



# Fiscal Year 2021 Capital Budget

## Fiscal Years 2021-2032 Capital Program



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**FISCAL YEAR 2021 CAPITAL BUDGET  
AND FISCAL YEARS 2021-2032 CAPITAL PROGRAM**

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**Southeastern Pennsylvania Transportation Authority**



**Approved by the SEPTA Board**

**June 25, 2020**

**Photographs on Cover - Pictures clockwise from top left:**

- *Circuit Breaker Installation at Yardley Substation on West Trenton Regional Rail Line*
- *Solar Panel Installation at 2nd & Wyoming Bus Maintenance Shop*
- *Paoli Transportation Center on Paoli/Thorndale Regional Rail Line*
- *Continuous Welded Rail Renewal along Norristown High Speed Line*
- *Bridge Installation for Service Restoration from Elwyn to Middletown Township, Delaware County on Media/Elwyn Regional Rail Line*
- *Paratransit Vehicle Replacement Program*
- *5th Street/Independence Hall Station Head House on Market-Frankford Line*

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# FY 2021 CAPITAL BUDGET AND FY 2021-2032 CAPITAL PROGRAM

## Overview and Summary

This document presents SEPTA's annual capital budget for Fiscal Year 2021 and the capital program for Fiscal Years 2021 through 2032. 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 for FY 2021 reflects anticipated federal and state grants as well as local matching funds and financing. The capital budget is organized as follows:

- Introduction to SEPTA
- Projects of Significance
- Sources of Capital Funding, with Funding Projections and Assumptions
- Uses of Capital Funding
- Program Progress
- FY 2021 Capital Budget and FY 2021 - 2032 Capital Program (Table)
- Descriptions of capital programs and individual projects
- Appendices



SEPTA's FY 2021 Capital Budget totals **\$640.22 million** and the 12-year Capital Program totals approximately **\$7.4 billion**. By comparison, the Board-approved FY 2020 Capital Budget totaled \$675.05 million and the FY 2020-2031 Capital Program totaled \$7.2 billion. The FY 2021 Capital Budget and 12-year Capital Program takes into account Federal funding assumed either via an extension to the Fixing America's Surface Transportation (FAST) Act or a new Surface Transportation Authorization; funding from the Commonwealth of Pennsylvania generated by Act 89 legislation; local match on federal and state funds; as well as anticipated capital financing. It is important to note that SEPTA may need to make adjustments to the Fiscal Year 2021 Capital Budget and 12-year capital program as a result of potential effects of the COVID-19 coronavirus on our funding sources. SEPTA will keep the public informed of any changes that may need to be necessitated by funding impacts resulting from COVID-19.

The passage of Act 89 in 2013 provided a long-term transportation funding solution for the Commonwealth of Pennsylvania. Over the past several years, this allowed SEPTA to initiate its "Rebuilding the System" capital program. This program advanced improvements throughout the transit network to bring transit assets into a state of good repair, modernize critical systems, and accommodate current and future ridership growth. SEPTA's capital program makes vital investments in the region's transportation infrastructure and is necessary to maintain transit assets in a state of good repair. SEPTA's Transit Asset Management System (TAMS) maintains comprehensive asset inventories and maintenance information for rolling stock and fixed assets such as bridges, stations, and rail. TAMS provides the data required to inform investment decisions that are reflected in the FY 2021 Capital Budget and 12-year Capital Program. As SEPTA looks towards the future, the Authority will continue to focus on addressing state of good repair while laying the framework for advancing its Projects of Significance. This effort requires a larger regional, Statewide, and national discussion of transit funding available to advance SEPTA's capital program within and beyond the 12-year capital program.

SEPTA will continue to advance its capital program including improvements to critical infrastructure such as substations, bridges, track and stations. SEPTA also proposes funding to support early actions to advance some of the Projects of Significance detailed in this budget document. The capital program provides for safety and security enhancements, along with modernization of communications and signal equipment. The SEPTA Key project continues to replace antiquated fare technology with modern payment technology. The Authority is replacing rail vehicles that have far exceeded their useful life. The fleet of hybrid diesel-electric buses is being expanded and pilot electric bus projects are being evaluated. Vehicle overhauls are being performed to optimize vehicle performance. SEPTA is also in the process of restoring rail service between Elwyn and a new station at US Route 1 in Middletown Township, Delaware County. The capital program includes annual financial obligations such as debt service and capital lease payments.

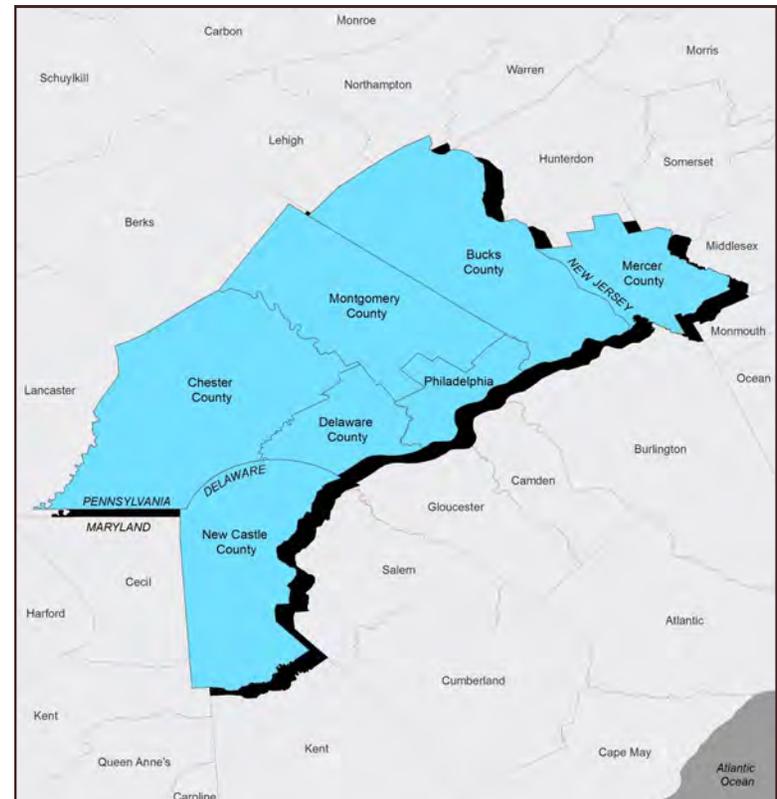
# FY 2021 CAPITAL BUDGET AND FY 2021-2032 CAPITAL PROGRAM

## Introduction to SEPTA

SEPTA is the nation’s fifth-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 City of Philadelphia and four counties in southeastern Pennsylvania: Bucks, Chester, Delaware and Montgomery. The service area also extends to Trenton and West Trenton in New Jersey, and Wilmington and Newark in Delaware.

SEPTA operates the following services:

- 120 bus routes
- 5 small bus circulator and shuttle services
- 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



| Service / Mode             | Ridership          | Revenue Vehicles |
|----------------------------|--------------------|------------------|
| Bus                        | 137,668,361        | 1,462            |
| Regional Rail              | 34,191,260         | 396              |
| Trolley                    | 24,404,182         | 159              |
| Subway/Elevated            | 87,427,791         | 343              |
| Norristown High Speed Line | 3,104,753          | 26               |
| Trackless Trolley          | 4,547,614          | 38               |
| Demand Response            | 1,513,266          | 460              |
| <b>Total</b>               | <b>292,857,227</b> | <b>2,884</b>     |

Source: FY 2019 SEPTA Operating Statistics, Year ended June 30, 2019

Southeastern PA is the Commonwealth’s key economic engine. THE FIVE COUNTIES GENERATE **41% OF STATE’S ECONOMIC ACTIVITY WITH 32% OF ITS POPULATION ON 5% OF ITS LAND.** This degree of economic productivity and density is not possible without transit to efficiently move people throughout the region.

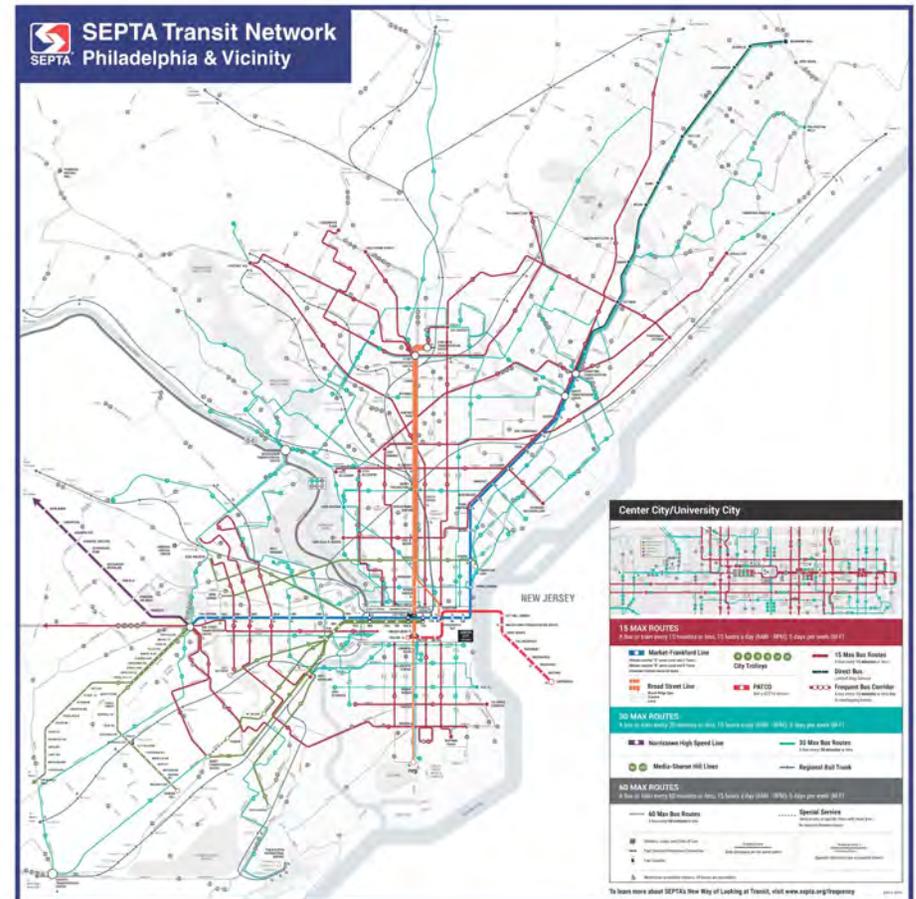
A map of the five SEPTA counties: Montgomery, Bucks, Chester, Philadelphia, and Delaware. The map is overlaid on a larger map of Pennsylvania, with the five counties highlighted in a darker blue color.

## SEPTA Transit Network Maps

### Railroad and Rail Transit



### Frequent Transit Network



**SEPTA's Value Proposition**

**Drives the Economy**

The five counties of Southeastern Pennsylvania generate 41% of the state's economic output on 5% of its land, a degree of economic productivity and density that is only possible with high-capacity mass transit.

**Supports Equity & Quality of Life**

Transit is preserving affordability and access to opportunity in a growing region. Using mass transit is more affordable than driving, saving the average Philadelphia household close to \$1,000 in annual cost of living.

**Promotes Public Health & Safety**

Using mass transit is ten times safer than driving and promotes healthy lifestyles that meet physician recommendations for daily physical activity.

**Advances Sustainability**

Using mass transit reduces carbon emissions from transportation, which at 28% is now the largest sector source of carbon in the United States. In Philadelphia, transportation only represents 17% of carbon emissions thanks to a culture of low and no-carbon travel, including mass transit.

**LEADERS IN SOUTHEASTERN PENNSYLVANIA AGREE:**



# FY 2021 CAPITAL BUDGET AND FY 2021-2032 CAPITAL PROGRAM

## SEPTA has a Profound Impact on Southeastern Pennsylvania

### PRESERVING AFFORDABILITY IN A GROWING CITY

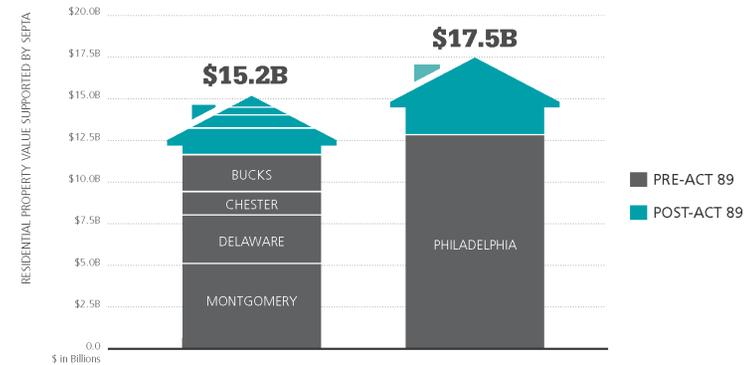
**Transit reduces household expenses.** In the City of Philadelphia, **THE AVERAGE HOUSEHOLD SAVES \$830 PER YEAR**, a net financial benefit associated with proximity to high-quality transit. These annual household savings add up to **\$481M CITYWIDE**.

#### IMPACT OF HIGH QUALITY TRANSIT

| Category                      | Item           | Icon        | Value           | Source                     |
|-------------------------------|----------------|-------------|-----------------|----------------------------|
| HOUSING                       | Premium        | House       | <b>+\$870</b>   | From Transit's Added Value |
|                               | Car Ownership  | Car         | <b>-\$1,670</b> | From Fewer Vehicles        |
| TRANSPORTATION                | Car Driving    | Fuel Pump   | <b>-\$530</b>   | From Less Fuel Usage       |
|                               | Public Transit | Bus         | <b>+\$500</b>   | From More Transit Use      |
| Average Savings Per Household |                | Dollar Sign | <b>\$830</b>    | <b>MORE AFFORDABLE</b>     |

### RESIDENTIAL PROPERTY VALUE INCREASES BASED ON PROXIMITY TO SEPTA TRANSIT

Access to transit increases home values. Statistical models allow economists to isolate this value through the analysis of housing sales. **ACCESS TO SEPTA SERVICE CONTRIBUTES A PREMIUM OF \$33 BILLION IN HOUSING VALUE**, representing **11% OF TOTAL HOUSING VALUE IN SOUTHEASTERN PA.**



## ...And the Entire Commonwealth of Pennsylvania.

### SEPTA PROCUREMENT OF GOODS AND SERVICES SUPPORTS JOBS AND ECONOMIES ACROSS PENNSYLVANIA

With funding from Act 89, SEPTA continues to invest in Pennsylvania businesses. Over the past five years (2015 – 2019), SEPTA has issued a total of **\$1.3B IN CONTRACTS TO PA COMPANIES**, an average annual value of **\$260M PER YEAR**.



SEPTA generates more than **\$3 billion** in annual statewide economic activity.



NOTE: ECONOMIC IMPACT NUMBERS REPRESENT FY2015 - FY2017 (IN \$2017) AVERAGE ANNUAL

# FY 2021 CAPITAL BUDGET AND FY 2021-2032 CAPITAL PROGRAM

## Recent Achievements

### SEPTA Awarded Federal Grant to Advance Next Phase of Boulevard Direct Service

SEPTA was awarded a \$2 million federal grant to design and construct Phase B of its Boulevard Direct bus service and provide high-frequency, limited stop service between Frankford Transportation Center and Wissahickon Transportation Center. SEPTA worked with the City of Philadelphia to pursue funding from the Federal Transit Administration's (FTA) Grants for Buses and Bus Facilities Program.

### SEPTA Continues to be a Sustainability Leader in the Transit Industry

SEPTA has been a transit industry leader in sustainability by focusing on projects that both make financial sense and lay the foundation for a green future. SEPTA's Sustainability Program, SEP-TAINABLE, recently implemented three projects that reinforce SEPTA's commitment to reducing energy consumption and greenhouse gases (GHG): A solar power purchase agreement, a solar-powered train signal system, and a comprehensive energy retrofit of several of its largest facilities.

### SEPTA implemented Key Tap-to-Exit to all Center City Regional Rail Stations

SEPTA introduced tap to exit to customers at its five (5) Center City Stations: Temple University, Jefferson Station, Suburban Station, 30th Street Station and Penn Medicine Station. The tap-to-exit rollout was designed to help customers prepare for the full implementation of the SEPTA Key on Regional Rail.

### SEPTA Enhanced Regional Rail Service for I-95 Reconstruction

SEPTA bolstered schedules and added capacity on the Trenton and West Trenton Lines to accommodate current riders and make room for more to use Regional Rail as an alternative during the reconstruction of I-95. SEPTA leased five rail coach cars from the Maryland Area Regional Commuter (MARC) rail system to help with these service enhancements and intends to utilize the new multi-level railcars along the I-95 corridor.



# SEPTA'S PROJECTS OF SIGNIFICANCE

## Southeast Partnership for Mobility

The Southeast Partnership for Mobility is a coalition of transportation stakeholders including SEPTA, the Pennsylvania Turnpike Commission, and PennDOT, with an advisory council made up of major employers, civic leaders, elected officials, and transportation agencies. The Partnership was formed in 2017 and convened four times in 2018 and 2019 to develop a vision for regional mobility, transportation investment and financing opportunities. The final report, published in 2019, is available at: [www.pamobilitypartnerships.com](http://www.pamobilitypartnerships.com). Some of the report's key principles that SEPTA continues to work to address are:

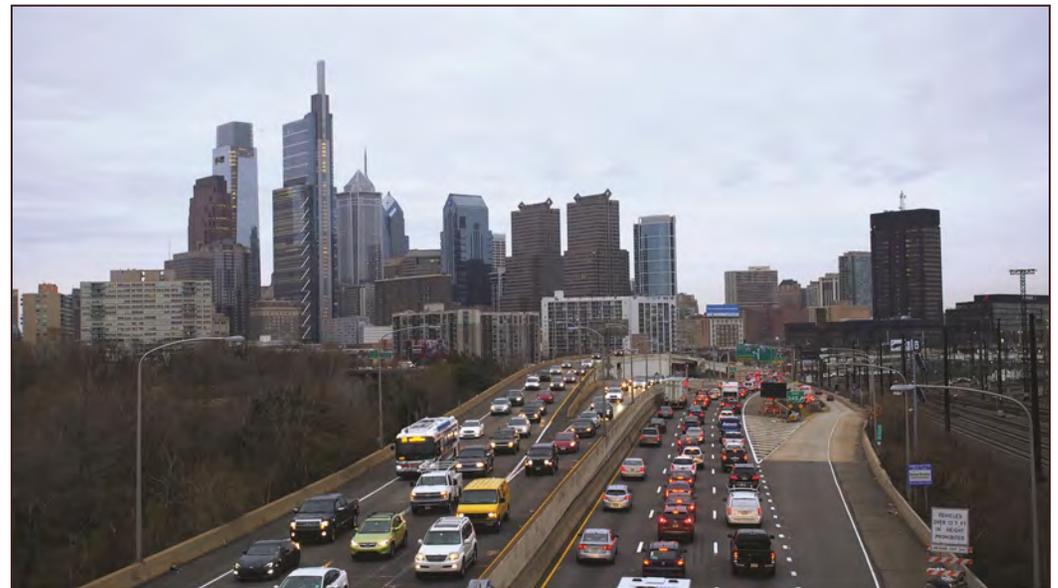
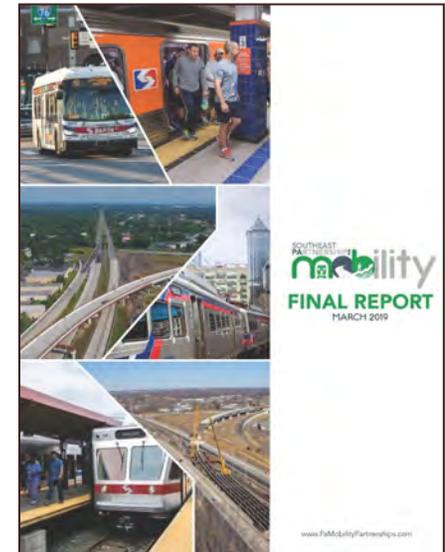
- Transportation is not a cost – it is an investment that supports SEPTA's value proposition.
- Other regions within the Northeastern United States are making higher levels of investment in mass transit. These investments are noticed by companies and employees as they decide where to locate business or where to work.
- Without investment in transit, the Philadelphia region is at risk of losing business and people to other regions that are making the choice to invest in transit.

## Projects of Significance

SEPTA continues to seek long-term funding to complete Projects of Significance highlighted for SEPTA in the Partnership's Final Report. These projects are viewed as key initiatives in meeting the region's transportation needs, accommodating the growing economy and addressing traffic congestion, but they will require additional, bondable revenue sources to complete.

SEPTA's current Transit Projects of Significance are shown on the following pages and include: Trolley Modernization; the King of Prussia Rail project; Rail Capacity Improvements; and, Comprehensive Bus Network Redesign. These transformative projects will permit increases in transit capacity and improved service quality, while generating additional tax revenues and promoting job growth across the region.

In this budget, SEPTA is proposing to provide funding to support initial design for the KOP Rail project and early action projects for Trolley Modernization. These early actions are discussed in more detail within the *Projects of Significance: Early Actions* program of projects on pages 39 - 41.



# SEPTA'S PROJECTS OF SIGNIFICANCE

## Trolley Modernization

### Project Highlights

- Acquisition of new trolleys and Infrastructure Improvements
- Will provide a completely ADA accessible system for all ages & abilities
- Results include improved customer experience, increased capacity, and a higher degree of cost effectiveness
- Ongoing partnerships with stakeholders and Delaware Valley Regional Planning Commission (DVRPC)

The \$1.55 billion Trolley Modernization Program will fund the purchase of modern light rail vehicles to replace the current fleet. The existing trolleys are beyond their useful life and are not ADA accessible.

Various planning and engineering initiatives are underway to support advancement of the Trolley Modernization Program. Funds have been identified to advance an early action phase, which includes vehicle specification development to support the future construction of a new trolley maintenance and storage facility, development of preliminary modern trolley station design concepts, evaluation of capacity and ridership trends, and investigating potential funding sources to support and advance the project.



*Rendering of modern vehicle and customer environment*

## King of Prussia (KOP) Rail

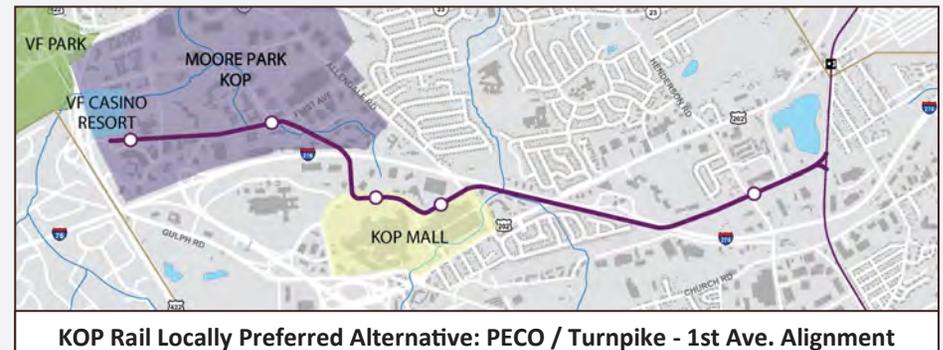
### Project Highlights

- 4.0 miles of elevated rail (8 track miles)
- 5 new fully ADA-compliant stations
- 2 park-and-ride facilities
- Total increase in ridership of 9,500 daily trips, doubling ridership on the NHSL
- Total travel time from 13th and Market Street to end of extension in under 40 minutes
- The Final Environmental Impact Statement (FEIS) is underway. 15% design funded

This project will provide an extension of the Norristown High Speed Line (NHSL) to King of Prussia. The project will promote and strengthen regional growth by connecting the three largest employment centers in the region: Center City, University City and King of Prussia. The extension will provide a high-quality transportation option for SEPTA's passengers, who currently endure unpredictable and longer than desired travel times due to growing congestion.

SEPTA is currently evaluating funding strategies to advance this project to the 30% design level. Final design and construction is currently estimated to cost over \$1.2 billion and will require additional sources of funding.

Project updates are available at the following website: <http://www.koprail.com/>



# SEPTA'S PROJECTS OF SIGNIFICANCE

## Rail Capacity Improvements

### Project Highlights

- The MFL serves some of the region's fastest growing neighborhoods and job centers. The MFL connects with all rail routes and 2/3 of bus routes and ridership on the line has significantly grown since 2000
- SEPTA's Silverliner IV railcar fleet, which was built between 1974 and 1976, is reaching the end of their useful life

SEPTA is currently exploring options to enhance capacity on its Market-Frankford Line (MFL) and Regional Rail network. This project will increase capacity on the MFL and RRD via associated vehicle procurement and infrastructure improvements.

The MFL is SEPTA's workhorse, the most heavily traveled route in SEPTA's transit network with 178,975 weekday riders in 2019. SEPTA's Regional Rail ridership has increased 52 percent since 2000 with virtually no new capacity added. The new regional railcars will replace the aging Silverliner IV fleet and increase capacity.

Current funding will not allow SEPTA to utilize an option it has on a New Jersey Transit procurement to begin the replacement of the Silverliner IV fleet nor pursue associated vehicle procurements on the MFL. Additional funding is also needed to complete all infrastructure upgrades.



## Comprehensive Bus Network Redesign

### Project Highlights

- Will address current and future bus ridership and bus network operating needs
- SEPTA's Bus Frequency Maps are an early roll-out of bus network redesign efforts

To ensure its bus network reflects recent ridership trends and to anticipate future ridership needs, SEPTA is undertaking a Comprehensive Bus Network Redesign (CBNR). Recently, SEPTA worked with Jarrett Walker and Associates (JWA) to assess the existing City Transit bus network, and explore if a bus network redesign would be valuable to help address bus ridership needs. In 2018, SEPTA and JWA released the result of the study, the Philadelphia Bus Network Choices Report.

The Philadelphia Bus Network Choices Report is only a first look. Now that the initial assessment is complete, SEPTA is taking the findings of this report and is undertaking the CBNR process.

More information regarding CBNR as well as the Philadelphia Bus Network Choices Report are available on SEPTA's website at <http://septa.org/service/bus/network/>.



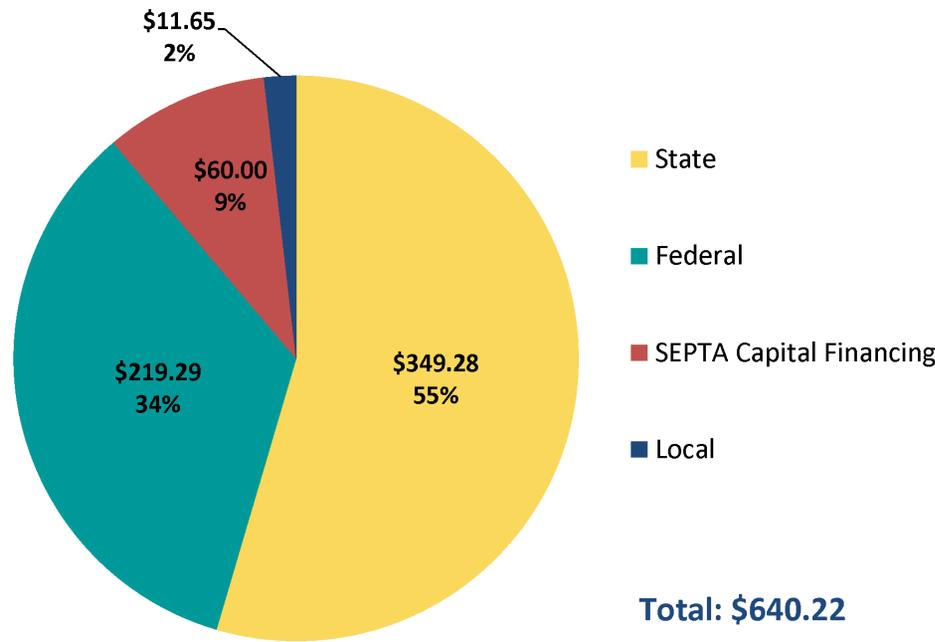
# SOURCES OF CAPITAL FUNDING

## FY 2021 Capital Budget

SEPTA's FY 2021 Capital Budget totals \$640.22 million and the FY 2021—2032 Capital Program totals \$7.4 billion. The chart below illustrates anticipated funds by source.

Federal funding authorization under the Fixing America's Surface Transportation Act (FAST Act) expires on September 30, 2020. For the FY 2021 Capital Budget, federal formula funding assistance is assumed to be equal to the amount SEPTA received from the Federal Transit Administration (FTA) in FY 2020.

## FY 2021 Funds by Source (\$M)



## State Funds: \$349.28 Million

SEPTA's FY 2021 Capital Budget includes \$349.28 million in state funds. The actual amount provided will be determined by PennDOT during the annual grant application process.

Act 89 of 2013 provided new State revenues for transportation 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 allowed SEPTA to begin addressing 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 initiated the "Rebuilding for the Future" initiative in its FY 2015 capital program.

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 on July 1, 2022. 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 non-federal capital projects. The remaining 3.225 percent is matched by Bucks, Chester, Delaware and Montgomery Counties and the City of Philadelphia. SEPTA also uses state transit funds to match federal grants, with the state share being 19.355 percent of the total project cost when used in this manner. The remaining 0.645 percent is matched by the four regional counties and City of Philadelphia.

## SOURCES OF CAPITAL FUNDING

### Federal Funds: \$219.29 Million

SEPTA's FY 2021 Capital Budget includes an estimated \$219.29 million in federal funds. Federal funding sources and FY 2021 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 primarily uses flex funds for bus replacements.

In 2015, President Obama signed into law the Fixing America's Surface Transportation (FAST) Act. Over its 5-year lifespan, the FAST Act authorized \$305 billion for surface transportation funding, including \$61 billion dedicated for public transportation. With the expiration of the FAST Act authorization period occurring September 30, 2020, SEPTA assumes funding levels for FY 2021 that are equal to the amount received from FAST Act authorized programs in FY 2020. SEPTA is participating in transit industry conversations regarding the next surface transportation authorization bill. The actual amount derived from federal funds will be determined once a reauthorization or extension of the FAST Act authorization period is enacted.

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 FY 2021 budget also includes \$1.46 million in projected Transit Security Grant Program (TSGP) funds allocated through competitive grants administered by the Federal Emergency Management Agency (FEMA). The Authority applies for other competitive federal grants when available. In recent years, SEPTA has received a variety of discretionary grant awards to support capital projects, such as Phase B of Boulevard Direct Bus Service and Fern Rock Yard Safety & Security Improvements. SEPTA recently received awards for battery electric bus power infrastructure upgrades and - in partnership with Amtrak and PennDOT - for the restoration of 10 miles of track west of Paoli on the Paoli/Thorndale Line.

| FY 2021 Capital Budget: Federal Funding Estimates |   |                   |
|---|---|-------------------|
| Program   | Description   | Amount (Millions) |
| FTA Section 5307                                  | Urbanized Area Formula Program. Funds transit capital projects. Allocations based on population, density, operating expenses, revenue miles and route miles.  | \$68.04           |
| FTA Section 5340                                  | Growing States and High Density States Formula Program. Allocations based on population forecasts and population density. SEPTA receives Growing States program funding.  |                   |
| FTA Section 5337                                  | State of Good Repair Program. Funds High Intensity Fixed Guideway (rail) and High Intensity Motorbus capital projects. Allocations based on vehicle revenue miles and route miles.  | \$121.49          |
| FTA Section 5339                                  | Bus and Bus Facilities Formula Program. Funds capital projects to replace, rehabilitate or purchase buses and related facilities. Allocations based on population and service factors after providing a minimum amount per state.   | \$9.21            |
| Highway Flex                                      | Federal highway program funds that PennDOT provides to state transit agencies for capital improvement projects. Based on the Governor's commitment, a minimum of \$25 million per year is flexed annually to transit operators. Federal funding is also flexed to support highway projects, such as I-95 reconstruction and I-76 congestion mitigation. | \$19.08           |
| Transit Security Grant Program                    | Competitive grant program administered by Federal Emergency Management Agency (FEMA). Provides funds for anti-terrorism, safety and security improvements, and operational activities such as directed patrols.   | \$1.46            |
| <b>Total Federal</b>                              |   | <b>\$219.29</b>   |

## SOURCES OF CAPITAL FUNDING

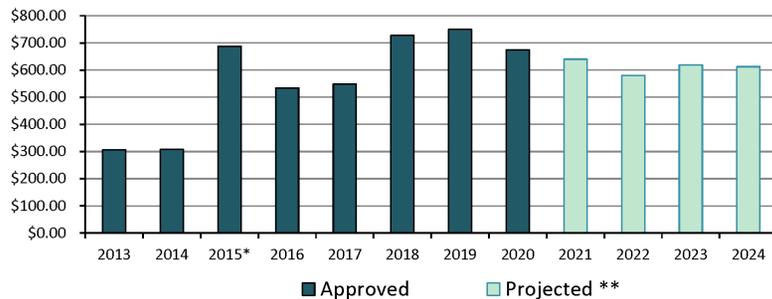
### Local Funds: \$11.65 Million

SEPTA's FY 2021 Capital Budget includes \$11.65 million in anticipated local matching funds. The required local match for state and federal 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: \$60.00 Million

SEPTA issued \$120.0 million principal amount of Capital Grant Receipts Bonds to fund the acquisition of 140 of the remaining 525 New Flyer hybrid-electric buses. \$60.0 M of the total principal will be utilized in FY 2021 to complete this bus purchase one year ahead of schedule. Refer to the "Financial Obligations" section for more information about capital financing.

Capital Budget, FY 2013 - 2024



\* FY 2015 included federal Hurricane Sandy Resilience funds.

\*\* State funding levels are based on PennDOT financial guidance as of June 25, 2020.

### Funding Projections and Assumptions

Annual capital funding for SEPTA is illustrated in the chart below. The FAST Act authorizes federal funding for surface transportation programs through September 30, 2020. For FY 2021, SEPTA's funding projections reflect the federal amount apportioned to SEPTA in FY 2020. Federal funding is projected to remain flat in subsequent years of the 12-year program. Once passage of a new surface transportation bill occurs, SEPTA's projections will be updated to reflect the new authorized funding levels.

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 and service expansion, while fostering job growth and economic development.

State funding levels are based on PennDOT financial guidance at the time the FY 2021 Capital Budget and FY 2021 - 2032 Capital Program was approved by the SEPTA Board on June 25, 2020. Funding provided under Act 89 is forecasted to total \$349.82 million in FY 2021. Funding for FY 2022 is slightly higher than the FY 2021 level. Starting in FY 2023, funding for the Public Transportation Trust Fund currently provided by the Pennsylvania Turnpike is scheduled to be replaced by new revenue sources, including sales and use taxes.

The 2021 Capital Budget includes anticipated funding provided via Capital Grant Receipts Bonds. Funding up to \$120 million in FYs 2020 and 2021 will allow SEPTA to expedite its purchase of 525 New Flyer hybrid-electric buses. SEPTA and New Flyer agreed to an expedited delivery schedule that results in overall cost savings of \$1.3 million for the Authority.

SEPTA's FY 2021 Capital Budget and FY 2021-2032 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.

# USES OF CAPITAL FUNDING

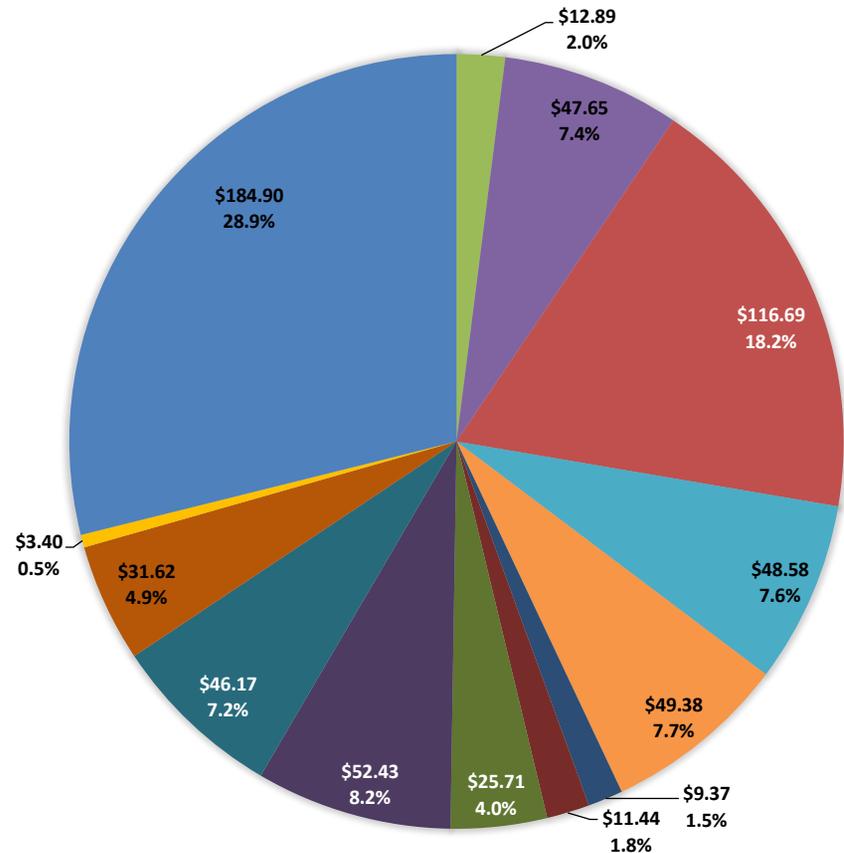
## FY 2021 Capital Budget - Summary

SEPTA's proposed FY 2021 Capital Budget totals **\$640.22 million**. Total projected FY 2021 spending 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 grouped into the following programs:

- **Bridge Program (\$12.89M):** Includes Regional Rail Stone Arch Bridges Phase 2, the Critical Bridge Program, and other bridge repairs.
- **Communications, Signal Systems and Technology Improvements (\$47.65M):** Includes a variety of improvements to signals, interlockings, dispatching and operations management systems, real-time information and other technology.
- **Financial Obligations (\$116.69M):** Includes SEPTA's Amtrak trackage lease, other capital asset leases and debt service payments.
- **Infrastructure Safety Renewal Program (\$48.58M):** Includes track replacement; station renewal; rehabilitation of signals, communications equipment, traction and power systems; and rehabilitation of maintenance facilities.
- **Maintenance/Transportation Shops and Offices (\$49.38M):** 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 and Wayne Car Shop to accommodate planned additions to the Regional Rail fleet.
- **Projects of Significance: Early Actions (\$9.37 M):** Includes early action design activities for King of Prussia Rail (KOP Rail) and Trolley Modernization projects.
- **Safety and Security Improvements (\$11.44 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 (\$25.71 M):** Includes modernization of SEPTA's fare payment system and companion projects.
- **Service Restoration and Improvements (\$52.43 M):** Rail Service Restoration to station at Route 1 in Middletown and Phase B of Boulevard Direct Bus Service.
- **Stations, Loops and Parking Improvements (\$46.17M):** Reconstruction or rehabilitation of SEPTA stations and parking expansions and improvements with a focus on accessibility.

- **Substations and Power Improvements (\$31.62M):** Modernization of SEPTA's railroad and transit substations, originally built in the 1920s and 1930s, and catenary replacement.
- **Track and Right-of-Way Improvements (\$3.40M):** To return rail infrastructure to a state of good repair. Includes tie replacement and continuous welded rail (CWR).
- **Vehicle Acquisitions and Overhauls (\$184.90M):** Replacing vehicles that have exceeded their useful life, acquisition of 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: \$640.22 Million**

# PROGRAM PROGRESS

## 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:

- 15th Street Station
- 103 Victory Avenue Facility Improvements
- Arrott Transportation Center
- Delivery of 25 Proterra 40-foot electric buses
- Electric Locomotives - 15 Delivered and in service
- Exton ADA Station Improvements
- Frazer Shop & Yard Track and Shop
- Lenni Substation
- Levittown Station
- Paoli Transportation Center
- Secane Station
- Stadium Station on Norristown High Speed Line
- Victory Bus Washer Roof Replacement
- Villanova Station – Phase 1
- Woodland Avenue Bridge

These investments are just a sample of the many projects implemented by SEPTA since the passage of Act 89 that helped the Authority to reduce the State of Good Repair backlog.



## **FY 2021 CAPITAL BUDGET AND FY 2021-2032 CAPITAL PROGRAM**

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### **Capital Program and Project Descriptions**



## FY 2021 CAPITAL BUDGET AND FY 2021-2032 CAPITAL PROGRAM

| Capital Programs /<br>Financial Obligations                   | Prior<br>Funding  | Budget          | Program Years   |                 |                 |                 | FY 2026-<br>2032  | 12-Year           | Beyond<br>FY 2032 | Total<br>Budget   |
|---|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|
|   |                   | Year<br>FY 21   | FY 22           | FY 23           | FY 24           | FY 25           |                   | Program<br>Total  |                   |                   |
| -----\$Millions-----  |                   |                 |                 |                 |                 |                 |                   |                   |                   |                   |
| <b>Capital Programs</b>                                       |                   |                 |                 |                 |                 |                 |                   |                   |                   |                   |
| Bridge Program  | \$20.37           | \$12.89         | \$13.97         | \$25.34         | \$25.45         | \$24.89         | \$166.64          | \$269.19          | \$0.00            | \$289.56          |
| Communications, Signal Systems and<br>Technology Improvements | \$323.04          | \$47.65         | \$46.92         | \$38.59         | \$38.00         | \$32.08         | \$250.86          | \$454.10          | \$0.00            | \$777.15          |
| Infrastructure Safety Renewal Program                         | \$0.00            | \$48.58         | \$49.58         | \$50.58         | \$51.58         | \$52.58         | \$396.03          | \$648.90          | \$0.00            | \$648.90          |
| Maintenance/Transportation Shops and<br>Offices               | \$114.56          | \$49.38         | \$26.51         | \$23.00         | \$20.02         | \$20.75         | \$88.71           | \$228.38          | \$0.00            | \$342.94          |
| Projects of Significance: Early Actions                       | \$25.02           | \$9.37          | \$5.55          | \$6.00          | \$10.00         | \$10.00         | \$10.00           | \$50.92           | \$0.00            | \$75.94           |
| Safety and Security Improvements                              | \$40.66           | \$11.44         | \$21.49         | \$20.98         | \$18.69         | \$18.75         | \$181.82          | \$273.16          | \$0.00            | \$313.83          |
| SEPTA Key   | \$253.01          | \$25.71         | \$14.03         | \$9.55          | \$0.00          | \$0.00          | \$0.00            | \$49.29           | \$0.00            | \$302.30          |
| Service Restoration and Improvements                          | \$113.35          | \$52.43         | \$21.91         | \$7.76          | \$0.00          | \$0.00          | \$0.00            | \$82.10           | \$0.00            | \$195.45          |
| Stations, Loops and Parking Improvements                      | \$340.19          | \$46.17         | \$42.31         | \$44.17         | \$60.99         | \$74.40         | \$640.77          | \$908.81          | \$64.15           | \$1,313.15        |
| Substations and Power Improvements                            | \$71.40           | \$31.62         | \$31.05         | \$44.77         | \$46.81         | \$47.91         | \$230.15          | \$432.30          | \$0.00            | \$503.70          |
| Track and Right-of-Way Improvements                           | \$11.37           | \$3.40          | \$3.65          | \$4.69          | \$4.79          | \$4.69          | \$65.29           | \$86.51           | \$17.90           | \$115.78          |
| Vehicle Acquisitions and Overhauls                            | \$627.54          | \$184.90        | \$202.60        | \$219.45        | \$208.15        | \$196.46        | \$1,421.75        | \$2,433.31        | \$0.00            | \$3,060.85        |
| <b>Financial Obligations</b>                                  |                   |                 |                 |                 |                 |                 |                   |                   |                   |                   |
| Capital Asset Leases  | \$0.00            | \$60.10         | \$61.92         | \$63.78         | \$65.70         | \$67.67         | \$534.41          | \$853.58          | \$0.00            | \$853.58          |
| Debt Service  | \$0.00            | \$56.59         | \$40.95         | \$62.52         | \$62.10         | \$62.10         | \$299.41          | \$583.67          | \$0.00            | \$583.67          |
| <b>Total Capital Budget</b>                                   | <b>\$1,940.51</b> | <b>\$640.22</b> | <b>\$582.44</b> | <b>\$621.19</b> | <b>\$612.27</b> | <b>\$612.27</b> | <b>\$4,285.83</b> | <b>\$7,354.22</b> | <b>\$82.05</b>    | <b>\$9,376.78</b> |

## BRIDGE PROGRAM

SEPTA owns and maintains more than 350 bridges. The majority of structures were constructed in the early 1900s or earlier. The bridge program consists of renewal and rehabilitation that will restore the structures to a state of good repair and extend their useful life.



Stone Arch Bridge West Trenton 15.95 - 1876

| Bridge Program -<br>Program Elements | Prior<br>Funding | Budget         | Program Years  |                |                |                | FY 2026 -       | 12-Year          | Beyond        | Total           |
|--------------------------------------|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|------------------|---------------|-----------------|
|                                      |                  | Year<br>FY 21  | FY 22          | FY 23          | FY 24          | FY 25          | 2032            | Program<br>Total | FY 2032       | Budget          |
| -----\$Millions-----                 |                  |                |                |                |                |                |                 |                  |               |                 |
| Bridge Program                       | \$20.37          | \$12.89        | \$13.97        | \$25.34        | \$25.45        | \$24.89        | \$166.64        | \$269.18         | \$0.00        | \$289.55        |
| <b>TOTAL</b>                         | <b>\$20.37</b>   | <b>\$12.89</b> | <b>\$13.97</b> | <b>\$25.34</b> | <b>\$25.45</b> | <b>\$24.89</b> | <b>\$166.64</b> | <b>\$269.18</b>  | <b>\$0.00</b> | <b>\$289.55</b> |



Mainline Schuylkill Bridges - 1929



Bridgeport Viaduct (Bridge 12.81) - 1911

## BRIDGE PROGRAM

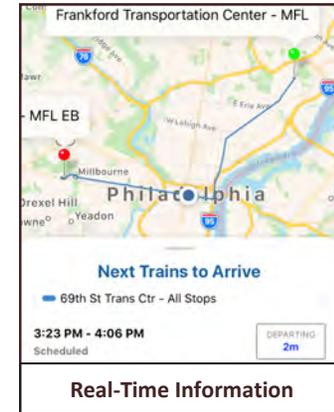
| Project Descriptions   | Budget               | Schedule / Status<br>(Calendar Year)                      | Location   | Service Area   |
|--|----------------------|---|--|--|
| <b>Railroad Bridge Projects (FY 2021 - 2025)</b>   |                      |   |  |  |
| <b><i>Chestnut Hill East Line Bridge Rehab Program</i></b>   |                      |   |  |  |
| Rehabilitation of five bridges on the Chestnut Hill East Regional Rail Line located at: Mile Post (MP) 5.04 (Wayne Avenue); MP 5.72 (Logan Street); MP 7.63 (Chew Street); MP 8.90 (Mt. Pleasant Avenue); and, MP 9.59 (Chresheim Valley Drive).   | \$30.00 M            | Design & Construction<br>2024 - 2027                      | Philadelphia   | Philadelphia   |
| <b><i>Chestnut Hill West Line Bridge Rehab Program</i></b>   |                      |   |  |  |
| Rehabilitation of seven bridges on the Chestnut Hill West Regional Rail Line located at: MP 0.06 (SEPTA Main Line); MP 0.83 (22nd Street ); MP 1.17 (Hunting Park Avenue ); MP 1.26 (CSX Tracks ); MP 2.98 (Rittenhouse Street); MP 4.42 (Carpenter Lane); and, MP 5.67 (Springfield Avenue).  | \$35.00 M            | Design & Construction<br>2024 - 2030                      | Philadelphia   | Philadelphia   |
| <b><i>Critical Bridge Program</i></b>  |                      |   |  |  |
| Annual program to rehabilitate or replace bridges throughout the system to restore infrastructure to a state of good repair.   | \$69.21 M            | Ongoing   | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>New Jersey       |
| <b><i>Mainline-Schuylkill Bridges (30th Street Station to Suburban Station)</i></b>  |                      |   |  |  |
| Rehabilitation of seven bridges between 30th Street Station and Suburban Station located at: MP 0.49 (21st Street); MP 0.58 (22nd Street); MPs 0.61, 0.64 and 0.68 (22nd Street/23rd Street); MP 0.72 (CSX Tracks); and, MP 0.76 (Schuylkill River). These bridges were built in 1929. The first phase of this project included critical repairs to bridges MP 0.49 and MP 0.58. | Phase 1<br>\$1.05 M  | Phase 1<br>Complete                                       |  |  |
|  | Phase 2<br>\$10.95 M | Phase 2<br>Design 2020 - 2021<br>Construction 2021 - 2024 | Philadelphia   | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State) |
| The second phase will include duct bank and cable work. The third phase will include complete rehabilitation of all seven bridges.   | Phase 3<br>\$45.05 M | Phase 3<br>Design & Construction<br>2026 - 2032 Project   |  | New Jersey   |

## BRIDGE PROGRAM

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year) | Location  | Service Area   |
|---|-----------|--------------------------------------|---|--|
| <b><i>Stone Arch Bridge Program - Phase 2</i></b>   |           |                                      |   |  |
| Rehabilitation of the following seven (7) Stone Arch Bridges on the Regional Railroad:  |           |                                      |   |  |
| <ul style="list-style-type: none"> <li>Lansdale/Doylestown Line Mile Post (MP) 4.87. Built 1915.</li> <li>Lansdale/Doylestown Line MP 18.91. Built 1903.</li> <li>Media/Elwyn Line MP 12.68. Built 1854.</li> <li>West Trenton Line MP 13.70. Built 1912.</li> <li>West Trenton Line MP 15.95. Built 1876.</li> <li>West Trenton Line MP 18.52. Built 1948.</li> <li>West Trenton Line MP 22.65. Built 1876.</li> </ul> | \$11.20 M | Design<br>2017 - 2020                | Bucks<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>New Jersey |
|   |           | Construction<br>2020 - 2022          |   |  |
| <b>Transit Bridge Projects (FY 2021- 2025)</b>  |           |                                      |   |  |
| <b><i>NHSL Bridge 0.15 over 69th St. Yard Tracks</i></b>  |           |                                      |   |  |
| Critical repairs to the superstructure of Bridge 0.15 on the Norristown High Speed Line (NHSL). This bridge was built in 1906. Construction is being advanced in phases in order to limit operational impacts.  | \$4.00 M  | Design<br>Complete                   | Delaware  | Delaware<br>Montgomery   |
|   |           | Construction<br>2018 - 2021          |   |  |
| <b><i>NHSL Viaduct over Schuylkill River</i></b>  |           |                                      |   |  |
| Rehabilitation of the Bridgeport Viaduct at Mile Post 12.81 (Schuylkill River) on the NHSL. The project includes steel, concrete and bearing repairs and painting. The viaduct was constructed in 1911 and is 3,165 feet long.  | \$35.00 M | Design<br>2021                       | Montgomery                                      | Delaware<br>Montgomery   |
|   |           | Construction<br>2022 - 2024          |   |  |
| <b><i>Suburban Rail Transit Critical Bridge Program</i></b>   |           |                                      |   |  |
| Annual program to rehabilitate or replace bridges throughout the suburban rail transit system (NHSL and Media-Sharon Hill Line (MSHL)) to restore infrastructure to a state of good repair.   | \$34.60 M | Ongoing                              | Delaware<br>Montgomery                          | Delaware<br>Montgomery<br>Philadelphia                                   |

# COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

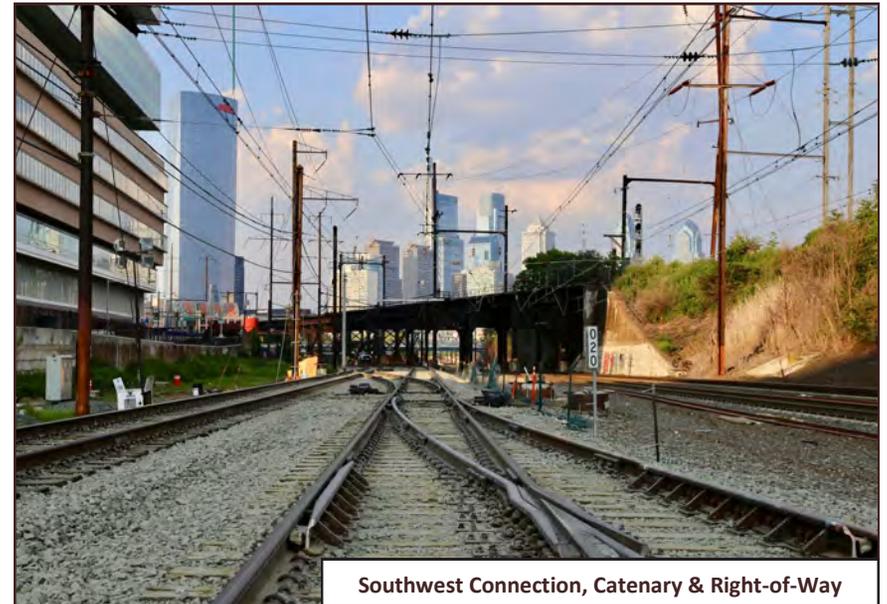
This program provides for improvements to SEPTA’s communications systems, signal systems, information technology infrastructure, and vehicle and facility video systems. Projects will upgrade hardware and software, and replace equipment that has reached or exceeded its useful life. As part of its capital program, SEPTA will install Positive Train Control on the Route 101/102 Trolley lines [Media-Sharon Hill Line (MSHL)], rehabilitate signals and interlockings, upgrade dispatching and scheduling systems, and implement a real-time vehicle arrival information display system. 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.



| Communications, Signal Systems and Technology Improvements - Program Elements | Prior Funding   | Budget               | Program Years  |                |                |                | FY 2026-2032    | 12-Year Program Total | Beyond FY 2032 | Total Budget    |
|---|-----------------|----------------------|----------------|----------------|----------------|----------------|-----------------|-----------------------|----------------|-----------------|
|   |                 | Year FY 21           | FY 22          | FY 23          | FY 24          | FY 25          |                 |                       |                |                 |
|   |                 | -----\$Millions----- |                |                |                |                |                 |                       |                |                 |
| Communications, Signals & Technology  | \$323.04        | \$47.65              | \$46.92        | \$38.59        | \$38.00        | \$32.08        | \$250.86        | \$454.10              | \$0.00         | \$777.15        |
| <b>TOTAL</b>  | <b>\$323.04</b> | <b>\$47.65</b>       | <b>\$46.92</b> | <b>\$38.59</b> | <b>\$38.00</b> | <b>\$32.08</b> | <b>\$250.86</b> | <b>\$454.10</b>       | <b>\$0.00</b>  | <b>\$777.15</b> |



NHSL Interlocking Reconfiguration



Southwest Connection, Catenary & Right-of-Way

## COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

| Project Descriptions  | Budget     | Schedule / Status<br>(Calendar Year)                     | Location   | Service Area   |
|---|------------|--|--|--|
| <b>Communications &amp; Signal Improvements - Railroad Projects (FY 2021-2032)</b>  |            |  |  |  |
| <b><i>Interlocking Improvement Program</i></b>  |            |  |  |  |
| Rebuilding, reconfiguration and construction of railroad interlockings to improve operational efficiency. Regional Rail locations include but are not limited to: Beth and York Interlockings, Hunt/Wayne Interlocking, West Interlocking, Schuylkill Interlocking, Broad Interlocking, Bartram Interlocking, and 16th Street Interlocking.   | \$120.46 M | Ongoing  | Montgomery<br>Philadelphia   | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |
| <b><i>Positive Train Control</i></b>  |            |  |  |  |
| Design and installation of a Positive Train Control (PTC) system for the Railroad Division. The PTC system is similar in all aspects to the system provided on the Northeast Corridor, to ensure complete interoperability not only with Amtrak, but with the various freight carriers that operate in SEPTA's territory. To date, SEPTA has implemented PTC systems on all Regional Rail lines. Remaining work involves the cohesive integration and interoperability of SEPTA's PTC system with CSX and Norfolk Southern PTC systems throughout the region. To ensure PTC technology remains up-to-date, future upgrades to this system are programmed in the Safety and Security Technology Upgrades project within the Safety & Security Program. | \$167.00 M | Design Complete<br><br>Construction<br>2012 - 2020       | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |
| The federally mandated deadline for all railroads to implement PTC is December 31, 2020.  |            |  |  |  |
| <b><i>Southwest Connection (30th to Phil Signals, Catenary, and ROW Improvements )</i></b>  |            |  |  |  |
| Reconfiguration and rebuilding of signals, track, catenary, and interlockings from 30th Street Station to Phil Interlocking. Work includes new track special work, Overhead Contact Systems (OCS), and switch and lock mechanisms, as well as the addition of new PTC systems.  | \$70.99 M  | Design<br>2014 - 2020<br><br>Construction<br>2017 - 2022 | Philadelphia   | Delaware<br>Philadelphia<br>Delaware (State)   |

## COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)                     | Location               | Service Area           |
|---|-----------|--|------------------------|------------------------|
| <b>Communications &amp; Signal Improvements - Transit Projects (FY 2021 - 2025)</b>   |           |  |                        |                        |
| <b><i>Broad Street Line Ridge-Spur Signals</i></b>  |           |  |                        |                        |
| Modernization of the signal system on the Broad Street Line's Broad-Ridge Spur. Work includes upgrades to improve operational reliability for the train control systems on the portion of track between Fairmount Interlocking and the 8th and Ridge Terminal Interlocking.   | \$8.66 M  | Design Complete<br><br>Construction<br>2015 - 2022       | Philadelphia           | Philadelphia           |
| <b><i>Broad Street Line Signals</i></b>   |           |  |                        |                        |
| Modernization of the signal system on the Broad Street Line. Work includes upgrades to improve operational reliability for the train control systems on the entire corridor to align with work conducted via the Ridge-Spur Signals project.  | \$65.00 M | Design & Construction<br>2025 - 2031                     | Philadelphia           | Philadelphia           |
| <b><i>Norristown High Speed Line Interlockings</i></b>  |           |  |                        |                        |
| Renewal and reconfiguration of interlockings on the Norristown High Speed Line at Wynnewood, Bryn Mawr, and Matsonford to bring interlockings to a state of good repair and improve operational reliability.  | \$12.27 M | Design<br>2018 - 2019<br><br>Construction<br>2018 - 2024 | Delaware<br>Montgomery | Delaware<br>Montgomery |
| <b><i>Route 101/102 Positive Train Control and ROW Improvements</i></b>   |           |  |                        |                        |
| 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. Includes new interlockings, track special work and power work, as well as a new Remote Operations Control Center. | \$76.40 M | Design Complete<br><br>Construction<br>2015 - 2022       | Delaware               | Delaware               |
| <b>Communications &amp; Signal Improvements - Transit Projects (FY 2026 - 2032)</b>   |           |  |                        |                        |
| <b><i>Trolley Signal System</i></b>   |           |  |                        |                        |
| Modernization of the signal system in the Subway Surface Tunnel. Work includes upgrades to improve operational reliability for the train control systems on the entire corridor. The new signal system will be compatible with both current and future trolley vehicles.  | \$35.00 M | Design & Construction<br>2026 - 2032 Project             | Philadelphia           | Philadelphia           |

## COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                     | Location     | Service Area |
|--|-----------|--|--------------|--------------|
| <b>Communications &amp; Signal Improvements - System-Wide Projects (FY 2021 - 2025)</b>  |           |  |              |              |
| <b><i>Computer Aided Radio Dispatch (CARD) System Replacement</i></b>  |           |  |              |              |
| <p>Replacement of existing Computer Aided Radio Dispatch (CARD) system. This 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 Middle Class Tax Relief and Job Creation Act of 2012 mandates the Federal Communications Commission (FCC) repurpose the existing 470-520MHz radio system (T-Band), which requires upgrades to the SEPTA's CARD system and transition to a 700MHz new radio system. 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.</p> | \$92.50 M | Design<br>2017 - 2020<br><br>Construction<br>2021- 2026  | Philadelphia | System-wide  |
| <b><i>Real-Time Information / Audio Visual Public Address (AVPA) System</i></b>  |           |  |              |              |
| <p>Upgrade and modernization of SEPTA's real-time arrival information for customers on all SEPTA modes of transportation. 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.</p>   | \$34.73 M | Design<br>2015 - 2020<br><br>Construction<br>2017 - 2023 | System-wide  | System-wide  |
| <b><i>Control Center Wall Display</i></b>  |           |  |              |              |
| <p>This project will provide for replacement of display hardware and technology upgrades for the Control Center, Video Evidence Department, and the Ancillary Control Center. The Control Center video walls are essential to the safe and efficient operation of all SEPTA modes of transportation. The current software and equipment are either approaching or are past their useful life.</p>  | \$3.89 M  | Design<br>2020<br><br>Construction<br>2020 - 2022        | Philadelphia | System-wide  |

## COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)                     | Location   | Service Area |
|---|-----------|--|--|--------------|
| <b>Technology Improvements (FY 2021 - 2025)</b>   |           |  |  |              |
| <b><i>Crash Hardened Video Recorders</i></b>  |           |  |  |              |
| Installation of crash and fire protected video recorders on SEPTA's regional rail and rail transit fleets. Audio and video from the devices will be easily accessible for accident investigation and as a tool to improve operational safety.       | \$4.80 M  | Implementation<br>2019 - 2022                            | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | System-wide  |
| <b><i>Operations Training Simulators</i></b>  |           |  |  |              |
| Purchase, installation and validation of training simulators for Regional Rail and Rail Transit Operations. Includes the installation of pre-fabricated modular soundproof rooms where the training simulators will be installed.                   | \$6.59 M  | Implementation<br>2017 - 2022                            | Philadelphia   | System-wide  |
| <b><i>Video Systems Refreshment Program</i></b>   |           |  |  |              |
| 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. | \$21.47 M | Implementation<br>2017 - 2023<br><br>2026 - 2032 Project | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | System-wide  |

## COMMUNICATIONS, SIGNAL SYSTEMS AND TECHNOLOGY IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year) | Location     | Service Area |
|--|-----------|--------------------------------------|--------------|--------------|
| <b>Technology Improvements (FY 2021 - 2032)</b>  |           |                                      |              |              |
| <b><i>Information Technology Program</i></b>   |           |                                      |              |              |
| <p>SEPTA continues to upgrade and improve the organization’s technology infrastructure, applications, and digital services for our customers. These upgrades and improvements include new and replacement computer hardware and software, Enterprise Resource Systems (ERP), threat detection security appliances, and real time location information for SEPTA travel and fare collection.</p> <p>The FY 2021 program includes:</p> <ul style="list-style-type: none"> <li>• An initiative to upgrade Enterprise applications, including a replacement of the Financial, Human Resources, Payroll and Benefits systems;</li> <li>• A Cyber Security upgrade is in process for proactive threat detection and prevention;</li> <li>• The availability for real time data information for all modes of SEPTA transportation including applications for display signs, website and mobile app, and Application Programming Interface (APIs) for open data initiatives;</li> <li>• Addition of SEPTA Key Fare System as well as pay for parking options in the SEPTA Mobile Application;</li> <li>• Enhancements to SEPTA’s network infrastructure including secure wireless networking for internal business and operational purposes; and,</li> <li>• Enhancements to SEPTA’s Capital Program Management System (CPMS) system, which provides multi-year capital budgeting, forecasting and reporting for SEPTA’s Capital Program.</li> </ul> |           |                                      |              |              |
|  | \$61.28 M | Ongoing                              | Philadelphia | System-wide  |

## FINANCIAL OBLIGATIONS

The Capital Asset Lease Program provides for payments attributable to capital leases. Capital Asset Leases covered by this program include Amtrak trackage leases, 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 anticipates using additional short and long-term financing tools to advance capital projects as described below.



40' New Flyer Hybrid-Electric Bus

| Financial Obligations -<br>Program Elements | Prior<br>Funding | Budget          |                 |                 |                 |                 | FY 2026 -<br>2032 | 12-Year<br>Program<br>Total | Beyond<br>FY 2032 | Total<br>Budget   |
|---|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-----------------------------|-------------------|-------------------|
|   |                  | Year<br>FY 21   | Program Years   |                 |                 |                 |                   |                             |                   |                   |
|   |                  |                 | FY 22           | FY 23           | FY 24           | FY 25           |                   |                             |                   |                   |
| -----\$Millions-----                        |                  |                 |                 |                 |                 |                 |                   |                             |                   |                   |
| Capital Asset Lease Program                 | \$0.00           | \$60.10         | \$61.92         | \$63.78         | \$65.70         | \$67.67         | \$534.41          | \$853.58                    | \$0.00            | \$853.58          |
| Debt Service                                | \$0.00           | \$56.59         | \$40.95         | \$62.52         | \$62.10         | \$62.10         | \$299.41          | \$583.67                    | \$0.00            | \$583.67          |
| <b>TOTAL</b>                                | <b>\$0.00</b>    | <b>\$116.69</b> | <b>\$102.87</b> | <b>\$126.30</b> | <b>\$127.80</b> | <b>\$129.76</b> | <b>\$833.82</b>   | <b>\$1,437.25</b>           | <b>\$0.00</b>     | <b>\$1,437.25</b> |



Silverliner V Rail Cars



SEPTA Operation on Amtrak's Keystone Corridor

## FINANCIAL OBLIGATIONS

| Project Descriptions   | Budget                              | Schedule / Status<br>(Calendar Year) | Location           | Service<br>Area    |
|--|-------------------------------------|--------------------------------------|--------------------|--------------------|
| <b>Capital Asset Leases (FY 2021 - 2032)</b>   |                                     |                                      |                    |                    |
| <i><b>Amtrak Trackage</b></i>  |                                     |                                      |                    |                    |
| <p>This agreement provides a payment mechanism for SEPTA's use of Amtrak tracks to operate the Trenton, Wilmington/Newark and Paoli/Thorndale Regional Rail service, and portions of the Chestnut Hill West, 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 agreement are SEPTA's costs based on methodologies and policies established by the NEC Infrastructure and Operations Advisory Commission for all NEC users pursuant to PRIIA.</p> | <p>12 Year Total<br/>\$839.68 M</p> | <p>Ongoing</p>                       | <p>System-wide</p> | <p>System-wide</p> |
| <i><b>Copiers</b></i>  |                                     |                                      |                    |                    |
| <p>This lease provides for rental of copiers, which are dispersed throughout SEPTA's headquarters and transportation/maintenance facilities.</p>   | <p>12 Year Total<br/>\$3.96 M</p>   | <p>Ongoing</p>                       | <p>System-wide</p> | <p>System-wide</p> |
| <i><b>Communications Towers</b></i>  |                                     |                                      |                    |                    |
| <p>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.</p>   | <p>12 Year Total<br/>\$9.94 M</p>   | <p>Ongoing</p>                       | <p>System-wide</p> | <p>System-wide</p> |

## FINANCIAL OBLIGATIONS

| Project Descriptions  | Budget                              | Schedule / Status<br>(Calendar Year)                                       | Location    | Service<br>Area |
|---|-------------------------------------|--|-------------|-----------------|
| <b>Debt Service (FY 2021 - 2032)</b>  |                                     |  |             |                 |
| <i>Payments on Capital Grant Receipts Bonds, Series 2011/2017</i>   |                                     |  |             |                 |
| <p><u>Acquisition of 120 Silverliner V Regional Rail Cars</u> - 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. 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 train passengers. These cars are equipped with on-board video surveillance and automatic passenger counting systems. The total cost for this project of \$319.7 million is funded through a combination of grants and capital financing.</p> | 12 Year<br>Debt<br>Service<br>Total | Final year of debt<br>service funding for<br>Series 2011/2017 Bonds - 2029 | System-wide | System-wide     |
| <p><u>Rehabilitation of the Wayne Junction Intermodal Facility</u> - 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, 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 shelters. The total project cost of \$29.4 million is funded through a Federal Transit Administration Bus and Bus Facilities Livability Grant and capital financing.</p>  | \$140.31 M                          |  |             |                 |
| <p>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.</p>  |                                     |  |             |                 |

## FINANCIAL OBLIGATIONS

| Project Descriptions   | Budget  | Schedule / Status<br>(Calendar Year)   | Location           | Service<br>Area    |
|--|---|--|--------------------|--------------------|
| <b><i>Payments on Converted Indexed Rate Revenue Refunding Bonds, Series 2007</i></b>  |   |  |                    |                    |
| <p>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 Regional Rail Cars, General Motors Locomotives and Frazer Regional 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.</p> | <p>12 Year Debt<br/>Service Total<br/><br/>\$25.60 M</p>  | <p>Final year of debt<br/>service funding<br/>for<br/>Series 2007 Bonds - 2022</p>                   | <p>System-wide</p> | <p>System-wide</p> |
| <b><i>Payments on Fixed Rate Revenue Refunding Bonds, Series 2017/2019</i></b>   |   |  |                    |                    |
| <p>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. In December 2019, the Authority refunded a portion of the Series 2010 bonds to further reduce future debt service payments. The final maturity of the Series 2017 and 2019 bonds was unchanged from the Series 2010 bonds.</p>  | <p>12 Year Debt<br/>Service Total<br/><br/>\$95.79 M</p>  | <p>Final year of debt service<br/>funding for<br/>Series 2017/2019 Bonds - 2028</p>                  | <p>System-wide</p> | <p>System-wide</p> |
| <b><i>Capital Financing - EB-5 Loan</i></b>  |   |  |                    |                    |
| <p>In January 2016, SEPTA entered into a loan agreement with the Delaware Valley Regional Center (DVRC) pursuant to the Employment Based Immigration-5<sup>th</sup> Preference (EB-5) Program administered by United States Citizenship and Immigration Services (USCIS). The loan was made available to SEPTA over a period of several years and was used to partially fund the acquisition of electric 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.</p>   | <p>12 Year Debt<br/>Service Total<br/><br/>\$251.47 M</p> | <p>Final year of debt<br/>service funding for<br/>EB-5 loan - 2044<br/>(Including option period)</p> | <p>System-wide</p> | <p>System-wide</p> |

## FINANCIAL OBLIGATIONS

| Project Descriptions   | Budget   | Schedule / Status<br>(Calendar Year)   | Location           | Service            |
|--|--|--|--------------------|--------------------|
| <b><i>Capital Financing - Other</i></b>  |  |  |                    |                    |
| <p><b>Acquisition of 140 Hybrid (Diesel-Electric) Buses</b> – These buses will replace diesel buses acquired in 2004. Vehicles fully comply with Americans with Disabilities Act (ADA) requirements and federal and state regulations. The buses have electronic exterior and interior destination signs, voice announcement of bus destination and upcoming bus stops, interior video display monitors and the capability for SEPTA’s Control Center to broadcast messages directly to passengers. These buses are equipped with on-board video surveillance and automatic passenger counting systems. The buses are also equipped with enhanced passenger amenities such as USB Charging Ports, Cellular Router for real time critical vehicle data on demand and a dual purpose Passenger Wifi system, and a QPod Wheelchair Restraint System to decrease wheelchair and scooter ambulatory device tipping.</p> | <p>12 Year Debt Service Total<br/>\$130.89 M</p> | <p>Final year of debt service funding for other Capital Financing - 2032</p> | <p>System-wide</p> | <p>System-wide</p> |

# INFRASTRUCTURE SAFETY RENEWAL PROGRAM (ISRP)

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

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



Street Track Renewal

| Infrastructure Safety Renewal Program - Program Elements | Prior Funding | Budget         | Program Years  |                |                |                | FY 2026-2032    | 12-Year         | Beyond FY 2032 | Total Budget    |
|--|---------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|----------------|-----------------|
|  |               | Year FY 21     | FY 22          | FY 23          | FY 24          | FY 25          |                 | Program Total   |                |                 |
| -----\$Millions-----                                     |               |                |                |                |                |                |                 |                 |                |                 |
| Infrastructure Safety Renewal Program                    | \$0.00        | \$48.58        | \$49.58        | \$50.58        | \$51.58        | \$52.58        | \$396.03        | \$648.90        | \$0.00         | \$648.90        |
| <b>TOTAL</b>   | <b>\$0.00</b> | <b>\$48.58</b> | <b>\$49.58</b> | <b>\$50.58</b> | <b>\$51.58</b> | <b>\$52.58</b> | <b>\$396.03</b> | <b>\$648.90</b> | <b>\$0.00</b>  | <b>\$648.90</b> |



Elm Street Station



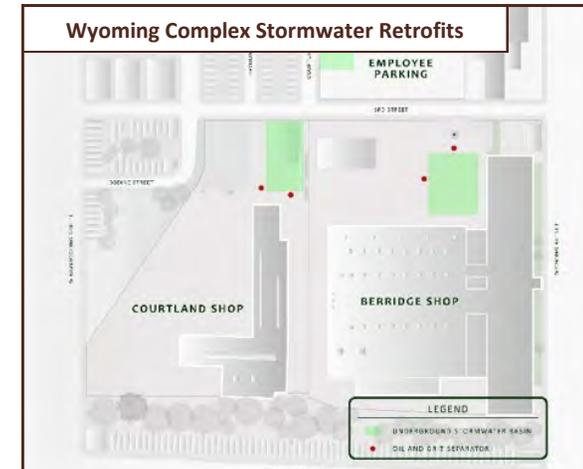
Catenary Replacement

| Project Descriptions                 | Budget    | Schedule / Status | Location    | Service     |
|--------------------------------------|-----------|-------------------|-------------|-------------|
|                                      |           | (Calendar Year)   |             | Area        |
| <b>Fiscal Year 2021 ISRP Program</b> | \$48.58 M | FY 2021 Program   | System-wide | System-wide |

|   |   |
|---|---|
| <p><b><i>Track and Right-of-Way Program</i></b></p> <p><u>Regional Rail</u> - Regional Rail (RRD) Tie, Surface, and Brush Cutting Program; RRD Open Deck Bridge Timber Renewal; Track Bumper Replacement Program; West Trenton (Neshaminy) Continuous Welded Rail (CWR).</p> <p><u>City/Suburban Transit</u> - City/Suburban Transit High Speed Special Track Work Renewal; Trolley Track Renewal Program; Market-Frankford Line (MFL) Direct Fixation Fastener Replacement; Track Bumper Replacement Program.</p>  | <p><b><i>Communications and Signals Program</i></b></p> <p><u>Regional Rail</u> - Communications &amp; Signals Cable Installation Program; Erie Interlocking Microprocessor Tech Refresh Project; Pedestrian Crossings Program; Wayne to Glenside (W2G) Signal Reliability Project; Crossing Flasher Upgrade – Warminster Line.</p> <p><u>City/Suburban Transit</u> - Green Line Communications Based Train Control (CBTC) Upgrade.</p> <p><u>Regional Rail/City/Suburban Transit</u> - Communications &amp; Signals Standards Renewal Project Phase 2.</p>   |
| <p><b><i>Station Facilities Program</i></b></p> <p><u>Regional Rail</u> - Platform Improvements Program; Paoli Line Station Improvements Program; Pedestrian Tunnel Improvement Program; Center City RRD Stations Security Improvements; Station Improvements Program.</p> <p><u>City/Suburban Transit</u> - Station Entrance Improvements; Norristown High Speed Line (NHSL) Township Line Station Renewal; MFL Station Renewal Program; 69th Street Master Plan; 33rd &amp; Dickenson Loop Improvement; Media-Sharon Hill Line (MSHL) Platform Improvements; Broad Street Subway (BSS) Station Renewal Program.</p> | <p><b><i>Power Systems Program</i></b></p> <p><u>Regional Rail</u> - Manayunk/Norristown Line Catenary Replacement; Substation Control Battery Replacement RRD; Sectionalizing Switch/Remote Terminal Unit (RTU)/Section Insulators (SI) Replacement Program; Feeder and Signal Component Replacement; Negative Return System Improvement Program; Chestnut Hill East Line Catenary Replacement; Fox Chase Line Catenary Replacement.</p> <p><u>City/Suburban Transit</u> - DC Traction Power Cable Replacement Program; Manhole Rehabilitation Program; AC Power &amp; Lighting Cable Replacement Program; City/Suburban Transit Substation Improvement Program; Trackless Trolley Power System Upgrade Program; 4/0 Trolley Wire Replacement Program; Substation Control Battery Replacement Program - City/Suburban Transit; Suburban Transit LED Lighting Upgrade Program; Duct Bank Replacement Program; Stinger System Replacement at Bridge Street Carhouse.</p> |
| <p><b><i>Maintenance/Support Facilities Program</i></b></p> <p><u>Regional Rail</u> - RRD Vent Well Reconstruction; Critical Catenary Structural Rehabilitation Program; Facilities Improvement Program.</p> <p><u>City/Suburban Transit</u> - Vent Well and Emergency Exit Rehabilitation; Pump Room Overhaul Program; Facilities Improvement Team (F.I.T.); Garage Shop Improvement Program; Ejector Room Replacement Program; Subway Column Rehab; V-Tag Wayside and Control System Upgrade; Motor Generator Improvement Program.</p>  |   |

## 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.



| Maintenance/Transportation Shops and Offices -<br>Program Elements | Prior<br>Funding | Budget<br>Year<br>FY 21 | Program Years  |                |                |                | FY 2026 -<br>2032 | 12-Year<br>Program<br>Total | Beyond<br>FY 2032 | Total<br>Budget |
|--|------------------|-------------------------|----------------|----------------|----------------|----------------|-------------------|-----------------------------|-------------------|-----------------|
|  |                  |                         | FY 22          | FY 23          | FY 24          | FY 25          |                   |                             |                   |                 |
| -----\$Millions-----   |                  |                         |                |                |                |                |                   |                             |                   |                 |
| Maintenance/Transportation Facilities and Offices                  | \$97.40          | \$37.79                 | \$17.71        | \$13.96        | \$9.20         | \$7.75         | \$47.25           | \$133.66                    | \$0.00            | \$231.06        |
| Roof Program   | \$17.16          | \$11.59                 | \$8.80         | \$9.04         | \$10.82        | \$13.00        | \$41.46           | \$94.71                     | \$0.00            | \$111.87        |
| <b>TOTAL</b>   | <b>\$114.56</b>  | <b>\$49.38</b>          | <b>\$26.51</b> | <b>\$23.00</b> | <b>\$20.02</b> | <b>\$20.75</b> | <b>\$88.71</b>    | <b>\$228.38</b>             | <b>\$0.00</b>     | <b>\$342.95</b> |



Midvale Bus Facility Roof



Frazer Rail Shop & Yard Upgrade

## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

| Project Descriptions  | Budget     | Schedule / Status<br>(Calendar Year)  | Location   | Service Area   |
|---|------------|---|--|--|
| <b>Maintenance &amp; Transportation Facilities (FY 2021 - 2025)</b>   |            |   |  |  |
| <b><i>Broad Street Subway Stormwater</i></b>  |            |   |  |  |
| Construction of an off-site stormwater management system associated with the Broad Street Subway Tunnel drainage near the Tasker-Morris Station.  | \$8.00 M   | Design<br>2022<br><br>Construction<br>2023 - 2024   | Philadelphia   | Philadelphia   |
| <b><i>Environmental Clean Up and Protection</i></b>   |            |   |  |  |
| 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.  | \$7.98 M   | Ongoing   | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | System-wide  |
| <b><i>Frazer Rail Shop and Yard Upgrade</i></b>   |            |   |  |  |
| Phased upgrade of the Frazer Maintenance Facility to accommodate the expansion of SEPTA's Regional Rail railcar and locomotive fleets including multi-level cars. Work includes extending existing storage tracks and adding new storage tracks; major upgrades to the repair shop and equipment, including the wheel truing machine and drop table; construction of a shop extension, new cleaning track, train washer building, storage building and yardmaster building; utility upgrades and stormwater improvements. In addition, the roof will be replaced and mechanical equipment will be replaced. | \$139.00 M | Design 2016 - 2020<br><br>Phase 1 & 2<br>Construction Complete<br><br>Phase 3<br>Construction 2021 - 2023 | Chester  | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (state)<br>New Jersey |
| <b><i>Garage / Shop Overhead Doors</i></b>  |            |   |  |  |
| Replacement of overhead and fire doors, which have exceeded their useful life, at various SEPTA facilities.   | \$7.50 M   | Design & Construction<br>2025 - 2029  | Delaware<br>Philadelphia                                   | Bucks<br>Delaware<br>Philadelphia  |

## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

| Project Descriptions  | Budget               | Schedule / Status<br>(Calendar Year)                               | Location   | Service Area   |
|---|----------------------|--|--|--|
| <b><i>Powelton Yard Facility Improvements</i></b>   |                      |  |  |  |
| Improvements to the Powelton Yard Facility including building repairs, new windows, new bathrooms, and replacement of the storeroom facility currently housed in a former railroad boxcar.  | \$3.92 M             | Design Complete<br>Construction<br>2020 - 2022                     | Philadelphia   | Philadelphia   |
| <b><i>Steel Wheel Lift Program</i></b>  |                      |  |  |  |
| 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.   | \$6.78 M             | Design & Construction<br>2025 - 2031                               | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |
| <b><i>Underground Storage Tank Relining / Replacement Program</i></b>   |                      |  |  |  |
| Replacement or relining of storage tanks, which have exceeded their useful life, at various SEPTA facilities.   | Phase 1<br>\$2.18 M  | Phase 1<br>Construction<br>2015 - 2020                             | Bucks<br>Chester<br>Delaware                               | System-wide  |
|   | Phase 2<br>\$8.86 M  | Phase 2<br>Construction<br>2025 - 2030                             | Montgomery<br>Philadelphia                                 |  |
| <b><i>Vehicle Washer Program</i></b>  |                      |  |  |  |
| Replacement and upgrading of the vehicle washers, which have exceeded their useful life, at various SEPTA facilities.   | \$14.00 M            | Design & Construction<br>2025 - 2030                               | Delaware<br>Montgomery<br>Philadelphia                     | System-wide  |
| <b><i>Wayne Junction Shop Improvements</i></b>  |                      |  |  |  |
| Upgrade of the Wayne Junction Shop to allow for improved maintenance functions and accommodate the expansion of SEPTA's Regional Rail 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. | Phase 1<br>\$11.25 M | Phase 1<br>Design<br>2017 - 2020<br><br>Construction<br>2021- 2023 | Philadelphia   | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (state)<br>New Jersey |

## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

| Project Descriptions  | Budget              | Schedule / Status<br>(Calendar Year)   | Location                               | Service Area   |
|---|---------------------|--|--|--|
| <b><i>Wheel Truing Program</i></b>  |                     |  |  |  |
| Reconditioning and rebuilding wheel truing machines at Overbrook Shop, 69th Street Shop, and Fern Rock Shop, and replacing the wheel truing machine at Woodland Shop.   | Phase 1<br>\$3.79 M | Phase 1<br>Construction<br>2016 - 2021 | Delaware<br>Philadelphia               | Bucks<br>Chester<br>Delaware<br>Montgomery                 |
|   | Phase 2<br>\$4.61 M | Phase 2<br>Construction<br>2024 - 2028 |  | Philadelphia<br>Delaware (state)<br>New Jersey             |
| <b><i>Wyoming Complex Stormwater Retrofits</i></b>  |                     |  |  |  |
| Reconfigure stormwater management and improve pavement conditions in the existing parking lot at SEPTA's Wyoming Complex which includes Wyoming, Berridge and Courtland shops. This is a joint effort working with the Philadelphia Water Department. | \$2.92 M            | Design<br>2020 - 2021                  | Philadelphia                           | Philadelphia   |
|   |                     | Construction<br>2021 - 2022            |  |  |
| <b>Maintenance &amp; Transportation Facilities (FY 2026- 2032)</b>  |                     |  |  |  |
| <b><i>Boiler Replacement Program</i></b>  |                     |  |  |  |
| Replacement of boilers at various SEPTA facilities. The boilers have exceeded their useful life and will be replaced with new energy efficient boilers.   | \$3.50 M            | 2026 - 2032 Project                    | Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia |
| <b><i>Bus Lift Program</i></b>  |                     |  |  |  |
| Replacement of in-ground and portable lifts that have exceeded their useful life at select SEPTA City Transit and Suburban Transit bus maintenance facilities.  | \$6.00 M            | 2026 - 2032 Project                    | Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia |

## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                     | Location     | Service Area                           |
|--|-----------|--|--------------|--|
| <b>Roof Program (FY 2021 - 2025)</b>   |           |  |              |  |
| <b><i>5800 Bustleton Roof Replacement</i></b>  |           |  |              |  |
| Replacement of the roof at SEPTA's office building located at 5800 Bustleton Avenue.   | \$1.75 M  | Design & Construction<br>2024 - 2025                     | Philadelphia | Philadelphia                           |
| <b><i>69th St. Transportation Center Shop Complex Roofs Replacement</i></b>  |           |  |              |  |
| Replacement of existing roofs. Includes replacement of mechanical equipment. Prior phases replaced roofs at the 69th Street Terminal, Media-Sharon Hill Line (MSHL) Car Shop, Norristown High Speed Line (NHSL) Maintenance Facility and Victory Bus Washer. Remaining phases include the Market-Frankford Line Canopy Roof and miscellaneous associated mechanical equipment. | \$14.10 M | Design Complete<br><br>Construction<br>2016 - 2022       | Delaware     | Delaware<br>Montgomery<br>Philadelphia |
| <b><i>Courtland Shop Roof Replacement</i></b>  |           |  |              |  |
| Replacement of the Courtland Shop roof with a new roofing system. Includes replacement of mechanical equipment.  | \$8.80 M  | Design<br>2018 - 2021<br><br>Construction<br>2021- 2022  | Philadelphia | Philadelphia                           |
| <b><i>Frankford Depot Roof Replacement</i></b>   |           |  |              |  |
| Replacement of the Frankford Depot roof with a new roofing system. Includes replacement of mechanical equipment.   | \$8.80 M  | Design<br>2023<br><br>Construction<br>2024 - 2025        | Philadelphia | Philadelphia                           |
| <b><i>Midvale Bus Garage Roof Replacement</i></b>  |           |  |              |  |
| Replacement of existing roofs with a new roofing system and mechanical equipment.  | \$30.03 M | Design<br>2018 - 2020<br><br>Construction<br>2020 - 2023 | Philadelphia | Philadelphia                           |

## MAINTENANCE/TRANSPORTATION SHOPS AND OFFICES

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year) | Location   | Service<br>Area |
|--|-----------|--------------------------------------|--|-----------------|
| <b><i>Southern Garage Roof Replacement</i></b>   |           |                                      |  |                 |
| Replacement and upgrade of the existing roof system at Southern Garage.  | \$3.40 M  | Design & Construction<br>2025 - 2026 | Philadelphia   | Philadelphia    |
| <b><i>Maintenance, Stations, and Substations Roof Program</i></b>  |           |                                      |  |                 |
| Replacement and upgrade of the existing roofs at maintenance facilities, stations and substations throughout the SEPTA system. Work may include replacement of mechanical equipment. | \$45.00 M | Design & Construction<br>2025 - 2032 | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | System-wide     |

## PROJECTS OF SIGNIFICANCE: EARLY ACTIONS

While the full scope of SEPTA's four Projects of Significance remain unfunded, some early action phases in support of these projects are underway. These activities are programmed in the FY 2021 Capital Budget and 12-year Capital Program. Early action items include 15% design for King of Prussia Rail (KOP Rail) and vehicle design and infrastructure studies in support of Trolley Modernization. These early actions are necessary to ensure SEPTA maintains momentum for these critical projects while funding solutions are developed.



| Projects of Significance: Early Actions - Program Elements | Prior Funding  | Budget               |               | Program Years |                |                |                | FY 2026 - 2032 | 12-Year Program Total | Beyond FY 2032 | Total Budget |
|--|----------------|----------------------|---------------|---------------|----------------|----------------|----------------|----------------|-----------------------|----------------|--------------|
|  |                | Year FY 21           | FY 22         | FY 23         | FY 24          | FY 25          |                |                |                       |                |              |
|  |                | -----\$Millions----- |               |               |                |                |                |                |                       |                |              |
| King of Prussia (KOP) Rail - 15% Design & EIS              | \$19.79        | \$1.37               | \$0.00        | \$0.00        | \$0.00         | \$0.00         | \$0.00         | \$1.37         | \$0.00                | \$21.16        |              |
| Trolley Acquisition and Infrastructure                     | \$5.23         | \$8.00               | \$5.55        | \$6.00        | \$10.00        | \$10.00        | \$10.00        | \$49.55        | \$0.00                | \$54.78        |              |
| <b>TOTAL</b>   | <b>\$25.02</b> | <b>\$9.37</b>        | <b>\$5.55</b> | <b>\$6.00</b> | <b>\$10.00</b> | <b>\$10.00</b> | <b>\$10.00</b> | <b>\$50.92</b> | <b>\$0.00</b>         | <b>\$75.94</b> |              |



Route 101 Trolley Vehicle



Artistic Rendering of KOP Rail along Mall Boulevard

## PROJECTS OF SIGNIFICANCE: EARLY ACTIONS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                | Location   | Service Area                           |
|--|-----------|---|------------|--|
| <b>King of Prussia Rail – 15 % Design and Environmental Impact Statement (FY 2021 - 2025)</b>  |           |   |            |  |
| <p>This project will provide an extension of the Norristown High Speed Line (NHSL) to King of Prussia. The project will promote and strengthen regional growth by connecting the three largest employment centers in the region: Center City, University City and King of Prussia.</p>   |           | 15% Design<br>2019                                  |            |  |
| <p>Project highlights include:</p> <ul style="list-style-type: none"> <li>• 4 miles of elevated rail (8 miles of track)</li> <li>• 5 new fully ADA-compliant stations</li> <li>• 2 park-and-ride facilities</li> <li>• Double ridership on the NHSL to 9,500 daily trips</li> <li>• Total travel time from 13th and Market Street to end of extension in under 40 minutes</li> </ul>   |           | Final Environmental Impact Statement (FEIS)<br>2020 |            |  |
| <p>An Alternatives Analysis and Draft Environmental Impact Statement (AA/DEIS) was completed for the project in 2017 and identified the PECO / Turnpike - 1st Ave. alignment as the Locally Preferred Alternative (LPA). The Final Environmental Impact Statement (FEIS) is currently underway. SEPTA awarded a contract for the Project Development phase (preliminary engineering) in January 2019. Funding programmed in Fiscal Year 2021 Capital Budget will complete Project Development to the 15% design level.</p> | \$21.25 M | 30% Design<br>TBD                                   | Montgomery | Delaware<br>Montgomery<br>Philadelphia |
| <p>SEPTA is currently evaluating funding strategies to advance this project to the 30% design level. Final design, construction, and acquisition of new railcars is currently estimated to cost \$1.2 billion and will require additional sources of funding.</p>  |           | Final Design<br>TBD                                 |            |  |
|  |           | Construction<br>TBD                                 |            |  |
|  |           | Vehicle Acquisition<br>TBD                          |            |  |

## PROJECTS OF SIGNIFICANCE: EARLY ACTIONS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)     | Location                 | Service Area             |
|--|-----------|--|--------------------------|--------------------------|
| <b>Trolley Acquisition and Infrastructure (FY 2021 - 2025)</b>   |           |  |                          |                          |
| <p>This project provides for the acquisition of modern and accessible light rail vehicles to replace the current fleet which serve City Transit Routes 10, 11, 13, 15, 34, 36 and Suburban Transit Routes 101 &amp; 102. These rail transit lines 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. The PPC-II cars are being overhauled by SEPTA and Route 15 is currently being bused.</p> |           |  |                          |                          |
| <p>In support of the vehicle acquisition, this project will also require an infrastructure modernization program. 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, creation of on-street stations, bridge improvements, fare payment and maintenance facilities.</p>   | \$54.78 M | Preliminary Design Phases<br>2020 - 2021 |                          |                          |
| <p>The goals of the program are:</p> <ul style="list-style-type: none"> <li>• A system in full compliance with the Americans with Disabilities Act;</li> <li>• A safe and improved customer experience;</li> <li>• Providing faster, higher capacity service; and</li> <li>• Reducing operating costs with modern and efficient vehicles.</li> </ul>   |           | Project Design & Planning<br>2021 - 2026 | Delaware<br>Philadelphia | Delaware<br>Philadelphia |
| <p>Funds have been identified to advance an early action phase, which includes vehicle specification development, development of preliminary modern trolley station design concepts, evaluation of capacity and ridership trends, operations and end-of-line analyses, and on-street station construction feasibility studies.</p>   |           | Construction<br>TBD                      |                          |                          |

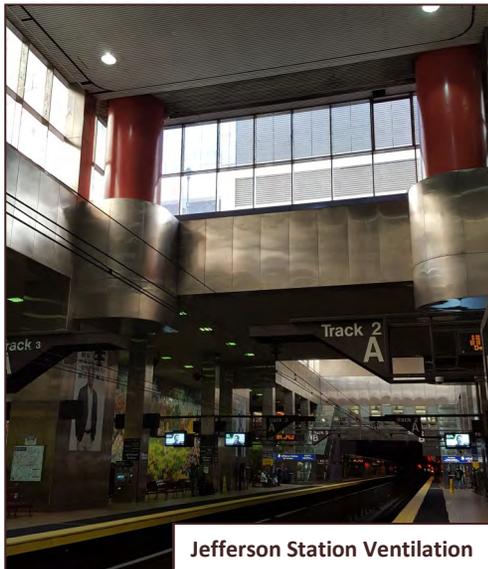
## SAFETY AND SECURITY IMPROVEMENTS

Safety is a core value at SEPTA. 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 promote safety and public health. This program includes life safety assessments and facility and vehicle safety and security measures. 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.



Fern Rock Station (Regional Rail) Platform Replacement

| Safety and Security Improvements - Program Elements | Prior Funding  | Budget         |                |                |                |                | FY 2026-2032    | 12-Year Program Total | Beyond FY 2032 | Total Budget    |
|---|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------------|----------------|-----------------|
|   |                | Year           | Program Years  |                |                |                |                 |                       |                |                 |
|   |                | FY 21          | FY 22          | FY 23          | FY 24          | FY 25          |                 |                       |                |                 |
| -----\$Millions-----                                |                |                |                |                |                |                |                 |                       |                |                 |
| Resiliency Projects                                 | \$14.50        | \$0.00         | \$6.13         | \$0.00         | \$0.00         | \$0.00         | \$0.00          | \$6.13                | \$0.00         | \$20.64         |
| Safety and Security Projects                        | \$26.16        | \$11.44        | \$15.36        | \$20.98        | \$18.69        | \$18.75        | \$181.82        | \$267.03              | \$0.00         | \$293.19        |
| <b>TOTAL</b>  | <b>\$40.66</b> | <b>\$11.44</b> | <b>\$21.49</b> | <b>\$20.98</b> | <b>\$18.69</b> | <b>\$18.75</b> | <b>\$181.82</b> | <b>\$273.16</b>       | <b>\$0.00</b>  | <b>\$313.83</b> |



Jefferson Station Ventilation



Manayunk /Norristown Line Shoreline Stabilization

## SAFETY AND SECURITY IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)                     | Location     | Service Area                        |
|---|-----------|--|--------------|-------------------------------------|
| <b>Resiliency Projects (FY 2021 - 2025)</b>   |           |  |              |                                     |
| <b><i>Sharon Hill Line Flood Mitigation</i></b>   |           |  |              |                                     |
| To provide relief from flooding on the Route 102 Sharon Hill Trolley Line, a pumped drainage system will be constructed where the Sharon Hill Trolley crosses under a freight railroad bridge at Mile Post 5.30 in Delaware County. This frequently flooded underpass forces SEPTA to rely on a bus substitution program to detour service around the high-water area more than a dozen times each year. Bus substitution is employed at a significant cost and disruption to passengers.   | \$12.18 M | Design Complete<br><br>Construction<br>2018 - 2022       | Delaware     | Delaware                            |
| <b><i>Shoreline Stabilization on the Manayunk/Norristown Line</i></b>   |           |  |              |                                     |
| This project will stabilize 2.45 miles of railroad right of way adjacent to the Schuylkill River in Montgomery County. The Manayunk/Norristown Line is one of SEPTA's most flood-prone assets and was the focus of a comprehensive FTA-funded vulnerability and risk assessment undertaken in 2012. The Schuylkill River has experienced more than half of its highest crests in recorded history at Norristown since 2003. This project will decrease the likelihood of washouts and increase the speed with which service can be restored after a flooding event. | \$8.46 M  | Design Complete<br><br>Construction<br>2020 - 2022       | Montgomery   | Montgomery<br>Philadelphia          |
| <b>Safety and Security Projects (FY 2021 - 2025)</b>  |           |  |              |                                     |
| <b><i>Escalator / Elevator Improvement Program</i></b>  |           |  |              |                                     |
| Modernization and upgrades to the escalators and elevators throughout the SEPTA system, including design, construction, and integration of an escalator remote monitoring system.   | \$74.58 M | Ongoing  | Philadelphia | System-wide                         |
| <b><i>Fern Rock Transportation Center Safety Improvements</i></b>   |           |  |              |                                     |
| Safety improvements at Fern Rock Transportation Center Regional Rail Station, which serves the Lansdale/Doylestown, Warminster and West Trenton Regional Rail Lines and provides connecting service to the Broad Street Line. Includes construction of a grade-separated pedestrian crossing, overhauling the elevator, platform repairs and related station modifications.   | \$20.52 M | Design<br>2018 - 2020<br><br>Construction<br>2019 - 2022 | Philadelphia | Bucks<br>Montgomery<br>Philadelphia |

## SAFETY AND SECURITY IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)   | Location   | Service Area   |
|--|-----------|--|--|--|
| <b><i>Grade Crossing Enhancement Program</i></b>   |           |  |  |  |
| This safety project will renew and upgrade various railroad and trolley highway/rail grade crossing locations within the SEPTA system, including the addition of passive and/or active safety enhancements.  | \$12.00 M | Ongoing  | System-wide  | System-wide  |
| <b><i>Lawndale Station Pedestrian Underpass &amp; High Level Platform</i></b>  |           |  |  |  |
| 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, passenger shelters, and improved station accessibility.   | \$9.59 M  | Design<br>2016 - 2020<br><br>Construction<br>2021 - 2023   | Montgomery<br>Philadelphia                                 | Montgomery<br>Philadelphia   |
| <b><i>Midvale Facility and Security Enhancements</i></b>   |           |  |  |  |
| 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. | \$23.20 M | Design & Construction<br>2024 - 2028   | Philadelphia   | System-wide  |
| <b><i>Operator Shields</i></b>   |           |  |  |  |
| Installation of operator safety shields on SEPTA buses, trolleys, and trackless trolleys to increase transit operator safety. The operator enclosure system will help protect the operator in the event of an emergency.   | \$12.51 M | Shield Installation:<br><br>Bus<br>2018 - 2020<br><br>Trolley & Trackless Trolley<br>2021 - 2023 | System-wide  | System-wide  |
| <b><i>Safety and Security Infrastructure Hardening Program</i></b>   |           |  |  |  |
| Infrastructure improvements and modifications throughout the SEPTA system that will improve safety and security of both passengers and assets. This program will also allow SEPTA to perform analysis and conceptual design of key safety and security initiatives.  | \$43.50 M | Ongoing  | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |

## SAFETY AND SECURITY IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                         | Location   | Service Area                                   |
|--|-----------|--|--|--|
| <b><i>Safety and Security Shop, Yard, &amp; Office Hardening</i></b>   |           |  |  |  |
| Infrastructure improvements and modifications throughout SEPTA's shops, yards, and offices to improve safety and security of employees and assets. This program will allow SEPTA to perform analysis and conceptual design of key safety and security initiatives.   | \$39.53 M | Ongoing  | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | System-wide                                    |
| <b><i>Station Ventilation Improvements</i></b>   |           |  |  |  |
| Replacement and upgrade of the existing ventilation systems at Jefferson Station, Suburban Station, and NRG Station.   |           |  |  |  |
| <ul style="list-style-type: none"> <li>Jefferson Station work includes removal and replacement of roof mounted exhaust/supply fans including all related ductwork, sound attenuators, structural improvements and electrical controls.</li> </ul>  | \$5.08 M  | Design Complete<br>Construction<br>2020 - 2021               |  | Bucks<br>Chester<br>Delaware                   |
| <ul style="list-style-type: none"> <li>Suburban Station work includes replacement of platform level exhaust fans and the installation of vane axial exhaust/supply fans for the concourse level. The work includes all related ductwork, sound attenuators, structural supports, and electrical power/controls.</li> </ul> | \$10.00 M | Design Complete<br>Phase 1: Complete<br>Phase 2: 2020 - 2022 | Philadelphia   | Montgomery<br>Philadelphia<br>Delaware (State) |
| <ul style="list-style-type: none"> <li>NRG Station work includes replacement of the ventilation system and installation of a smoke abatement system. The work includes all related ductwork, sound attenuators, structural supports, and electrical power/controls.</li> </ul>   | \$10.00 M | 2026 - 2032 Project  |  | New Jersey                                     |
| <b>Safety &amp; Security Projects (FY 2026 - 2032)</b>   |           |  |  |  |
| <b><i>On-Site Power for Major Facilities</i></b>   |           |  |  |  |
| Installation of emergency back-up power and power system upgrades and at major SEPTA maintenance and transportation facilities.  | \$6.00 M  | 2026 - 2032 Project  | Bucks<br>Delaware<br>Montgomery<br>Philadelphia            | System-wide                                    |

## SAFETY AND SECURITY IMPROVEMENTS

| Project Descriptions | Budget | Schedule / Status<br>(Calendar Year) | Location | Service Area |
|----------------------|--------|--------------------------------------|----------|--------------|
|----------------------|--------|--------------------------------------|----------|--------------|

### Safety & Security Technology Upgrades

This project will fund critical infrastructure software and hardware investments necessary to address current and future security and functional needs. Funding includes upgrades for Positive Train Control (PTC) and SEPTA Key technology and system support.

\$31.00 M

2026 - 2032 Project

System-wide

System-wide

### Transit Security Grant Projects (FY 2021 - 2032)

Through the U.S. Department of Homeland Security (DHS), 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); maintenance of a computer aided dispatch and records management system (CAD/RMS) for the Philadelphia region; and perimeter fencing and security cameras at SEPTA's Fern Rock facility. SEPTA will continue to fund eligible projects from this grant program.

Competitive  
Annual  
Program  
~\$1 M

Ongoing

System-wide

System-wide

# SEPTA KEY

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 support the enhanced system-wide fare collection system.

SEPTA Key deployment is substantially complete for Transit services (Bus, Trolley, Trackless Trolley and High Speed Lines). Regional Rail phased roll-out is underway. Railroad deployment will continue through 2020 with Travel Wallet, conductor sales, and other features and products. CCT development is underway with deployment starting in 2020. Upcoming Key features include upgraded Key Card readers, mobile ticketing and open payment/mobile wallets.

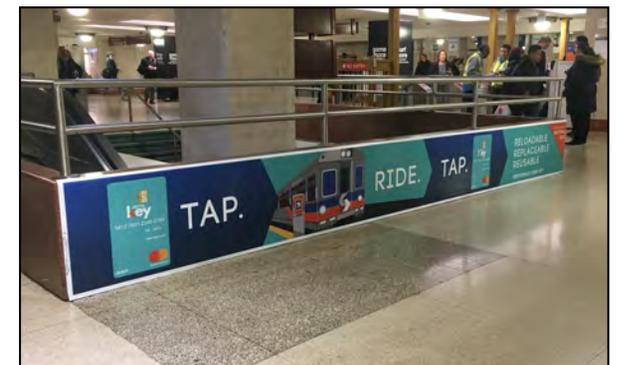
Companion projects supporting the SEPTA Key project include: bus and trolley farebox upgrade; Market-Frankford Line and Broad Street Line fiber optics improvements; electrical support for new fare lines at five Center City Regional Rail stations (Temple University, Jefferson Station, Suburban Station, 30th Street Station and Penn Medicine Station); 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. Most of this work is complete or nearing completion.

To ensure SEPTA Key technology remains up-to-date and secure, new payment technology upgrades are included in the outer years of the capital program within the Safety and Security Technology Upgrades project in the Safety & Security Program.

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/>.

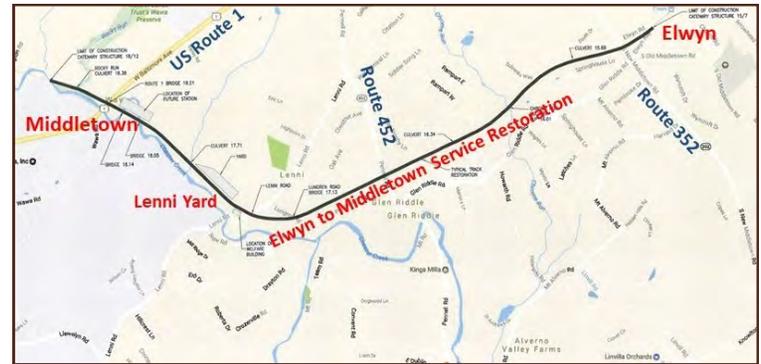
| SEPTA Key - Program Elements | Prior Funding   | Budget         | Program Years  |               |               |               | FY 2026-2032  | 12-Year Program Total | Beyond FY 2032 | Total Budget    |
|------------------------------|-----------------|----------------|----------------|---------------|---------------|---------------|---------------|-----------------------|----------------|-----------------|
|                              |                 | Year           | FY 22          | FY 23         | FY 24         | FY 25         |               |                       |                |                 |
|                              |                 | FY 21          |                |               |               |               |               |                       |                |                 |
| -----\$Millions-----         |                 |                |                |               |               |               |               |                       |                |                 |
| SEPTA Key                    | \$253.01        | \$25.71        | \$14.03        | \$9.55        | \$0.00        | \$0.00        | \$0.00        | \$49.29               | \$0.00         | \$302.30        |
| <b>TOTAL</b>                 | <b>\$253.01</b> | <b>\$25.71</b> | <b>\$14.03</b> | <b>\$9.55</b> | <b>\$0.00</b> | <b>\$0.00</b> | <b>\$0.00</b> | <b>\$49.29</b>        | <b>\$0.00</b>  | <b>\$302.30</b> |



# SERVICE RESTORATION AND IMPROVEMENTS

This program provides for the Elwyn to Middletown Township/US Route 1 Rail Service Restoration project. This will restore rail service on the Media/Elwyn Regional Rail Line from its existing terminus at Elwyn, Delaware County, to a new terminus in Middletown Township/US Route 1 in 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 and parking deck at US Route 1 as well as crew and yard facilities at Leni.

This program also supports the implementation of Boulevard Direct Phase B, expanding existing direct bus service from Frankford Transportation Center to the Wissahickon Transportation Center via Roosevelt Boulevard and Ridge Avenue.



| Service Restoration and Improvements - Program Elements | Prior Funding   | Budget         |                | Program Years |               |               | FY 2026-2032  | 12-Year Program Total | Beyond FY 2032 | Total Budget    |
|---|-----------------|----------------|----------------|---------------|---------------|---------------|---------------|-----------------------|----------------|-----------------|
|   |                 | Year FY 21     | FY 22          | FY 23         | FY 24         | FY 25         |               |                       |                |                 |
| -----\$Millions-----                                    |                 |                |                |               |               |               |               |                       |                |                 |
| Elwyn to Middletown/US Route 1 Service                  | \$113.35        | \$51.43        | \$20.41        | \$7.76        | \$0.00        | \$0.00        | \$0.00        | \$79.60               | \$0.00         | \$192.95        |
| Boulevard Direct Phase B                                | \$0.00          | \$1.00         | \$1.50         | \$0.00        | \$0.00        | \$0.00        | \$0.00        | \$2.50                | \$0.00         | \$2.50          |
| <b>TOTAL</b>  | <b>\$113.35</b> | <b>\$52.43</b> | <b>\$21.91</b> | <b>\$7.76</b> | <b>\$0.00</b> | <b>\$0.00</b> | <b>\$0.00</b> | <b>\$82.10</b>        | <b>\$0.00</b>  | <b>\$195.45</b> |



Bridge 18.21 Replacement over US Route 1



Service Restoration Right-of-Way Construction

## SERVICE RESTORATION AND IMPROVEMENTS

| Project Descriptions  | Budget            | Schedule / Status<br>(Calendar Year)                         | Location        | Service<br>Area                              |
|---|-------------------|--|-----------------|--|
| <b>Elwyn to Middletown/US Route 1 Service (FY 2021 - 2025)</b>  |                   |  |                 |  |
| <p>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 at Middletown Township/US Route 1, Delaware County along the existing right-of-way 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 replacement; and the replacement and rehabilitation of bridges and culverts. The installation of a bi-directional signal system and communications system improvements including Positive Train Control (PTC) is being funded separately under a competitive PTC grant from the Federal Transit Administration.</p> | <p>\$192.95 M</p> | <p>Design Complete<br/><br/>Construction<br/>2018 - 2023</p> | <p>Delaware</p> | <p>Chester<br/>Delaware<br/>Philadelphia</p> |
| <p>The new terminus at Middletown Township/US Route 1 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; a 600+ car parking deck; and connections to SEPTA bus service. The new facility will be fully ADA compliant. The project also includes the construction of a new traffic intersection and access road connecting US Route 1 to the station. A railcar storage/maintenance yard and crew facility will be constructed on SEPTA property in Lenni, Delaware County.</p>  |                   |  |                 |  |

**SERVICE RESTORATION AND IMPROVEMENTS**

| Project Descriptions | Budget | Schedule / Status<br>(Calendar Year) | Location | Service Area |
|----------------------|--------|--------------------------------------|----------|--------------|
|----------------------|--------|--------------------------------------|----------|--------------|

**Boulevard Direct Phase B (FY 2021 - 2025)**

This project will enhance bus service by connecting SEPTA’s Frankford Transportation Center to Wissahickon Transportation Center. This project is being implemented with funding from, and in coordination with, the City of Philadelphia. Eight new bus plazas will be constructed at four key intersections along Roosevelt Blvd to support Phase B of the Roosevelt Boulevard Direct Bus project.

Roosevelt Boulevard Direct Bus Phase B is a continuation of the initial phase completed in 2018. DIRECT Bus service implemented under the first phase was launched in the fall of 2017 and provides reliable and frequent service with fewer stops along Roosevelt Boulevard between Frankford Transportation Center and the Neshaminy Mall. Combined with the existing service, this project will complete the planned DIRECT BUS corridor envisioned within the *Route for Change* initiative sponsored by the U.S. Department of Transportation, PennDOT, SEPTA, and the City of Philadelphia.

The goal of this project is to enhance the public transit network along Philadelphia’s multimodal Roosevelt Boulevard Corridor by reducing end-to-end travel times via bus; improving the bus, pedestrian and bicycle networks in order to increase transit options for zero-car households; and accommodating the anticipated increases in ridership, population and employment opportunities that are expected to occur over the next 20 years along the Corridor.

SEPTA received competitive funds from the Federal Transit Administration to complete this project.

\$2.50 M

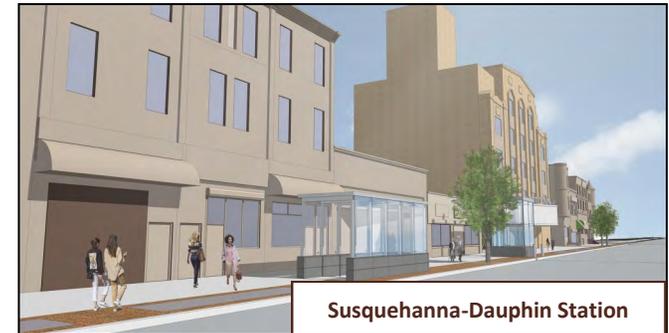
Design & Construction  
2020 - 2022

Philadelphia

Philadelphia

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

This program provides for the construction, reconstruction or rehabilitation of transit and regional rail stations and terminals, bus/trolley loop facilities, transportation centers, bicycle facilities, and parking expansions and improvements. Program elements include the replacement or rehabilitation of station and loop facility components, such as station buildings, ticket 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. SEPTA currently has 121 wheelchair accessible railroad/rail transit stations.



Susquehanna-Dauphin Station

| Stations, Loops and Parking -<br>Program Elements | Prior<br>Funding | Budget         | Program Years  |                |                |                | FY 2026 -       | 12-Year         | Beyond<br>FY 2032 | Total<br>Budget   |
|---|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-------------------|-------------------|
|   |                  | Year           |                |                |                |                | 2032            | Program         |                   |                   |
|   |                  | FY 21          | FY 22          | FY 23          | FY 24          | FY 25          |                 | Total           |                   |                   |
| -----\$Millions-----                              |                  |                |                |                |                |                |                 |                 |                   |                   |
| Ardmore Transportation Center                     | \$50.51          | \$3.09         | \$0.00         | \$0.00         | \$0.00         | \$0.00         | \$10.00         | \$13.09         | \$16.05           | \$79.65           |
| City Hall & 15th Street                           | \$77.93          | \$1.90         | \$1.64         | \$2.00         | \$5.34         | \$11.00        | \$46.66         | \$68.54         | \$0.00            | \$146.47          |
| Exton Station & Garage                            | \$28.23          | \$0.00         | \$0.00         | \$0.00         | \$0.00         | \$0.00         | \$38.64         | \$38.64         | \$0.00            | \$66.87           |
| Paoli Transportation Center                       | \$41.94          | \$0.00         | \$0.00         | \$0.00         | \$0.00         | \$0.00         | \$50.28         | \$50.28         | \$0.00            | \$92.22           |
| Parking Improvements                              | \$41.68          | \$12.91        | \$3.01         | \$11.78        | \$4.75         | \$10.25        | \$157.14        | \$199.84        | \$48.10           | \$289.62          |
| Transit, Regional Rail Stations & Loops           | \$78.38          | \$28.27        | \$37.66        | \$30.39        | \$46.99        | \$46.34        | \$338.05        | \$527.70        | \$0.00            | \$606.08          |
| Villanova Station                                 | \$21.52          | \$0.00         | \$0.00         | \$0.00         | \$3.91         | \$6.81         | \$0.00          | \$10.72         | \$0.00            | \$32.24           |
| <b>TOTAL</b>                                      | <b>\$340.19</b>  | <b>\$46.17</b> | <b>\$42.31</b> | <b>\$44.17</b> | <b>\$60.99</b> | <b>\$74.40</b> | <b>\$640.77</b> | <b>\$908.81</b> | <b>\$64.15</b>    | <b>\$1,313.15</b> |



Ardmore Station



30th Street Station (MFL)

**STATIONS, LOOPS AND PARKING IMPROVEMENTS**

| Project Descriptions   | Budget                       | Schedule / Status<br>(Calendar Year)                                     | Location          | Service Area  |
|--|------------------------------|--|-------------------|---|
| <b>Ardmore Transportation Center</b>   |                              |  |                   |   |
| <p>Improvements to the Ardmore Transportation Center on the Paoli/Thorndale Regional Rail Line will be completed in two phases.</p>  |                              |  |                   |   |
| <p>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 installing foundations for a future parking garage.</p> | <p>Phase 1<br/>\$53.60 M</p> | <p>Design Complete<br/><br/>Phase 1<br/>Construction<br/>2019 - 2022</p> | <p>Montgomery</p> | <p>Chester<br/>Delaware<br/>Montgomery<br/>Philadelphia</p> |
| <p>Phase 2 includes the construction of an accessible multi-level parking garage with approximately 500 spaces; landscaping; site improvements; bus berthing area inside the garage; and improved vehicle and pedestrian access to Lancaster Avenue. Phase 2 will be fully advanced upon identification of all funding sources.</p>  | <p>Phase 2<br/>\$26.05 M</p> | <p>Phase 2<br/>Construction<br/>2026 - 2032 &amp; Beyond Project</p>     |                   |   |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions  | Budget            | Schedule / Status<br>(Calendar Year)                            | Location            | Service<br>Area     |
|---|-------------------|---|---------------------|---------------------|
| <b>City Hall &amp; 15th Street Stations</b>   |                   |   |                     |                     |
| <p>Rehabilitation of City Hall Station on the Broad Street Line and 15th Street Station on the Market-Frankford Line (MFL) 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:</p>  |                   |   |                     |                     |
| <ol style="list-style-type: none"> <li>1) 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;</li> <li>2) 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;</li> <li>3) 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; and,</li> <li>4) 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.</li> </ol>   |                   | <p>Dilworth Park &amp;<br/>15th Street Station<br/>Complete</p> |                     |                     |
| <p>The City Hall / 15th Street Stations project has been divided into the following phases:</p> <ul style="list-style-type: none"> <li>• Dilworth Park Phase (complete): Included work to prepare for the park’s construction by the Center City District (CCD); construction of the new station entrance outside the west portal of City Hall; and five new elevators connecting street level to the rebuilt farelines and 15th Street Station and the eastbound trolley platform.</li> <li>• 15th Street Station (complete): 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 accessibility improvements.</li> <li>• Interlocking Reconfiguration: Modification of the interlocking at Fairmount to allow for track outages necessary for City Hall underpinning and station construction.</li> <li>• Inter-Station Connections and City Hall Station structural work (underpinnings): New and widened corridors with ramps, improved ventilation structures, platform wall openings, and new elevator shaftways from the City Hall Station mezzanines to the platforms.</li> <li>• 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.</li> </ul> | <p>\$146.47 M</p> | <p>City Hall Station</p>  | <p>Philadelphia</p> | <p>Philadelphia</p> |
|   |                   | <p>Design<br/>2019 - 2023</p>                                   |                     |                     |
|   |                   | <p>Construction<br/>2020 - 2028</p>                             |                     |                     |

# STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions | Budget | Schedule / Status<br>(Calendar Year) | Location | Service Area |
|----------------------|--------|--------------------------------------|----------|--------------|
|----------------------|--------|--------------------------------------|----------|--------------|

## 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.

|                      |  |         |   |
|----------------------|--|---------|---|
| Phase 1<br>\$28.23 M | Phase 1<br>Complete  | Chester | Chester<br>Delaware<br>Montgomery<br>Philadelphia |
| Phase 2<br>\$6.00 M  | Phases 2 & 3<br>Design & Construction<br>2026 - 2032 Project |         |   |
| Phase 3<br>\$32.64 M |  |         |   |

## Paoli Transportation Center

This project provides for the engineering and construction of a new multimodal transportation center in Paoli, Chester County. The new facility is located on SEPTA's Paoli/Thorndale Regional Rail Line and Amtrak's Harrisburg Line. Connecting services include Bus Routes 92, 106, 204, and 206. SEPTA partnered with PennDOT and Amtrak to advance this project.

The project will be advanced in two phases. Phase 1, completed in September 2019, made the existing station ADA accessible. This phase included 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 were reconfigured and pedestrian sidewalks and crosswalks, provided throughout the station area.

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.

|                       |   |         |   |
|-----------------------|---|---------|---|
| Phase 1:<br>\$41.94 M | Phase 1<br>Complete                                     | Chester | Chester<br>Delaware<br>Montgomery<br>Philadelphia |
| Phase 2:<br>\$50.28 M | Phase 2<br>Design & Construction<br>2026 - 2032 Project |         |   |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions  | Budget  | Schedule / Status<br>(Calendar Year)   | Location     | Service Area                           |
|---|---|--|--------------|--|
| <b>Parking Improvements/Expansions (FY 2021 - 2025)</b>   |   |  |              |  |
| <b><i>69th Street Transportation Center Parking Garage</i></b>  |   |  |              |  |
| 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 included site and utility work within the project perimeter, as well as relocating and upgrading electrical facilities. Phase 2 will include construction of the parking garage, bus terminal and pedestrian connections between the facilities. | \$31.01 M                                       | Design Complete<br>Phase 1 Complete<br>Phase 2 Construction 2020 - 2025            | Delaware     | Delaware<br>Montgomery<br>Philadelphia |
| <b><i>Conshohocken Station Parking</i></b>  |   |  |              |  |
| In support of PennDOT's I-76 Integrated Corridor Management (ICM) Program, this project provides for design, property acquisition, and construction of a multi-level smart parking garage. Along with additional surface parking, this project will provide for 450 additional parking spaces at Conshohocken Station. SEPTA anticipates receiving a total of \$10 million in Federal Highway Administration (FHWA) Flex funds to support this project.             | \$37.17 M                                       | Design 2020<br>Construction 2021 - 2023  | Montgomery   | Delaware<br>Montgomery<br>Philadelphia |
| <b><i>Gwynedd Valley Station Parking</i></b>  |   |  |              |  |
| Parking expansion and improvements at Gwynedd Valley Station on the Lansdale/Doylestown Regional Rail Line. Includes construction of an additional parking lot, accessible pathways, signage, new lighting, stormwater management system improvements and landscaping.  | \$2.54 M  | Design Complete<br>Construction 2020 - 2021  | Montgomery   | Bucks<br>Montgomery<br>Philadelphia    |
| <b><i>Ivy Ridge Parking Improvements</i></b>  |   |  |              |  |
| Parking expansion and improvements at Ivy Ridge Station on the Manayunk/Norristown Regional Rail Line. This project will include property acquisition, expanded parking and access improvements at the station and will be advanced in two phases. Phase 1 will include property acquisition and parking improvements. Phase 2 will include ADA accessibility improvements and expanded parking.  | Phase 1<br>\$8.50 M<br><br>Phase 2<br>\$26.50 M | Phase 1 Property Acquisition 2021<br><br>Phase 2 Design & Construction 2026 - 2032 | Philadelphia | Montgomery<br>Philadelphia             |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                             | Location     | Service Area                                      |
|--|-----------|--|--------------|---|
| <b><i>Noble Station, Parking Garage and Storage Track</i></b>  |           |  |              |   |
| 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. SEPTA is coordinating this project with PennDOT's replacement of the adjacent Route 611 bridge. | \$53.00 M | Design<br>2016 - 2021<br><br>Construction<br>2026 - 2032 Project | Montgomery   | Bucks<br>Montgomery<br>Philadelphia<br>New Jersey |
| <b>Parking Improvements/Expansions (FY 2026 - 2032)</b>  |           |  |              |   |
| <b><i>Philmont Station Parking</i></b>   |           |  |              |   |
| Parking expansion and improvements at Philmont Station on the West Trenton Regional Rail Line. This project will include expanded parking and ADA accessibility improvements at the station.   | \$25.00 M | 2026 - 2032 Project  | Montgomery   | Bucks<br>Montgomery<br>Philadelphia<br>New Jersey |
| <b><i>Fern Rock Complex</i></b>  |           |  |              |   |
| Renovation of Fern Rock Complex to enhance accessibility, expand parking capacity and increase operational efficiency. This project provides for station and accessibility improvements including ramps; new structured parking deck and surface lot; improved access between the Regional Rail and Broad Street lines; new bus shelters; and signage, lighting and drainage improvements.   | \$77.50 M | 2026 - 2032 Project  | Philadelphia | Bucks<br>Montgomery<br>Philadelphia<br>New Jersey |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)                     | Location   | Service Area   |
|---|-----------|--|--|--|
| <b>Transit &amp; Regional Rail Stations Program — Regional Rail (FY 2021—2025)</b>  |           |  |  |  |
| <b><i>ADA Bridge Plates</i></b>   |           |  |  |  |
| This project will provide replacement and additional bridge plates at Rail Stations to assist passengers with disabilities or special needs to board railcars over gaps that exist between station platforms and vehicles.  | \$2.21 M  | Design & Procurement<br>2020 - 2023                      | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |
| <b><i>Bicycle Transit Access Program</i></b>  |           |  |  |  |
| Installation of new bicycle parking shelters and racks at select SEPTA Regional Rail and transit stations. The addition of bicycle parking shelters and racks will improve bicycle access and security at SEPTA stations, thereby encouraging more customers to bike to transit and expanding opportunities to access SEPTA stations.   | \$2.50 M  | Ongoing  | System-wide  | System-wide  |
| <b><i>Chestnut Hill East ADA Improvements</i></b>   |           |  |  |  |
| Accessibility improvements at the Chestnut Hill East Regional Rail Station including construction of a high-level platform, station building improvements and an ADA-accessible pathway to the station.   | \$11.17 M | Design<br>2021 - 2022<br><br>Construction<br>2023 - 2024 | Philadelphia   | Philadelphia   |
| <b><i>Conshohocken Station</i></b>  |           |  |  |  |
| This project provides for design and construction of 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 station building and 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. | \$15.00 M | Design<br>2018 - 2020<br><br>Construction<br>2020 - 2022 | Montgomery   | Delaware<br>Montgomery<br>Philadelphia   |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions  | Budget               | Schedule / Status<br>(Calendar Year)                     | Location   | Service Area   |
|---|----------------------|--|--|--|
| <b><i>East Falls Station</i></b>  |                      |  |  |  |
| Modernization of East Falls Station on the Manayunk/Norristown Regional Rail Line that will make the station fully ADA accessible. Work includes installing high level platforms and new passenger shelters; elevators; accessible pathways and handrails/guardrails; new signage and lighting; stormwater management systems and landscaping.  | \$19.50 M            | Design & Construction<br>2024 - 2027                     | Philadelphia   | Montgomery<br>Philadelphia   |
| <b><i>Jenkintown-Wyncote Station on the Regional Rail Mainline</i></b>  |                      |  |  |  |
| Improvements that will make the station fully ADA accessible. This station will receive new full length high-level platforms; new pedestrian overpass and elevators; new passenger shelters; accessible pathways and handrails/guardrails; new signage and lighting; stormwater management systems and landscaping.   | \$25.32 M            | Design<br>2016 - 2020<br><br>Construction<br>2020 - 2024 | Montgomery   | Bucks<br>Montgomery<br>Philadelphia  |
| <b><i>Regional Rail Station Roof Program</i></b>  |                      |  |  |  |
| Phased construction of various station roofs along the Regional Rail network. Work will include roof repair, renewal, and/or replacement.   | \$11.25 M            | Ongoing  | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |
| <b><i>Secane Station on the Media/Elwyn Regional Rail Line</i></b>  |                      |  |  |  |
| Rehabilitation of Secane Station on the Media/Elwyn Regional Rail Line that will be completed in two phases. Phase 1, completed in September 2019, made the station fully ADA accessible and included new full length high-level platforms, a new pedestrian tunnel, and a new station building with canopies. The phase also included new signage, lighting and security cameras, drainage improvements and improved pedestrian access to the station. | Phase 1<br>\$26.90 M | Phase 1<br>Complete                                      | Delaware   | Delaware<br>Philadelphia   |
| Phase 2 of the project will include construction of expanded parking on the outbound side of the new station.   | Phase 2<br>\$3.00 M  | Phase 2<br>Design & Construction<br>2020 - 2021          |  |  |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                     | Location     | Service Area                                      |
|--|-----------|--|--------------|---|
| <b><i>Willow Grove Station on the Warminster Regional Rail Line</i></b>  |           |  |              |   |
| Relocation of Willow Grove Station on the Warminster Regional Rail Line that will make the station fully ADA accessible. Work includes a new full length high-level center platform and related right-of-way improvements; new passenger shelters; accessible pathways and handrails/guardrails; improved station access; parking expansion; new signage and lighting; stormwater management systems; and landscaping. | \$20.89 M | Design<br>2017 - 2021<br><br>Construction<br>2020 - 2024 | Montgomery   | Bucks<br>Montgomery<br>Philadelphia               |
| <b>Transit &amp; Regional Rail Stations Program - Regional Rail (FY 2026 - 2032)</b>   |           |  |              |   |
| <b><i>Malvern Station High Level Platforms</i></b>   |           |  |              |   |
| Design and construction of high-level platforms and ADA improvements at Malvern Station on the Paoli/Thorndale Regional Rail Line. This station will receive new full length high-level platforms; new passenger shelters; accessible pathways; bike facilities; additional new signage and lighting; stormwater management systems and landscaping.   | \$15.26 M | 2026 - 2032 Project                                      | Chester      | Chester<br>Delaware<br>Montgomery<br>Philadelphia |
| <b><i>Regional Rail Stations</i></b>   |           |  |              |   |
| Stations programmed in FY 2026 - 2032 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 | 2026 - 2032 Project                                      | Chester      |   |
| • Glenside Station on the Airport/Warminster/Doylestown Regional Rail Lines  | \$24.75 M | 2026 - 2032 Project                                      | Montgomery   |   |
| • Ivy Ridge Station on the Manayunk/Norristown Regional Rail Line  | \$18.50 M | 2026 - 2032 Project                                      | Philadelphia |   |
| • Marcus Hook Station on the Wilmington/Newark Regional Rail Line  | \$22.50 M | 2026 - 2032 Project                                      | Delaware     | Bucks<br>Chester                                  |
| • Roslyn Station on the Warminster Regional Rail Line  | \$6.50 M  | 2026 - 2032 Project                                      | Montgomery   | Delaware  |
| • Stenton Station on the Chestnut Hill East Regional Rail Line   | \$7.15 M  | 2026 - 2032 Project                                      | Philadelphia | Montgomery<br>Philadelphia                        |
| • Swathmore Station on the Media/Elwyn Regional Rail Line  | \$17.96 M | 2026 - 2032 Project                                      | Delaware     | Delaware (State)                                  |
| • Wissahickon Station on the Manayunk/Norristown Regional Rail Line  | \$28.20 M | 2026 - 2032 Project                                      | Philadelphia |   |
| • Wyndmoor Station on the Chestnut Hill East Regional Rail Line  | \$19.50 M | 2026 - 2032 Project                                      | Philadelphia |   |
| • Wynnewood Station on the Paoli/Thorndale Regional Rail Line  | \$19.50 M | 2026 - 2032 Project                                      | Montgomery   |   |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)                     | Location     | Service<br>Area |
|---|-----------|--|--------------|-----------------|
| <b>Transit &amp; Regional Rail Stations Program — Rail Transit (FY 2021-2025)</b>   |           |  |              |                 |
| <b><i>5th Street / Independence Hall Station</i></b>  |           |  |              |                 |
| 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.       | \$27.52 M | Design<br>Complete<br><br>Construction<br>2018 - 2022    | Philadelphia | Philadelphia    |
| <b><i>8th Street Customer Service Office</i></b>  |           |  |              |                 |
| Renovation of the existing unused ticket office located in vestibule connecting 8th Street Station on the Broad Street Line Broad-Ridge Spur and Market-Frankford Line to the Philadelphia Fashion District.  | \$0.24 M  | Design & Construction<br>2020 - 2021                     | Philadelphia | Philadelphia    |
| <b><i>11th Street Station</i></b>   |           |  |              |                 |
| Improvements to 11th Street Station on the Market-Frankford Line that will make the station fully ADA accessible. The project provides for installation of elevators and accessibility improvements; renovation of existing platforms and station interior; new signage, lighting and security cameras; and waterproofing improvements. | \$9.51 M  | Design<br>2019 - 2020<br><br>Construction<br>2021 - 2023 | Philadelphia | Philadelphia    |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions   | Budget           | Schedule / Status                                   | Location            | Service Area        |
|--|------------------|---|---------------------|---------------------|
| <p><b><i>30th Street Station (MFL) - Phase A</i></b></p>   |                  |   |                     |                     |
| <p>This project will improve accessibility to and around SEPTA's 30th Street Station on the Market-Frankford Line and Trolley Routes through phased construction. Includes reconstruction of the west headhouses and installation of two new elevators at the 31st Street entrance and reconfiguration of the fare lines at that entrance. This project includes design for Phases A and B.</p>  | <p>\$28.55 M</p> | <p>Design Complete<br/>Construction Complete</p>    | <p>Philadelphia</p> | <p>Philadelphia</p> |
| <p><b><i>30th Street Station (MFL) - Phase B</i></b></p>   |                  |   |                     |                     |
| <p>Modernization of 30th Street Station on the Market-Frankford Line that will increase capacity and support economic development. This phase includes the construction of a new headhouse at the 30th Street entrance, installation of new escalators, elevators, and stairways from the street to the mezzanine, and a new elevator and rehabilitated stairways from the mezzanine to the platform. Also includes new fare lines, floor finishes, signage, lighting and security cameras. This phase is supported by an award from the U.S. Department of Transportation's Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program.</p> | <p>\$38.80 M</p> | <p>Design Complete<br/>Construction 2020 - 2023</p> | <p>Philadelphia</p> | <p>Philadelphia</p> |
| <p><b><i>34th Street Station</i></b></p>   |                  |   |                     |                     |
| <p>Improvements to the 34th Street Station on the Market-Frankford 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.</p>   | <p>\$31.00 M</p> | <p>Design &amp; Construction 2024 - 2030</p>        | <p>Philadelphia</p> | <p>Philadelphia</p> |

# STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions | Budget | Schedule / Status<br>(Calendar Year) | Location | Service |
|----------------------|--------|--------------------------------------|----------|---------|
|----------------------|--------|--------------------------------------|----------|---------|

**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: (Complete) 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.

\$59.65 M

Phase 1 & 3  
Complete

Phase 2 & 4  
Design  
2018 - 2020  
Construction  
2021 - 2023

Phases 5 - 8  
Design & Construction  
2023 - 2026

Philadelphia

Philadelphia

**STATIONS, LOOPS AND PARKING IMPROVEMENTS**

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                              | Location     | Service Area |
|--|-----------|---|--------------|--------------|
| <p><b><i>Erie Station</i></b></p> <p>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 southbound 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, passenger amenities; and drainage and waterproofing improvements.</p> | \$9.00 M  | <p>Design<br/>2020 - 2021</p> <p>Construction<br/>2021 - 2023</p> | Philadelphia | Philadelphia |
| <p><b><i>Hunting Park Station</i></b></p> <p>Improvements to Hunting Park 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.</p>  | \$12.50 M | Design & Construction<br>2024 - 2026                              | Philadelphia | Philadelphia |
| <p><b><i>Snyder Station</i></b></p> <p>Improvements to Snyder 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.</p>  | \$9.80 M  | Design & Construction<br>2024 - 2027                              | Philadelphia | Philadelphia |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                     | Location     | Service Area           |
|--|-----------|--|--------------|------------------------|
| <b><i>Spring Garden Station on the Market-Frankford Line</i></b>   |           |  |              |                        |
| Improvements to Spring Garden Station on the Market-Frankford 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 new signage, lighting and security cameras. Work will be conducted concurrently with and in coordination with PennDOT's I-95 Improvement Project. | \$7.37 M  | Design & Construction<br>2024 - 2026                     | Philadelphia | Philadelphia           |
| <b><i>Susquehanna-Dauphin Station</i></b>  |           |  |              |                        |
| 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.  | \$22.50 M | Design Complete<br><br>Construction<br>2020 - 2023       | Philadelphia | Philadelphia           |
| <b><i>Tasker-Morris Station</i></b>  |           |  |              |                        |
| Improvements to Tasker-Morris Station on the Broad Street Line that will make the station fully ADA accessible. The project provides for installation of elevators and accessibility improvements; renovation of existing platforms and station interior; new signage, lighting and security cameras; and waterproofing improvements.  | \$9.80 M  | Design<br>2017 - 2020<br><br>Construction<br>2020 - 2023 | Philadelphia | Philadelphia           |
| <b><i>Villanova Station on the Norristown High Speed Line</i></b>  |           |  |              |                        |
| Improvements will make the station fully ADA accessible. Rehabilitation of station facilities, including improvements to existing platforms and shelters; accessibility improvements including ramps and handrails/guardrails; new signage, lighting and security cameras; and stormwater management.  | \$4.00 M  | Design & Construction<br>2021 - 2024                     | Delaware     | Delaware<br>Montgomery |

**STATIONS, LOOPS AND PARKING IMPROVEMENTS**

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year) | Location     | Service      |
|---|-----------|--------------------------------------|--------------|--------------|
| <b>Transit &amp; Regional Rail Stations Program – Rail Transit (FY 2026 - 2032)</b>   |           |                                      |              |              |
| <i>Rail Transit Stations</i>  |           |                                      |              |              |
| 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: |           |                                      |              |              |
| • Chinatown Station on the Broad-Ridge Spur   | \$12.50 M | 2026-2032 Project                    | Philadelphia | Philadelphia |
| • Ellsworth-Federal Station   | \$9.80 M  | 2026-2032 Project                    | Philadelphia | Philadelphia |
| • Fairmount Station   | \$18.00 M | 2026-2032 Project                    | Philadelphia | Philadelphia |
| • Logan Station   | \$12.50 M | 2026-2032 Project                    | Philadelphia | Philadelphia |
| • Lombard-South Station   | \$9.80 M  | 2026-2032 Project                    | Philadelphia | Philadelphia |
| • Wyoming Station   | \$5.00 M  | 2026-2032 Project                    | Philadelphia | Philadelphia |

## STATIONS, LOOPS AND PARKING IMPROVEMENTS

| Project Descriptions | Budget | Schedule / Status<br>(Calendar Year) | Location | Service Area |
|----------------------|--------|--------------------------------------|----------|--------------|
|----------------------|--------|--------------------------------------|----------|--------------|

### Transit & Regional Rail Stations Program – Bus & Trolley Loops (FY 2021 - 2025)

Modernization of bus and trolley loops including accessibility improvements and enhancements to shelters, loading platforms, lighting, landscaping and operator bathroom facilities. Locations include:

|   |           |  |              |                            |
|---|-----------|--|--------------|----------------------------|
| • Bethlehem Pike  | \$3.38 M  | Design 2021<br>Construction 2022 - 2023        | Philadelphia | Philadelphia               |
| • Rising Sun & Olney  | \$1.75 M  | Design 2022<br>Construction 2023 - 2024        | Philadelphia | Philadelphia               |
| • Westmoreland  | \$2.00 M  | Design Complete<br>Construction 2020 - 2021    | Philadelphia | Philadelphia               |
| • Wissahickon Transportation Center<br>(Includes property acquisition, entrance improvements) | \$17.64 M | Design 2017 - 2020<br>Construction 2020 - 2022 | Philadelphia | Montgomery<br>Philadelphia |
| • Wycombe   | \$2.00 M  | Design 2023<br>Construction 2024 - 2025        | Delaware     | Delaware                   |

### Transit & Regional Rail Stations Program – Bus & Trolley Loops (FY 2026 - 2032)

Modernization of bus and trolley loops including accessibility improvements and enhancements to shelters, loading platforms, lighting, landscaping, and operator bathroom facilities. Locations include:

|                  |          |                     |              |              |
|------------------|----------|---------------------|--------------|--------------|
| • Ridge & Summit | \$1.75 M | 2026 - 2032 Project | Philadelphia | Philadelphia |
|------------------|----------|---------------------|--------------|--------------|

### 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 improved station accessibility and included 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.

|                       |  |  |          |   |
|-----------------------|--|--|----------|---|
|                       |  | Design Complete                        |          |   |
| Phase 1:<br>\$21.52 M |  | Phase 1<br>Complete                    | Delaware | Chester<br>Delaware<br>Montgomery<br>Philadelphia |
| Phase 2:<br>\$10.45 M |  | Phase 2<br>Construction<br>2023 - 2025 |          |   |

## SUBSTATIONS AND POWER IMPROVEMENTS

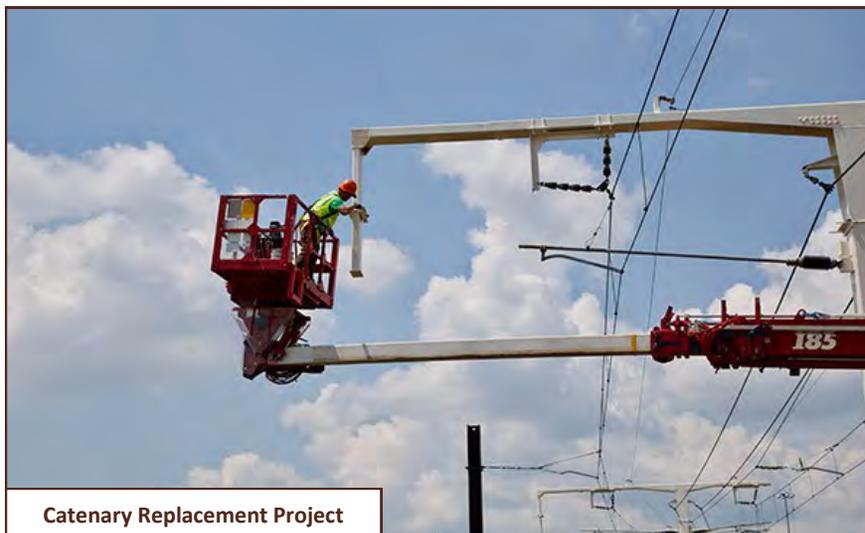
Many of SEPTA's railroad and transit substations have been in continuous operation since the 1920s and 1930s. In order to bring these substations up to modern standards of reliability and performance, they must be overhauled or replaced. These projects will replace existing equipment with modern indoor switchgear and state-of-the-art industry safety systems, communications and relay protection systems, and will provide additional power and reliability. Work includes replacing transformers, trolley breakers, feeder switches, substation switchgears and protective relaying.

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).



Yardley Substation

| Substations and Power Improvements - Program Elements | Prior Funding  | Budget         |                | Program Years  |                |                | FY 2026 - 2032  | 12-Year Program Total | Beyond FY 2032 | Total Budget    |
|---|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------------|----------------|-----------------|
|   |                | Year FY 21     | FY 22          | FY 23          | FY 24          | FY 25          |                 |                       |                |                 |
| -----\$Millions-----                                  |                |                |                |                |                |                |                 |                       |                |                 |
| Power   | \$8.25         | \$3.35         | \$3.71         | \$3.71         | \$21.97        | \$20.97        | \$15.03         | \$68.74               | \$0.00         | \$77.00         |
| Substations   | \$63.15        | \$28.27        | \$27.34        | \$41.06        | \$24.84        | \$26.94        | \$215.12        | \$363.57              | \$0.00         | \$426.72        |
| <b>TOTAL</b>  | <b>\$71.40</b> | <b>\$31.62</b> | <b>\$31.05</b> | <b>\$44.77</b> | <b>\$46.81</b> | <b>\$47.91</b> | <b>\$230.15</b> | <b>\$432.30</b>       | <b>\$0.00</b>  | <b>\$503.70</b> |



Catenary Replacement Project



Bethayres Substation

## SUBSTATIONS AND POWER IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)              | Location                            | Service Area   |
|---|-----------|---|-------------------------------------|--|
| <b>Multimodal Substation Overhaul Program (FY 2021 - 2025)</b>  |           |   |                                     |  |
| <b><i>Substation Design and Equipment Purchase</i></b>  |           |   |                                     |  |
| This program includes the design necessary for improvements to seven transit substations (Market, Ellen, Ranstead, Park, Broad, Loudon, and Castor), eight railroad substations and switching stations (Neshaminy, Bethayres, Yardley, Lansdale, Hatboro, 18th St./12th St./Portal switching stations), and one new substations at Woodbourne. The program also includes procuring long lead equipment such as auto transformers and circuit breakers that will be required for the substation construction projects. | \$28.23 M | Design / Procurement<br>2016 - 2023               | Bucks<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>New Jersey |
| <b>Railroad Substations (FY 2021 - 2025)</b>  |           |   |                                     |  |
| <b><i>18th Street Switching Station</i></b>   |           |   |                                     |  |
| Overhaul of 18th Street Switching Station in the Center City Tunnel. 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).  | \$13.00 M | Construction<br>2022 - 2025                       | Philadelphia                        | Bucks Delaware<br>Montgomery<br>Philadelphia<br>New Jersey               |
| <b><i>Brill Substation</i></b>  |           |   |                                     |  |
| Replacement of major power components at Brill Substation, originally built in 1985, on the Airport Regional Rail Line. Work includes installing new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying.  | \$12.80 M | Design & Construction<br>2024 - 2027              | Philadelphia                        | Philadelphia   |
| <b><i>Chestnut Hill Substation</i></b>  |           |   |                                     |  |
| Construct new Chestnut Hill Substation for the Chestnut Hill East and West Regional Rail Lines. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. The new Chestnut Hill East substation will consolidate the functions of existing Chestnut Hill East substation, Allen's Lane switching station, and Amtrak's North Philadelphia substation.   | \$22.54 M | Design<br>2022<br><br>Construction<br>2023 - 2026 | Philadelphia                        | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>New Jersey |

## SUBSTATIONS AND POWER IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)                     | Location                   | Service Area  |
|---|-----------|--|----------------------------|---|
| <p><b><i>Lansdale, Hatboro and 12th Street/Portal Switching Stations</i></b></p> <p>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 performed as part of the Substation Design and Equipment Purchase project (see description above).</p> <ul style="list-style-type: none"> <li>Lansdale Substation on the Lansdale/Doylestown Regional Rail Line</li> <li>Hatboro Substation on the Warminster Regional Rail Line</li> <li>12th Street and Portal Switching Stations in the Center City Tunnel</li> </ul> | \$33.87 M | Construction<br>2019 - 2022                              | Montgomery<br>Philadelphia | Bucks<br>Delaware<br>Montgomery<br>Philadelphia<br>New Jersey |
| <p><b><i>Neshaminy, Bethayres, Yardley Substations</i></b></p> <p>Overhaul of the following railroad substations. Work includes new transformers, trolley breakers, feeder breakers, substation switchgear and protective relaying. Design is being performed as part of the Substation Design and Equipment Purchase project (see description above).</p> <ul style="list-style-type: none"> <li>Neshaminy Substation on the West Trenton Regional Rail Line</li> <li>Bethayres Substation on the West Trenton Regional Rail Line</li> <li>Yardley Substation on the West Trenton Regional Rail Line</li> </ul>  | \$24.58 M | Construction<br>2018 - 2021                              | Bucks<br>Montgomery        | Bucks<br>Montgomery<br>Philadelphia<br>New Jersey             |
| <p><b><i>Wayne Junction Static Frequency Converters (SFC) #1-4</i></b></p> <p>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 replacement of the three existing converters are initiated to sustain existing service during construction.</p>  | \$60.00 M | Design<br>2015 - 2020<br><br>Construction<br>2020 - 2023 | Philadelphia               | Bucks<br>Montgomery<br>Philadelphia                           |
| <p><b><i>Woodbourne Substation</i></b></p> <p>Construction of a new Traction Power and Signal Power Substation on the West Trenton Regional Rail Line. Design is being performed as part of the Substation Design and Equipment Purchase project (see description above).</p>   | \$23.49 M | Construction<br>2022- 2024                               | Bucks                      | Bucks<br>Montgomery<br>Philadelphia<br>New Jersey             |

## SUBSTATIONS AND POWER IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year) | Location     | Service Area |
|---|-----------|--------------------------------------|--------------|--------------|
| <b>Transit Substations (FY 2021– 2025)</b>  |           |                                      |              |              |
| <b><i>Ellen Substation</i></b>  |           |                                      |              |              |
| Overhaul of Ellen Substation, serving the Market-Frankford Line and a portion of the Rt. 15 Trolley. Work includes replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gears. Design is being performed as part of the Substation Design and Equipment Purchase project (see description above).              | \$12.68 M | Construction<br>2025 - 2028          | Philadelphia | Philadelphia |
| <b><i>Market Substation</i></b>   |           |                                      |              |              |
| Overhaul of the Market Substation, serving the Market-Frankford Line and City Trolley Lines. Work includes replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gears. Design is being performed as part of the Substation Design and Equipment Purchase project (see description above).                      | \$12.50 M | Construction<br>2021 - 2024          | Philadelphia | Philadelphia |
| <b><i>Park, Broad, Louden, Castor Substations</i></b>   |           |                                      |              |              |
| Overhaul of the following transit substations. Work includes replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gears. Design is being performed as part of the Substation Design and Equipment Purchase project (see description above).  | \$19.95 M | Construction<br>2020 - 2023          | Philadelphia | Philadelphia |
| <ul style="list-style-type: none"> <li>• Park Substation, serving the Broad Street Line</li> <li>• Broad Substation, serving the Broad Street Line and Ridge Avenue Spur</li> <li>• Louden Substation, serving the Broad Street Line and Route 75 Trackless Trolley</li> <li>• Castor Substation, serving the Route 59 Trackless Trolley</li> </ul> |           |                                      |              |              |

## SUBSTATIONS AND POWER IMPROVEMENTS

| Project Descriptions   | Budget     | Schedule / Status<br>(Calendar Year)                     | Location     | Service Area   |
|--|------------|--|--------------|--|
| <b>Transit Substations (FY 2026 - 2032)</b>  |            |  |              |  |
| <i>Transit Substations - Ranstead</i>  |            |  |              |  |
| Overhaul of Ranstead Substation, serving the Market-Frankford Line and a portion of the City and Suburban Trolley Lines. Work includes replacement and upgrade of existing breakers, rectifiers, transformers, relays and switch gears. Design is being performed as part of the Substation Design and Equipment Purchase project (see description above). | \$12.68 M  | 2026 - 2032 Project                                      | Philadelphia | Philadelphia<br>Delaware   |
| <i>Transit Substation Program</i>  |            |  |              |  |
| Multi-year overhaul of other transit substations. Work includes installing new breakers, rectifiers, transformers, relays and switch gear.   | \$150.69 M | 2026 - 2032 Project                                      | Philadelphia | Philadelphia   |
| <b>Power Improvements (FY 2021 - 2025)</b>   |            |  |              |  |
| <i>30th Street West Catenary Replacement</i>   |            |  |              |  |
| Replacement and upgrade of the overhead contact system including catenary structures from 30th Street Station to 'K' Interlocking and the Powelton Yard Complex.   | \$77.00 M  | Design<br>2015 - 2020<br><br>Construction<br>2020 - 2025 | Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |

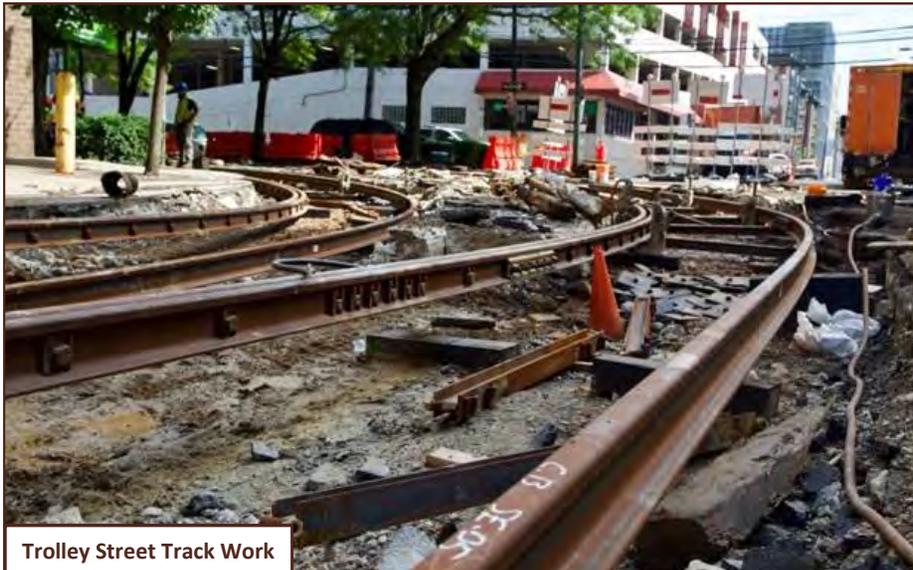
## TRACK AND RIGHT-OF-WAY IMPROVEMENTS

This program will provide for improvements to SEPTA’s track and right-of-way (ROW). SEPTA operates rail service over 605 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. This program includes projects on both 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 and erosion control, track drainage, and the repair and prevention of sinkholes in the right-of-way. Additional track and right-of-way improvements will be undertaken as part of the Infrastructure Safety Renewal Program (ISRP).



Trolley Tunnel Track Work

| Track and Right-of-Way Improvements - Program Elements | Prior Funding  | Budget        | Program Years |               |               |               | FY 2026-2032   | 12-Year Program Total | Beyond FY 2032 | Total Budget    |
|--|----------------|---------------|---------------|---------------|---------------|---------------|----------------|-----------------------|----------------|-----------------|
|  |                | Year FY 21    | FY 22         | FY 23         | FY 24         | FY 25         |                |                       |                |                 |
| -----\$Millions-----                                   |                |               |               |               |               |               |                |                       |                |                 |
| Track and Right-of-Way                                 | \$11.37        | \$3.40        | \$3.65        | \$4.69        | \$4.79        | \$4.69        | \$65.29        | \$86.51               | \$17.90        | \$115.78        |
| <b>TOTAL</b>   | <b>\$11.37</b> | <b>\$3.40</b> | <b>\$3.65</b> | <b>\$4.69</b> | <b>\$4.79</b> | <b>\$4.69</b> | <b>\$65.29</b> | <b>\$86.51</b>        | <b>\$17.90</b> | <b>\$115.78</b> |



Trolley Street Track Work



NHSL Tie Replacement & Continuous Welded Rail

## TRACK AND RIGHT-OF-WAY IMPROVEMENTS

| Project Descriptions   | Budget    | Schedule / Status<br>(Calendar Year)                     | Location               | Service Area             |
|--|-----------|--|------------------------|--------------------------|
| <b>Railroad and Transit Projects (FY 2021 - 2025)</b>  |           |  |                        |                          |
| <b><i>Market-Frankford Line Bridge Street Yard Program</i></b>   |           |  |                        |                          |
| Renewal of yard tracks including 3rd rail for the Market-Frankford Line at the Bridge Street Yard.   | \$3.00 M  | Design & Construction<br>2021 - 2023                     | Philadelphia           | Philadelphia<br>Delaware |
| <b><i>Norristown High Speed Line Tie Replacement and Continuous Welded Rail</i></b>  |           |  |                        |                          |
| Renewal of ties and bridge timbers, and conversion of 100 pound rail to 115 pound rail for the Norristown High Speed Line (NHSL), including track surfacing, and new special track work. Project includes acquiring special rail maintenance of way (MOW) equipment including a tie handler, tie inserter/extractor, tamper, spiker, and spike puller. | \$29.60 M | Design Complete<br><br>Construction<br>2014 - 2025       | Delaware<br>Montgomery | Delaware<br>Montgomery   |
| <b><i>Route 101/102 Yard Tracks Program</i></b>  |           |  |                        |                          |
| Renewal of yard tracks and special track work for the Suburban Transit Division Route 101/102 Trolley Lines at the 69th Street maintenance complex.  | \$7.10 M  | Design<br>2021 - 2022<br><br>Construction<br>2023 - 2026 | Delaware               | Delaware<br>Philadelphia |
| <b><i>Track &amp; Right of Way Rail Service Improvements</i></b>   |           |  |                        |                          |
| Track and right-of-way improvements and modifications throughout the SEPTA system to enhance rail service. This program will allow SEPTA to perform analysis, conceptual design, and construction of strategic rail service improvement initiatives. This program includes Railroad and Transit projects.  | \$19.25 M | Ongoing  | System-wide            | System-wide              |
| <b><i>Trolley Tunnel Track</i></b>   |           |  |                        |                          |
| Annual program to renew track, ties, and curve worn rail in the City Transit Division Trolley Tunnel. The tunnel serves Trolley Routes 10, 11, 13, 34 and 36.  | \$24.15 M | Ongoing  | Philadelphia           | Philadelphia             |

## TRACK AND RIGHT-OF-WAY IMPROVEMENTS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year) | Location                 | Service Area               |
|---|-----------|--------------------------------------|--------------------------|----------------------------|
| <b>Transit Projects (FY 2026 - 2032)</b>  |           |                                      |                          |                            |
| <i>Track and Right of Way Improvements</i>  |           |                                      |                          |                            |
| <p>Renewal of street track and special track work on City Transit Division trolley routes. This includes Trolley Routes 15, 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.</p> | \$27.50 M | 2026 - 2032 Project                  | Delaware<br>Philadelphia | Delaware<br>Philadelphia   |
| <b>Railroad Projects (FY 2026 - 2032)</b>   |           |                                      |                          |                            |
| <i>Norristown Station Regional Rail 3rd Track</i>   |           |                                      |                          |                            |
| <p>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.</p>   | \$34.50 M | 2026 - 2032 Project                  | Montgomery               | Montgomery<br>Philadelphia |

## VEHICLE ACQUISITIONS AND OVERHAULS

Based upon SEPTA FY 2019 Operating Statistics, SEPTA's revenue vehicle fleet consists of 1,462 buses (including 25 battery electric buses), 924 rail vehicles, 38 trackless trolleys and 460 paratransit vehicles. SEPTA also operates 15 new Regional Rail locomotives to accommodate its fleet of push/pull regional rail cars. In addition to the revenue vehicle fleets, SEPTA utilizes a fleet of non-revenue vehicles and equipment which are used for construction, vehicle and facility maintenance and service supervision. Under this Program of Projects, vehicles will be overhauled on a planned schedule to maintain a quality state of good repair throughout a vehicle's service life. This program also provides for the replacement of vehicles and equipment that have exceeded their useful life and 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 rail vehicle procurements included in this program. In addition, to accommodate new vehicles, SEPTA is conducting cross disciplinary systems analyses for new trolleys and buses to determine potential costs associated with infrastructure needs as well as operational and service impacts.

| Revenue Vehicle Inventory |       |
|---------------------------|-------|
| Regional Rail Locomotives | 15    |
| Push/Pull Cars            | 45    |
| Silverliner IV's          | 231   |
| Silverliner V's           | 120   |
| MFSE Cars                 | 218   |
| BSS Cars                  | 125   |
| NHSL Cars                 | 26    |
| City LRV Trolleys         | 112   |
| City PCC Trolleys         | 18    |
| Suburban Trolleys         | 29    |
| Buses                     | 1,462 |
| Trackless Trolleys        | 38    |
| Paratransit Vehicles      | 460   |

| Vehicle Acquisitions and Overhauls -<br>Program Elements | Budget               |                 | Program Years   |                 |                 |                 | FY 2026 -<br>2032 | 12-Year<br>Program<br>Total | Beyond<br>FY 2032 | Total<br>Budget   |
|--|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|-----------------------------|-------------------|-------------------|
|  | Prior<br>Funding     | Year<br>FY 21   | FY 22           | FY 23           | FY 24           | FY 25           |                   |                             |                   |                   |
|  | -----\$Millions----- |                 |                 |                 |                 |                 |                   |                             |                   |                   |
| Bus Purchase Program                                     | \$431.36             | \$66.51         | \$51.60         | \$80.00         | \$90.00         | \$100.00        | \$717.51          | \$1,105.62                  | \$0.00            | \$1,536.98        |
| Paratransit Vehicle Acquisition                          | \$0.00               | \$7.00          | \$7.00          | \$7.00          | \$7.00          | \$7.00          | \$49.00           | \$84.00                     | \$0.00            | \$84.00           |
| Regional Rail Electric Locomotive Acq.                   | \$149.05             | \$1.95          | \$0.00          | \$0.00          | \$0.00          | \$0.00          | \$0.00            | \$1.95                      | \$0.00            | \$151.00          |
| Regional Rail Multi-Level Railcar Acq.                   | \$47.13              | \$16.54         | \$50.21         | \$40.10         | \$20.32         | \$0.00          | \$0.00            | \$127.17                    | \$0.00            | \$174.30          |
| Utility Vehicle Renewal                                  | \$0.00               | \$9.13          | \$9.00          | \$9.00          | \$7.00          | \$7.00          | \$53.00           | \$94.13                     | \$0.00            | \$94.13           |
| Vehicle Overhaul Program                                 | \$0.00               | \$83.78         | \$84.79         | \$83.35         | \$83.83         | \$82.46         | \$602.24          | \$1,020.45                  | \$0.00            | \$1,020.45        |
| <b>TOTAL</b>   | <b>\$627.54</b>      | <b>\$184.90</b> | <b>\$202.60</b> | <b>\$219.45</b> | <b>\$208.15</b> | <b>\$196.46</b> | <b>\$1,421.75</b> | <b>\$2,433.31</b>           | <b>\$0.00</b>     | <b>\$3,060.85</b> |



Regional Rail Vehicle Overhaul



Multi-Level Railcar



New Flyer Hybrid-Electric Bus

## VEHICLE ACQUISITIONS AND OVERHAULS

| Project Descriptions  | Budget              | Schedule / Status<br>(Calendar Year)   | Location  | Service Area  |
|---|---------------------|--|---|---|
| <b>Bus Purchase Program (FY 2021- 2032)</b>   |                     |  |   |   |
| <p>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. The procurements of 10 additional battery-electric buses (see below) will expand SEPTA’s existing pilot program to evaluate the viability of cost-effective “green technology” buses on SEPTA’s diverse service territory.</p> |                     | <p>40-Ft. Battery-Electric Bus Purchase<br/>\$29.75 M<br/>25 Buses<br/>Vehicles delivered and in Revenue Service</p> |   |   |
| <p>SEPTA is currently piloting use of 25 battery-electric buses on Routes 29 and 79 in South Philadelphia and SEPTA is collecting information regarding their performance.</p>  |                     | <p>40-Ft. Battery-Electric Bus Purchase<br/>\$11.72 M<br/>10 Buses<br/>Delivery 2022-2023</p>                        | <p>Bucks<br/>Chester<br/>Delaware<br/>Montgomery<br/>Philadelphia</p> | <p>Bucks<br/>Chester<br/>Delaware<br/>Montgomery<br/>Philadelphia</p> |
| <p>In August 2018, the Federal Transit Administration awarded SEPTA a “Low or No Emission Program” (Low-No) grant to assist in the purchase of 10 new battery-electric buses and related infrastructure and equipment. This \$1.5 million grant represents the differential in price over 10 diesel-electric hybrid buses. These buses will operate on routes originating from Midvale Bus Garage.</p>  | <p>\$1,536.98 M</p> | <p>40-Ft. Hybrid Bus Purchase<br/>\$460.00 M<br/>525 Buses<br/>Delivery 2017 - 2020</p>                              |   |   |
| <p>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 are being delivered over a 5-year period that began in 2017 and will be completely delivered by 2020.</p>  |                     | <p>Balance of Program for Future Bus Purchase<br/>\$1,128.78 M</p>   |   |   |
| <p>SEPTA is currently analyzing data from its battery-electric bus pilot program as well as exploring emerging technologies utilized throughout the transit industry as it begins efforts to procure the next round of Bus Fleet Replacement vehicles.</p>  |                     |  |   |   |

## VEHICLE ACQUISITIONS AND OVERHAULS

| Project Descriptions   | Budget     | Schedule / Status<br>(Calendar Year)                         | Location   | Service Area   |
|--|------------|--|--|--|
| <b>Paratransit Vehicle Purchase (FY 2021- 2032)</b>  |            |  |  |  |
| <p>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.</p> <p>SEPTA ownership of these vehicles provides the following benefits:</p> <ul style="list-style-type: none"> <li>• The flexibility to rapidly exchange vehicles between carrier networks should the need arise</li> <li>• Creates an economic incentive for carriers to provide quality service</li> <li>• More control over fleet composition and standardization of the fleet</li> <li>• More control over vehicle design features</li> </ul> <p>In Calendar Year 2021, 92 vehicles are scheduled for delivery consisting of 60 lift-equipped mini-buses, 18 high capacity lift-equipped mini-buses, and 14 12-passenger mini-buses without wheelchair lifts.</p>   | \$84.00 M  | Annual delivery to replace vehicles beyond their useful life | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia                                   |
| <b>Regional Rail Electric Locomotive Acquisition (FY 2021 - 2025)</b>  |            |  |  |  |
| <p>This project provides for the acquisition of new electric locomotives. In 2015, SEPTA awarded a contract to Siemens Industry Inc., Mobility Division for thirteen ACS-64 locomotives plus two option vehicles. All 15 locomotives have been delivered and are in service. The locomotives will accommodate the acquisition of an expanded fleet of new multi-level push-pull passenger railcars. Remaining contract activities include receipt of capital spare material and correspondence closeout. These state-of-the-art locomotives are more powerful and significantly more reliable than SEPTA's former locomotives.</p> <p>The new locomotives fully comply with all federal standards and regulations and are 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. Through the locomotive 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.</p> | \$151.00 M | Vehicles delivered and in Revenue Service                    | Regional Rail System                                       | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |

## VEHICLE ACQUISITIONS AND OVERHAULS

| Project Descriptions  | Budget     | Schedule / Status<br>(Calendar Year)            | Location                | Service  |
|---|------------|---|-------------------------|--|
| <b>Regional Rail Multi-Level Car Acquisition (FY 2021 - 2025)</b>   |            |   |                         |  |
| <p>This project provides for the acquisition of new multi-level push-pull passenger 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. In 2017, a contract was awarded to CRRC MA Corp. for 45 railcars with an option for an additional 10 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 announcement 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.</p> | \$174.30 M | Contract Award Complete<br>Delivery 2021 - 2022 | Regional Rail<br>System | Bucks<br>Chester<br>Delaware<br>Montgomery<br>Philadelphia<br>Delaware (State)<br>New Jersey |

## VEHICLE ACQUISITIONS AND OVERHAULS

| Project Descriptions  | Budget              | Schedule / Status<br>(Calendar Year)  | Location           | Service Area       |
|---|---------------------|---|--------------------|--------------------|
| <b>Vehicle Overhaul Program (FY 2021 - 2032)</b>  |                     |   |                    |                    |
| <b>Vehicle Overhaul Program (VOH)</b>   |                     |   |                    |                    |
| <p>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 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. The VOH Program will allow SEPTA to continue its overhaul of rolling stock, thus ensuring continued safe and reliable service.</p> |                     |   |                    |                    |
| <p>Highlights of the Fiscal Year 2021 program includes the following activities:</p> <ul style="list-style-type: none"> <li>• Bus Overhaul: 40-foot New Flyer hybrid buses, 40-foot Nova hybrid buses, 60-foot Nova Articulated hybrid buses, New Flyer Trackless Trolleys,</li> <li>• Rail Overhaul: Broad Street B-IV cars, City and Suburban trolleys, Regional Rail Silverliner IV and V cars, Regional Rail Push-Pull cars, Market Frankford M-4 cars, Route 15 PCC-II Trolley Cars, Norristown High Speed Line N-5 cars, and support vehicles and equipment.</li> </ul>   | <p>\$1,020.45 M</p> | <p>Bus and Rail VOH<br/>\$1,014.45 M<br/>Annual program to overhaul a portion of each vehicle fleet</p> <p>Automatic Passenger Counters<br/>\$6.00 M<br/>Installation<br/>2021 - 2023</p> | <p>System-wide</p> | <p>System-wide</p> |
| <p>Highlights of campaigns for Fiscal Year 2021 include: Installation of Hybrid Bus, Trackless Trolley, and Trolley Operator Protection System installations; M-4 LCU Software Upgrade; M-4 carbody bolster repairs, PCC-II fleet overhaul. Regional Rail campaigns include Push-Pull cab/coach center door overhaul, HVAC control box upgrade, battery overhaul and E5-E7 Decelostat Conversion; and various Silverliner IV equipment and system overhauls.</p>  |                     |   |                    |                    |
| <p>Automatic Passenger Counters (APCs) – A separate campaign will be advanced to purchase and install APCs on the bus, trolley, and Norristown High Speed Line fleets. APCs will provide SEPTA with accurate, reliable, and consistent data for stop-level ridership, passenger loads, running time, on-time performance, and speed.</p>  |                     |   |                    |                    |

## VEHICLE ACQUISITIONS AND OVERHAULS

| Project Descriptions  | Budget    | Schedule / Status<br>(Calendar Year)   | Location    | Service<br>Area |
|---|-----------|--|-------------|-----------------|
| <b>Utility Fleet Renewal (Non-Revenue Vehicles) (FY 2021 - 2032)</b>  |           |  |             |                 |
| <p>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.</p> <p>The utility fleet comprises the following types of vehicles and equipment:</p> <ul style="list-style-type: none"> <li>• Utility vehicles for transit and paratransit supervisors, and SEPTA police officers.</li> <li>• Maintenance of way vehicles used for inspection, maintenance and construction of buildings, overhead power systems, communications systems, signal systems and track. These vehicles include trucks, cranes, high rail vehicles and maintenance-of-way equipment.</li> <li>• Transporter vehicles used in garages and shops, including revenue trucks, forklifts for material handling, pick-up trucks for material movement between depots and shops, and for snow removal.</li> <li>• Service vehicles used for vehicle maintenance including wreckers, tow tractors, man lifts and pick-up trucks.</li> <li>• Miscellaneous equipment such as generators, compressors, trailers, floor scrubbers and welding units.</li> </ul> <p>In addition to regular utility fleet program, SEPTA is implementing the following non-revenue fleet renewal projects:</p> <ul style="list-style-type: none"> <li>• Driving PA Forward – Class 8 Truck and Transit Bus Grant Program: This project will replace five (5) utility fleet vehicles, funded via Pennsylvania’s share of the Volkswagen Environmental Mitigation Trust. The new vehicles will help improve air quality and reduce diesel emissions.</li> <li>• Work train locomotives to replace three (3) diesel-electric locomotives manufactured in 1954 and 1992. The project will preserve SEPTA’s work train locomotive fleet, which is critical to maintaining SEPTA’s Regional Rail network, while also providing local and regional air quality benefits. The new vehicles will provide a 90 percent reduction in harmful emissions as compared to the existing vehicles.</li> </ul> |           |  |             |                 |
|   | \$94.13 M | Utility Fleet & Maintenance of<br>Way Fleet Renewal<br>\$87.00M<br>Ongoing<br><br>Driving PA Forward Utility Fleet<br>Renewal<br>\$1.13 M<br>2021<br><br>Work Train Locomotives<br>\$6.00 M<br>2021 - 2023 | System-wide | System-wide     |

**FY 2021 CAPITAL BUDGET AND FY 2021- 2032 CAPITAL PROGRAM**

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**Appendices**



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



SEPTA’s former Strategic Business Plan was adopted by the Board in July 2014 for Fiscal Years 2015 through 2019. The plan positioned SEPTA to evaluate and take advantage of key trends and to meet the region’s evolving transportation needs. As the transportation industry continues to change faster than it ever has before, SEPTA is developing a new Strategic Business Plan to actively address these challenges and ensure that transit is the backbone of mobility across the region. The former strategic plan is available at [www.septa.org/strategic-plan](http://www.septa.org/strategic-plan).

The Capital Program is a key tool for implementing SEPTA’s Strategic Business Plan. The matrix below illustrates the relationship between SEPTA’s current Strategic Business Plan objectives and the FY 2021-2032 Capital Program.

The next Strategic Business Plan will focus on goals that enhance SEPTA’s Value Proposition and will be used to guide future fiscal year capital budgets. The matrix will be updated for the new Strategic Business Plan in the coming fiscal years.

| Capital Programs                               | Strategic Business Plan Objectives |                       |                       |                         |                  |                |                           |                       |
|--|------------------------------------|-----------------------|-----------------------|-------------------------|------------------|----------------|---------------------------|-----------------------|
|  | Safety & Security                  | Rebuilding the System | Emerging Technologies | The Customer Experience | Ridership Growth | Sustainability | Human Capital Development | Business Partnerships |
| Bridge Program                                 | ✓                                  | ✓                     | ✓                     | ✓                       |                  | ✓              |                           |                       |
| Communications, Signal Systems and Technology  | ✓                                  | ✓                     | ✓                     | ✓                       | ✓                |                | ✓                         | ✓                     |
| Financial Obligations                          |                                    | ✓                     |                       | ✓                       | ✓                | ✓              |                           |                       |
| Infrastructure Safety Renewal Program          | ✓                                  | ✓                     | ✓                     | ✓                       |                  | ✓              | ✓                         |                       |
| Maintenance / Transportation Shops and Offices | ✓                                  | ✓                     |                       | ✓                       |                  | ✓              | ✓                         |                       |
| Projects of Significance: Early Actions        | ✓                                  | ✓                     | ✓                     | ✓                       | ✓                | ✓              |                           | ✓                     |
| Safety and Security Improvements               | ✓                                  | ✓                     | ✓                     | ✓                       |                  |                |                           | ✓                     |
| SEPTA Key                                      | ✓                                  | ✓                     | ✓                     | ✓                       | ✓                | ✓              | ✓                         | ✓                     |
| Service Restoration and Improvements           |                                    | ✓                     |                       | ✓                       | ✓                | ✓              |                           |                       |
| Stations, Loops and Parking Improvements       | ✓                                  | ✓                     |                       | ✓                       | ✓                | ✓              |                           | ✓                     |
| Substations and Power Improvements             | ✓                                  | ✓                     | ✓                     |                         |                  | ✓              |                           |                       |
| Track and Right-of-Way Improvements            | ✓                                  | ✓                     |                       | ✓                       | ✓                | ✓              |                           |                       |
| Vehicle Acquisitions and Overhauls             | ✓                                  | ✓                     | ✓                     | ✓                       | ✓                | ✓              |                           |                       |

## APPENDIX B: LONG-TERM PLANNING EFFORTS

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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

##### *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 NRG 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 updated the original findings based upon the 2013 Navy Yard Master Plan and examined 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 final report was released in March 2019.

#### Long Range Planning

##### *Roosevelt Boulevard*

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

The City of Philadelphia was awarded a \$2.5 million U.S. Department of Transportation Investment Generating Economic Recovery (TIGER) grant in 2014 to develop a long-range plan for the Roosevelt Boulevard ( "Route for Change"). Work on this study began in 2015, with PennDOT and SEPTA being core stakeholders. The Route for Change study is expected to last into 2020. An early action item from this study and Delaware Valley Regional Planning Commission's (DVRPC) Alternatives Development for the Roosevelt Boulevard Transit Enhancements study is the implementation of "Boulevard Direct", a bus service that provides a competitive transit alternative to personal vehicles. Boulevard Direct (Phase A) was introduced in Fall 2017, operating with limited stops between the Neshaminy Mall and the Frankford Transportation Center. The service has many of the characteristics of a Bus Rapid Transit (BRT) service, including greater stop spacing, enhanced bus stops or "stations", with shelters and other amenities and uniquely branded (wrapped) buses. An additional station was opened at Southampton Road in February 2019.

Boulevard Direct (Phase B) will connect the Frankford Transportation Center and the Wissahickon Transportation Center on the southern portion of Roosevelt Boulevard. Boulevard Direct (Phase B) is expected to begin service with the opening of the new Wissahickon Transportation Center. In December 2019, SEPTA was awarded a \$2 million Federal Transit Administration Bus and Bus Facilities grant for the Boulevard Direct (Phase B) project. Details are found in the Service Restoration and Improvements Program of Projects section of the capital budget.

## APPENDIX B: LONG-TERM PLANNING EFFORTS

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### 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's recommendations and meet regularly to advance plan implementation. The 30th Street Station (MFL) Improvements project is included in the FY 2021 Capital Budget and Fiscal Years 2021-2032 Capital Program as part of the Stations, Loops and Parking Improvements Program. Construction has begun on new elevator access at the 31st Street entrance to the SEPTA station.

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#### *Connect: Philadelphia's Strategic Transportation Plan*

Lead agency: Philadelphia City Planning Commission

Connect: Philadelphia's Strategic Transportation Plan was released in October 2018. The document lays out goals and strategies to support the vision of creating "a transportation system that benefits everyone". The plan's outlook is for the years 2019 - 2025.

The plan lays out five goals:

- Vision Zero
- Transit First
- Great Streets
- A Competitive City
- Efficient Government

SEPTA staff continues to be involved in plan development and implementation. SEPTA is represented on all Connect committees including: Executive, Trolley Modernization, Operations, and Planning and Development. Many near-term implementation strategies have focused on enforcement to ensure that SEPTA buses can operate reliably on Center City's ever busier streets. Connect also dovetails with SEPTA's forthcoming Comprehensive Bus Network Redesign project.

## APPENDIX B: LONG-TERM PLANNING EFFORTS

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### 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 the planning efforts along the Corridor. The NEC Commission directs efforts to redefine the use of the NEC with its comprehensive cost-allocation methodology that has been adopted by the Northeast Corridor States. SEPTA is designated by Governor Wolf to be an alternate to PennDOT representing the Commonwealth of Pennsylvania as a voting member on the NEC Commission. SEPTA and PennDOT are engaged in decision making for short and long term financial, operational, and infrastructure policies impacting the Northeast Corridor.

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#### *NEC Strategic Development Plan*

Lead agency: NEC Commission

In 2019, the NEC Commission began the creation of the NEC Strategic Development Plan (SDP). The purpose of the SDP is to create a feasible, consensus-based vision for advancing state of good repair and improving rail service along the NEC. The SDP will build upon the NEC FUTURE planning vision and articulate the benefits of investment and risks of not investing, identify key vulnerabilities and investment priorities, identify and resolve challenges of funding and implementing projects and inform the Commission's ongoing five-year capital planning process. The SDP is expected to be complete in the summer of 2021.

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#### *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, 2019 to June 30, 2020. 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. These DVRPC Work Program projects span Fiscal Years 2019-2020 and reflect projects SEPTA will directly contribute to and be the lead stakeholder for:

- Safe Routes to Transit – Morton Borough
  - Devon Station Multimodal Access Study
  - King of Prussia Rail Modeling
  - License Plate Survey of SEPTA Passenger Rail Stations
  - Bus Stop Design Guidelines Update
  - Eastwick Intermodal Center
  - TOD Policy Analysis
  - Trolley Modernization - Routes 11 and 13 (Delaware County Operations)
  - Direct Bus Expansion Feasibility Study
-

## APPENDIX C: BUDGET AND SCHEDULE CHANGES

The table below summarizes changes to project budgets and schedules between the approved FY 2020 Capital Budget and Fiscal Years 2020-2031 Capital Program and the proposed FY 2021 Capital Budget and Fiscal Years 2021-2032 Capital Program.

| Program                                      | Project   | FY 2020 Capital Program |   | FY 2021 Capital Program |  |
|--|---|-------------------------|---|-------------------------|--|
|  |   | Budget*                 | Schedule (Calendar Year)*   | Budget                  | Schedule (Calendar Year)                                       |
| Bridge Program                               | Chestnut Hill East Line Bridge Rehab Program                | \$30.00 M               | 2025-2031   | \$30.00 M               | Design & Construction 2024 - 2027                              |
|  | Critical Bridge Program                                     | \$64.20 M               | Ongoing   | \$69.21 M               | Ongoing  |
|  | Mainline-Schuylkill Bridges - Phase 2                       | \$56.00 M               | Design 2023; Construction 2023-2027                                       | \$10.95 M               | Design 2020-2021; Construction 2021-2024                       |
|  | Mainline-Schuylkill Bridges - Phase 3                       |                         |   | \$45.05 M               | Design & Construction 2026-2032                                |
|  | NHSL Bridge 0.15 over 69th St. Yard Tracks                  | \$15.50 M               | Design 2016-2018; P1 Construction 2018-2019;<br>P2 Construction 2024-2025 | \$4.00 M                | Design Complete; Construction 2018-2021                        |
|  | Stone Arch Bridge Program – Phase 2                         | \$11.20 M               | Design 2017-2019; Construction 2019-2021                                  | \$11.20 M               | Design 2017-2020; Construction 2020-2022                       |
|  | Suburban Rail Transit Critical Bridge Program               | N/A                     | N/A   | \$34.60 M               | Ongoing  |
| Communications, Signal Systems, & Technology | Broad Street Line Ridge-Spur Signals                        | \$8.66 M                | Design complete; Construction 2015-2019                                   | \$8.66 M                | Design complete; Construction 2015-2022                        |
|  | Broad Street Line Signals                                   | N/A                     | N/A   | \$65.00 M               | Design & Construction 2025-2031                                |
|  | Computer Aided Radio Dispatch (CARD) System Replacement     | \$32.50 M               | Design 2017-2019; Construction 2019-2022                                  | \$92.50 M               | Design 2017-20; Construction 2021-2026                         |
|  | Control Center Wall Display                                 | N/A                     | N/A   | \$3.89 M                | Design 2020; Construction 2020-2022                            |
|  | Crash Hardened Video Recorders                              | \$4.80 M                | Implementation 2019-2020  | \$4.80 M                | Implementation 2019-2022                                       |
|  | Information Technology Program                              | \$62.08 M               | Ongoing   | \$61.28 M               | Ongoing  |
|  | Interlocking Improvement Program (RRD)                      | \$75.00 M               | Ongoing   | \$120.46 M              | Ongoing  |
|  | Operations Training Simulators                              | \$5.38 M                | Implementation 2017-2020  | \$6.59 M                | Implementation 2017-2022                                       |
|  | Positive Train Control                                      | \$170.00 M              | Design Complete; Construction 2012-2021                                   | \$167.00 M              | Design Complete; Construction 2012-2020                        |
|  | Norristown High Speed Line Interlockings                    | \$7.10 M                | Design 2018-2019; Construction 2018-2021                                  | \$12.27 M               | Design 2018-2019; Construction 2018-2024                       |
|  | Real-Time Information / Audio Visual Public Address (AVPA)  | \$34.73 M               | Design 2015-2019; Construction 2017-2021                                  | \$34.73 M               | Design 2015-2020; Construction 2017-2023                       |
|  | Route 101/102 Positive Train Control & ROW Improvements     | \$76.40 M               | Construction 2015-2020  | \$76.40 M               | Construction 2015-2022   |
|  | Southwest Connection (30th to Phil Signals, Catenary & ROW) | \$70.99 M               | Design 2014-2019; Construction 2017-2021                                  | \$70.99 M               | Design 2014-2020; Construction 2017-2022                       |
|  | Trolley Signal Systems                                      | N/A                     | N/A   | \$35.00 M               | Design & Construction 2026-2032                                |
|  | Video Systems Refreshment Program                           | \$6.46 M                | Implementation 2017-2023  | \$21.47 M               | Implementation 2017-2023; 2026-2032                            |
| Financial Obligations                        | Capital Asset Leases  | \$805.38 M              | Ongoing   | \$853.58 M              | Ongoing  |
|  | Debt Service  | \$658.69 M              | Ongoing   | \$583.67 M              | Ongoing  |
| ISRP   | Infrastructure Safety Renewal Program (ISRP)                | \$625.00 M              | Ongoing   | \$648.90 M              | Ongoing  |
| Maintenance / Transportation Shops & Offices | Broad Street Subway Stormwater                              | \$8.0 M                 | Design 2023; Construction 2024  | \$8.00 M                | Design 2022; Construction 2023-2024                            |
|  | Environmental Clean Up and Protection                       | \$6.28 M                | Ongoing   | \$7.98 M                | Ongoing  |
|  | Frazer Rail Shop and Yard Upgrade                           | \$139.00 M              | Design 2016-2019; P1&P2 Complete;<br>P3 Construction 2019-2022            | \$139.00 M              | Design 2016-2020; P1&P2 Complete;<br>P3 Construction 2021-2023 |
|  | Powelton Yard Facility Improvements                         | \$3.92 M                | Design Complete; Construction 2019-2020                                   | \$3.92 M                | Design Complete; Construction 2020-2022                        |
|  | Wayne Junction Shop Improvements                            | \$150.00 M              | P1 Design 2017-2019; Construction 2019-2022<br>P2 2025-2031               | \$11.25 M               | P1 Design 2017-2020; Construction 2021-2023                    |
|  | Wheel Truing Program Phase 1                                | \$3.79 M                | Construction 2016-2020  | \$3.79 M                | Construction 2016-2021   |
|  | Wyoming Complex Stormwater Retrofits                        | \$2.92 M                | Design 2019; Construction 2020-2021                                       | \$2.92 M                | Design 2020-2021; Construction 2021-2022                       |

\*Projects listed with "N/A" indicates: 1) Project is new to the Capital Budget; or, 2) Project was previously within budget as part of a larger program of projects and is now a standalone project.

## APPENDIX C: BUDGET AND SCHEDULE CHANGES

| Program                                 | Project   | FY 2020 Capital Program                                    |  | FY 2021 Capital Program  |   |
|---|---|--|--|--|---|
|   |   | Budget*  | Schedule (Calendar Year)*                | Budget   | Schedule (Calendar Year)  |
| Roof Program                            | 69th St. Transportation Center Shop Complex Roofs Replacement | \$14.10 M  | Construction 2016-2020                   | \$14.10 M  | Construction 2016-2022  |
|   | Courtland Shop Roof Replacement                               | \$8.80 M   | Design 2018-2019; Construction 2019-2020 | \$8.80 M   | Design 2018-2021; Construction 2021-2022  |
|   | Midvale Bus Garage Roof Replacement                           | \$30.03 M  | Design 2018-2019; Construction 2020-2023 | \$30.03 M  | Design 2018-2020; Construction 2020-2023  |
|   | Southern Garage Roof Replacement                              | \$3.40 M   | Design & Construction 2024-2028          | \$3.40 M   | Design & Construction 2025-2026   |
|   | Maintenance, Stations and Substations Roof Program            | \$21.00 M  | 2025-2031                                | \$45.00 M  | Design & Construction 2025-2032   |
| Projects of Significance: Early Actions | King of Prussia (KOP) Rail: 15% Design & EIS                  | N/A  | N/A                                      | \$21.25 M  | 15% Design - 2019; Final EIS 2020<br>TBD: 30% Design; Final Design; Construction; Vehicle Acquisition |
|   | Trolley Acquisition and Infrastructure                        | \$1,500 M  | 2025-2031 and Beyond                     | \$54.78 M  | Preliminary Design 2020-2021;<br>Project Design & Planning 2021-2026<br>Construction TBD              |
| Safety & Security                       | Fern Rock Transportation Center Safety Improvements           | \$20.52 M  | Design 2018-2019; Construction 2019-2022 | \$20.52 M  | Design 2018-2020; Construction 2019-2022  |
|   | Grade Crossing Enhancement Program                            | N/A  | N/A                                      | \$12.00 M  | Ongoing   |
|   | Lawndale Station Pedestrian Underpass & High Level Platform   | \$9.59 M   | Design 2016-2019; Construction 2020-2022 | \$9.59 M   | Design 2016-2020; Construction 2021-2023  |
|   | Operator Shields (formerly Bus Operator Shields)              | \$6.26 M   | Installation 2018-2020                   | \$12.51 M  | Installation Trolley & Trackless Trolley 2021-2023  |
|   | Safety and Security Shop, Yard, and Office Hardening          | N/A  | N/A                                      | \$39.53 M  | Ongoing   |
|   | Sharon Hill Line Flood Mitigation                             | \$12.18 M  | Design Complete; Construction 2018-2020  | \$12.18 M  | Design Complete; Construction 2018-2022   |
|   | Shoreline Stabilization on the Manayunk/Norristown Line       | \$8.23 M   | Design Complete; Construction 2019-2020  | \$8.46 M   | Design Complete; Construction 2020-2022   |
|   | Station Ventilation Improvements: Jefferson Station           | \$5.08 M   | Construction 2019-2020                   | \$5.08 M   | Construction 2020-2021  |
|   | Station Ventilation Improvements: Suburban Station            | \$10.00 M  | Construction 2016-2020                   | \$10.00 M  | P1 Complete; P2 2020-2022   |
| Safety & Security Technology Upgrades   | N/A   | N/A  | \$31.00 M                                | 2026-2032 Project  |   |
| SEPTA Key                               | SEPTA Key (New Payment Technology)                            | \$302.30 M   | Implementation 2008-2020                 | \$302.30 M   | Implementation 2008-2022  |
| Service Restorations & Improvements     | Elwyn to Middletown/US Route 1 Rail Service                   | \$177.86 M   | Design Complete; Construction 2018-2021  | \$192.95 M   | Design Complete; Construction 2018-2023   |
|   | Boulevard Direct Phase B                                      | N/A  | N/A                                      | \$2.50 M   | Design & Construction 2020-2022   |
| Stations, Loops & Parking               | 5th Street / Independence Hall Station                        | \$27.52 M  | Construction 2018-2020                   | \$27.52 M  | Construction 2018-2022  |
|   | 8th Street Customer Service Office                            | N/A  | N/A                                      | \$0.24 M   | Design & Construction 2020-2021   |
|   | 11th Street Station   | \$9.50 M   | Design 2019-2020; Construction 2020-2022 | \$9.51 M   | Design 2019-2020; Construction 2021-2023  |
|   | 30th Street Station (MFL) - Phase A                           | \$28.55 M  | Design complete; Construction 2017-2019  | \$28.55 M  | Design complete; Construction 2017-2024   |
|   | 30th Street Station (MFL) - Phase B                           | \$38.80 M  | Design 2018-2019; Construction 2019-2021 | \$38.80 M  | Design complete; Construction 2020-2023   |
|   | 34th Street Station   | N/A  | N/A                                      | \$31.00 M  | Design & Construction 2024-2030   |
|   | 69th Street Transportation Center Parking Garage              | \$31.01  | P2 Construction 2019-2023                | \$31.01  | P2 Construction 2020-2025   |
|   | ADA Bridge Plates   | N/A  | N/A                                      | \$2.21 M   | Design & Procurement 2020-2023  |
|   | Ardmore Transportation Center Phase 1                         | \$36.29 M  | Construction 2019-2021                   | \$53.60 M  | Construction 2019-2022  |
|   | Ardmore Transportation Center Phase 2                         | \$26.05 M  | 2025-2031                                | \$26.05 M  | Design & Construction 2026-2032 & Beyond  |
|   | Bethlehem Pike Loop   | \$1.75 M   | Design 2021; Construction 2022-2023      | \$3.38 M   | Design 2021; Construction 2022-2023   |
| Center City Concourses                  | \$59.65 M   | P1 Complete, P2-8 Design 2016-2030; Construction 2019-2031 | \$59.65 M                                | P1 & 3 Complete; P 2 & 4 Design 2018-2020; Construction 2021-2023; P 5 - 8 Design & Construction 2023-2026 |   |

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## APPENDIX C: BUDGET AND SCHEDULE CHANGES

| Program                                  | Project   | FY 2020 Capital Program                  |  | FY 2021 Capital Program                  |   |
|--|---|--|--|--|---|
|  |   | Budget*                                  | Schedule (Calendar Year)*  | Budget                                   | Schedule (Calendar Year)  |
| Stations, Loops & Parking<br>(Continued) | Chestnut Hill East ADA Improvements             | \$11.17 M                                | Design 2021-2022; Construction 2022-2023                           | \$11.17 M                                | Design 2021-2022; Construction 2023-2024  |
|  | Chinatown Station                               | N/A                                      | N/A  | \$12.50 M                                | 2026-2032 Project   |
|  | City Hall & 15th Street Stations                | \$146.47 M                               | 15th Street 2017-2019;<br>City Hall 2020-2025                      | \$146.47 M                               | 15th Street Complete;<br>City Hall: Design 2019-2023;<br>Construction 2020-2028 |
|  | Conshohocken Station                            | \$15.00 M                                | Design 2018-2019; Construction 2019-2021                           | \$15.00 M                                | Design 2018-2020; Construction 2020-2022  |
|  | Conshohocken Station Parking                    | \$10.00 M                                | Design 2019; Construction 2020-2021                                | \$37.17 M                                | Design 2020; Construction 2021-2023   |
|  | Ellsworth-Federal Station                       | N/A                                      | N/A  | \$9.80 M                                 | 2026-2032 Project   |
|  | Erie Station                                    | \$9.00 M                                 | Design 2019-2020; Construction 2021-2023                           | \$9.00 M                                 | Design 2020-2021; Construction 2021-2023  |
|  | Exton Station Improvements Phase 1              | \$25.10 M                                | Construction 2015-2019   | \$28.23 M                                | Complete  |
|  | Exton Station Improvements Phase 2 & 3          | \$38.64 M                                | Design & construction 2024-2027                                    | \$38.64 M                                | Design & Construction 2026-2032   |
|  | Fairmount Station                               | N/A                                      | N/A  | \$18.00 M                                | 2026-2032 Project   |
|  | Glenside Station                                | N/A                                      | N/A  | \$24.75 M                                | 2026-2032 Project   |
|  | Gwynedd Valley Station Parking                  | \$2.54 M                                 | Construction 2019-2020   | \$2.54 M                                 | Construction 2020-2021  |
|  | Hatboro Station                                 | \$7.15 M                                 | 2025-2031  | \$7.15 M                                 | 2026-2032 ISRP  |
|  | Hunting Park Station                            | \$5.50 M                                 | 2025-2031  | \$12.50 M                                | Design & Construction 2024-2026   |
|  | Ivy Ridge Parking Improvements                  | \$35.00 M                                | 2025-2031  | \$35.00 M                                | P1 Property Acquisition 2021;<br>P2 Design & Construction 2026-2032             |
|  | Ivy Ridge Station                               | N/A                                      | N/A  | \$18.50 M                                | 2026-2032 Project   |
|  | Jenkintown-Wyncote Station                      | \$25.32 M                                | Design 2016-2019; Construction 2020-2023                           | \$25.32 M                                | Design 2016-2020; Construction 2020-2024  |
|  | Logan Station                                   | N/A                                      | N/A  | \$12.50 M                                | 2026-2032 Project   |
|  | Lombard-South Station                           | N/A                                      | N/A  | \$9.80 M                                 | 2026-2032 Project   |
|  | Noble Station, Parking Garage and Storage Track | \$53.00 M                                | Design 2016-2019; Construction 2024-2027                           | \$53.00 M                                | Design 2016-2021; Construction 2026-2032  |
|  | Paoli Intermodal Transportation Center Phase 1  | \$35.93 M                                | Construction 2017-2019   | \$41.94 M                                | Complete  |
|  | Regional Rail Station Roof Program              | N/A                                      | N/A  | \$11.25 M                                | Ongoing   |
|  | Secane Station Phase 2                          | \$3.00 M                                 | 2025-2031  | \$3.00 M                                 | Design & Construction 2020-2021   |
|  | Snyder Station                                  | \$9.80 M                                 | 2025-2031  | \$9.80 M                                 | Design & Construction 2024-2027   |
|  | Spring Garden Station MFL                       | \$7.37 M                                 | 2025-2031  | \$7.37 M                                 | Design & Construction 2024-2026   |
|  | Stenton Station                                 | N/A                                      | N/A  | \$7.15 M                                 | 2026-2032 Project   |
|  | Susquehanna-Dauphin Station                     | \$14.94 M                                | Construction 2019-2021   | \$22.50 M                                | Construction 2020-2023  |
|  | Tasker-Morris Station                           | \$9.80 M                                 | Design 2017-2019; Construction 2020-2022                           | \$9.80 M                                 | Design 2017-2020; Construction 2020-2023  |
|  | Villanova Station NHSL                          | \$4.00 M                                 | Design & Construction 2022-2023                                    | \$4.00 M                                 | Design & Construction 2021-2024   |
|  | Villanova Station Phase 2                       | \$10.45 M                                | Canopies Construction 2019-2020;<br>Station Construction 2024-2026 | \$10.45                                  | Construction 2023-2025  |
| Willow Grove Station                     | \$20.89 M                                       | Design 2017-2020; Construction 2025-2031 | \$20.89 M  | Design 2017-2021; Construction 2020-2024 |   |
| Westmoreland Loop                        | \$1.75 M  | Design 2019; Construction 2020           | \$2.00 M   | Design 2019; Construction 2020-2021      |   |
| Wissahickon Station                      | N/A   | N/A                                      | \$28.20 M  | 2026-2032 Project                        |   |
| Wissahickon Transportation Center        | \$14.22 M                                       | Design 2017-20; Construction 2020-2022   | \$17.64 M  | Design 2017-20; Construction 2020-2022   |   |

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## APPENDIX C: BUDGET AND SCHEDULE CHANGES

| Program                          | Project   | FY 2020 Capital Program |  | FY 2021 Capital Program |  |
|----------------------------------|---|-------------------------|--|-------------------------|--|
|                                  |   | Budget*                 | Schedule (Calendar Year)*                | Budget                  | Schedule (Calendar Year)                 |
| Substations & Power              | 30th Street West Catenary Replacement                 | \$77.00 M               | Design 2015-2019; Construction 2019-2024 | \$77.00 M               | Design 2015-2020; Construction 2020-2025 |
|                                  | Railroad Substation - 18th Street Switching Station   | \$13.00 M               | Construction 2023-2026                   | \$13.00 M               | Construction 2022-2025                   |
|                                  | Railroad Substation - Brill Substation                | \$12.80 M               | 2025-2031 Project                        | \$12.80 M               | Design & Construction 2024-2027          |
|                                  | Railroad Substation - Chestnut Hill Substation        | \$22.54 M               | Construction 2023-2026                   | \$22.54 M               | Design 2022; Construction 2023-2026      |
|                                  | Railroad Substation - Woodbourne Substation           | \$23.49 M               | Construction 2020-2023                   | \$23.49 M               | Construction 2022-2024                   |
|                                  | Transit Substation - Ellen                            | \$18.68 M               | Construction 2019-2022                   | \$12.68 M               | Construction 2025-2028                   |
|                                  | Transit Substation - Market                           |                         |  | \$12.50 M               | Construction 2021-2024                   |
|                                  | Transit Substation - Ranstead                         |                         |  | \$12.68 M               | 2026-2032                                |
|                                  | Transit Substation Program                            | \$47.66 M               | 2025-2031                                | \$150.69 M              | 2026-2032                                |
|                                  | Wayne Junction Static Frequency Converters (SFC) #1-4 | \$60.00 M               | Design 2015-2019; Construction 2019-2022 | \$60.00 M               | Design 2015-2020; Construction 2020-2023 |
| Track & ROW Improvements         | Market-Frankford Line Bridge Street Yard Program      | \$3.00 M                | Construction 2022-2023                   | \$3.00 M                | Construction 2021-2023                   |
|                                  | Route 101/102 Yard Tracks Program                     | \$5.69 M                | 2025-2031                                | \$7.10 M                | Design & Construction 2021-2026          |
|                                  | Transit Track and Right of Way Improvements           | N/A                     | N/A                                      | \$27.50 M               | 2026-2032                                |
| Vehicle Acquisitions & Overhauls | Automatic Passenger Counters (APCs)                   | N/A                     | N/A                                      | \$6.00 M                | Installation 2021-2023                   |
|                                  | Bus Purchase Program                                  | \$1,343.25 M            | Ongoing                                  | \$1,536.98 M            | Ongoing                                  |
|                                  | Regional Rail Multi-Level Car Acquisition             | \$174.30 M              | Delivery 2020-2022                       | \$174.30 M              | Delivery 2021-2022                       |
|                                  | Utility Fleet Renewal                                 | \$77.90 M               | Ongoing                                  | \$94.13 M               | Ongoing                                  |
|                                  | Vehicle Overhaul Program                              | \$1,008.72 M            | Ongoing                                  | \$1,014.45 M            | Ongoing                                  |

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