FISCAL YEAR 2019 CAPITAL BUDGET
AND FISCAL YEARS 2019-2030 CAPITAL PROGRAM

“REBUILDING THE SYSTEM”

Proposal
March 2018
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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 http://www.SEPTA.org/rebuilding.
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

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

Source: FY 2017 SEPTA Operating Statistics

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.
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-Ewlyn 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.
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.

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.

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

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>GRANTS</th>
<th>REVENUE</th>
<th>SAVINGS</th>
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<tbody>
<tr>
<td>FY2009</td>
<td>$-</td>
<td>$-</td>
<td>$-</td>
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<td>FY2010</td>
<td>$-</td>
<td>$70,207</td>
<td>$-</td>
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<tr>
<td>FY2011</td>
<td>$27,640,000</td>
<td>$123,780</td>
<td>$-</td>
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<tr>
<td>FY2012</td>
<td>$-</td>
<td>$179,675</td>
<td>$-</td>
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<tr>
<td>FY2013</td>
<td>$1,280,000</td>
<td>$273,312</td>
<td>$726,650</td>
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<tr>
<td>FY2014</td>
<td>$-</td>
<td>$322,263</td>
<td>$583,501</td>
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<tr>
<td>FY2015</td>
<td>$86,800,000*</td>
<td>$418,696</td>
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<td>FY2016</td>
<td>$2,600,000</td>
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<td>$1,061,124</td>
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<td>FY2017</td>
<td>$-</td>
<td>$1,761,475</td>
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<tr>
<td>TOTAL</td>
<td>$118,320,000</td>
<td>$3,428,083</td>
<td>$2,884,116</td>
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</table>

*FTA’s Resilience Grant

**ANNUAL DIESEL USE (INCLUDING NON-REVENUE VEHICLES)**

GALLONS

<table>
<thead>
<tr>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
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<tr>
<td>17.1M</td>
<td>16.8M</td>
<td>16.7M</td>
<td>15.9M</td>
<td>15.6M</td>
<td>15.3M</td>
<td>15.0M</td>
<td>14.9M</td>
<td>14.9M</td>
<td>14.3M</td>
<td>14.0M</td>
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</table>

**TOTAL POSITIVE FINANCIAL IMPACT $124,632,200**

<table>
<thead>
<tr>
<th></th>
<th>GRANTS</th>
<th>REVENUE</th>
<th>SAVINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>$118,320,000</td>
<td>$3,428,083</td>
<td>$2,884,116</td>
</tr>
</tbody>
</table>
STRATEGIC PLANNING EFFORTS

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.
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.
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 will begin the Final Environmental Impact Statement (FEIS) in Spring 2018, which is anticipated to take approximately 18 months to complete. Funding for planning and some design work is being provided under an existing Federal Transit Administration (FTA) grant.

Recent Milestones

- Release of Draft Environmental Impact Statement: October 2017
- Board Adoption of the LPA: January 2018
- Begin Final Environmental Impact Statement: April 2018

Additional project information can be found at www.kingofprussiarail.com
SOURCES OF CAPITAL FUNDING

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

- **State**: $11.75 (1.5%)
- **Federal**: $170.00 (22.7%)
- **SEPTA Capital Financing**: $351.48 (46.9%)
- **Local**: $216.39 (28.9%)

Total: $749.62

**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.

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**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.
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

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Amount (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTA Section 5307</td>
<td>Urbanized Area Formula Program. Funds transit capital projects. Allocations based on population, density, operating expenses, revenue miles and route miles.</td>
<td>$69.43</td>
</tr>
<tr>
<td>FTA Section 5340</td>
<td>Growing States and High Density States Formula Program. Allocations based on population forecasts and population density. SEPTA receives Growing States program funding.</td>
<td></td>
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<tr>
<td>FTA Section 5337</td>
<td>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.</td>
<td>$121.38</td>
</tr>
<tr>
<td>FTA Section 5339</td>
<td>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.</td>
<td>$7.50</td>
</tr>
<tr>
<td>Highway Flex</td>
<td>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.</td>
<td>$17.08</td>
</tr>
<tr>
<td>Transit Security Grant Program</td>
<td>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.</td>
<td>$1.00</td>
</tr>
<tr>
<td>Total Federal</td>
<td></td>
<td>$216.39</td>
</tr>
</tbody>
</table>
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.
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.

**USES OF CAPITAL FUNDING**

**FY 2019 Capital Budget - Summary**

- **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.

Total: $749.6 Million
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 distribute project costs over a longer period of time. 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 February 28, 2018, SEPTA issued Notices to Proceed for 136 major third-party construction contracts. Of those contracts, 59 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

<table>
<thead>
<tr>
<th>Capital Programs / Financial Obligations</th>
<th>Prior Year Funding FY 19</th>
<th>Budget Years FY 20</th>
<th>Program Years FY 21</th>
<th>FY 22</th>
<th>FY 23</th>
<th>FY 2024-2030</th>
<th>Beyond FY 2030</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capital Programs</strong></td>
<td></td>
<td>$3.50</td>
<td>$5.24</td>
<td>$5.56</td>
<td>$7.25</td>
<td>$11.08</td>
<td>$21.93</td>
<td>$172.54</td>
</tr>
<tr>
<td>Bridge Program</td>
<td></td>
<td>$5.24</td>
<td>$5.56</td>
<td>$7.25</td>
<td>$11.08</td>
<td>$21.93</td>
<td>$172.54</td>
<td>$223.60</td>
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<tr>
<td>Communications, Signal Systems and Technology Improvements</td>
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<td>$50.69</td>
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<td>Maintenance/Transportation Shops and Offices</td>
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<td>$48.15</td>
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<td>$26.63</td>
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<td>$19.58</td>
<td>$20.35</td>
<td>$14.03</td>
<td>$11.35</td>
<td>$12.01</td>
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<td>$97.96</td>
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<td>Service Restorations</td>
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<td>$47.59</td>
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<td>Stations, Loops and Parking Improvements</td>
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<td>$77.69</td>
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<td>Substations and Power Improvements</td>
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<td>$30.59</td>
<td>$46.14</td>
<td>$48.12</td>
<td>$40.12</td>
<td>$54.77</td>
<td>$82.50</td>
<td>$302.24</td>
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<tr>
<td>Track and Right-of-Way Improvements</td>
<td>$17.70</td>
<td>$7.60</td>
<td>$11.74</td>
<td>$12.05</td>
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<td>$7.34</td>
<td>$44.00</td>
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<td>Vehicle Acquisitions and Overhauls</td>
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<td>$263.74</td>
<td>$220.35</td>
<td>$244.83</td>
<td>$224.83</td>
<td>$175.15</td>
<td>$1,731.73</td>
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<td><strong>Subtotal Capital Programs</strong></td>
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<td>$517.50</td>
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<td><strong>Financial Obligations</strong></td>
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<td>Capital Leases</td>
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<td>$56.31</td>
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<td>$70.45</td>
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<td><strong>Total Capital Budget</strong></td>
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<td>$710.97</td>
<td>$666.13</td>
<td>$586.12</td>
<td>$586.12</td>
<td>$4,102.80</td>
<td>$7,401.76</td>
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</tbody>
</table>

**Total Capital Budget**: $1,039.69

**Beyond FY 2030**: $733.85

**Total Budget**: $10,414.93
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.

<table>
<thead>
<tr>
<th>Bridge Program</th>
<th>Prior Funding FY 19</th>
<th>Program Years FY 20</th>
<th>Program Years FY 21</th>
<th>Program Years FY 22</th>
<th>Program Years FY 23</th>
<th>FY 2024 - 2030 Total $Millions</th>
<th>Beyond FY 2030 $Millions</th>
<th>Total Budget $Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge Program</td>
<td>$3.50</td>
<td>$5.24</td>
<td>$5.56</td>
<td>$7.25</td>
<td>$11.08</td>
<td>$21.93</td>
<td>$172.54</td>
<td>$223.60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$3.50</td>
<td>$5.24</td>
<td>$5.56</td>
<td>$7.25</td>
<td>$11.08</td>
<td>$21.93</td>
<td>$172.54</td>
<td>$223.60</td>
</tr>
</tbody>
</table>

NHSL Bridge 0.15 - 1906

Stone Arch Bridge Lansdale 18.91 - 1903

Stone Arch Bridge Media/Elwyn 12.68 - 1854
## 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.

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>Phase 1 Design Complete Construction 2018 - 2019</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phase 2 Design 2023 Construction 2023 - 2027</td>
<td></td>
</tr>
<tr>
<td>Bucks</td>
<td>$2.00 M</td>
<td></td>
</tr>
<tr>
<td>Chester</td>
<td>$56.00 M</td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware (State)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Stone Arch Bridge Program - Phase 2

Rehabilitation of the following seven (7) Stone Arch Bridges on SEPTA’s Regional Railroad:

- West Trenton Line Mile Post 13.70. Built 1912.
- West Trenton Line Mile Post 15.95. Built 1876.
- West Trenton Line Mile Post 22.65. Built 1876.

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bucks</td>
<td>$10.00 M</td>
<td>Design 2017 - 2018 Construction 2018 - 2020</td>
</tr>
<tr>
<td>Chester</td>
<td></td>
<td>Bucks Delaware Montgomery Philadelphia</td>
</tr>
<tr>
<td>Delaware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Philadelphia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Jersey</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 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.

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
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<td>2024 - 2030 Project</td>
</tr>
<tr>
<td>Philadelphia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bucks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>$35.00 M</td>
<td>2024 - 2030 Project</td>
</tr>
<tr>
<td>Philadelphia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bucks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delaware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montgomery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17
# BRIDGE PROGRAM

## Project Descriptions

### Transit and Railroad Bridge Projects (FY 2019 - 2023)

**Critical Bridge Program**

Annual program to rehabilitate or replace bridges throughout the system to maintain infrastructure in a state of good repair.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$45.00 M</td>
<td>Ongoing</td>
<td>System-wide</td>
<td>System-wide</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delaware</td>
<td>Delaware</td>
</tr>
<tr>
<td>Montgomery</td>
<td>Montgomery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Phase 1</th>
<th>Phase 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design 2016</td>
<td>Construction 2018</td>
</tr>
<tr>
<td>$1.70 M</td>
<td>$1.30 M</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Montgomery</td>
<td>Montgomery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design 2021</th>
<th>Construction 2021 - 2024</th>
</tr>
</thead>
<tbody>
<tr>
<td>$35.00 M</td>
<td>$13.80 M</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Communications, Signal Systems and Technology Improvements</th>
<th>Prior Year FY 2019</th>
<th>Program Years FY 2020-2023</th>
<th>12-Year Program Beyond FY 2030</th>
<th>Total Budget</th>
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<tr>
<td>Communications, Signals &amp; Technology</td>
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<td>$42.01</td>
<td>$50.69</td>
<td>$89.25</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$79.74</td>
<td>$42.01</td>
<td>$50.69</td>
<td>$89.25</td>
</tr>
</tbody>
</table>

**Route 101/102 Positive Train Control**

**30th to Phil Signals, Catenary & Right-of-Way**
## Communications & Signal Improvements—Railroad Projects (FY 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.

- **Budget**: $45.90 M
- **Schedule / Status**:
  - Design: 2014 - 2018
  - Construction: 2017 - 2019
- **Location**: Philadelphia
- **Service Area**: 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.

- **Budget**: $75.00 M
- **Schedule / Status**: Ongoing
- **Location**: Montgomery Philadelphia
- **Service Area**: Bucks Chester Delaware Philadelphia 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.

- **Budget**: $4.00 M
- **Schedule / Status**:
  - Design: Complete 2015 - 2018
  - Construction: 2015 - 2018
- **Location**: Delaware Philadelphia
- **Service Area**: Delaware Philadelphia
## Communications & Signal Improvements - Transit Projects (FY 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
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<tr>
<td></td>
<td>Construction 2015 - 2019</td>
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<td></td>
</tr>
</tbody>
</table>

### Route 101/102 Positive Train Control

Installation 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
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<tr>
<td></td>
<td>Construction 2015 - 2019</td>
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<td></td>
</tr>
</tbody>
</table>

## Communications & Signal Improvements - System-Wide Projects (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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$32.50 M</td>
<td>Design 2017 - 2018</td>
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</tr>
<tr>
<td></td>
<td>Construction 2019 - 2022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Real-Time Information / Audio Visual Public Address (AVPA) System

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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$34.73 M</td>
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</tr>
<tr>
<td></td>
<td>Construction 2017 - 2021</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$60.00 M</td>
<td>Ongoing</td>
<td>Philadelphia</td>
<td>System-wide</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$9.80 M</td>
<td>Implementation 2017 - 2020</td>
<td>Philadelphia</td>
<td>System-wide</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$6.46 M</td>
<td>Implementation 2017 - 2023</td>
<td>Bucks Chester Delaware Montgomery Philadelphia</td>
<td>System-wide</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Financial Obligations - Program Elements</th>
<th>Prior Funding</th>
<th>Budget Year</th>
<th>FY 19</th>
<th>FY 20</th>
<th>FY 21</th>
<th>FY 22</th>
<th>FY 23</th>
<th>FY 2024 - 2030</th>
<th>12-Year Program Total</th>
<th>Beyond FY 2030</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Asset Lease Program</td>
<td>$0.00</td>
<td>$48.32</td>
<td>$56.31</td>
<td>$57.44</td>
<td>$58.59</td>
<td>$59.76</td>
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<td>$453.43</td>
<td>$733.85</td>
<td>$0.00</td>
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<tr>
<td>Debt Service</td>
<td>$0.00</td>
<td>$55.38</td>
<td>$51.14</td>
<td>$91.19</td>
<td>$53.44</td>
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<td>$423.50</td>
<td>$745.10</td>
<td>$338.23</td>
<td>$1,083.33</td>
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<tr>
<td>TOTAL</td>
<td>$0.00</td>
<td>$103.70</td>
<td>$107.45</td>
<td>$148.63</td>
<td>$112.03</td>
<td>$130.21</td>
<td></td>
<td>$876.93</td>
<td>$1,478.95</td>
<td>$338.23</td>
<td>$1,817.18</td>
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</table>
## Capital Asset Leases (FY 2019 - 2030)

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amtrak Trackage</td>
<td>12 Year Total $733.85 M</td>
<td>Ongoing Program through 2030</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
</tr>
<tr>
<td>Communications Towers</td>
<td></td>
<td></td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
</tr>
<tr>
<td>Copiers</td>
<td></td>
<td></td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
</tr>
<tr>
<td>Warehouse Facility</td>
<td></td>
<td></td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
</tr>
</tbody>
</table>

- **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.

- **Copiers** - This lease provides for rental of copiers, which are dispersed throughout SEPTA's headquarters and transportation/maintenance facilities.

- **Warehouse Facility** - This lease provides for rental of a storeroom facility at 2045 Wheatsheaf Lane in the City of Philadelphia.
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.
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.

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 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.
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.

Projects to be funded under this program may include vehicle purchases and infrastructure improvements, depending upon cash flow requirements.

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

<table>
<thead>
<tr>
<th>Infrastructure Safety Renewal Program - Program Elements</th>
<th>Prior Funding</th>
<th>Budget Year FY 19</th>
<th>Program Years FY 20</th>
<th>FY 21</th>
<th>FY 22</th>
<th>FY 23</th>
<th>FY 2024-2030 $Millions</th>
<th>12-Year Program Total</th>
<th>Beyond FY 2030 $</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure Safety Renewal Program</td>
<td>$0.00</td>
<td>$46.50</td>
<td>$47.50</td>
<td>$47.50</td>
<td>$48.50</td>
<td>$49.50</td>
<td>$374.50</td>
<td>$614.00</td>
<td>$0.00</td>
<td>$614.00</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$0.00</td>
<td>$46.50</td>
<td>$47.50</td>
<td>$47.50</td>
<td>$48.50</td>
<td>$49.50</td>
<td>$374.50</td>
<td>$614.00</td>
<td>$0.00</td>
<td>$614.00</td>
</tr>
</tbody>
</table>
MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

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.

<table>
<thead>
<tr>
<th>Maintenance/Transportation Shops &amp; Offices</th>
<th>Prior Funding</th>
<th>Budget Year FY 19</th>
<th>Program Years FY 20</th>
<th>Program Years FY 21</th>
<th>Program Years FY 22</th>
<th>Program Years FY 23</th>
<th>FY 2024 - 2030 Program</th>
<th>Beyond Total FY 2030</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance/Transportation Facilities</td>
<td>$86.76</td>
<td>$33.73</td>
<td>$31.86</td>
<td>$20.84</td>
<td>$25.02</td>
<td>$23.79</td>
<td>$133.52</td>
<td>$268.76</td>
<td>$79.44</td>
</tr>
<tr>
<td>Roof Program</td>
<td>$13.70</td>
<td>$13.82</td>
<td>$16.29</td>
<td>$6.50</td>
<td>$1.61</td>
<td>$2.74</td>
<td>$56.18</td>
<td>$97.14</td>
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</tr>
<tr>
<td>TOTAL</td>
<td>$100.46</td>
<td>$47.55</td>
<td>$48.15</td>
<td>$27.34</td>
<td>$26.63</td>
<td>$26.53</td>
<td>$189.70</td>
<td>$365.90</td>
<td>$79.44</td>
</tr>
</tbody>
</table>
## 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.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Budget (M)</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>$12.31</td>
<td>Design Complete</td>
<td>Delaware</td>
<td>Delaware</td>
</tr>
<tr>
<td></td>
<td>$7.50</td>
<td>Phase 1 Construction 2017 - 2018</td>
<td>Montgomery</td>
<td>Montgomery</td>
</tr>
<tr>
<td>Phase 2</td>
<td>$12.31</td>
<td>Phase 2 2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Budget (M)</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
</table>
| Phase 1 | $1.18      | Phase 1 Design / Construction 2016 - 2018 | Delaware | Bucks
|         | $3.50      | Phase 2 FY 2024 - 2030 Project | Montgomery | Chester Delaware
| Phase 2 | $3.50      | Phase 2 FY 2024 - 2030 Project | Philadelphia | 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.

<table>
<thead>
<tr>
<th>Budget (M)</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
</table>
| $5.64      | Ongoing                     | Bucks Chester | System-wide
|           |                             | Delaware      | Delaware
|           |                             | Montgomery    | Philadelphia
|           |                             | Philadelphia  | Philadelphia

### 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.

<table>
<thead>
<tr>
<th>Budget (M)</th>
<th>Schedule / Status</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>$17.60</td>
<td>Phase 1 Construction 2015 - 2017</td>
<td>Philadelphia</td>
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<tr>
<td></td>
<td>Phase 2 Construction 2017 - 2019</td>
<td>Philadelphia</td>
</tr>
</tbody>
</table>
### Project Descriptions

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Frazer Rail Shop and Yard Upgrade</strong></td>
<td>$139.00 M</td>
<td>Design 2016 - 2018 Construction 2017 - 2022</td>
<td>Chester</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (state) New Jersey</td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Frontier Garage Roof, Washer and Paving</strong></td>
<td>$14.67 M</td>
<td>Design Complete Construction 2017 - 2019</td>
<td>Montgomery</td>
<td>Bucks Chester Montgomery</td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Garage Stormwater Management &amp; Pavement Improvements</strong></td>
<td>$5.88 M</td>
<td>Design Complete Construction 2017 - 2018</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Project Descriptions

<table>
<thead>
<tr>
<th>Steel Wheel Lift Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 and to elevate railcars to safe heights and hold them as required to perform inspections and repairs under the rail vehicles.</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
</tr>
<tr>
<td>Phase 1 $2.11 M</td>
</tr>
<tr>
<td>Phase 2 $6.00 M</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tasker-Morris Stormwater</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction of an off-site stormwater management system associated with the Broad Street Subway Tunnel drainage near the Tasker-Morris Station.</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
</tr>
<tr>
<td>$8.0 M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Underground Storage Tank Relining / Replacement Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement or relining of storage tanks, which have exceeded their useful life, at various SEPTA facilities.</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
</tr>
<tr>
<td>Phase 1 $1.93 M</td>
</tr>
<tr>
<td>Phase 2 $9.00 M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wayne Junction Shop Improvements</th>
</tr>
</thead>
<tbody>
<tr>
<td>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 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.</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
</tr>
<tr>
<td>Phase 2 $124.71 M</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wheel Truing Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>Budget</strong></td>
</tr>
<tr>
<td>Phase 1 $2.40 M</td>
</tr>
<tr>
<td>Phase 2 $6.00 M</td>
</tr>
<tr>
<td>Project Description</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>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.</td>
</tr>
<tr>
<td><strong>Maintenance &amp; Transportation Facilities (FY 2024 - 2030)</strong></td>
</tr>
<tr>
<td><strong>Bus Lift Program</strong></td>
</tr>
<tr>
<td>Replacement of in-ground and portable lifts that have exceeded their useful life at select SEPTA City Transit and Suburban Transit bus maintenance facilities.</td>
</tr>
<tr>
<td><strong>Garage / Shop Overhead Doors</strong></td>
</tr>
<tr>
<td>Replacement of overhead and fire doors, which have exceeded their useful life, at various SEPTA facilities.</td>
</tr>
<tr>
<td><strong>On-Site Power for Major Facilities</strong></td>
</tr>
<tr>
<td>Installation of emergency back-up power and power system upgrades and at major SEPTA maintenance and transportation facilities.</td>
</tr>
<tr>
<td><strong>Vehicle Washer Program</strong></td>
</tr>
<tr>
<td>Replacement and upgrading of the vehicle washers, which have exceeded their useful life, at various SEPTA facilities.</td>
</tr>
</tbody>
</table>
## Roof Program (FY 2019 - 2023)

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>69th St. Transportation Center Shop Complex Roofs Replacement</strong></td>
<td>$14.10 M</td>
<td>Design Complete Construction 2016 - 2019</td>
<td>Delaware</td>
<td>Delaware Montgomery Philadelphia</td>
</tr>
<tr>
<td>Replacement of existing roofs. Includes replacement of mechanical equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Broad Substation Roof Replacement</strong></td>
<td>$2.00 M</td>
<td>Design Complete Construction 2018</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Replacement of the roof at Broad Substation, located on Mt. Vernon Street and serving the Broad Street Line.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Comly Roof Replacement</strong></td>
<td>$7.50 M</td>
<td>Design 2018 Construction 2018 - 2020</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Replacement of existing roof at Comly Garage with a new roofing system. Includes replacement of mechanical equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Courtland Shop Roof Replacement</strong></td>
<td>$8.80 M</td>
<td>Design 2018 Construction 2019 - 2020</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Replacement of the Courtland Shop roof with a new roofing system. Includes replacement of mechanical equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Frankford Depot Roof Replacement</strong></td>
<td></td>
<td>Phase 1 Design/Construction 2018 - 2019</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Replacement of the Frankford Depot roof with a new roofing system. Includes replacement of mechanical equipment. Phase 1 will address critical repair work and Phase 2 will include complete roof replacement.</td>
<td></td>
<td>Phase 1 Design/Construction 2018 - 2019</td>
<td>Philadelphia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phase 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$8.14 M</td>
<td></td>
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</tbody>
</table>
## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement of existing roofs with a new roofing system. Includes replacement of mechanical equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replacement of existing roof with a new roofing system. Includes replacement of mechanical equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Southern Garage Roof Replacement</strong></td>
<td>Phase 1 $3.25 M, Phase 2 $4.45 M</td>
<td>Phase 1 Design/Construction 2018 - 2019, Phase 2 2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Replacement and upgrade of existing roof system at Southern Garage. Phase 1 will address critical repair work and Phase 2 will include complete roof replacement.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Roof Program (FY 2024 - 2030)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5800 Bustleton Roof Replacement</strong></td>
<td>$1.75 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Replacement of roof at SEPTA office building located at 5800 Bustleton Avenue.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maintenance, Stations and Substations Roof Program</strong></td>
<td>$21.00 M</td>
<td>2024 - 2030 Project</td>
<td>Bucks, Chester, Delaware, Montgomery, Philadelphia</td>
<td>System-wide</td>
</tr>
<tr>
<td>Replacement and upgrade of the existing roofs at maintenance facilities, stations and substations throughout the SEPTA system. Work may include replacement of mechanical equipment.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sansom Substation Roof</strong></td>
<td>$2.00 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Safety &amp; Security Improvements</th>
<th>Prior Funding</th>
<th>Budget Year FY 19</th>
<th>Program Years FY 20</th>
<th>Program Years FY 21</th>
<th>Program Years FY 22</th>
<th>Program Years FY 23</th>
<th>FY 2024-2030 Total</th>
<th>Beyond FY 2030 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety &amp; Security Improvements</td>
<td>$25.54</td>
<td>$19.58</td>
<td>$20.35</td>
<td>$14.03</td>
<td>$11.35</td>
<td>$12.01</td>
<td>$64.28</td>
<td>$141.60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$25.54</td>
<td>$19.58</td>
<td>$20.35</td>
<td>$14.03</td>
<td>$11.35</td>
<td>$12.01</td>
<td>$64.28</td>
<td>$141.60</td>
</tr>
</tbody>
</table>

SAFETY & SECURITY IMPROVEMENTS

Bus Turn Alerting System

Lawndale Station Pedestrian Underpass

Radio Interoperability
## SAFETY & SECURITY IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety &amp; Security Projects (FY 2019 - 2023)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Bus Operator Shields</strong></td>
<td>$6.26 M</td>
<td>Installation 2018 - 2020</td>
<td>System-wide</td>
<td>System-wide</td>
</tr>
<tr>
<td>Installation of operator safety shields on SEPTA buses and trackless trolleys to</td>
<td></td>
<td></td>
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<tr>
<td>increase transit operator safety. The operator enclosure system will help protect</td>
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<td></td>
</tr>
<tr>
<td>the operator in the event of an emergency.</td>
<td></td>
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</tr>
<tr>
<td><strong>Bus Turn Alerting System</strong></td>
<td>$4.85 M</td>
<td>Installation 2016 - 2019</td>
<td>System-wide</td>
<td>System-wide</td>
</tr>
<tr>
<td>Installation of a bus turn alerting system on SEPTA buses. The system will serve</td>
<td></td>
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<tr>
<td>as a secondary warning system to alert customers, bicyclists and pedestrians, both</td>
<td></td>
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</tr>
<tr>
<td>audibly and visually, that a bus is making a turn.</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td><strong>Elmwood Safety &amp; Security</strong></td>
<td>$0.40 M</td>
<td>Design 2017 - 2018</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Installation of security cameras, access control measures, fencing, and gates at</td>
<td></td>
<td>Construction 2018 - 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elmwood Carhouse.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Escalator / Elevator Improvement Program</strong></td>
<td>$25.43 M</td>
<td>2019 - 2030</td>
<td>Philadelphia</td>
<td>System-wide</td>
</tr>
<tr>
<td>Modernization and upgrades to the escalators and elevators throughout the SEPTA</td>
<td></td>
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<tr>
<td>system, including design, construction, and integration of an escalator remote</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>monitoring system.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Fern Rock Transportation Center Safety Improvements</strong></td>
<td>$19.52 M</td>
<td>Design 2018 - 2019</td>
<td>Philadelphia</td>
<td>Bucks</td>
</tr>
<tr>
<td>Safety improvements at Fern Rock Transportation Center Railroad Station, which</td>
<td></td>
<td>Construction 2019 - 2022</td>
<td></td>
<td>Montgomery</td>
</tr>
<tr>
<td>serves the Lansdale/Doylestown, Warminster and West Trenton Regional Rail Lines and</td>
<td></td>
<td></td>
<td></td>
<td>Philadelphia</td>
</tr>
<tr>
<td>provides connecting service to the Broad Street Line. Includes construction of a</td>
<td></td>
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<tr>
<td>grade separated pedestrian crossing, replacement of elevator entrances and hoist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>equipment and related station modifications.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Descriptions</td>
<td>Budget</td>
<td>Schedule / Status</td>
<td>Location</td>
<td>Service Area</td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
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</tr>
<tr>
<td><strong>Lawndale Station Pedestrian Underpass &amp; High Level Platform</strong></td>
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<tr>
<td>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.</td>
<td>$9.59 M</td>
<td>Design 2016 - 2018</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
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<tr>
<td></td>
<td></td>
<td>Construction 2019 - 2020</td>
<td>Montgomery</td>
<td>Philadelphia</td>
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<tr>
<td></td>
<td></td>
<td>Phase 2</td>
<td>Philadelphia</td>
<td>System-wide</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$23.20 M</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Phase 2</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2024 - 2030 Project</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Midvale Facility and Security Enhancements</strong></td>
<td></td>
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<tr>
<td>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.</td>
<td>Phase 1</td>
<td>Design 2017 - 2018</td>
<td>Philadelphia</td>
<td></td>
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<tr>
<td></td>
<td>$3.50 M</td>
<td>Construction 2018 - 2020</td>
<td></td>
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<tr>
<td></td>
<td>Phase 2</td>
<td></td>
<td>Philadelphia</td>
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</tr>
<tr>
<td></td>
<td>$23.20 M</td>
<td></td>
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<tr>
<td></td>
<td>Phase 2</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2024 - 2030 Project</td>
<td></td>
<td></td>
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<tr>
<td><strong>Radio Interoperability</strong></td>
<td></td>
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<tr>
<td>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.</td>
<td></td>
<td>Design Complete</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
<td>$24.89 M</td>
<td>Construction 2016 - 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Safety and Security Infrastructure Hardening Program</strong></td>
<td></td>
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</tr>
<tr>
<td>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.</td>
<td>$3.00 M</td>
<td>Ongoing</td>
<td>Bucks Chester</td>
<td>Delaware</td>
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<td></td>
<td></td>
<td></td>
<td>Delaware</td>
<td>State</td>
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<td></td>
<td></td>
<td></td>
<td>Philadelphia</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Delaware (State)</td>
<td>New Jersey</td>
</tr>
</tbody>
</table>
## SAFETY & SECURITY IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Station Ventilation Improvements at Suburban and AT&amp;T Stations</strong></td>
<td></td>
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</tr>
<tr>
<td>Replacement and upgrade of the existing ventilation systems at Suburban Station and AT&amp;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&amp;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.</td>
<td>Phase 1 $10.00 M</td>
<td>Design 2015 - 2017</td>
<td>Philadelphia</td>
<td>Bucks Chester Delaware Montgomery Delaware (State) New Jersey</td>
</tr>
<tr>
<td></td>
<td>Phase 2 $10.00 M</td>
<td>Construction 2016 - 2019</td>
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<tr>
<td></td>
<td></td>
<td>Phase 2 2024 - 2030 Project</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Wayne Junction Security Improvements, Phase 2</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>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.</td>
<td>$2.50 M</td>
<td>Design 2017 Construction 2021</td>
<td>Philadelphia</td>
<td>Bucks Chester Delaware Montgomery Delaware (State) New Jersey</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Safety &amp; Security Projects (FY 2024 - 2030)</strong></td>
<td></td>
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<tr>
<td><strong>Pump Rooms</strong></td>
<td></td>
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</tr>
<tr>
<td>Improvements to pump rooms, which control water levels in SEPTA’s transit and railroad tunnels.</td>
<td>$ 10.00 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
</tbody>
</table>
# SAFETY & SECURITY IMPROVEMENTS

## 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.

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive Annual Program</td>
<td>$1 M</td>
<td>2018 - 2019</td>
<td>Bucks, Chester, Delaware, Montgomery, Philadelphia</td>
<td>System-wide</td>
</tr>
</tbody>
</table>
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 [http://www.septa.org/key/](http://www.septa.org/key/).

<table>
<thead>
<tr>
<th>SEPTA Key</th>
<th>Prior Year FY 19</th>
<th>Program Years FY 20</th>
<th>Program Years FY 21</th>
<th>Program Years FY 22</th>
<th>Program Years FY 23</th>
<th>12-Year Total FY 2030</th>
<th>Beyond FY 2030</th>
<th>Total Budget $Millions</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEPTA Key</td>
<td>$199.81</td>
<td>$70.22</td>
<td>$27.74</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$97.96</td>
<td>$297.77</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$199.81</td>
<td>$70.22</td>
<td>$27.74</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$97.96</td>
<td>$297.77</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Service Restorations and Expansions - Project Elements</th>
<th>Prior Year Funding FY 19</th>
<th>Budget FY 20</th>
<th>Program Years FY 21 FY 22 FY 23</th>
<th>12-Year Program Total FY 2024-2030</th>
<th>Beyond FY 2030 Total</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elwyn to Wawa Rail Service</td>
<td>$26.81</td>
<td>$35.20</td>
<td>$47.59</td>
<td>$36.48</td>
<td>$31.78</td>
<td>$151.05</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$26.81</td>
<td>$35.20</td>
<td>$47.59</td>
<td>$36.48</td>
<td>$31.78</td>
<td>$151.05</td>
</tr>
</tbody>
</table>
## Project Descriptions

<table>
<thead>
<tr>
<th>Service Area</th>
<th>Location</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Project Description</th>
</tr>
</thead>
</table>

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.

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 railcar storage/maintenance yard and crew facility will be constructed on SEPTA property in Lenni, Delaware County.
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.

<table>
<thead>
<tr>
<th>Stations, Loops &amp; Parking Program Elements</th>
<th>Prior Year Funding FY 19</th>
<th>Budget FY 20</th>
<th>Program Years FY 21 FY 22 FY 23</th>
<th>12-Year Program Total FY 2030</th>
<th>Beyond FY 2030 Total</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Hall &amp; 15th Street Stations</td>
<td>$56.49 $9.94 $8.00 $6.65 $9.28 $24.72 $31.39 $89.98 $0.00 $146.47</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Exton Station &amp; Garage</td>
<td>$15.06 $9.53 $0.00 $0.00 $0.00 $0.00 $39.33 $48.86 $0.00 $63.92</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Levittown Station</td>
<td>$26.42 $7.52 $2.07 $0.00 $0.00 $0.00 $0.00 $9.59 $0.00 $36.01</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Paoli Transportation Center</td>
<td>$28.17 $6.77 $0.00 $0.00 $0.00 $0.00 $0.00 $51.19 $57.96 $0.00 $86.13</td>
<td></td>
<td></td>
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<tr>
<td>Parking Improvements</td>
<td>$11.17 $1.58 $4.04 $4.38 $6.65 $9.67 $133.05 $159.37 $53.50 $224.04</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Transit, Regional Rail Stations &amp; Loops</td>
<td>$109.84 $40.80 $63.60 $32.78 $29.17 $47.03 $211.34 $424.72 $0.00 $534.56</td>
<td></td>
<td></td>
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<tr>
<td>Villanova Station</td>
<td>$19.62 $1.55 $0.00 $0.00 $0.00 $0.00 $11.07 $12.62 $0.00 $32.24</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>TOTAL</td>
<td>$266.77 $77.69 $77.71 $43.81 $45.10 $81.42 $477.37 $803.10 $53.50 $1,123.37</td>
<td></td>
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<tr>
<td>Project Descriptions</td>
<td>Budget</td>
<td>Schedule / Status</td>
<td>Location</td>
<td>Service Area</td>
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<tr>
<td><strong>City Hall &amp; 15th Street Stations</strong></td>
<td>$146.47 M</td>
<td>15th Street &amp; City Hall Stations Design 2014 - 2019</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
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</tbody>
</table>

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.

The City Hall / 15th Street Stations project has been divided into the following phases:

- **Dilworth Park Phase (complete):** Included work to prepare for the park’s construction by the Center City District (CCD) and construction of the new station entrance in the park outside the west portal of City Hall; and elevator access through five new elevators connecting street level to the rebuilt farelines and 15th Street station 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 and widened corridors with ramps, improved ventilation structures, platform wall openings for easier connections, and new elevator shaftways from the City Hall Station mezzanines to the platforms.
- **City Hall Station:** Upgrades within City Hall Station including fitting out the elevator shaftways with elevators to complete ADA compliance and new or renovated platforms, stairs, lighting and amenities.
## Exton Station 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.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
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<tr>
<td>1</td>
<td>$24.42 M</td>
<td>Design Complete</td>
<td>Chester</td>
<td>Delaware Montgomey</td>
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<td></td>
<td></td>
<td>Construction 2015 - 2018</td>
<td></td>
<td>Philadelphia</td>
</tr>
<tr>
<td>2 &amp; 3</td>
<td>$39.5 M</td>
<td>Phase 2 &amp; 3:</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2024 - 2030 Project</td>
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</table>

## Levittown Station Reconstruction

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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$36.01 M</td>
<td>Design Complete</td>
<td>Bucks</td>
<td>Bucks</td>
</tr>
<tr>
<td></td>
<td>Construction 2015 - 2018</td>
<td></td>
<td>Philadelphia</td>
</tr>
</tbody>
</table>
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.

A companion PennDOT project will consist of the extension of Darby Road over the railroad, including a new bridge connecting to the station, and the removal of the North Valley Road bridge. The companion project must be completed prior to Phase 2 construction.

Phase 2 includes an intermodal station complex complete with an additional high-level platform on the outbound side, passenger amenities, enhanced bus facilities, and a 600-plus space commuter parking garage.
## STATIONS, LOOPS AND PARKING IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parking Improvements/Expansions (FY 2019 - 2023)</strong></td>
<td></td>
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</tr>
<tr>
<td><strong>69th Street Transportation Center Parking Garage</strong></td>
<td>$31.01 M</td>
<td>Design Complete</td>
<td>Delaware</td>
<td>Chester</td>
</tr>
<tr>
<td>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.</td>
<td>Phase 1</td>
<td>Construction 2015 - 2018</td>
<td></td>
<td>Delaware</td>
</tr>
<tr>
<td></td>
<td>Phase 2</td>
<td>Construction 2019- 2023</td>
<td></td>
<td>Montgomery</td>
</tr>
<tr>
<td><strong>Gwynedd Valley Station Parking</strong></td>
<td>$2.54 M</td>
<td>Design Complete</td>
<td>Montgomery</td>
<td>Montgomery</td>
</tr>
<tr>
<td>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.</td>
<td>Design Complete</td>
<td>Construction 2018 - 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Noble Station, Parking Garage and Storage Track</strong></td>
<td>$53.00 M</td>
<td>Design 2016 - 2019</td>
<td>Montgomery</td>
<td>Bucks</td>
</tr>
<tr>
<td>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.</td>
<td>Design 2016 - 2019</td>
<td>Construction 2022 - 2025</td>
<td></td>
<td>Montgomery</td>
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</table>
# STATIONS, LOOPS AND PARKING IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parking Improvements/Expansions (FY 2024 - 2030)</strong></td>
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</tr>
<tr>
<td><em>Ivy Ridge Parking Improvements</em></td>
<td>$35.00 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Montgomery</td>
</tr>
<tr>
<td>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.</td>
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</tr>
<tr>
<td><em>Philmont Station Parking</em></td>
<td>$25.00 M</td>
<td>2024 - 2030 Project</td>
<td>Montgomery</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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.</td>
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</tr>
<tr>
<td><em>Fern Rock Complex</em></td>
<td>$77.50 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Montgomery</td>
</tr>
<tr>
<td>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.</td>
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</table>
## Transit & Regional Rail Stations Program — Regional Rail (FY 2019 - 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.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Budget</th>
<th>Schedule / Status</th>
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<tbody>
<tr>
<td>Phase 1</td>
<td>$36.29 M</td>
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<td>Montgomey</td>
<td>Montgomery</td>
</tr>
<tr>
<td>Phase 2</td>
<td>$26.05 M</td>
<td>Construction 2019 - 2021</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$2.50 M</td>
<td>Ongoing</td>
<td>Bucks</td>
<td>Bucks</td>
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<tr>
<td></td>
<td></td>
<td>Chester</td>
<td>Chester</td>
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<td></td>
<td></td>
<td>Delaware</td>
<td>Delaware</td>
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<td></td>
<td></td>
<td>Montgomery</td>
<td>Montgomery</td>
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<td></td>
<td></td>
<td>Philadelphia</td>
<td>Philadelphia</td>
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</table>

### 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
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<tbody>
<tr>
<td></td>
<td>Construction 2022 - 2023</td>
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</table>
## STATIONS, LOOPS AND PARKING IMPROVEMENTS

### Project Descriptions

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
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</thead>
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<tr>
<td>Conshohocken Station</td>
<td>Station $15.00 M</td>
<td>Station Design 2018 - 2019 Construction 2019 - 2020</td>
<td>Montgomery</td>
<td>Montgomery Philadelphia</td>
</tr>
<tr>
<td></td>
<td>Parking $2.00 M</td>
<td>Parking Design 2019</td>
<td></td>
<td></td>
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<tr>
<td>In support of PennDOT’s I-76 Integrated Corridor Management (ICM), SEPTA is constructing 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. SEPTA is currently evaluating opportunities for a parking garage at Conshohocken Station and anticipates receiving a $2M FHWA Flex in FY 2019 to support the design effort.</td>
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<tr>
<td>East Falls Station</td>
<td>$19.50 M</td>
<td>Design &amp; Construction FY 2021 - 2025</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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.</td>
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<tr>
<td>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.</td>
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<tr>
<td>Malvern Station High Level Platforms</td>
<td>$15.26 M</td>
<td>Design 2021-2022 Construction 2023 - 2025</td>
<td>Chester</td>
<td>Chester Delaware Montgomery Philadelphia</td>
</tr>
<tr>
<td>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.</td>
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</table>
### 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.

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<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
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<tbody>
<tr>
<td>Phase 1 $21.20 M</td>
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<td>Delaware Philadelphia</td>
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<tr>
<td>Phase 2 $3.00 M</td>
<td>Construction 2015 - 2018</td>
<td>Phase 2</td>
<td>2024 - 2030 Project</td>
</tr>
</tbody>
</table>

### 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.

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<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
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<tbody>
<tr>
<td>$1.81 M</td>
<td>Design Complete</td>
<td>Construction 2018</td>
<td>Delaware</td>
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</tbody>
</table>

### 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.

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<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
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### Transit & Regional Rail Stations Program - Regional Rail (FY 2024 - 2030)

#### 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 Chester Delaware
- Marcus Hook Station on the Wilmington/Newark Regional Rail Line $22.50 M 2024 - 2030 Project Delaware
- Roslyn Station on the Warminster Regional Rail Line $6.50 M 2024 - 2030 Project Montgomery
- Wyndmoor Station on the Chestnut Hill East Regional Rail Line $19.50 M 2024 - 2030 Project Philadelphia
- Wynnewood Station on the Paoli/Thorndale Regional Rail Line $19.50 M 2024 - 2030 Project Montgomery
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.

- **Budget**: $19.45 M
- **Schedule / Status**: Design Complete, Construction 2018 - 2020
- **Location**: Philadelphia
- **Service Area**: 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.

- **Budget**: $9.50 M
- **Schedule / Status**: Design 2019 - 2020, Construction 2020 - 2022
- **Location**: Philadelphia
- **Service Area**: 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.

- **Budget**: $28.55 M
- **Schedule / Status**: Phase 1 2017 - 2018, Phase 2 2019 - 2021
- **Location**: Philadelphia
- **Service Area**: 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.

- **Budget**: $39.86 M
- **Schedule / Status**: Design Complete, Construction 2015 - 2018
- **Location**: Philadelphia
- **Service Area**: Philadelphia
## Project Descriptions

### 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; 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:

- **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 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$59.65 M</td>
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<tr>
<td></td>
<td>Phases 3, 5 - 8 2024 - 2030 Project</td>
<td></td>
<td>Delaware (State)</td>
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<td></td>
<td></td>
<td>Bucks</td>
<td>New Jersey</td>
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<td></td>
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<td>Chester</td>
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<td></td>
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<td>Delaware</td>
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</table>
## Project Descriptions

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<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Erie Station</strong></td>
<td>$9.00 M</td>
<td>Design 2021 - 2022</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
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<tr>
<td></td>
<td></td>
<td>Construction 2022 - 2024</td>
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<tr>
<td>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.</td>
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</tr>
<tr>
<td><strong>Fairmount Station</strong></td>
<td>$18.00 M</td>
<td>Preliminary Design 2019 - 2020</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Final Design &amp; Construction 2024 - 2030 Project</td>
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</tr>
<tr>
<td>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.</td>
<td></td>
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</tr>
<tr>
<td><strong>Susquehanna-Dauphin Station</strong></td>
<td>$14.94 M</td>
<td>Design 2016 - 2018</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction 2018 - 2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
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</tr>
<tr>
<td><strong>Tasker-Morris Station</strong></td>
<td>$9.8 M</td>
<td>Design 2017 - 2018</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction 2019 - 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
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</tr>
</tbody>
</table>
## STATIONS, LOOPS AND PARKING IMPROVEMENTS

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status (Calendar Year)</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stadium Station on the Norristown High Speed Line</strong></td>
<td>$3.00 M</td>
<td>Construction 2018 - 2019</td>
<td>Delaware</td>
<td>Delaware/Montgomery</td>
</tr>
<tr>
<td>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.</td>
<td></td>
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</tr>
</tbody>
</table>

| **Villanova Station on the Norristown High Speed Line** | $4.00 M | Design & Construction 2022 - 2023 | Delaware | Delaware/Montgomery |
| 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. | | | | |

| **Transit & Regional Rail Stations Program – Rail Transit (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 |
### STATIONS, LOOPS AND PARKING IMPROVEMENTS

#### Project Descriptions

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transit &amp; Regional Rail Stations Program – Bus &amp; Trolley Loops</strong> (FY 2019 - 2023)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modernization of bus and trolley loops including accessibility improvements and enhancements to shelters, loading platforms, lighting, landscaping and operator bathroom facilities. Locations include:</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>• Bethlehem Pike</td>
<td>$1.75 M</td>
<td>Design 2021 - 2022</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Ridge &amp; Summit</td>
<td>$1.75 M</td>
<td>Design 2023 - 2024</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td></td>
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</tr>
<tr>
<td>• Wissahickon Transportation Center (Includes property acquisition, entrance improvements)</td>
<td>$14.22 M</td>
<td>Design 2017 - 2018</td>
<td>Philadelphia</td>
<td>Montgomery</td>
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</tbody>
</table>

#### Transit & Regional Rail Stations Program – Bus & Trolley 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 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.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1: Design Complete Construction</td>
<td>$21.79 M</td>
<td>2016 - 2018</td>
<td>Delaware</td>
<td>Delaware Montgomery</td>
</tr>
<tr>
<td>Phase 2:</td>
<td>$10.45 M</td>
<td>2024 - 2030 Project</td>
<td>Delaware</td>
<td>Montgomery</td>
</tr>
</tbody>
</table>
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).
### 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.

- **Budget**: $60.00 M
- **Location**: Philadelphia
- **Service Area**: Bucks

#### Multimodal Substation Overhaul Program (FY 2019 - 2023)

**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.

- **Budget**: $28.23 M
- **Schedule / Status**: Design / Procurement 2016 - 2021
- **Location**: Bucks, Montgomery
- **Service Area**: Philadelphia

**Railroad Substations - Lansdale, Chestnut Hill East, 18th/12th/Portal, Hatboro**

Overhaul of the following railroad substations and switching stations. 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).

- Lansdale Substation on the Lansdale/Doylestown Regional Rail Line
- Chestnut Hill East Substation on the Chestnut Hill East Regional Rail Line
- 18th St./12th St./Portal Switching Stations in the Center City Tunnel
- Hatboro Substation on the Warminster Regional Rail Line

- **Budget**: $25.24 M
- **Schedule / Status**: Construction 2019 - 2022
- **Location**: Montgomery
- **Service Area**: Philadelphia, Delaware

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### Project Descriptions

<table>
<thead>
<tr>
<th>Substations</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Railroad Substations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Neshaminy, Bethayres, Yardley</td>
<td>$24.58 M</td>
<td>Construction 2018 - 2021</td>
<td>Bucks Montgomery</td>
<td>Bucks Montgomery New Jersey</td>
</tr>
<tr>
<td>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).</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Bethayres Substation on the West Trenton Regional Rail Line</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Neshaminy Substation on the West Trenton Regional Rail Line</td>
<td></td>
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</tr>
<tr>
<td>- Yardley Substation on the West Trenton Regional Rail Line</td>
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</tr>
<tr>
<td><strong>Transit Substations</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>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).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Market Substation on Market Street, serving the Market-Frankford Line and City Trolley Lines</td>
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</tr>
<tr>
<td>- Ellen Substation at Front &amp; Ellen Streets, serving the Market-Frankford Line and a portion of the Rt. 15 Trolley</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Ranstead Substation on Ranstead Street, serving the Market-Frankford Line and a portion of the Trolley Lines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Transit Substations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Park, Broad, Louden, Castor</td>
<td>$19.95 M</td>
<td>Construction 2020 - 2023</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>- Park Substation at Cumberland &amp; Park Streets, serving the Broad Street Line</td>
<td></td>
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<tr>
<td>- Broad Substation on Mt. Vernon Street, serving the Broad Street Line</td>
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<tr>
<td>- Louden Substation at Carlisle &amp; Louden Streets, serving the Broad Street Line and Rt. 75 Trackless Trolley</td>
<td></td>
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</tr>
<tr>
<td>- Castor Substation on Castor Avenue, serving the Route 59 Trackless Trolley</td>
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</tr>
</tbody>
</table>
## Substations and Power Improvements

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule/Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodbourne Substation</td>
<td>$23.49 M</td>
<td>Construction 2020 - 2023</td>
<td>Bucks</td>
<td>Bucks, Montgomery, Philadelphia, New Jersey</td>
</tr>
<tr>
<td>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).</td>
<td></td>
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</tbody>
</table>

### Railroad Substations (FY 2024 - 2030)

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule/Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allen Lane Substation</td>
<td>$15.00 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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.</td>
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</table>

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule/Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brill Substation Overhaul</td>
<td>$12.80 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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.</td>
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</table>

### Transit Substations (FY 2024 - 2030)

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule/Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transit Substation Program</td>
<td>$45.00 M</td>
<td>2024 - 2030 Project</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>Multi-year overhaul of other transit substations. Work includes installing new breakers, rectifiers, transformers, relays and switch gear.</td>
<td></td>
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</tbody>
</table>

### Power Improvements (FY 2019 - 2023)

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule/Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>30th Street West Catenary Replacement</td>
<td>$77.00 M</td>
<td>Design 2015 - 2018 Construction 2018 - 2022</td>
<td>Philadelphia</td>
<td>Bucks, Chester, Delaware, Montgomery, Philadelphia, Delaware (State), New Jersey</td>
</tr>
<tr>
<td>Replacement and upgrade of the overhead contact system including catenary structures from 30th Street Station to ‘K’ Interlocking and the Powelton Yard Complex.</td>
<td></td>
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</tr>
</tbody>
</table>
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).

<table>
<thead>
<tr>
<th>Track and Right-of-Way</th>
<th>Prior Year FY 19</th>
<th>Budget FY 20</th>
<th>Program Years FY 20-23</th>
<th>12-Year Program Total FY 2030</th>
<th>Beyond FY 2030</th>
<th>Total Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track and Right-of-Way</td>
<td>$17.70</td>
<td>$7.60</td>
<td>$11.74</td>
<td>$12.05</td>
<td>$7.00</td>
<td>$7.34</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$17.70</td>
<td>$7.60</td>
<td>$11.74</td>
<td>$12.05</td>
<td>$7.00</td>
<td>$7.34</td>
</tr>
</tbody>
</table>
## TRACK AND RIGHT-OF-WAY IMPROVEMENTS

### Project Descriptions

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

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trolley Tunnel Track Renewal</strong></td>
<td>$1.50 M</td>
<td>Design Complete</td>
<td>Philadelphia</td>
<td>Philadelphia</td>
</tr>
<tr>
<td>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.</td>
<td></td>
<td>Construction 2018</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Transit Projects (FY 2024 - 2030)

#### Street Track Improvements (Trolley Revenue, Non-Revenue and Diversion Routes)

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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>$27.25 M</td>
<td>2024 - 2030 Project</td>
<td>Delaware Philadelphia</td>
<td>Delaware Philadelphia</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
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<tbody>
<tr>
<td>$5.69 M</td>
<td>2024 - 2030 Project</td>
<td>Delaware Philadelphia</td>
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### 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.

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
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<td>$34.50 M</td>
<td>2024 - 2030 Project</td>
<td>Montgomery Philadelphia</td>
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VEHICLE ACQUISITIONS AND OVERHAULS

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.

<table>
<thead>
<tr>
<th>Vehicle Acquisitions and Overhaul - Program Elements</th>
<th>Prior Funding FY 19</th>
<th>Budget Year FY 19</th>
<th>Program Years FY 20</th>
<th>Program Years FY 21</th>
<th>Program Years FY 22</th>
<th>Program Years FY 23</th>
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<th>Beyond FY 2030 Total</th>
<th>Total Budget</th>
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<tr>
<td>Bus Purchase Program</td>
<td>$174.40</td>
<td>$103.05</td>
<td>$112.77</td>
<td>$107.06</td>
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<td>$591.53</td>
<td>$996.31</td>
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<td>TOTAL</td>
<td>$296.63</td>
<td>$263.74</td>
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<td>$1,731.73</td>
<td>$2,859.90</td>
<td>$1,453.87</td>
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Vehicle Inventory

| Regional Rail Locomotives | 8                   |
| Push/Pull Cars            | 45                  |
| Silverliner V’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                 |
VEHICLE ACQUISITIONS AND OVERHAULS

### Project Descriptions

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Budget</th>
<th>Schedule/Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
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<tr>
<td><strong>Bus Purchase Program (FY 2019 - 2030)</strong></td>
<td>$927.28 M</td>
<td>40-Ft. Electric Bus Purchase</td>
<td>Bucks, Chester, Delaware,</td>
<td>Bucks, Chester, Delaware (State), New Jersey</td>
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<td></td>
<td>$29.75 M</td>
<td>25 Buses Delivery 2018</td>
<td>Philadelphia</td>
<td>Delaware</td>
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<tr>
<td></td>
<td>$467.96 M</td>
<td>40-Ft. Hybrid Bus Purchase</td>
<td>Bucks, Chester, Delaware,</td>
<td>Montgomery, Philadelphia, New Jersey</td>
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<td></td>
<td></td>
<td>525 Buses Delivery 2017 - 2021</td>
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<td></td>
<td>$429.57 M</td>
<td>Balance of Program</td>
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</table>

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.

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.

### Paratransit Vehicle Purchase (FY 2019 - 2030)

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

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

In 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.

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**Note:** The table and text content are extracted from the document, preserving the structure and details as accurately as possible. The page number 66 indicates the page where this content is located in the document.
**VEHICLE ACQUISITIONS AND OVERHAULS**

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional Rail Electric Locomotive Acquisition (FY 2019 - 2023)</strong></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>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 consoles in the ergonomically-designed cab. Through the cab consoles, the engineer can monitor the performance of all locomotive systems in real time, and maintenance technicians can troubleshoot problems with an integrated maintenance manual.</td>
<td>$154.50 M</td>
<td>Contract Award Complete Delivery 2018</td>
<td>Regional Rail System</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey</td>
</tr>
<tr>
<td><strong>Regional Rail Multi-Level Car Acquisition (FY 2019 - 2023)</strong></td>
<td></td>
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</tr>
<tr>
<td>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.</td>
<td>$174.30 M</td>
<td>Contract Award Complete Delivery 2020 - 2021</td>
<td>Regional Rail System</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey</td>
</tr>
</tbody>
</table>
### Regional Rail Silverliner IV Replacement  (FY 2024 - 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.

- **Budget**: $1,100.00 M
- **Schedule / Status**: 2024 - 2030 and Beyond Project
- **Location**: Regional Rail System
- **Service Area**: 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.

SEPTA has been working with stakeholders through a visioning and conceptual design process led by the Delaware Valley Regional Planning Commission.
VEHICLE ACQUISITIONS AND OVERHAULS

Project Descriptions

<table>
<thead>
<tr>
<th>Utility Fleet Renewal (FY 2019 - 2030)</th>
</tr>
</thead>
<tbody>
<tr>
<td>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:</td>
</tr>
<tr>
<td>• Utility vehicles for transit and paratransit supervisors, and SEPTA police officers.</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
<tr>
<td>• 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.</td>
</tr>
<tr>
<td>• Service vehicles used for vehicle maintenance including wreckers, tow tractors, man lifts and pick-up trucks.</td>
</tr>
<tr>
<td>• Miscellaneous equipment such as generators, compressors, trailers, floor scrubbers and welding units.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>$74.00 M</td>
<td>Ongoing Program</td>
<td>System-Wide</td>
<td>Bucks Chester Delaware Montgomery Philadelphia Delaware (State) New Jersey</td>
</tr>
</tbody>
</table>
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 installations; 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 includes the phased 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.

<table>
<thead>
<tr>
<th>Project Descriptions</th>
<th>Budget</th>
<th>Schedule / Status</th>
<th>Location</th>
<th>Service Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Overhaul Program (FY 2019 - 2030)</td>
<td>$996.31 M</td>
<td>Annual program to overhaul a portion of each vehicle fleet</td>
<td>System-Wide</td>
<td>Bucks&lt;br&gt;Chester&lt;br&gt;Delaware&lt;br&gt;Montgomery&lt;br&gt;Philadelphia&lt;br&gt;Delaware (State)&lt;br&gt;New Jersey</td>
</tr>
</tbody>
</table>
FY 2019 CAPITAL BUDGET AND FY 2019-2030 CAPITAL PROGRAM

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

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</table>
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 study 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 given the changes in the area over the past decade in land use, population growth, the expansion of the King of Prussia Mall (the largest Mall complex in the United States) and the formation of a Business Improvement District (BID). 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. The project includes an Alternatives Analysis and Draft Environmental Impact Statement (AA/DEIS) which began in 2012 to evaluate the best route and potential environmental impacts. The goal of this study was to evaluate 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 providing 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. The study includes development of capital and operating costs, a simulation of service operations, appropriate environmental review steps as required by the National Environmental Policy Act (NEPA), 3D modeling of the locally preferred alternative, and significant outreach to the public as well as area stakeholders. Ridership modeling for each of the alternatives will also be developed by the Delaware Valley Regional Planning Commission (DVRPC). The AA/DEIS was completed in Fall 2017, and 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 will begin 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.

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.
APPENDIX B: LONG-TERM PLANNING EFFORTS

Project Descriptions

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 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 Pennridge in West Rockhill Township, with some degree of phasing. This project was placed on hold in 2012 pending the FTA finalization of new evaluation criteria for federal transit projects under MAP-21. DVRPC released updated ridership estimates in December 2015 as part of its FY15 Work Program.

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, 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 Bus” that provides a competitive transit alternative to personal vehicles. Boulevard Direct is SEPTA’s first foray into Bus Rapid Transit or BRT service. Boulevard Direct Bus Phase A was introduced in Fall 2017, featuring limited stops between the Neshaminy Mall and the Frankford Transportation Center, including enhanced bus shelters and uniquely branded buses. The new service is 30% faster than the Route 14 local service. Boulevard Direct Bus Phase B will connect Frankford Transportation Center and Wissahickon Transportation Center on the southern portion of Roosevelt Boulevard, and is expected in late 2019-2020 to coincide with the opening of the new Wissahickon Transportation Center.
APPENDIX B: LONG-TERM PLANNING EFFORTS

Project Descriptions

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.
APPENDIX B: LONG-TERM PLANNING EFFORTS

Project Descriptions

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
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 proposed FY 2019 Capital Budget and Fiscal Years 2019-2030 Capital Program.

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<thead>
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## APPENDIX C: BUDGET AND SCHEDULE CHANGES

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