road connecting U.S. Route 1 to the station. Finally, a				

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 offices, waiting rooms, passenger shelters, canopies, platforms, crosswalks and overpasses, escalators and elevators, lighting, signage, and accessible paths. All improvements fully comply with requirements of the Americans with Disabilities Act of 1990. To date, SEPTA has 110 wheelchair accessible railroad / rail transit stations.



		Budget			-			12-Year		
Stations, Loops & Parking	Prior	Year		Program	n Years		FY 2024 -	Program	Beyond	Total
Program Elements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Million	IS				
City Hall & 15th Street Stations	\$56.49	\$9.94	\$8.00	\$6.65	\$9.28	\$24.72	\$31.39	\$89.98	\$0.00	\$146.47
Exton Station & Garage	\$15.06	\$9.53	\$0.00	\$0.00	\$0.00	\$0.00	\$39.33	\$48.86	\$0.00	\$63.92
Levittown Station	\$26.42	\$7.52	\$2.07	\$0.00	\$0.00	\$0.00	\$0.00	\$9.59	\$0.00	\$36.01
Paoli Transportation Center	\$28.17	\$6.77	\$0.00	\$0.00	\$0.00	\$0.00	\$51.19	\$57.96	\$0.00	\$86.13
Parking Improvements	\$11.17	\$1.58	\$4.04	\$4.38	\$6.65	\$9.67	\$133.05	\$159.37	\$53.50	\$224.04
Transit, Regional Rail Stations & Loops	\$109.84	\$40.80	\$63.60	\$32.78	\$29.17	\$47.03	\$211.34	\$424.72	\$0.00	\$534.56
Villanova Station	\$19.62	\$1.55	\$0.00	\$0.00	\$0.00	\$0.00	\$11.07	\$12.62	\$0.00	\$32.24
TOTAL	\$266.77	\$77.69	\$77.71	\$43.81	\$45.10	\$81.42	\$477.37	\$803.10	\$53.50	\$1,123.37





and widened corridors with ramps, improved ventilation structures, platform wall openings for easier connections, and new elevator shaftways from the City Hall

 City Hall Station: Upgrades within City Hall Station including fitting out the elevator shaftways with elevators to complete ADA compliance and new or renovated

Station mezzanines to the platforms.

platforms, stairs, lighting and amenities.

Project Descriptions Budget Schedule / Status Location Service (Calendar Year) Area **City Hall & 15th Street Stations** Rehabilitation of City Hall Station on the Broad Street Line and 15th Street Station on the Market-Frankford Line to make the stations fully ADA accessible; bring the stations to a state of good repair; improve customer use, safety and security; and reduce heavy maintenance costs. Specifically, the project will: Provide full access for riders with disabilities through fourteen new elevators and ramps to all levels of both stations, new and wider ramped corridors connecting the stations, and new accessible fare line gates. Improve passenger flow with new and reconfigured fare lines outfitted for the new SEPTA Key program, new and wider stairs and railings, and more open areas in the 15th Street Mezzanine and on the platforms. Update station interiors and systems including new architectural finishes, new signs, Art-in-Transit, new seating and other amenities, new lighting and public address systems, new updated fire alarm system, closed-circuit TV and security systems. Provide structural repairs and upgrades, mechanical and natural ventilation and improvements to prevent/intercept water infiltration and inflow, new fire suppression systems and new employee restrooms. 15th Street & City Hall The City Hall / 15th Street Stations project has been divided into the following phases: Stations Design 2014 - 2019 Dilworth Park Phase (complete): Included work to prepare for the park's construction \$146.47 M Philadelphia Philadelphia by the Center City District (CCD) and construction of the new station entrance in the Construction: park outside the west portal of City Hall; and elevator access through five new 15th Street 2017 - 2019 elevators connecting street level to the rebuilt farelines and 15th Street station City Hall 2020 - 2024 Market Frankford Line (MFL) and the eastbound trolley platform. • 15th Street Station (in construction): Five new elevators for 15th Street Station connecting street level to MFL and trolley platforms and overall interior renovations and upgrades to station finishes, platforms, lighting, fare lines, security system and amenities to make the station fully ADA accessible. Inter-Station Connections and City Hall Station structural work (underpinnings): New ٠

Project Descriptions Budget Schedule / Status Location Service (Calendar Year) Area Exton Station Improvements Improvements Improvements

This project, which will be advanced in phases, will include the construction of full length high-level platforms, a station building, bus circulation loops, and a multi-level parking garage at Exton Station on the Paoli-Thorndale Regional Rail Line. Phase 1 encompasses the construction of high-level platforms with canopies and wind screens; stormwater management improvements; and a new station building. The station facilities will be fully ADA compliant. New lighting, signage, security features, and passenger amenities will also be provided. Phase 2 comprises 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 the development and construction of a fully accessible parking expansion.

Levittown	Station	Reconstruction	
	Station	neconsti action	

Improvements to Levittown Station on the Trenton Regional Rail Line that will make the station fully ADA accessible. Work includes installation of new full length high-level platforms with canopies; replacement of the station building; parking improvements and expansion; stormwater management; new signage, lighting, and passenger amenities. In addition, 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, improve traffic flow, and enhance safety for motorists and pedestrians through the station and parking areas.

Phase 1:	Phase 1		
	Design Complete		Chester
\$24.42 M	Construction 2015 - 2018	Chastar	Delaware
Phase 2 & 3:		Chester	Montgomery
\$39.5 M	Phase 2 & 3:		Philadelphia
339.3 IVI	2024 - 2030 Project		

\$36.01 M	Design Complete Construction 2015 - 2018	Bucks	Bucks Philadelphia

North Valley Road bridge. The companion project must be completed prior to

Phase 2 includes an intermodal station complex complete with an additional highlevel platform on the outbound side, passenger amenities, enhanced bus facilities,

Phase 2 construction.

and a 600-plus space commuter parking garage.

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Paoli Intermodal Transportation Center				
This project provides for the engineering and construction of a new multimodal transportation center in Paoli, Chester County. The new facility will be located on the Paoli/Thorndale Regional Rail Line at the approximate location of the existing station. Connecting services include Bus Routes 92, 105, 106, 204, 205 and 206. SEPTA is partnering with PennDOT and Amtrak to advance this project.				
The project will be advanced in two phases. Phase 1 will make the existing station ADA accessible. This phase includes construction of a pedestrian overpass with elevators linking inbound and outbound station parking lots as well as a new full length 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 1 is progressing with funding from Amtrak, SEPTA and PennDOT. The total budget for Phase 1 is \$48.69 million. Of that amount, SEPTA is programming \$35.01 million to reflect SEPTA and PennDOT's contribution.	Phase 1: \$35.01 M Phase 2:	Phase 1 Design Complete Construction 2017 - 2019 Phase 2 FY 2024 - 2030 Project	Chester	Chester Delaware Montgomery Philadelphia
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	\$51.2 M			

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Parking Improvements/Expansions (FY 2019 - 2023))			
69th Street Transportation Center Parking Garage				
Development and construction of a fully accessible parking garage at the 69th Street Transportation Center, including pedestrian connections to the historic 69th Street Terminal building. Phase 1 of the project will address site and utility work within the project perimeter, as well as upgrading electrical facilities. Phase 2 will include construction of the parking garage, bus terminal and pedestrian connections between the facilities.	\$31.01 M	Design Complete Phase 1 Construction 2015 - 2018 Phase 2 Construction 2019- 2023	Delaware	Chester Delaware Montgomery Philadelphia
Gwynedd Valley Station Parking				
Parking expansion and improvements at Gwynedd Valley Station on the Lansdale/Doylestown Regional Rail Line. Includes construction of an additional parking lot, accessible pathways, signage, new lighting, stormwater management system improvements and landscaping.	\$2.54 M	Design Complete Construction 2018 - 2019	Montgomery	Montgomery
Noble Station, Parking Garage and Storage Track				
Construction of new station facilities, parking garage and storage track at Noble Station on the West Trenton Regional Rail Line, making the station fully ADA accessible. The new station will include full length high-level platforms; canopies and passenger shelters; accessible pathways, sidewalks and handrails/guardrails; new signage, lighting and security cameras; stormwater management systems and landscaping. This project is being advanced in coordination with PennDOT's replacement of the adjacent Route 611 bridge.	\$53.00 M	Design 2016 - 2019 Construction 2022 - 2025	Montgomery	Bucks Montgomery

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Parking Improvements/Expansions (FY 2024 - 2030)	l.			
Ivy Ridge Parking Improvements				
Parking expansion and improvements at Ivy Ridge Station on the Manayunk / Norristown Regional Rail Line. This project will include expanded parking and access improvements at the station.	\$35.00 M	2024 - 2030 Project	Philadelphia	Montgomery Philadelphia
Philmont Station Parking				
Parking expansion and improvements at Philmont Station on the West Trenton Regional Rail Line. This project will include expanded parking and ADA accessibility improvements at the station.	\$25.00 M	2024 - 2030 Project	Montgomery	Montgomery Philadelphia
Fern Rock Complex				
Renovation of Fern Rock Complex to enhance accessibility, expand parking capacity and increase operational efficiency. This project provides for station and accessibility improvements including 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	2024 - 2030 Project	Philadelphia	Bucks Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Transit & Regional Rail Stations Program — Regional Rail (F	Y 2019 - 2	2023)		
Ardmore Transportation Center				
Improvements to the Ardmore Transportation Center on the Paoli/Thorndale Regional Rail Line will be completed in two phases.				
Phase 1 will make this station fully ADA accessible with enhancements that include a new inbound station building; outbound shelters; high and low-level platforms; canopies; passenger amenities; tunnel accessibility improvements; elevators and accessible pathways; improved lighting; new signage; landscaping and site improvements including stormwater management; and preparing the foundation for a future parking garage. Phase 1 costs include design for Phase 2. Phase 2 includes 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 1 \$36.29 M Phase 2 \$26.05 M	Design Complete Phase 1 Construction 2019 - 2021 Phase 2 2024 - 2030 Project	Montgomery	Montgomery Philadelphia
Bicycle Transit Access Program				
Installation of new bicycle parking shelters and racks at select SEPTA Regional Rail and transit stations. The addition of bicycle parking shelters and racks will improve bicycle access and security at SEPTA stations, thereby encouraging more customers to bike to transit and expanding opportunities to access SEPTA stations.	\$2.50 M	Ongoing	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia
Chestnut Hill East ADA Improvements				
Accessibility improvements at the Chestnut Hill East Regional Rail Station including construction of a high-level platform, station building improvements and an ADA-accessible pathway to the station.	\$11.17 M	Design 2021 - 2022 Construction 2022 - 2023	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Conshohocken Station				
In support of PennDOT's I-76 Integrated Corridor Management (ICM) Program, SEPTA is advancing the design for a new fully ADA accessible station, and station access improvements at Conshohocken Station on the Manayunk/Norristown Regional Rail Line. This station will receive new full length high-level platforms; new passenger shelters; accessible pathways, sidewalks and handrails/guardrails; bike facilities; additional roadway access to the station; new signage and lighting; stormwater management systems and landscaping. Construction of the station is anticipated to commence in Calendar Year 2019.	Station \$15.00 M	Station Design 2018 - 2019 Construction 2019 - 2020	Montgomery	Montgomery Philadelphia
SEPTA is currently evaluating opportunities for a parking garage at Conshohocken Station and anticipates receiving a \$2M Federal Highway Administration (FHWA) Flex in FY 2019 to support the design effort. FHWA funds of \$8 million have been committed by PennDOT for the construction phase. As the design phase moves forward, SEPTA will continue to work with its planning partners to identify options for the additional funding necessary to advance construction of a parking garage.	Parking \$2.00 M	Parking Design 2019		Pillaueipilla
East Falls Station				
Modernization of East Falls Station on the Manayunk/Norristown Regional Rail Line that will make the station fully ADA accessible. Work includes installing high level platforms and new passenger shelters; elevators; accessible pathways and handrails/guardrails; new signage and lighting; stormwater management systems and landscaping.	\$19.50 M	Design & Construction 2021 - 2025	Philadelphia	Philadelphia
Jenkintown-Wyncote Station on the Regional Rail Mainline				
Improvements that will make the station fully ADA accessible. This station will receive new full length high-level platforms; new pedestrian overpass and elevators; new passenger shelters; accessible pathways and handrails/guardrails; new signage and lighting; stormwater management systems and landscaping.	\$25.32 M	Design 2016 - 2018 Construction 2020 - 2023	Montgomery	Bucks Montgomery Philadelphia
Malvern Station High Level Platforms				
Design and construction of high-level platforms and accessibility improvements at Malvern Station on the Paoli/Thorndale Regional Rail Line. This station will receive new full length high-level platforms; new passenger shelters; accessible pathways, bike facilities; additional new signage and lighting; stormwater management systems and landscaping.	\$15.26 M	Design 2021-2022 Construction 2023 - 2025	Chester	Chester Delaware Montgomery Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Secane Station on the Media/Elwyn Regional Rail Line Rehabilitation of Secane Station on the Media/Elwyn Regional Rail Line that will make the station fully ADA accessible. Phase 1 work includes new full length high-level platforms, a new pedestrian tunnel and a new station building with canopies. The project will also include accessible pathways and handrails/guardrails; new signage, lighting and security cameras; drainage improvements and improved pedestrian access to the station. Phase 2 of the project will include expanded parking on the outbound side of the new station.	Phase 1 \$21.20 M Phase 2 \$3.00 M	Phase 1 Design Complete Phase 1 Construction 2015 - 2018 Phase 2 2024 - 2030 Project	Delaware	Delaware Philadelphia
Swarthmore Roof Replacement & Exterior Improvements Replacement of the existing station building roof including canopy and exterior station building improvements to Swarthmore Station on the Media/Elwyn Regional Rail Line. Exterior improvements include painting, and re-pointing select stone mortar joints.	\$1.81 M	Design Complete Construction 2018	Delaware	Delaware Philadelphia
Willow Grove Station on the Warminster Regional Rail Line Relocation of Willow Grove Station on the Warminster Regional Rail Line that will make the station fully ADA accessible. Work includes a new full length high-level center platform and related right-of-way improvements; new passenger shelters; accessible pathways and handrails/guardrails; improved station access; parking expansion; new signage and lighting; stormwater management systems; and landscaping.	\$20.89 M	Design 2017 - 2019 Construction 2020 - 2022	Montgomery	Bucks Montgomery Philadelphia
Transit & Regional Rail Stations Program - Regional Rail (FY	<mark>7 2024 - 2</mark> 0	030)		
Regional Rail Stations Stations programmed in FY 2024 - 2030 will be modernized and made ADA 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	2024 - 2030 Project	Chester	
Hatboro Station on the Warminster Regional Rail Line	\$7.15 M	2024 - 2030 Project	Montgomery	Bucks
Marcus Hook Station on the Wilmington/Newark Regional Rail Line	\$22.50 M	2024 - 2030 Project	Delaware	Chester Delaware
Roslyn Station on the Warminster Regional Rail Line	\$6.50 M	2024 - 2030 Project	Montgomery	Montgomery
Wyndmoor Station on the Chestnut Hill East Regional Rail Line	\$19.50 M	2024 - 2030 Project	Philadelphia	Philadelphia
Wynnewood Station on the Paoli/Thorndale Regional Rail Line	\$19.50 M	2024 - 2030 Project	Montgomery	

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Transit & Regional Rail Stations Program — Rail Transit				
5th Street / Independence Hall Station				
Rehabilitation and improvements to 5th Street / Independence Hall Station on the Market- Frankford Line. Work includes ADA accessibility upgrades; critical structural repairs and waterproofing; improvements to platforms and stairways; new fare payment, security and communication systems; new finishes, signage and lighting.	\$19.45 M	Design Complete Construction 2018 - 2020	Philadelphia	Philadelphia
11th Street Station				
Improvements to 11th Street Station on the Market-Frankford Line that will make the station fully ADA accessible. The project provides for installation of elevators and accessibility improvements; renovation of existing platforms and station interior; new signage, lighting and security cameras; and waterproofing improvements.	\$9.50 M	Design 2019 - 2020 Construction 2021-2023	Philadelphia	Philadelphia
30th Street Station (MFL) Improvements & Connector				
This project will improve accessibility to and around SEPTA's 30th Street Station on the Market-Frankford Line and Trolley Routes through phased construction. Phase 1, which is currently in construction, includes new elevators at the 31st Street entrance and reconfiguration of the fare lines at that entrance. Phase 2 will provide for improvements to the station entrances at 30th and Market Streets and improvements into and around the station. Phase 2 will support future work to build a connector tunnel between the 30th Street Station on the Market-Frankford and Trolley Lines and the 30th Street Station served by SEPTA's Regional Rail and Amtrak intercity rail.	\$28.55 M	Phase 1 2017 - 2018 Phase 2 2019 - 2021	Philadelphia	Philadelphia
Arrott Transportation Center (Margaret/Orthodox Station)				
Improvements at Arrott Transportation Center (Margaret-Orthodox Station) on the Market- Frankford Line that will make the station ADA accessible. Includes installation of one elevator to connect the street and platform level of the elevated station, and two accessible elevators to connect the platform level to the East Station overpass. Other accessibility improvements include new curb ramps, sidewalk repaving and ADA-compliant signage. This project also provides for new platforms with tactile edging; repair/replacement of stairways, handrails, new metal wall panels, tile wall finishes, and canopy roof; safety and security enhancements including lighting, security cameras, power and communication system upgrades; and Art-in- Transit.	\$39.86 M	Design Complete Construction 2015 - 2018	Philadelphia	Philadelphia

Center City Concourses Multi-phase improvements to the Center City Concourses to improve accessibility and bring the concourse network to a good state of repair. This program will revitalize the concourse network with new finishes, lighting and security features;				
and bring the concourse network to a good state of repair. This program will				
develop the concourse as a place of interest, providing a safe and pleasant environment for pedestrians; and provide potential opportunities for development in the South Broad Concourse. Infrastructure improvements will include structural rehabilitation, new drainage and electrical upgrades.				
Completed early action items included replacement of the two escalators at 15th Street and replacement of an escalator and an elevator at 8th Street; waterproofing improvements and structural repairs; South Broad concourse improvements; Emergency Call Box replacement; and signage improvements.				
Major capital improvements will be advanced in the following phases:		Phases 1, 2 and 4 2014 - 2020		Bucks Chester
 Phase 1 (Complete): Center Square under South Penn St. passing over South Broad concourse and terminating at Juniper St. adjacent to the Macy's store entrance. Phase 2: Concourse from East Suburban Station entrance adjacent to Love Dark continuing in front of the Municipal Services Building and terminating 	\$59.65 M	Phases 3, 5 - 8 2024 - 2030 Project	Philadelphia	Delaware Montgomery Philadelphia Delaware (State) New Jersey
Park continuing in front of the Municipal Services Building and terminating at the Market East Concourse (North).				
 Phase 3: Concourse from 15th Street Station to Dilworth Park and West Trolley entrance. 				
Phase 4: East Market Street Concourse (North and South Corridors).				
Phase 5: 8th Street concourse on North and South side of Market Street.				
Phase 6: Corridors under City Hall Plaza from City Hall Station to Juniper				
Street.				
 Phase 7: Corridors in Suburban Station between 17th and 16th Streets. Phase 8: South Broad Concourse from City Hall to Spruce Street. 				

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Erie Station				
Installation of three (3) ADA-compliant elevators at Erie Station on the Broad Street Line. 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 and lighting, security features including surveillance cameras, and passenger amenities; and drainage and waterproofing improvements.	\$9.00 M	Design 2019-2020 Construction 2021-2023	Philadelphia	Philadelphia
Fairmount Station				
Improvements to Fairmount Station on the Broad Street Line that will make the station fully ADA accessible. The project provides for the installation of elevators and accessibility improvements; renovation of existing platforms and station interior; new signage, lighting and security cameras; and waterproofing improvements.	\$18.00 M	Preliminary Design 2021-2022 Final Design & Construction 2024 - 2030 Project	Philadelphia	Philadelphia
Susquehanna-Dauphin Station				
Modernization of Susquehanna-Dauphin Station on the Broad Street Line to make the station fully ADA accessible. The project includes the installation of elevators; relocating the existing head house and replacing with a covered head house; accessible pathways and handrails/guardrails; signage, lighting and security cameras.	\$14.94 M	Design 2016 - 2018 Construction 2018 - 2020	Philadelphia	Philadelphia
Tasker-Morris Station				
Improvements to Tasker-Morris Station on the Broad Street Line that will make the station fully ADA accessible. The project provides for installation of elevators and accessibility improvements; renovation of existing platforms and station interior; new signage, lighting and security cameras; and waterproofing improvements.	\$9.8 M	Design 2017 - 2018 Construction 2019 - 2021	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Stadium Station on the Norristown High Speed Line				
Improvements will make the station fully ADA accessible. Project includes new station facilities, including improvements to existing platforms and shelters; accessibility improvements including ramps and handrails/guardrails; new signage, lighting and security cameras; and stormwater management.	\$3.00 M	Construction 2018 - 2019	Delaware	Delaware Montgomery
Villanova Station on the Norristown High Speed Line				
Improvements will make the station fully ADA accessible. Rehabilitation of station facilities, including improvements to existing platforms and shelters; accessibility improvements including ramps and handrails/guardrails; new signage, lighting and security cameras; and stormwater management.	\$4.00 M	Design & Construction 2022 - 2023	Delaware	Delaware Montgomery
Transit & Regional Rail Stations Program – Rail Transi	t (FY 2024	- 2030)		
Rail Transit Stations				
Renovation of transit stations and accessibility improvements, including rehabilitation of platforms and station interiors; accessible pathways and handrails/guardrails; installation or modernization of elevators and escalators; new signage, lighting and security cameras; and drainage and waterproofing improvements. A detailed scope of work will be developed for these stations as they are designed:				
Hunting Park on the Broad Street Line	\$5.50 M	2024 - 2030 Project	Philadelphia	Philadelphia
A South Broad Station on the Broad Street Line	\$9.80 M	2024 - 2030 Project	Philadelphia	Philadelphia
Wyoming Station on the Broad Street Line	\$5.00 M	2024 - 2030 Project	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Transit & Regional Rail Stations Program – Bus & Tro	olley Loops	(FY 2019 - 2023)		
Modernization of bus and trolley loops including accessibility improvements and enhancements to shelters, loading platforms, lighting, landscaping and operator bathroom facilities. Locations include:				
Bethlehem Pike	\$1.75 M	Design 2021 - 2022 Construction 2022 - 2023	Philadelphia	Philadelphia
Ridge & Summit	\$1.75 M	Design 2023 - 2024 Construction 2024 - 2025	Philadelphia	Philadelphia
Westmoreland	\$1.75 M	Design 2019 - 2020 Construction 2020 - 2021	Philadelphia	Philadelphia
 Wissahickon Transportation Center (Includes property acquisition, entrance improvements) 	\$14.22 M	Design 2017 - 2018 Construction 2018 - 2020	Philadelphia	Montgomer Philadelphia
Transit & Regional Rail Stations Program – Bus & Tro	olley Loops	(FY 2024 - 2030)		
Modernization of bus and trolley loops including accessibility improvements and enhancements to shelters, loading platforms, lighting, landscaping, and operator bathroom facilities. Locations include:				
Rising Sun & Olney	\$1.75 M	2024 - 2030 Project	Philadelphia	Philadelphia
• Wycombe	\$2.00 M	2024 - 2030 Project	Delaware	Delaware
Villanova Station				
This project will modernize Villanova Station on the Paoli/Thorndale Regional Rail Line, making the station fully ADA accessible, and will advance in phases. Phase 1 will improve station accessibility and will include construction of a new, wider pedestrian tunnel with access ramps and stairs, additional parking spaces stormwater management improvements new signage lighting and	Phase 1: \$21.79 M	Phase 1 Design Complete Construction 2016 - 2018	Delaware	Delaware

new, wider pedestrian tunnel with access ramps and stairs, additional parking spaces, stormwater management improvements, new signage, lighting, and passenger amenities. Phase 2 will make the station fully ADA accessible and includes full length high-level platforms, new canopies, station building improvements, passenger shelters, security improvements and passenger amenities.

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Phase 2:

\$10.45 M

2016 - 2018

Phase 2:

2024 - 2030 Project

Delaware

Montgomery

Many of SEPTA's railroad and transit substations have been in continuous operation since 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 replacing transformers, trolley breakers, feeder switches, substation switchgears 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 infrastructure must also be brought to a state of good repair. This includes replacing catenary systems and upgrading 80+ year old Regional Rail infrastructure. Additional power improvements will be undertaken as part of the Infrastructure Safety Renewal Program (ISRP).



Wayne Junction Static Frequency Converters

		Budget		-	-	-	-	12-Year	-	
Substations and Power	Prior	Year		Program	Years		FY 2024 -	Program	Beyond	Total
Substations and Fower	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					-\$Millions					
Substations and Power	\$22.73	\$30.59	\$46.14	\$48.12	\$40.12	\$54.77	\$82.50	\$302.24	\$25.00	\$349.97
TOTAL	\$22.73	\$30.59	\$46.14	\$48.12	\$40.12	\$54.77	\$82.50	\$302.24	\$25.00	\$349.97





Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad Substations (FY 2019 - 2023)				
Wayne Junction Static Frequency Converters (SFC) #1-4				
The major components of the three Static Frequency Converters (SFCs), 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. The construction of a new #4 converter must be completed before the overhauls of the three other converters are initiated to sustain existing service during construction. After SFC #4 is completed, SFC #1 will be overhauled, followed by SFC #2 and #3.	\$60.00 M	Design 2015 - 2018 Construction 2018 - 2022	Philadelphia	Bucks Montgomer Philadelphia
Multimodal Substation Overhaul Program (FY 2019 - 2023)				
Substation Design and Equipment Purchase				
Substation Design and Equipment Purchase Design of improvements to seven transit substations (Market, Ellen, Ranstead, Park, Broad, Louden, and Castor), nine railroad substations and switching stations (Neshaminy, Bethayres, Yardley, Lansdale, Chestnut Hill East, Hatboro, 18th St./12th St./Portal switching stations), and one new substation at Woodbourne. The program also includes the purchase of equipment such as auto transformers and circuit breakers that will be required for the substation improvement projects.	\$28.23 M	Design / Procurement 2016 - 2021	Bucks Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia New Jersey
Design of improvements to seven transit substations (Market, Ellen, Ranstead, Park, Broad, Louden, and Castor), nine railroad substations and switching stations (Neshaminy, Bethayres, Yardley, Lansdale, Chestnut Hill East, Hatboro, 18th St./12th St./Portal switching stations), and one new substation at Woodbourne. The program also includes the purchase of equipment such as auto transformers and circuit breakers that will be required			Montgomery	Chester Delaware Montgomer Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad Substations - Neshaminy, Bethayres, Yardley				
 Overhaul of the following railroad substations. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. Design is being done as part of the Substation Design and Equipment Purchase project (see description above). Bethayres Substation on the West Trenton Regional Rail Line Neshaminy Substation on the West Trenton Regional Rail Line Yardley Substation on the West Trenton Regional Rail Line 	\$24.58 M	Construction 2018 - 2021	Bucks Montgomery	Bucks Montgomery Philadelphia New Jersey
Transit Substations - Market, Ellen, Ranstead				
 Overhaul of the following transit substations. Work includes replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gears. Design is being done as part of the Substation Design and Equipment Purchase project (see description above). Market Substation on Market Street, serving the Market-Frankford Line and City Trolley Lines Ellen Substation at Front & Ellen Streets, serving the Market-Frankford Line and a portion of the Rt. 15 Trolley Ranstead Substation on Ranstead Street, serving the Market-Frankford Line and a portion of the Trolley Lines 	\$18.68 M	Construction 2018 - 2021	Philadelphia	Philadelphia Delaware
Transit Substations - Park, Broad, Louden, Castor				
 Overhaul of the following transit substations. Work includes replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gears. Design is being done as part of the Substation Design and Equipment Purchase project (see description above). Park Substation at Cumberland & Park Streets, serving the Broad Street Line Broad Substation on Mt. Vernon Street, serving the Broad Street Line Louden Substation at Carlisle & Louden Streets, serving the Broad Street Line and Rt. 75 Trackless Trolley Castor Substation on Castor Avenue, serving the Route 59 Trackless Trolley 	\$19.95 M	Construction 2020 - 2023	Philadelphia	Philadelphia

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Woodbourne Substation				Bucks
Construction of a new Traction Power and Signal Power Substation on the West Trenton Regional Rail Line. Design is being done as part of the Substation Design and Equipment Purchase project (see description above).	\$23.49 M	Construction 2020 - 2023	Bucks	Montgomery Philadelphia New Jersey
Railroad Substations (FY 2024 - 2030)				
Allen Lane Substation				
Overhaul of the Allen Lane Substation on the Chestnut Hill West Regional Rail Line. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying.	\$15.00 M	2024 - 2030 Project	Philadelphia	Philadelphia
Brill Substation Overhaul				
Replacement of major power components at Brill Substation, originally built in 1985, on the Airport Regional Rail Line. Work includes installing new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying.	\$12.80 M	2024 - 2030 Project	Philadelphia	Philadelphia
Transit Substations (FY 2024 - 2030)				
Transit Substation Program				
Multi-year overhaul of other transit substations. Work includes installing new breakers, rectifiers, transformers, relays and switch gear.	\$45.00 M	2024 - 2030 Project	Philadelphia	Philadelphia
Power Improvements (FY 2019 - 2023)				
30th Street West Catenary Replacement				Bucks Chester Delaware
Replacement and upgrade of the overhead contact system including catenary structures from 30th Street Station to 'K' Interlocking and the Powelton Yard Complex.	\$77.00 M	Design 2015 - 2018 Construction 2018 - 2022	Philadelphia	Montgomery Philadelphia Delaware (State) New Jersey

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 the System 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 timbers. This program also focuses on the stabilization of soil and rock slopes, stormwater control, erosion control, soil compaction, earth-bridge construction, and the repair and prevention of sinkholes in the right-of-way and track areas. Additional track and right-of-way improvements will be undertaken as part of the Infrastructure Safety Renewal Program (ISRP).



		Budget		-	-		-	12-Year	-	
Track and Right-of-Way	Prior	Year		Progra	m Years		FY 2024-	Program	Beyond	Total
Track and Right-OF-Way	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Millions					
Track and Right-of-Way	\$17.70	\$7.60	\$11.74	\$12.05	\$7.00	\$7.34	\$44.00	\$89.73	\$23.44	\$130.87
TOTAL	\$17.70	\$7.60	\$11.74	\$12.05	\$7.00	\$7.34	\$44.00	\$89.73	\$23.44	\$130.87





TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Railroad and Transit Projects (FY 2019 - 2023)				
Doylestown and Warminster Tie Renewal & Surfacing				
Replacement of railroad cross ties, track lining and surfacing, ballasting for surfacing, and tree trimming/brush cutting needed for the re-establishment of shoulders along the Doylestown and Warminster Regional Rail Lines. This project will replace railroad cross ties that have exceeded their useful life and will assist in maintaining transitway infrastructure in a state of good repair.	\$7.89 M	Design Complete Construction 2018 - 2019	Bucks Montgomery	Bucks Montgomery Philadelphia
Market-Frankford Line Bridge Street Yard Program				
Renewal of yard tracks including 3rd rail for the Market-Frankford Line at the Bridge Street Yard.	\$3.00 M	Construction 2022 - 2023	Philadelphia	Philadelphia Delaware
Norristown High Speed Line Interlockings				
Renewal and reconfiguration of interlockings on the Norristown High Speed Line at Wynnewood, Bryn Mawr, and Matsonford to bring interlockings to a state of good repair and improve operational reliability.	\$7.10 M	Design 2018 - 2019 Construction 2019 - 2021	Delaware Montgomery	Delaware Montgomery
Norristown High Speed Line Tie Replacement and Continuous W	Velded Rail			
Renewal of ties and timbers, and conversion of 100 pound rail to 115 pound rail for the Norristown High Speed Line (NHSL), including track surfacing, and new special track work. Project includes the use of special rail equipment including a tie handler, tie inserter/extractor, tamper, spiker, and spike puller.	\$26.00 M	Design Complete Construction 2014 - 2023	Delaware Montgomery	Delaware Montgomery
Track & ROW Rail Service Improvements				Bucks Chester
Track and right-of-way improvements and modifications throughout the SEPTA system to enhance rail service. This program will allow SEPTA to perform analysis, conceptual design, and construction of strategic rail service improvement initiatives. This program includes Railroad and Transit projects.	\$19.25 M	Ongoing	Bucks Chester Delaware Montgomery Philadelphia	Delaware Montgomery Philadelphia Delaware (State) New Jersey

TRACK AND RIGHT-OF-WAY IMPROVEMENTS

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Trolley Tunnel Track Renewal				
Renewal of track and curve worn rail in the City Transit Division Trolley Tunnel. The tunnel serves Trolley Routes 10, 11, 13, 34 and 36.	\$1.50 M	Design Complete Construction 2018	Philadelphia	Philadelphia
Transit Projects (FY 2024 - 2030)				
Street Track Improvements (Trolley Revenue, Non-Revenue and	d Diversion R	outes)		
Renewal of street track and special track work on City Transit Division trolley routes. This includes Trolley Routes 10, 11, 13, 34 and 36 and diversion routes and non-revenue routes. Trolley diversion routes are used to transport customers to 40th Street Station on the Market Frankford Line when the tunnel portion of the trolley lines is out of service for maintenance. Non-revenue tracks are used by trolleys heading to and from Elmwood and Callowhill Shops/Yards.	\$27.25 M	2024 - 2030 Project	Delaware Philadelphia	Delaware Philadelphia
Route 101/102 Yard Tracks Program				
Renewal of yard tracks and special track work for the Route 101/102 Trolley at the 69th Street maintenance complex.	\$5.69 M	2024 - 2030 Project	Delaware	Delaware Philadelphia
Railroad Projects (FY 2024 - 2030)				
Norristown Station Regional Rail 3rd Track				
Construction of a third track at Norristown Station to separate freight rail service from passenger rail service and facilitate the opportunity for increased frequency on SEPTA's Manayunk/Norristown Regional Rail Line. The Norristown Regional Rail Station will be reconstructed and made fully ADA accessible as part of this project.	\$34.50 M	2024 - 2030 Project	Montgomery	Montgomery Philadelphia

Based upon SEPTA FY 2017 Operating Statistics, SEPTA's revenue vehicle fleet consists of 1,416 buses, 924 rail vehicles, 38 trackless trolleys and 456 paratransit vehicles. SEPTA also operates 8 Regional Rail locomotives to accommodate its fleet of push/pull regional rail cars and a fleet of non-revenue vehicles and equipment which are used for construction, vehicle and facility maintenance and service supervision. Vehicles will be 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. This program will also provide for fleet expansion to meet present and projected increases in ridership demand. SEPTA will be reviewing financing options, such as the issuance of bonds and loans, to assist in the advancement of the rail vehicle procurements included in this program. In addition, to accommodate new vehicles, SEPTA is conducting cross disciplinary systems analyses for trolleys to determine potential costs associated with infrastructure needs as well as operational and service impacts.

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	1,416
Trackless Trolleys	38
Paratransit Vehicles	456

		Budget				-		12-Year		
Vehicle Acquisitions and Overhaul -	Prior	Year		Program	n Years		FY 2024 -	Program	Beyond	Total
Program Elements	Funding	FY 19	FY 20	FY 21	FY 22	FY 23	2030	Total	FY 2030	Budget
					\$Millior	าร				
Bus Purchase Program	\$174.40	\$103.05	\$112.77	\$107.06	\$27.00	\$53.00	\$350.00	\$752.88	\$0.00	\$927.28
Paratransit Vehicle Acquisition	\$0.00	\$7.00	\$7.00	\$7.00	\$7.00	\$7.00	\$49.00	\$84.00	\$0.00	\$84.00
Regional Rail Electric Locomotive Acq.	\$78.15	\$67.59	\$7.56	\$1.20	\$0.00	\$0.00	\$0.00	\$76.35	\$0.00	\$154.50
Regional Rail Multi-Level Railcar Acq.	\$41.39	\$0.00	\$0.00	\$38.11	\$86.36	\$4.15	\$4.29	\$132.91	\$0.00	\$174.30
Regional Rail Silverliner IV Replacement	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2.50	\$280.00	\$282.50	\$817.50	\$1,100.00
Trolley Acquisition	\$2.70	\$2.50	\$3.75	\$3.95	\$16.68	\$19.15	\$414.90	\$460.93	\$636.37	\$1,100.00
Utility Vehicle Renewal	\$0.00	\$8.00	\$6.00	\$6.00	\$6.00	\$6.00	\$42.00	\$74.00	\$0.00	\$74.00
Vehicle Overhaul Program	\$0.00	\$75.59	\$83.27	\$80.78	\$81.79	\$83.35	\$591.53	\$996.31	\$0.00	\$996.31
TOTAL	\$296.63	\$263.74	\$220.35	\$244.10	\$224.83	\$175.15	\$1,731.73	\$2 <i>,</i> 859.90	\$1,453.87	\$4,610.40







Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Bus Purchase Program (FY 2019 - 2030)				
 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 30-foot buses for suburban circulator and contracted service routes. In February 2017, SEPTA issued a Notice to Proceed to Proterra for 25 battery electric buses and related equipment. These buses will be deployed on SEPTA Bus Routes 29 and 79 in South Philadelphia. Buses are scheduled for delivery in 2018. 	\$927.28 M	40-Ft. Electric Bus Purchase \$29.75 M 25 Buses Delivery 2018 40-Ft. Hybrid Bus Purchase \$467.96 M 525 Buses Delivery 2017 - 2021	Bucks Chester Delaware Montgomery Philadelphia	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey
In June 2016, SEPTA issued a Notice to Proceed to New Flyer Industries for the manufacture of 525 40-foot low-floor hybrid buses. These buses will be delivered over a five-year period, which began in 2017.		Balance of Program \$429.57 M		New Jeisey

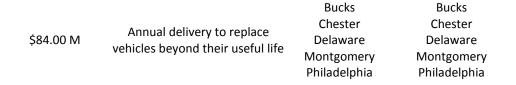
Paratransit Vehicle Purchase (FY 2019 - 2030)

SEPTA routinely acquires new revenue vehicles for its paratransit and sharedride services to replace vehicles that have exceeded their useful life of five years. These vehicles are provided to private carriers, which operate the services and maintain the vehicles under contract to SEPTA.

SEPTA ownership of these vehicles provides the following benefits:

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

In Calendar Year 2019, 68 vehicles are scheduled for delivery consisting of 34 lift-equipped mini-buses and 34 twelve-passenger mini-buses without wheelchair lifts.



maintenance manual.

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Regional Rail Electric Locomotive Acquisition (FY 20	19 - 2023)			
The acquisition of new electric locomotives will allow SEPTA to retire its current, life-expired locomotives and accommodate the planned acquisition of new multi-level push-pull railcars to address growing ridership. A contract was awarded to Siemens Industry Inc., Mobility Division for thirteen ACS-64 locomotives plus two option vehicles. These state-of-the-art locomotives are more powerful and significantly more reliable than SEPTA's current fleet. The locomotives will come equipped with SEPTA's Positive Train Control system. Supporting SEPTA's Sustainability initiatives, the ACS-64 locomotives feature regenerative braking. This capability enables energy from the train's motion when slowing down to be fed back to the power system for use by other trains. In addition, the traction and locomotive control system of the ACS-64 connects all subsystem computers, input/output stations as well as the engineer can monitor the performance of all locomotive systems in real time,	\$154.50 M	Contract Award Complete Delivery 2018	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey

Regional Rail Multi-Level Car Acquisition (FY 2019 - 2023)

This project provides for the acquisition of 45 new multi-level push-pull passenger railcars with an option for an additional 10 push-pull railcars. These cars are required to accommodate growing ridership and increased service capacity needs on SEPTA's Regional Rail system, and are additions to SEPTA's current fleet of 45 push-pull railcars. The new cars will fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations regarding safety features and systems. The cars will include passenger amenities, such as a state-of-the-art climate control system, bicycle storage area and WiFi. The new cars will have electronic exterior and interior destination signs, voice annunciation and corresponding display on video screens of train destination and upcoming station stops. In addition, the new railcars will be equipped with on-board video surveillance and automatic passenger counting systems.

and maintenance technicians can troubleshoot problems with an integrated

			BUCKS
			Chester
	Contract Award Complete	Pagional Pail	Delaware
\$174.30 M Contract Award Complete Delivery 2020 - 2021	Regional Rail System	Montgomery	
		,	Philadelphia
			Delaware (State)
			New Jersey

Duck

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Regional Rail Silverliner IV Replacement (FY 2024 - 2	2030)			
This project will provide 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. These new railcars will fully comply with the evolving federal and state regulations regarding safety features and systems, and will be fully compliant with the Americans with Disabilities Act (ADA) requirements.	\$1,100.00 M	2024 - 2030 and Beyond Project	Regional Rail System	Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey
Trolley Acquisition (FY 2024 - 2030)				
This project provides for the purchase of modern low-floor articulated light rail vehicles to replace trolleys on 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 "Presidential Conference Committee" (PCC-II) cars originally manufactured in 1947 and rebuilt by Brookville Equipment Company in 2003-2004.				
SEPTA is advancing a modernization program in support of the vehicle acquisition. The modern light rail vehicles will require a complex and closely interrelated series of infrastructure upgrades in areas such as communications, signals, power supplies, subway station and in-street stop upgrades, track and bridge improvements, fare payment and maintenance facilities. The goals of the program are: 1) a system in full compliance with the Americans with Disabilities Act (ADA); 2) a safe and improved customer experience; 3) controlled vehicle acquisition costs by providing a faster, higher capacity service; and 4) reduced operating costs through fleet right-sizing based on faster, higher capacity service.	\$1,100.00 M	2024 - 2030 and Beyond Project	Delaware Philadelphia	Delaware Philadelphia
SEPTA has been working with stakeholders through a visioning and conceptual design process led by the Delaware Valley Regional Planning Commission.				

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service
Utility Fleet Renewal (FY 2019 - 2030)				
The Utility Fleet Renewal Program is a comprehensive effort to upgrade and replace the Authority's utility fleet and automotive service fleet. SEPTA utility vehicles support transit and railroad operations. In order to have adequate and reliable utility vehicles, SEPTA has developed a program to periodically renew this fleet on a vehicle-by-vehicle basis, contingent upon the vehicle's age, condition and usage within the Authority.				
The utility fleet comprises the following types of vehicles and equipment:				
 Utility vehicles for transit and paratransit supervisors, and SEPTA police officers. 				Bucks
 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. 	\$74.00 M	Ongoing Program	System-Wide	Chester Delaware Montgomery Philadelphia Delaware (State)
 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. 				New Jersey
 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. 				

upgrade of HVAC equipment on the B-IV cars, including auxiliary motors and power inverters. The existing HVAC system was designed in the early 1980s,

and replacement is needed to improve reliability and maintainability.

Project Descriptions	Budget	Schedule / Status (Calendar Year)	Location	Service Area
Vehicle Overhaul Program (FY 2019 - 2030)				
SEPTA's Vehicle Overhaul Program (VOH) provides for the systematic replacement or upgrade of systems on SEPTA's rolling stock. Vehicles are scheduled for overhauls during their service lives based on vehicle type and age. A vehicle must receive periodic overhauls if it is to optimize performance throughout its useful service life. Prudent fleet management requires a program of preventive maintenance for optimal fleet reliability, service quality, efficient performance, and passenger comfort. Advanced scheduling of vehicle preventive maintenance allows SEPTA to purchase material and produce rebuilt components in an efficient and effective manner. In addition to vehicle overhauls, this program also provides for vehicle campaigns. Campaigns address both critical items and vehicle equipment upgrades and modifications, which are accomplished on a fleet-wide basis. The Vehicle Overhaul Program will allow SEPTA to continue its overhaul of rolling stock, thus ensuring continued safe and reliable service. Highlights of the Fiscal Year 2019 program include the overhaul of 40-foot low floor New Flyer hybrid buses, New Flyer Trackless Trolleys, Broad Street B-IV cars, City and Suburban trolleys, Regional Rail Silverliner IV cars, Regional Rail Push-Pull cars, Market Frankford M-4 cars, Norristown High Speed Line N-5 cars, and support vehicles and equipment. Highlights of campaigns for Fiscal Year 2019 include: Hybrid Bus and Trackless Trolley Driver Protection System nstallations; M-4 LCU Software Upgrade; Regional Rail campaigns include Push-Pull cab/coach center door overhaul, HVAC control box upgrade, battery overhaul and E5-E7 Decelostat Conversion; and Silverliner IV safety, reliability and seat replacement program, cab heater installation, traction motor replacements, wheel and axle replacements, PA amplifier replacement, DC to AC Compressor Upgrade, A/C unit overhaul, rebuilding of pantographs, main transformer conversion, overhead heater assembly, double-ended blower motors, and smoothing reactors. The total budget	\$996.31 M	Annual program to overhaul a portion of each vehicle fleet	System-Wide	Bucks Chester Delaware Montgomery Philadelphia Delaware (State New Jersey

FY 2019 CAPITAL BUDGET AND FY 2019-2030 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 decisionmaking. 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 http://www.septa.org/strategic-plan/reports.html.

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 2019-2030 Capital Program.

Strategic Business Plan Objectives (FY2015-2019)

	Mategie Business Flan Objectives (F10010-1010)							
Capital Programs	Safety & Security	Rebuilding the System	Emerging Technologies	The Customer Experience	Ridership Growth	Sustain- ability	Human Capital Development	Business Partnerships
Bridge Program	✓	~				✓		
Communications, Signal Systems & Technology Improvements	✓	~	✓	~	✓		✓	\checkmark
Financial Obligations		~		~	~	✓		
Infrastructure Safety Renewal Program	✓	~	~	~		✓	✓	
Maintenance / Transportation Shops and Offices	✓	~		~		✓	~	
Safety & Security	✓	~	~	~				\checkmark
SEPTA Кеу	✓	✓	\checkmark	~	✓	\checkmark	✓	\checkmark
Service Restorations		\checkmark			✓	\checkmark		
Stations, Loops and Parking Improvements	✓	✓		~	✓	✓		\checkmark
Substations and Power Improvements	✓	✓	\checkmark			✓		
Track and Right-of-Way Improvements	✓	✓		~	✓	✓		
Vehicle Acquisitions and Overhauls	✓	~	✓	~	~	\checkmark		

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)

King of Prussia Rail is a project to extend the Norristown High Speed Line to King of Prussia. The project is expected to promote and strengthen regional growth by connecting the three largest employment centers in the region – Philadelphia, University City and King of Prussia. This planning effort is critical to support evolving needs in King of Prussia. It will provide a convenient, reliable and efficient way to connect 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, to opportunity within the region. An Alternatives Analysis and Draft Environmental Impact Statement (AA/DEIS) for this project was completed in the fall 2017. The AA/DEIS evaluated 30 different alternatives in order to determine a locally preferred alternative for an extension of the existing Norristown High Speed line to King of Prussia that would provide access to the key destinations of the King of Prussia Mall, the King of Prussia Business Park, and Valley Forge National Historical Park, as well as other destinations. This study included 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 and area stakeholders. Ridership modeling for each of the alternative swas developed by the Delaware Valley Regional Planning Commission (DVRPC). The PECO/TP - 1st Ave alignment was chosen as the Locally Preferred Alternative (LPA). The LPA was adopted by the SEPTA Board in January 2018. SEPTA initiated the Final Environmental Impact Statement (FEIS) in Spring 2018. The FEIS will study the impacts of the LPA in greater detail and enable a higher level of engineering design for the extension. The FEIS is anticipated to last eighteen months. A request for proposals is under development for the Project Development

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

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

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. This study will update the original findings based upon the new 2013 Navy Yard Master Plan and will examine the potential to move the extension forward within the FTA New Starts guidance associated with the Fixing America's Surface Transportation Act (FAST Act). The project is expected to release its final report with estimated ridership and capital costs in 2018.

Quakertown Branch Rail Restoration - Alternatives Analysis

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

The Alternatives Analysis (AA) study investigated the feasibility of restoring passenger rail service linking Bucks County and North Penn communities with Center City Philadelphia, via Lansdale. The AA examined transit options that would mitigate highway congestion in the Route 309 corridor. 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 reflected an approach to restoring service in the Route 309 corridor by recommending electrification of the SEPTA-owned branch line to a terminus point at Perkasie Borough, with some degree of phasing. An Alternatives Analysis was completed in 2012. Further studies were placed on hold due to the changes first included in MAP-21 and continued in the FAST Act regarding minimum rating criteria to determine eligibility of projects for the New Starts program. DVRPC released updated ridership estimates as part of its FY15 Work Program. There will be an opportunity for additional studies of this proposed extension, including capital operational and maintenance cost analyses, as part of a future SEPTA Long Range Plan.

West Chester Branch Rail Restoration — Feasibility Study

Lead agencies: PennDOT, SEPTA, Advisory Committee to Reestablish Rail Service to West Chester

SEPTA has participated on the Borough of West Chester's steering committee for the Advisory Ad Hoc Committee to Reestablish Rail Service to West Chester. As a result of those efforts, PennDOT is funding a study to determine if extending the Media/Elwyn Line—currently undergoing a three-mile service restoration to Wawa—to its former terminus in West Chester is feasible. The study will examine two alternatives of extending service to West Chester and discuss the potential capital costs, ridership, and environmental impacts of an extension. The analysis is complete, and an open house was held in Winter 2018. The Feasibility Study will be released in Spring 2018.

Long Range Planning

Roosevelt Boulevard

Lead agencies: City of Philadelphia (Office of Transportation and Infrastructure Systems and Philadelphia Streets Department), SEPTA, Pennsylvania Department of Transportation, and DVRPC

The City of Philadelphia was awarded a \$2.5 million Transportation Investment Generating Economic Recovery (TIGER) grant in 2014 to develop long-range plans for the Roosevelt Boulevard. Work on this study began in 2015, with PennDOT and SEPTA being core stakeholders. The study is expected to last into 2019. An early action item from this study and Delaware Valley Regional Planning Commission's (DVRPC) Alternatives Development for the Roosevelt Boulevard Transit Enhancements study is the implementation of "Boulevard Direct", a bus service that provides a competitive transit alternative to personal vehicles. Boulevard Direct (Phase A) was introduced in Fall 2017, operating with limited stops between the Neshaminy Mall and the Frankford Transportation Center. The service has many of the characteristics of a Bus Rapid Transit (BRT) service, including greater stop spacing, enhanced bus stops or "stations", with shelters and other amenities and uniquely branded (wrapped) buses. The new service is 30% faster than the Route 14 local service. Boulevard Direct (Phase B) will connect Frankford Transportation Center and Wissahickon Transportation Center on the southern portion of Roosevelt Boulevard, and is expected to begin service with the opening of the new Wissahickon Transportation Center.

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 presents a single, integrated vision for both the station and its surrounding area. The study was completed in 2016 and highlights opportunities for community development, economic growth and improved transportation connections. The master planning process involved three main elements of analysis: transportation, the station and associated facilities, and commercial opportunities. The planning process was guided by the project partners, including SEPTA, with input from the community at public meetings held throughout the two-year timeframe. SEPTA and its planning partners are currently working towards implementation of the plan recommendations. The 30th Street Station (MFL) Improvements & Connector project is included in the FY2019 Capital Budget and Fiscal Years 2019-2030 Capital Program as part of the Stations, Loops and Parking Improvements Program.

Long Range Regional Transportation Plan – Connections 2045 Plan for Greater Philadelphia

Lead agency: Delaware Valley Regional Planning Commission (DVRPC)

DVRPC is required to update the Long Range Regional Transportation Plan every five years. The plan addresses transportation, land use, environmental and economic competitiveness policies and includes fiscally constrained transportation projects. The Connections 2045 plan was adopted by the DVRPC Board in October 2017 and published in December 2017. SEPTA participated in this process by providing updated information and fiscal analysis for transit projects contained within the plan.

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

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 (NEC) Commission Actions

Lead agency: NEC Infrastructure and Operations Advisory Commission

Under the Passenger Rail Investment and Improvement Act (PRIIA) of 2008, the NEC Infrastructure and Operations Advisory Commission was established to guide and lead the various planning efforts throughout the Corridor. The NEC Commission directs efforts to redefine the use of the NEC with its recently approved comprehensive cost-allocation methodology that has been adopted by the Northeast Corridor States. Both SEPTA and PennDOT have roles in these efforts. The implementation of full cost allocation by the States and Commuter rail carriers for operating costs and capital investments on the NEC, in addition to a stronger partnership with Amtrak on key decision-making, is ongoing.

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 Northeast Corridor (NEC), with consideration of both current and future markets for improved rail service and capacity; a corridor-level (Tier 1) environmental impact statement (EIS) that considers the impacts to the environment and supports reduction in energy use; and an investment plan for passenger rail on the NEC that can be approached incrementally. Primary among the plan goals is to consider high-speed rail alignments and improve connectivity among rail services and between rail and other modes. SEPTA is participating in the process and providing information to the project team about capital improvements that would enhance commuter rail operations on the NEC. The FRA released Tier 1 Draft EIS in 2015, the Tier 1 Final EIS and preferred alternative in 2016, and will coordinate with operators on a Service Development Plan.

Other Planning Activities

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, 2017 to June 30, 2018. The listing includes DVRPC projects, as well as projects planned by member governments and transit organizations. The Work Program is developed annually by the DVRPC Board with its planning partners to reflect the region's short-range planning needs. The Fiscal Year 2018 DVRPC Work Program projects that SEPTA will directly contribute to and be the lead stakeholder for include:

- Safe Routes to Transit
- Centennial District Trolley Service Concept Evaluation
- South Philadelphia Transportation Center

- Exton Train Station Concept Planning
- Eastwick Intermodal Center
- Delaware County Transit Facility Bicycle Audits

APPENDIX C: BUDGET AND SCHEDULE CHANGES

The table below summarizes changes to project budgets and schedules between the approved FY 2018 Capital Budget and Fiscal Years 2018-2029 Capital Program and the approved FY 2019 Capital Budget and Fiscal Years 2019-2030 Capital Program.

Drogram	Project	F	Y 2018 Capital Program	FY 2019 Capital Program		
Program		Budget	Schedule	Budget	Schedule	
	Critical Bridge Program	N/A	N/A	\$45.00 M	Ongoing	
	Mainline-Schuylkill Bridges Phase 1	\$2.00 M	Design Complete; Construction 2017-18	\$2.00 M	Design Complete; Construction 2018-19	
Duides Dus susu	Mainline-Schuylkill Bridges Phase 2	\$56.00 M	2023-2029	\$56.00 M	Construction 2023-2027	
Bridge Program	NHSL Bridge 0.15 over 69th St. Yard Tracks Phase 1	\$1.70 M	Design 2016-18; Construction 2018-20	\$1.70 M	Design 2016-18; Construction 2018-19	
	NHSL Bridge 0.15 over 69th St. Yard Tracks Phase 2	\$13.80 M	Construction 2020-22	\$13.80 M	2024-2030	
	Stone Arch Bridge Program – Phase 2	\$10.00 M	Design 2017; Construction 2018-20	\$10.00 M	Design 2017-18; Construction 2018-20	
	30th to Phil Signals, Catenary, and ROW Improvements	\$41.80 M	Design 2014-2017; Construction 2017-19	\$45.90 M	Design 2014-2018; Construction 2017-19	
	Broad Street Line Ridge-Spur Signals	\$8.66 M	Construction 2015-17	\$8.66 M	Construction 2015-19	
Communications,	Real-Time Information / Audio Visual Public Address (AVPA)	\$34.73 M	Design 2015-17; Construction 2017-21	\$34.73 M	Design 2015-18; Construction 2017-21	
Signal Systems, & Technology	Route 101/102 Positive Train Control	\$74.96 M	Construction 2015-19	\$76.40 M	Construction 2015-19	
reennology	Scheduling Systems Enhancements	\$8.10 M	Implementation 2017-2018	\$9.80 M	Implementation 2017-2020	
	Video Systems Refreshment Program	\$6.34 M	Implementation 2017-2022	\$6.46 M	Implementation 2017-2023	
Financial	Capital Asset Leases	\$708.93 M	Ongoing Program through 2029	\$733.85 M	Ongoing Program through 2030	
Obligations	Debt Service	\$575.23 M	Ongoing Program through 2029	\$745.10 M	Ongoing Program through 2030	
ISRP	Infrastructure Safety Renewal Program (ISRP)	\$603.00 M	Ongoing Program through 2029	\$614.00 M	Ongoing Program through 2030	
	Boiler Replacement Program Phase 1	\$1.00 M	Design/Construction 2016-2018	\$1.18 M	Design/Construction 2016-2018	
	Boiler Replacement Program Phase 2	\$3.50 M	0 M 2023-2029		2024-2030	
	Environmental Clean Up and Protection	\$5.89 M	Ongoing	\$5.64 M	Ongoing	
	Frankford Transportation Building	\$9.70 M	Construction 2015-17	\$17.60 M	Phase 1 2015-2017; Phase 2 2017-2019	
	Frazer Rail Shop and Yard Expansion	\$139.00 M	Design 2016-17; Construction 2017-22	\$139.00 M	Design 2016-18; Construction 2017-22	
	Frontier Garage Roof, Washer and Paving	\$14.20 M	Construction 2017-2018	\$14.67 M	Construction 2017-2019	
Maintenance /	Powelton Yard Facility Improvements	\$3.92 M	Design 2017; Construction 2020-21	\$3.92 M	Design 2017-2018; Construction 2020-21	
Transportation Shops	Tasker-Morris Stormwater	N/A	N/A	\$8.00 M	Design 2023; Construction 2024	
& Offices	Underground Storage Tank Replacement Program Phase 1	\$1.13 M	Construction 2015-18	\$1.93 M	Construction 2015-20	
	Underground Storage Tank Replacement Program Phase 2	\$9.00 M	2023-2029	\$9.00 M	2024-2030	
	Wayne Junction Shop Improvements Phase 1	\$15.29 M	Design 2017-18; Construction 2019-20	\$25.29 M	Design 2017-18; Construction 2018-20	
[Wayne Junction Shop Improvements Phase 2	\$134.71 M	2023-2029 \$1		2024-2030	
[Wheel Truing Program Phase 1	\$2.40 M	M Construction 2016-18 \$2.40 M C		Construction 2016-19	
[Wheel Truing Program Phase 2	\$6.00 M	2023-2029 \$6.00 M		2024-2030	
	Wyoming Complex Stormwater Retrofits	\$2.92 M	2023-2029	\$2.92 M	Design 2019; Construction 2020-21	

APPENDIX C: BUDGET AND SCHEDULE CHANGES

Program	Project		FY 2018 Capital Program	FY 2019 Capital Program		
Tiogram	i roject	Budget	Schedule	Budget	Schedule	
	Broad Substation Roof	\$2.00 M	Construction 2017-18	\$2.00 M	Construction 2018	
	Comly Roof Replacement	\$6.40 M	Design 2018; Construction 2019	\$7.50 M	Design 2018; Construction 2018-20	
	Frankford Roof Replacement Phase 1		Was not phased	\$0.66 M	Design/Construction 2018-19	
Roof Program	Frankford Roof Replacement Phase 2	\$8.80 M	Design 2019; Construction 2020-21	\$8.14 M	2024-2030	
	Midvale Bus Garage Roof Replacement	\$30.03 M	Design 2019-20; Construction 2021-23	\$30.03 M	Design 2018-19; Construction 2020-23	
	Southern Garage Roof Replacement Phase 1	4	Was not phased	\$3.25 M	Design/Construction 2018-19	
	Southern Garage Roof Replacement Phase 2	\$7.70 M	2023-2029	\$4.45 M	2024-2030	
	Bus Operator Shields	N/A	N/A	\$6.26 M	Installation 2018-20	
	Elmwood Safety & Security	\$0.40 M	Design 2017; Construction 2017-18	\$0.40 M	Design 2017-18; Construction 2018-19	
	Escalator / Elevator Improvement Program	\$22.78 M	2018-29	\$25.43 M	2019-2030	
	Fern Rock Transportation Center Safety Improvements	N/A	N/A	\$19.52 M	Design 2018-19; Construction 2019-22	
Safety & Security	Lawndale Station Pedestrian Underpass & High Level Platform	\$9.59 M	Design 2016-17; Construction 2018-19	\$9.59 M	Design 2016-18; Construction 2019-20	
	Station Ventilation Improvements at Suburban & AT&T Stations Phase 1	\$10.00 M	Design 2015-17; Construction 2016-19	\$10.00 M	Design 2015-17; Construction 2016-19	
	Station Ventilation Improvements at Suburban & AT&T Stations Phase 2	\$10.00 M	Construction 2022-2023	\$10.00 M	2024-2030	
	Wayne Junction Security Improvements (Phase 2)	\$2.50 M	Design 2017; Construction 2019	\$2.50 M	Design 2017; Construction 2021	
SEPTA Key	SEPTA Key	\$267.90 M	Ongoing	\$297.77 M	Ongoing	
Service Restorations	Elwyn to Wawa Rail Service	\$150.56 M	Construction 2018-21	\$177.86 M	Construction 2018-21	
	11th Street Station	\$9.50 M	Design 2019-20; Construction 2020-22	\$9.50 M	Design 2019-20; Construction 2021-23	
	30th Street Station (MFL) Improvements & Connector	\$11.00 M	P1 Construction 2017-18; P2-3 Design 2017-18	\$28.55 M	P1 2017-18; P2 2019-21	
	69th Street Transportation Center Parking Garage	\$31.01 M	P1 Construction 2015-17; P2 2018-23	\$31.01 M	P1 Construction 2015-18; P2 2019-23	
	Ardmore Transportation Center Phase 1	\$36.29 M	Construction 2018-21	\$36.29 M	Construction 2019-21	
	Ardmore Transportation Center Phase 2	\$26.05 M	2023-2029	\$26.05 M	2024-2030	
	Bicycle Transit Access Program	\$2.50 M	Construction 2015-19	\$2.50 M	Ongoing	
	Center City Concourses	\$59.65 M	P1 2014-19; P2 2023-2029	\$59.65 M	P1,2,4 2014-20; P3,5-8 2024-2030	
	Chestnut Hill East ADA Improvements	N/A	N/A	\$11.17 M	Design 2021-22; Construction 2022-23	
	City Hall & 15th Street Stations	\$146.47 M	15th 2016-18; CH 2019-23	\$146.47 M	15th 2017-19; CH 2020-24	
Chattana Laana R	Conshohocken Station - Station	\$15.00 M	Design 2017-18; Construction 2019-20	\$15.00 M	Design 2018-19; Construction 2019-20	
Stations, Loops & Parking	Conshohocken Station - Parking	N/A	N/A	\$2.00 M	Design 2019	
	Erie Station	\$9.0 M	Design 2021-22; Construction 2022-24	\$9.0 M	Design 2019-20; Construction 2021-23	
	Exton Station Improvements Phase 1	\$23.44 M	Construction 2015-18	\$24.42 M	Construction 2015-18	
	Exton Station Improvements Phase 2 & 3	\$39.50 M	2023-2029	\$39.50 M	2024-2030	
	Fairmount Station	\$18.0 M	Prelim. design 2019-20	\$18.0 M	Prelim. design 2021-22	
	Gwynedd Valley Station Parking	\$2.54 M	Construction 2017-18	\$2.54 M	Construction 2018-19	
	Ivy Ridge Parking Improvements	N/A	N/A \$35.00 M		2024-2030	
	Malvern Station High Level Platforms	N/A	N/A	\$15.26 M	Design 2021-22; Construction 2023-25	
	Noble Station, Parking Garage and Storage Track	\$53.00 M	Design 2016-18; Construction 2022-25	\$53.00 M	Design 2016-19; Construction 2022-25	
	Paoli Intermodal Transportation Center Phase 1	\$30.74 M	Construction 2017-18	\$35.01 M	Construction 2017-19	
	Paoli Intermodal Transportation Center Phase 2	\$51.20 M	2022-2025	\$51.20 M	2024-2030	

APPENDIX C: BUDGET AND SCHEDULE CHANGES

Drogrom	Drojost	FY	2018 Capital Program	FY 2019 Capital Program		
Program	Project	Budget	Schedule	Budget	Schedule	
	Philmont Station Parking	\$25.0 M	Design 2019; Construction 2020-22	\$25.0 M	2024-2030	
	Ridge & Summit Bus Loop	\$1.75 M	2023-2029	\$1.75 M	Design 2023-24; Construction 2024-25	
	South Broad Station - Broad Street Line	N/A	N/A	\$9.80 M	2024-2030	
	Stadium Station on the Norristown High Speed Line	N/A	N/A	\$3.00 M	Construction 2018-19	
Stations, Loops & Parking	Swarthmore Roof Replacement & Exterior Improvements	\$1.00 M	Construction 2017	\$1.81 M	Construction 2018	
(Continued)	Tasker-Morris Station	\$7.00 M	Design 2018-19; Construction 2020-22	\$9.80 M	Design 2017-18; Construction 2019-21	
(continucu)	Villanova Station on the Norristown High Speed Line	\$6.00 M	Design/Construction 2022-23	\$4.00 M	Design/Construction 2022-23	
	Willow Grove Station on the Warminster Regional Rail Line	\$6.50 M	Design 2021; Construction 2022-23	\$20.89 M	Design 2017-19; Construction 2020-22	
	Westmoreland Loop	\$1.75 M	Design 2018-19; Construction 2019-20	\$1.75 M	Design 2019-20; Construction 2020-21	
	Wissahickon Transportation Center	\$13.25 M	Design 2017-18; Construction 2018-20	\$14.22 M	Design 2017-18; Construction 2018-20	
	Railroad Substations - Neshaminy, Bethayres, Yardley	\$24.58 M	Construction 2017-21	\$24.58 M	Construction 2018-2021	
	Transit Substations – Market, Ellen, Ranstead	\$18.68 M	Construction 2018-22	\$18.68 M	Construction 2018-21	
Substations & Power	Transit Substations – Park, Broad, Louden, Castor	\$19.95 M	Construction 2018-21	\$19.95 M	Construction 2020-23	
rower	Wayne Junction Static Frequency Converters (SFC) #1-4	\$60.00 M	Design 2015-17; Construction 2018-22	\$60.00 M	Design 2015-18; Construction 2018-22	
	Woodbourne Substation	\$23.49 M	Construction 2019-22	\$23.49 M	Construction 2020-23	
	Doylestown and Warminster Tie Renewal & Surfacing	N/A	N/A	\$7.89 M	Construction 2018-19	
Track & ROW	Norristown High Speed Line Interlocking Improvements	N/A	N/A	\$7.10 M	Design 2018-19; Construction 2019-21	
Improvements	Track and ROW Rail Service Improvements	\$2.50 M	Ongoing	\$19.25 M	Ongoing	
	Trolley Tunnel Track Renewal	N/A	N/A	\$1.50 M	Construction 2018	
	Bus Purchase Program	\$900.99 M	Ongoing Program through 2029	\$927.28 M	Ongoing Program through 2030	
	Regional Rail Multi-Level Car Acquisition	\$174.30 M	Delivery 2019-2021	\$174.30 M	Delivery 2020-2021	
Vehicle Acquisitions & Overhauls	Trolley Modernization	\$713.25 M	2024-2030	\$1,100.00 M	2024-2030	
G Overnauis	Utility Fleet Renewal	\$76.00 M	Ongoing Program through 2029	\$74.00 M	Ongoing Program through 2030	
	Vehicle Overhaul Program	\$980.08 M	Ongoing Program through 2029	\$996.31 M	Ongoing Program through 2030	