SEP-TAINABLE

ANNUAL REPORT (March 2019)

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LETTER FROM SEPTA LEADERSHIP

2018 was the year in which public transit's role as a solution to growing sustainability challenges became increasingly clear. For the first time in 40 years, nationwide, transportation is the largest source of greenhouse gas emissions. According to the United States Environmental Protection Agency, transportation's 28 percent share is now larger than emissions from the electric grid, industrial production, agriculture, and commercial and residential building sectors. The majority of these transportation-related emissions are generated by personal automobiles.

Here in Philadelphia, it is a very different story. The City's recently-released "Clean Energy Vision for Philadelphia" reports that transportation represents just 17 percent of citywide emissions, well below industry and buildings. According to the report, "transportation emissions are relatively low in Philadelphia thanks to residents riding SEPTA and other low-carbon options" – such as biking and walking. Transit is one of the most important assets we have in pursuing a sustainable future. To this end, SEPTA is a committed partner in guiding a transportation system that benefits everyone.

We are also committed to doing our part to reduce transit-related emissions through the implementation of a now award-winning Sustainability Program. The plan, SEP-TAINABLE, was adopted by the SEPTA Board in 2011, updated in 2017, and includes ambitious yet achievable goals for energy and emissions reductions, waste minimization, and stormwater management. Highlights from 2018 include:

1) Continued transition towards one of the largest "green" bus fleets in the United States, including the largest zero emission fleet on the East Coast by 2019 and more than 95 percent of the fleet either hybrid or electric by 2021;
2) Aggressive enforcement of the vehicle anti-idling program that strictly adheres to city and state regulations, with initiatives as far-reaching as new signage at bus terminals, compliance checks by transportation managers, and automatic-shut off devices for all new buses;
3) Completion of the largest transit energy storage project on the East Coast, with 10.75 megawatts of batteries capturing, storing, and reusing energy created by braking trains on the Market-Frankford & Broad Street Lines;
4) Contract execution for the second largest solar project in the history of the City of Philadelphia, with 3 megawatts of panels currently being installed on the roofs of four bus and rail maintenance facilities across the city;
5) Release of an RFP soliciting proposals to convert 10-20 percent of SEPTA's base electrical load to renewable energy;
6) Implementation of a comprehensive building energy retrofit program that self-funds facility upgrades through guaranteed energy savings generated by each project;
7) Progress on an infrastructure resilience program with projects to reinforce power, rail right of way, and stormwater systems in an ongoing effort to guard against the impacts of extreme weather.
8) Certification of a second maintenance facility under the globally recognized ISO14001 standard for environmental management.

Public transit is key to an environmentally, socially, and economically sustainable future for southeastern Pennsylvania. These projects and others detailed in the following pages reinforce SEPTA's role as a solution to the sustainability challenges we face and our commitment to serve as an industry and regional leader in addressing them.

SEPTA is please to share this annual report with you.

Pasquale T. Deon, Sr.
Chairman

Jeffrey D. Knueppel
General Manager

A GUIDE TO SEP-TAINABLE

In 2011, SEPTA launched its first five-year Sustainability Program, entitled SEP-TAINABLE: The Route to Regional Sustainability. In 2017, SEPTA launched its second-generation plan, SEP-TAINABLE 2020, which established goals and targets for performance improvements across the triple bottom line approach: Natural Environment, Healthy Communities and Workforce, and Economic Vitality.

NATURAL ENVIRONMENT

Sustaining the natural environment ensures sufficient resources to support our society and healthy living conditions - now and in the future.

HEALTHY COMMUNITIES & WORKFORCE

Creating healthy communities and workforces helps to ensure a good social well-being.

ECONOMIC VITALITY

Focusing on economic vitality leverages the impact of transit on supporting the region's density and economic productivity.

The 2019 SEP-TAINABLE Annual Report provides an update on progress, highlighting current and future efforts that represent a commitment to continual improvement in each pillar of the plan. Complimentary updates about SEPTA's Sustainability Program can be found on the SEPTA Sustainability website www.septa.org/sustain.

The plan document and website are designed to be accessible and relevant to all riders and residents of southeastern Pennsylvania. We hope that you enjoy discovering how SEPTA is contributing to a more sustainable region and what you can do to help support SEPTA's efforts.

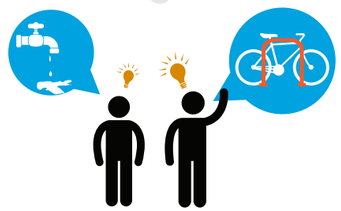
HOW YOU CAN HELP
SEPTA'S SUSTAINABILITY PROGRAM

By reading SEPTA's Sustainability Program Plan Annual Reports, and visiting the SEPTA Sustainability webpage, you can learn more about SEPTA's various environmental, social, and economic sustainability efforts throughout the region. Sharing this information with your family and friends will help to spur conversations and help to spread the message of sustainability.

One of the best things you can do to support our sustainability program is continue to use public transportation. SEPTA plays a critical role in reducing transportation emissions in southeastern Pennsylvania's. On average, commuters who choose transit over driving cut their personal transportation emissions by 70%.

The more riders SEPTA has, the deeper SEPTA's positive impact on regional sustainability becomes.

You can support SEPTA's waste management strategies by properly utilizing waste and recycling combo units. These combo units can be found at all SEPTA stations, and the recycling bins have new lids with updated stickers to direct riders on how to separate waste and recycling from one another. This is especially important to avoid contaminating our recycling loads to increase the amount of waste that can actually be recycled once it reaches the plant.



It is equally important for our riders to report problems or provide suggestions for what they would like to see from our sustainability program. Examples include things like reporting a leaky faucet in a station restroom or a recycling bin without a lid. Passengers can also request that bike racks be installed at SEPTA owned stations throughout the system.

For this and any other input on sustainability at SEPTA, please email SEPTA at sustainability@septa.org.

NATURAL ENVIRONMENT

Public transportation is inherently sustainable. SEPTA reduces greenhouse emissions through reducing private auto use, congestion, and supporting compact, energy efficient development. SEPTA also engages in its own internal sustainability efforts to continually mitigate its environmental footprint.

The Natural Environment chapter of this Annual Report provides an update on progress towards goals focused on reducing greenhouse gas emissions and energy and water consumption, mitigating stormwater runoff, and improving waste minimization and diversion strategies.

Natural Environment 2020 GOAL	GOAL 1 Decrease Normalized GHG Emissions 20%	GOAL 2 Decrease Normalized Energy Consumption 10%	GOAL 3 Decrease Normalized Water Consumption 25%	GOAL 4 Increase Green Acreage By 25 Acres	GOAL 5 Maintain A 25% Diversion Rate For Waste Produced By Passengers At Stations	GOAL 5 Reach An 80% Diversion Rate For Waste Produced By Employees At Facilities
	LBS CO2-E PER / PMT	MBTU / PMT	GALLONS / PMT	NEW GREENED ACRES	TONS RECYCLED / TONS TOTAL WASTE	TONS RECYCLED / TONS TOTAL WASTE
BASELINE (FY2015)	0.55(CY14)	2.75	0.094	0	24%	78%
FY2016	0.54 (CY15)	2.55	0.089	3.20	26%	84%
FY2017	0.56 (CY16)	2.89	0.088	8.66	26%	70%
FY2018	**0.56 (CY17)**	**2.99**	**0.079**	**8.66**	**23%**	**69%**
FY2019	n/a	n/a	n/a	n/a	n/a	n/a
FY2020	n/a	n/a	n/a	n/a	n/a	n/a
2020 TARGET	0.44	2.48	0.067	25	25%	80%

GOAL 1

REDUCE SEPTA'S CARBON FOOTPRINT

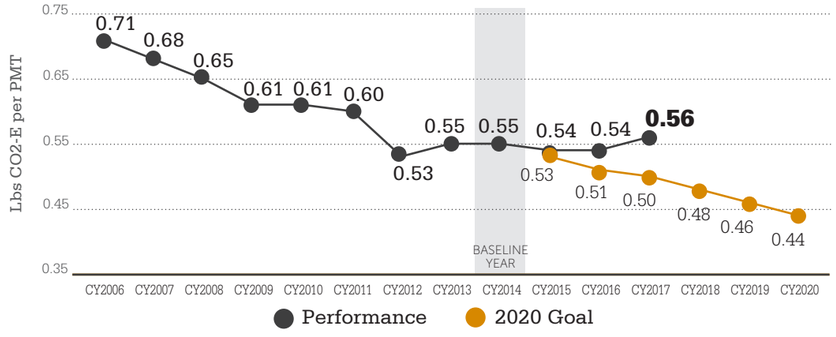
DECREASE NORMALIZED GHG EMISSIONS BY **20%** BY 2020

HOW WE'RE DOING:

From baseline year CY2015 through CY2017, SEPTA reduced its gross greenhouse gas emissions (GHG) by more than 71 million lbs of CO2-e, from 836M lbs CO2-e to 764M lbs CO2-e. Normalized emissions per passenger mile increased by 4% due to decreased ridership.

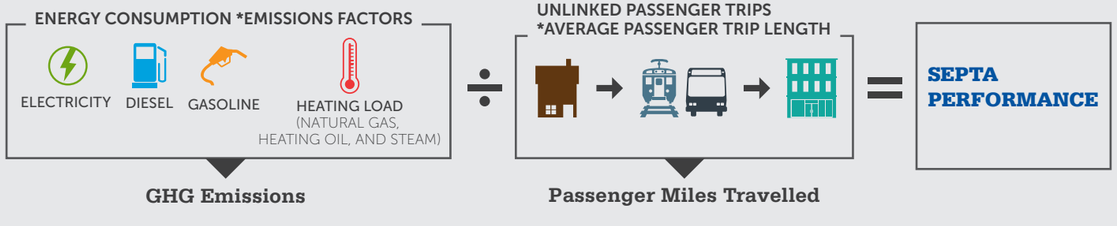
SEPTA is a net reducer of transportation GHG by moving people on more efficient, lower carbon modes than automobiles. SEPTA aims to minimize its own GHG with an ambitious goal of reducing emissions by 20% by 2020 from baseline year 2015. SEPTA measures progress toward this goal on a per passenger mile basis – normalizing emissions in this way ensures efforts to reduce GHG emissions are tied back to SEPTA's core business of moving people.

NORMALIZED GHG EMISSIONS



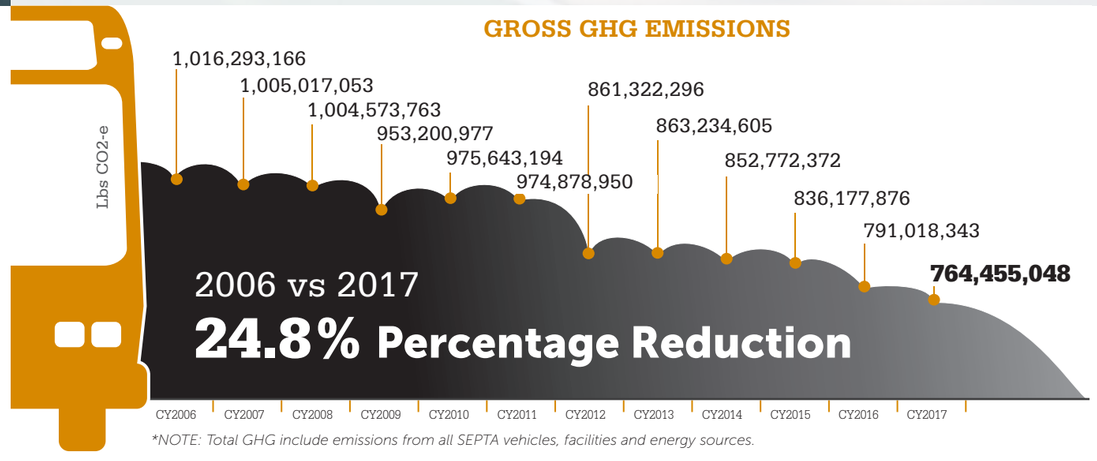
SEPTA will continue to reduce its footprint with initiatives summarized in this section and in the 2018 Energy Action Plan, while growing ridership to meet its 2020 goal for GHG emission per passenger mile traveled.

CALCULATING SEPTA'S GHG EMISSIONS



In CY2017, buses and rail modes together accounted for 83% of SEPTA's energy consumption, and therefore account for the majority of SEPTA's emissions. SEPTA's buses produced approximately 44% of emissions, while trolleys and trains produced 39% of emissions. SEPTA has reduced its emissions across both bus and rail modes through various initiatives like installing wayside energy storage batteries at SEPTA's substations, upgrading the Silverliner V Fleet, and investing more in low or no emission buses.

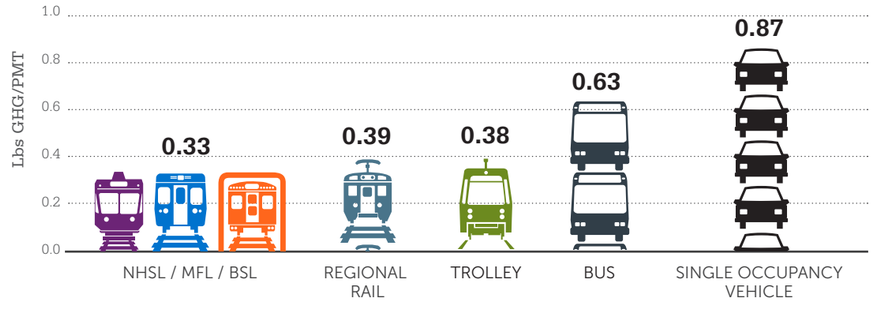
GROSS GHG EMISSIONS



**NOTE: Total GHG include emissions from all SEPTA vehicles, facilities and energy sources.*

EMISSIONS BREAKDOWN BY MODE

Source: SEPTA GHG Inventory & U.S. Energy Information Administration (EIA)



GOAL 1

GLOBAL IMPACT OF TRANSPORTATION

In CY2017, SEPTA prevented 2,534,983,703 lbs of carbon dioxide emissions that otherwise would have occurred if SEPTA riders had instead traveled by single-occupancy vehicle. Transit is inherently more sustainable as a transportation mode by shifting transportation away from less-dense automobiles, providing congestion relief, and supporting dense, compact land uses.

SEPTA reduces the number of single-occupancy vehicles on the road, which simultaneously provides congestion relief and reduces idling time in high-traffic conditions. Additionally, SEPTA's high-capacity service produces what is known as the "multiplier effect," "which increases density and reduces dependence on private vehicle use.

CY2017 PREVENTED GHG EMISSIONS

MODE SHIFT

25% 621,534,509 POUNDS CO2-E

CONGESTION RELIEF

5% 132,292,746 POUNDS CO2-E

LAND USE & DEVELOPMENT

70% 1,788,036,574 POUNDS CO2-E

TOTAL EMISSIONS PREVENTED

100% 2,534,983,708 POUNDS CO2-E

RENEWABLE ENERGY POWER PURCHASING AGREEMENTS

A commitment of SEPTA's 2018 Energy Action Plan is to explore the feasibility of increasing the proportion of renewable energy as a share of SEPTA's total electricity consumption. In October 2018, SEPTA released a Request for Proposal for electricity to be generated by a wind, solar or other renewable energy plant. Proposals are currently under review.

ELECTRIC BUSES

SEPTA will receive its first procurement of 25 electric buses, which will replace diesel and hybrid-electric buses along routes 29 and 79. Replacing 25 diesel-powered buses with 25 electric buses will reduce emissions by approximately 2.1 million lbs CO2-E.

Additionally, in August 2018, SEPTA was awarded a Federal Transit Administration (FTA) Low or No Emission Program (Low-No) grant for the purchase of 10 new electric buses. The $1.5 million grant represents the differential in price between diesel-electric hybrid buses and battery-electric buses. Delivery of the additional buses is anticipated prior to 2021.

SOLAR POWER PURCHASE AGREEMENT

SEPTA has selected SunVest Solar, Inc. for a power purchase agreement (PPA) through a competitive process to install solar panels on the rooftops of four SEPTA backshops. Combined, the solar panels will produce 3MW worth of energy annually and reduce SEPTA's emissions by more than 3 million lbs CO2-E. Installation began in late 2018. Once completed this project will be the second largest solar installation in the City of Philadelphia.

GOAL 2

IMPROVE ENERGY EFFICIENCY

DECREASE NORMALIZED ENERGY CONSUMPTION BY **10%** BY 2020

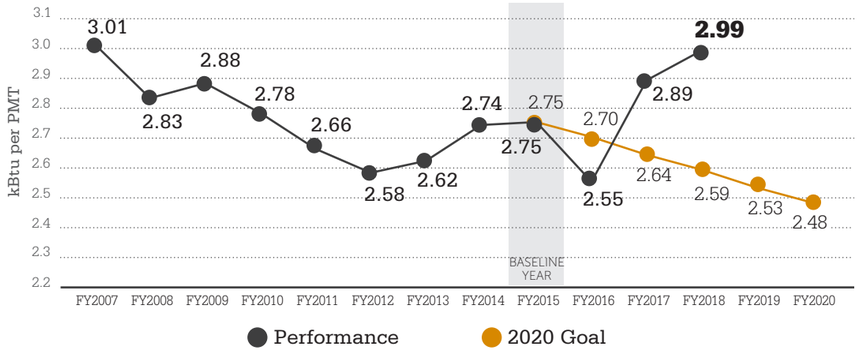
HOW WE'RE DOING:

From baseline year FY2015 to FY2018, SEPTA reduced its gross energy consumption by 5%, from 4,206,252 mmBtu to 3,980,783 mmBtu. Normalized energy consumption per passenger mile increased by 9% due to decreased ridership.

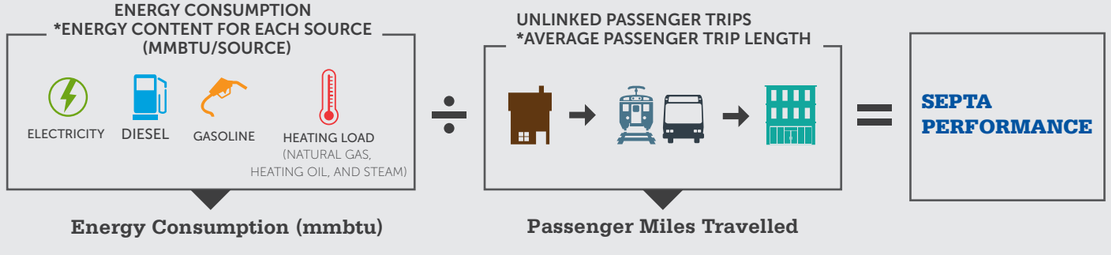
SEPTA uses energy for every aspect of its operations—from powering railcars and buses to heating stations and illuminating track signals. In addition to initiatives that transition SEPTA to lower-carbon forms of energy to reduce greenhouse gases, SEPTA has established specific targets for reducing energy consumption through efficiency.

SEPTA will continue to reduce its energy consumption with initiatives summarized in this section and in the 2018 Energy Action Plan, while growing ridership to meet its 2020 goal for energy consumption per passenger mile traveled.

NORMALIZED ENERGY CONSUMPTION

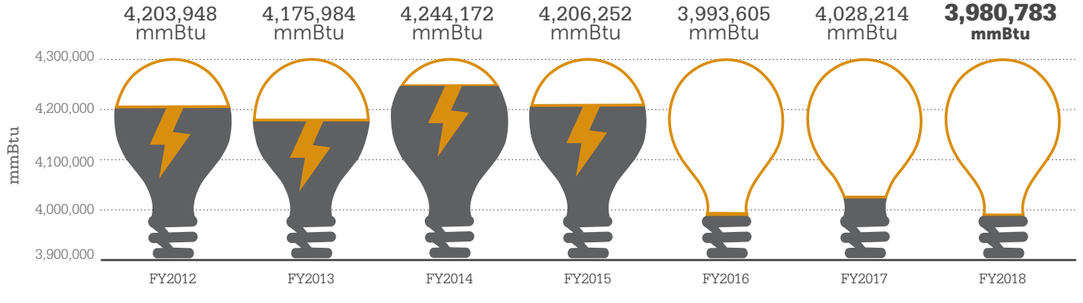


CALCULATING SEPTA'S ENERGY CONSUMPTION



SEPTA's energy consumption profile is roughly split evenly between electrically powered vehicles and diesel or gasoline-powered vehicles. SEPTA has been able to significantly reduce energy consumption by investing in energy efficient fleets, such as trains and locomotives with regenerative braking and wayside storage, and buses with hybrid- and battery-electric drives.

GROSS ENERGY CONSUMPTION



GOAL 2

ENERGY BREAKDOWN BY MODE

Propulsion Electricity			Diesel	Diesel/Gasoline
REGIONAL RAIL	NHSL / MFL / BSL	TROLLEY	BUS	CCT
702,545 mmBtu	477,521 mmBtu	113,180 mmBtu	1,681,772 mmBtu	264,282 mmBtu

ESCO MASTER PLAN

As part of the 2018 Energy Action Plan, SEPTA has committed to partnering with an Energy Saving Company (ESCOs) to implement energy efficiency retrofits. This year, SEPTA began the ESCO process at its headquarters building, 1234 Market Street. Scope includes lighting upgrades, sub-metering, and upgrading inefficient heating and cooling systems.

WAYSIDE STORAGE

This year, the last of the additional seven wayside energy storage systems (WESS) came online. These batteries, combined with two existing WESS systems already installed on the Market-Frankford Line, will provide a total of 10.75 MW of energy storage on SEPTA's subway/elevated system. These systems capture and reuse energy created by braking trains that would otherwise be wasted.

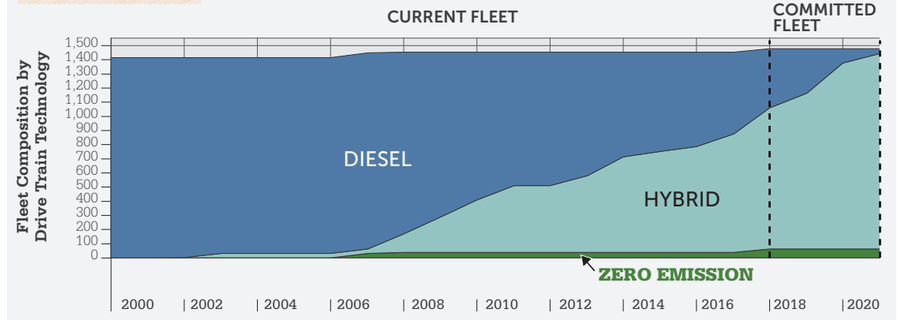
FRONTIER BUS DEPOT LIGHTING PROJECT

To improve safety and working conditions at SEPTA's Frontier Bus Depot, the existing high pressure sodium perimeter and building-mounted light fixtures were replaced by in-house SEPTA forces with a variety of new, energy efficient LED fixtures. The locations, spacing, and quantity of fixtures were also modified, including the installation of two high-mast poles, to bring the site into compliance with SEPTA's illumination standards.

HYBRID-ELECTRIC BUSES

In 2018, SEPTA continued to receive delivery of its newest fleet of 525 hybrid-electric buses. These buses are 20-30% more fuel efficient on average than the diesel buses they are replacing. By 2021, more than 90% of SEPTA's bus fleet will be driven by hybrid-electric technology. Combined with SEPTA's investment in trackless trolley and battery-electric buses, this represents one of the largest "green fleets" in the United States.

BUS FLEET



GOAL 3

IMPROVE WATER EFFICIENCY

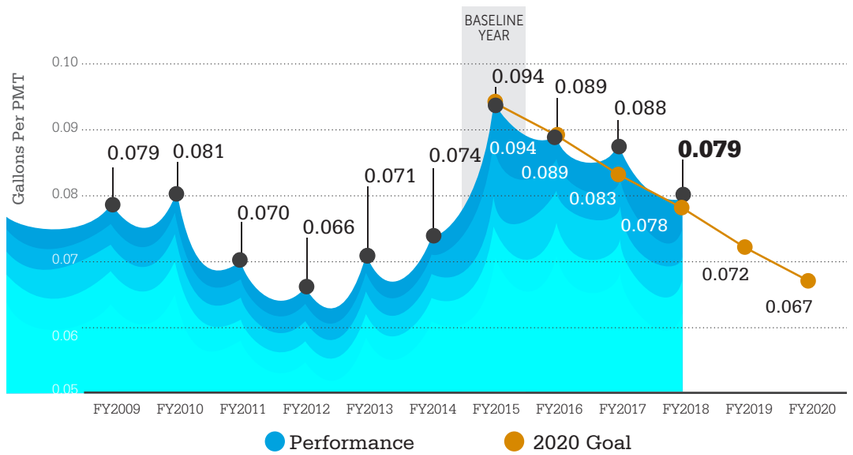
DECREASE NORMALIZED WATER CONSUMPTION BY **25%** BY 2020

HOW WE'RE DOING:

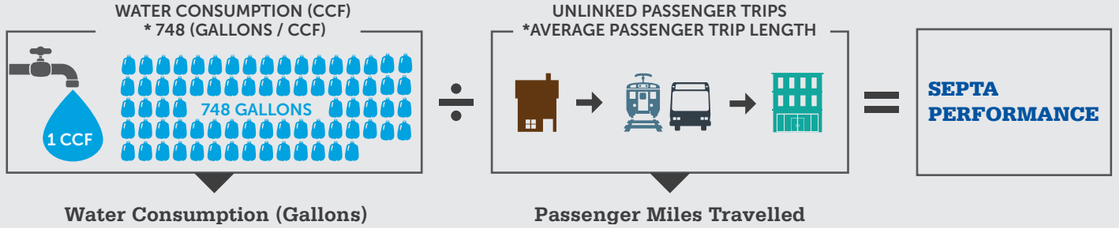
From baseline year FY2015 to FY2018, SEPTA reduced its gross water consumption by 39.8 million gallons (28 percent), from 144,319,457 gallons to 104,491,368 gallons. Normalized water consumption per passenger mile also decreased during this time by 16%, close to pace of a goal of 25% by 2020.

SEPTA makes water efficiency a priority in recognition of its importance to being truly sustainable and having the least environmental impact. Water is an essential part of SEPTA's operations, from bus washers to bathrooms at passenger stations and SEPTA aims to decrease its consumption in recognition that clean, fresh water is a limited resource.

NORMALIZED WATER CONSUMPTION



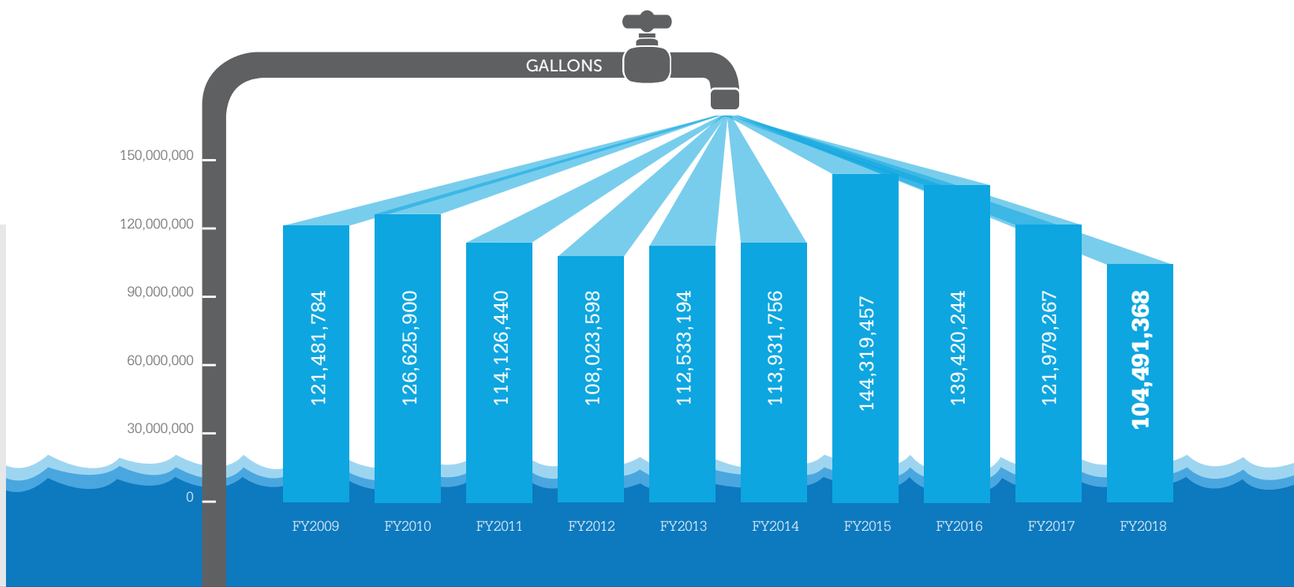
CALCULATING SEPTA'S WATER CONSUMPTION



GROSS WATER CONSUMPTION

SEPTA's gross water consumption has decreased this year. SEPTA has over 300 water accounts that service many types of locations – from station buildings to bus washers. A goal for SEPTA's Sustainability program is to identify accounts that have inconsistent or high usage to understand how we can incorporate water conservation measures.

GROSS WATER CONSUMPTION

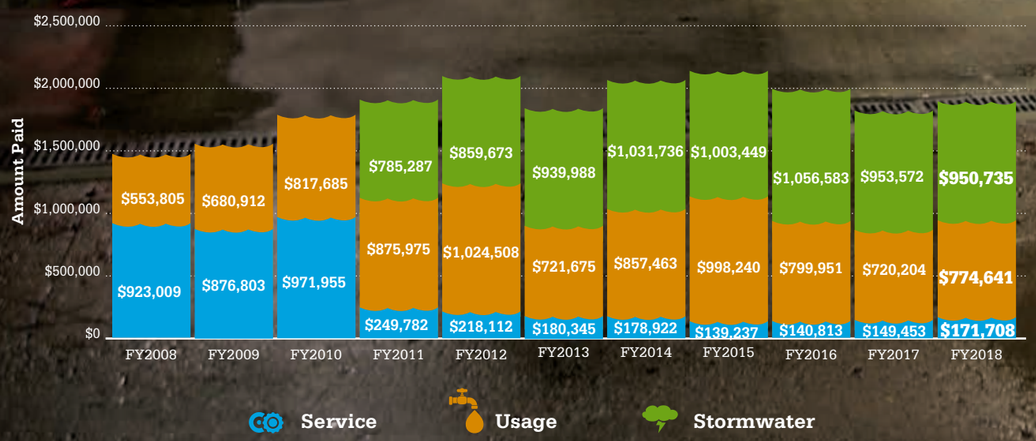


GOAL 3

COST OF WATER

The cost of water to SEPTA is a function of three factors: service charges, usage charges, and stormwater charges. The relative magnitude of these charges have changed over time. Goal 3 deals with the impact of water service and usage, while Goal 4 of this plan deals with the impact of stormwater. In both cases, efforts to reduce environmental impacts through water consumption and stormwater runoff have a positive financial return to SEPTA's annual operating budget.

BUDGETARY IMPACT OF WATER



FRONTIER BUS DISTRICT

At SEPTA's Frontier Bus District, two 30,000 gallon underground storage tanks are being installed to collect rainwater. The rainwater will be reclaimed used to wash buses, which will reduce freshwater consumption requirements by approximately one million gallons annually.

WATER EFFICIENT FIXTURES

As part of SEPTA's first ESCO project at five backshops and depots, low-flow water fixtures were installed to increase water efficiency. SEPTA's ESCO project at its 1234 Market Headquarters Building will include similar water efficiency features. Water efficiency upgrades are also incorporated in station retrofit projects, such as the recently completed renovation at Suburban Station.

GOAL 4

REDUCE STORMWATER RUNOFF

INCREASE GREEN ACREAGE BY
25 ACRES BY 2020

HOW WE'RE DOING:

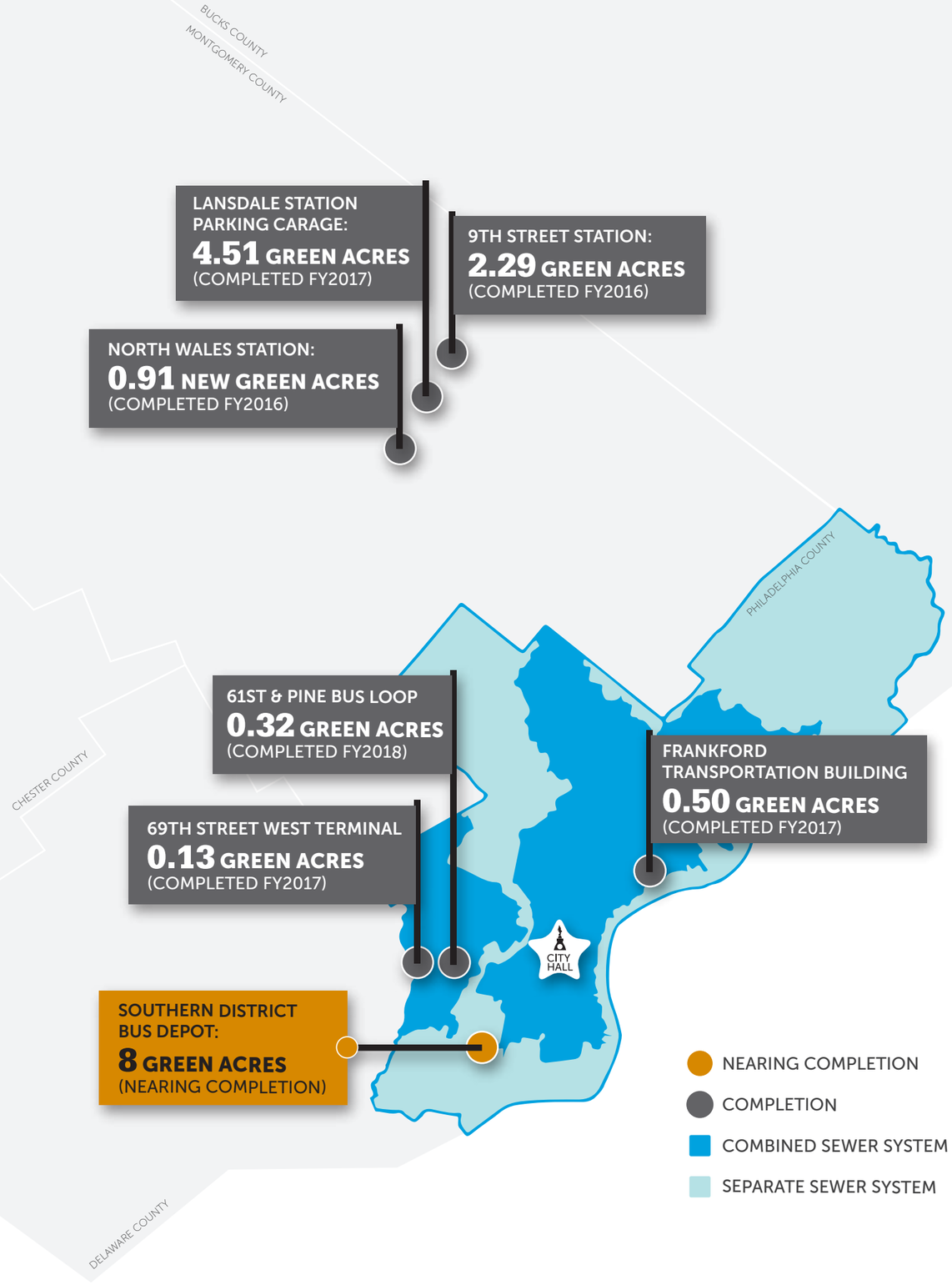
From FY2015 to FY2018, SEPTA's increased green acreage by 8.66 acres, with another 8 acres nearing completion.

SEPTA supports efforts to green infrastructure across southeastern Pennsylvania and works proactively with municipalities to leverage capital projects to mitigate stormwater runoff wherever possible. From baseline year FY2015 through FY2018, SEPTA's greened 8.66 green acres, with an 8-acre site nearing completion that will nearly double this result.

WHY MANAGE STORMWATER?

SEPARATE SEWER SYSTEM:
sanitary sewage (liquid waste that goes down drains from households and commercial buildings) is piped directly to treatment facilities while stormwater runoff is piped directly from streets to local waterways.

COMBINED SEWER SYSTEM:
stormwater runoff joins sanitary sewage and are piped together to water treatment facilities. When the capacity of the system is exceeded, untreated combined sewage flows directly into local waterways.

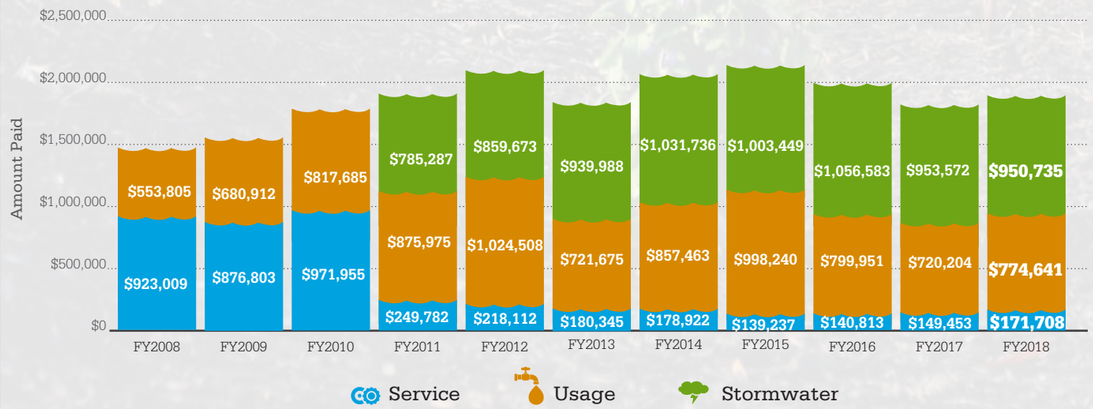


GOAL 4

COST OF STORMWATER

In 2011, the City of Philadelphia began charging stormwater fees based on square footage of impervious surface. Since then, SEPTA's green roofs, retention basins, and other green infrastructure across the city have mitigated runoff, helping to reduce the budgetary impact of stormwater fees. Efforts to-date have been successful: SEPTA's stormwater fees of $950,735 in FY2018 are more than five percent below their peak.

ANNUAL STORMWATER FEES



SOUTHERN DISTRICT STORMWATER RETROFIT

In 2018, SEPTA began putting the finishing touches on bioretention basins and repaving project at Southern District in South Philadelphia. Once complete, the project will capture more than 8 acres of stormwater, nearly doubling SEPTA's greened acreage and representing one of the largest stormwater management projects in the City of Philadelphia since its ground-breaking "Green City, Clean Waters" plan was adopted.

SEPTA has also continued to integrate stormwater management into other projects in its Capital Program. Both Villanova Station and Levittown Station have incorporated stormwater management features into renovation work.

GREEN ROOFS

SEPTA has leveraged other projects in its Capital Program to incorporate stormwater management features into infrastructure investments. To-date, SEPTA has installed green roofs at the 33rd & Dauphin Bus Loop in Strawberry Mansion and the Frankford Transportation Building, as well as a green wall at 69th Street Transportation Center West Terminal. While at times challenging due to weight and other infrastructure-related restrictions, SEPTA will continue to explore opportunities to integrate green infrastructure to manage stormwater where appropriate and beneficial to do so.

1262 TREES have been planted from 2008-2018

TREE PLANTINGS

Trees are a tool for beautification, carbon sequestration and stormwater runoff mitigation. One mature tree can intercept approximately 1,000 gallons of water annually. In 2017, SEPTA planted 4 trees, bringing the total planted over the decade since 2008 to 1,324 trees. SEPTA will continue to plant as many trees as physical space within the footprint of capital projects allow.

GOAL 5

REDUCE & REUSE WASTE

1. REACH A **25%** DIVERSION RATE FOR WASTE PRODUCED BY PASSENGERS AT STATIONS BY 2020
2. MAINTAIN AN **80%** DIVERSION RATE FOR WASTE PRODUCED BY EMPLOYEES AT FACILITIES BY 2020

HOW WE'RE DOING:

SEPTA's passenger diversion rate is 23%. Recycling rates at employee facilities is 69%.

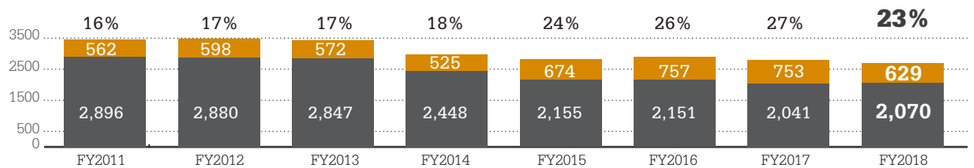
SEPTA collects waste at passenger stations, facilities, and construction sites. Landfills can release harmful pollutants that generate both air and groundwater pollution. To address this, SEPTA has established two waste management goals to increase the diversion rate of passenger-produced waste and to maintain the diversion rate of waste produced by employees at SEPTA facilities.

SEPTA will continue to support recycling programs at facilities, seek new ways to reduce and reuse its waste products, and improve recycling accessibility for passengers. SEPTA is proud that educational outreach and investments in combo waste and recycling units have produced significant growth in both employee and passenger recycling rates to date.

In FY 2018, SEPTA passenger diversion rate and recycling rates at employee facilities decreased as compared to the previous year. This was due in part to tightened standards for contamination. If SEPTA hopes to meet diversion goals, it is imperative that both passengers and employees "recycle right". Additionally SEPTA needs to continually audit work procedures to identify opportunities to reduce waste.

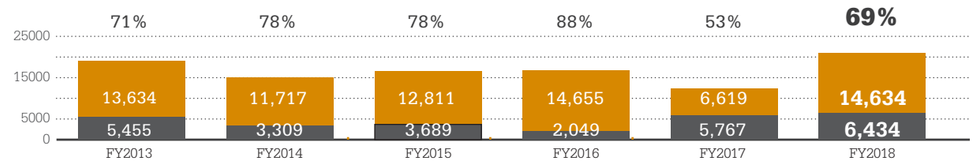
RECYCLING

GOAL 1 - TOTAL PASSENGER WASTE & RECYCLING

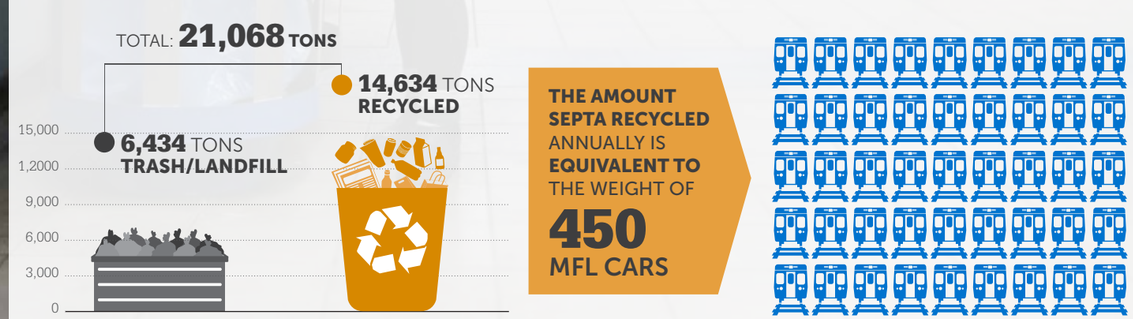


WASTE

GOAL 2 - TOTAL EMPLOYEE & FACILITY WASTE & RECYCLING



RECYCLING AT SEPTA



RECYCLED MATERIALS AT FACILITIES IN 2018

466 TONS WOOD WASTE RECYCLED

1,655 TONS METAL RECYCLED

13,268 TONS CLEAN RUBBLE RECYCLED

PASSENGER STATION RECYCLING BINS

As of June 2018, over 150 waste and recycling combo units have been installed on the Broad Street, Market-Frankford and City Trolley Lines. Replacement of waste and recycling bins on Regional Rail Lines occur with station improvement projects.

ZERO WASTE AND LITTER CABINET

The City of Philadelphia launched the Zero Waste and Litter Cabinet in December 2016. The goal of the cabinet is to move the city of Philadelphia toward a Zero Waste and litter-free future by 2035. SEPTA has been an active participant on the cabinet since its inception and is committed to meeting the goals in the Zero Waste and Litter Action Plan.

As part of SEPTA's commitment to the Zero Waste and Litter Action Plan, SEPTA has conducted litter surveys at all passenger stations on the Market-Frankford Line, Broad Street Line and Regional Rail Stations within the City of Philadelphia.

For more information about the City of Philadelphia's Zero Waste and Litter Action Plan, including SEPTA's role, please visit cleanphl.org.

HEALTHY COMMUNITIES & WORKFORCE

SEPTA strives to provide equitable and accessible transportation service throughout Southeastern Pennsylvania. SEPTA's "social sustainability" platform positively impacts its employees, customers, and communities throughout the region.

The Healthy Communities & Workforce chapter of this Annual Report provides an update on progress towards goals to increase participation of disadvantaged business enterprises, improve food access, long-term investments in employee health and professional development, and participation in ongoing local and regional planning efforts.

HEALTHY COMMUNITIES & WORKFORCE 2020 GOAL	GOAL 6		GOAL 7	GOAL 8	GOAL 9
	Lead 3 Planning Studies Per Year	**Collaborate With 30 External Planning Efforts Per Year**	**Host Five Farmers Markets On SEPTA Property By 2020**	**Implement Five-Year Human Resources Master Plan**	**Increase FFY2016 Baseline of Contracting Dollars Committed To Small, Minority And Women-Owned Companies By 20%**
BASELINE (FY2015)	NEW GOAL: NO BASELINE		4	NEW GOAL: NO BASELINE	NEW GOAL: NO BASELINE
FY2016	Led 4 planning studies	Collaborated with 38 planning efforts	4	Master Plan Adopted with 16 initiatives	16% (FFY2017)
FY2017	Led 5 planning studies	Collaborated with 45 planning efforts	4	Progress towards HR Master Plan Completion	16% (FFY2017)
FY2018	**Led 4 planning studies**	**Collaborated with 44 planning efforts**	**5**	**Progress towards HR Master Plan Completion**	**16% (FFY2018)**
FY2019	n/a		n/a	n/a	n/a
FY2020	n/a		n/a	n/a	n/a
2020 TARGET	Lead a total of 15 planning studies	Collaborate on a total of 150 planning studies	5	n/a	19.2%

GOAL 6

INTEGRATE WITH LIVABLE COMMUNITIES

1. LEAD **3** PLANNING STUDIES PER YEAR

2. COLLABORATE WITH **30** EXTERNAL PLANNING EFFORTS PER YEAR

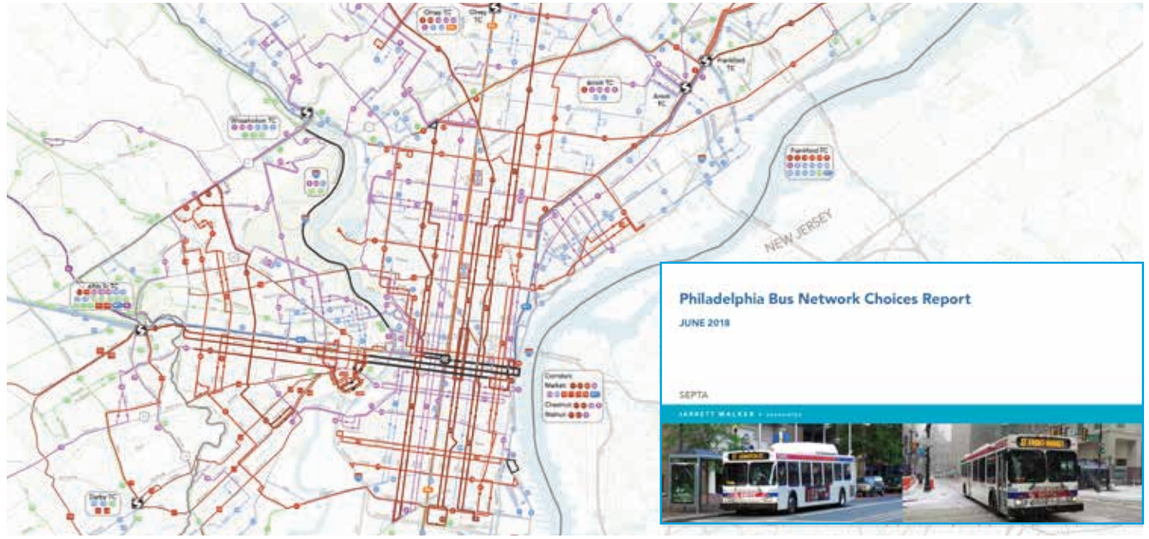
HOW WE'RE DOING:

Between FY2017 – FY2018, SEPTA has led a total of 4 planning studies and collaborated on a total of 44 planning efforts. Both SEPTA led and collaborative planning efforts contribute to more livable communities.

SEPTA led long-range planning efforts support a shared vision for livable communities by spurring economic development through improved access to jobs and services. Similarly, collaborative planning efforts with non-profit organizations, municipalities and cities improve the quality of life in the communities SEPTA serves through the development of better transportation services, streetscape design and transit-oriented development opportunities.

For SEPTA, long-range planning ensures that the Authority can continue to provide southeastern Pennsylvania with better services that benefit all residents.

SEPTA led Planning Studies	
Philadelphia Bus Network Choices Report	**Completed FY 2018**
West Chester Rail Restoration of Service Feasibility Study	**Completed FY 2018**
Broad Street Line Extension to the Navy Yard	**Ongoing**
King of Prussia Rail	**Ongoing**



BUS NETWORK PLANNING

In FY18, SEPTA worked with Jarrett Walker and Associated (JWA) to optimize the existing bus network given changing ridership patterns, growing employment centers and new investments in retail, arts, and culture hubs. The result of the study is the Philadelphia Bus Network Choices Report, which can be publicly viewed on SEPTA's website at http://septa.org/service/bus/network

The Philadelphia Bus Network Choices Report is only a first look. Now that the initial assessment is complete, SEPTA's next step is hire consultants to take the findings of this report and start the Comprehensive Bus Network Redesign (CBNR) process. The CBNR process will last a few years, and will involve outreach and coordination throughout SEPTA's service area.

HUB OF HOPE

In January 2018, the Hub of Hope, a seasonal walk-in engagement center for homeless in Philadelphia, opened its doors at its new location in Suburban Station. The Hub of Hope provides services such as showers, laundry and referrals to other social agencies.

Within the first 8 weeks, Case Managers and Peer Support staff from Project HOME, the organization that runs the Hub of Hope, were able to place more than 400 people into shelters, Safe Havens and other programs. This resource would not have been possible if not for the collaborative efforts of Project Home, the City of Philadelphia and SEPTA.

GOAL 7

IMPROVE ACCESS TO LOCAL FOOD VIA TRANSIT

HOST FIVE FARMERS MARKETS
ON SEPTA PROPERTY BY 2020

HOW WE'RE DOING:

SEPTA hosted five farmers markets on or near SEPTA property.

Supporting farmers markets is one way SEPTA contributes to healthy communities in southeastern Pennsylvania. In FY2018, SEPTA hosted five farmers markets within two blocks of SEPTA properties.

Many Philadelphians are challenged to accessing quality fresh food on a regular basis because it often requires traveling significant distances or paying more in either case, a burden for especially those living in low-income communities. In attempts to improve food accessibility for all, SEPTA hosts several farmers markets in places where large numbers of people board or transfer every day to help provide a way for Philadelphians to more easily access quality fresh food as part of their daily commute.

FOOD ACCESS VIA TRANSIT

SEPTA Seasonal Farmers Market Locations*

OLNEY TRANSPORTATION CENTER

OLNEY TRANSPORTATION CENTER

46TH STREET STATION

46TH STREET STATION

FRANKFORD TRANSPORTATION CENTER

FRANKFORD TRANSPORTATION CENTER

ALLEGHENY BUS DEPOT

ALLEGHENY DEPOT

SNYDER STATION

BROAD & SNYDER

**Farmers Markets are operated by the following partners: The Food Trust & The Enterprise Center*

PHILABUNDANCE "STOP HUNGER AT YOUR STATION"

Since 2009, SEPTA has held an annual two-week "Stop Hunger at Your Station" food drive. Through the annual food drive and other community service programs, SEPTA continues to demonstrate a commitment to improving the health and wellness of communities it serves in Southeastern Pennsylvania.

IN FY2018 ALMOST

8,679 POUNDS OF FOOD - OR 8,679 MEALS were collected for Philabundance during the Authority's two-week "Stop Hunger at Your Station" food drive.

$5,475 OF MONETARY GIFTS were received during the food drive providing an additional **18,000** meals for residents served by Philabundance and its member agencies.

Since 2009, SEPTA customers and employees have donated more than **164,000 POUNDS OF FOOD** and approximately **$67,500** which is the **EQUIVALENT TO** more than **299,000 MEALS**

COOKING DEMONSTRATIONS

As a way to encourage Philadelphians to discover new types of produce sold at the farmers markets, the Food Trust has organized pop-up cooking demonstrations. Frankford Transportation Center, Allegheny Depot and Olney Transportation Center have provided cooking demonstrations for customers – many of whom are SEPTA customers and employees.

WALNUT HILL COMMUNITY FARM

The Walnut Hill Community Farm, located on a SEPTA property next to 46th Street Station on the Market-Frankford Line in West Philadelphia, has been run by The Enterprise Center since 2010. The farm generates fresh, local produce for community members and has distributed thousands of pounds of food to CSA participants.

GOAL 8

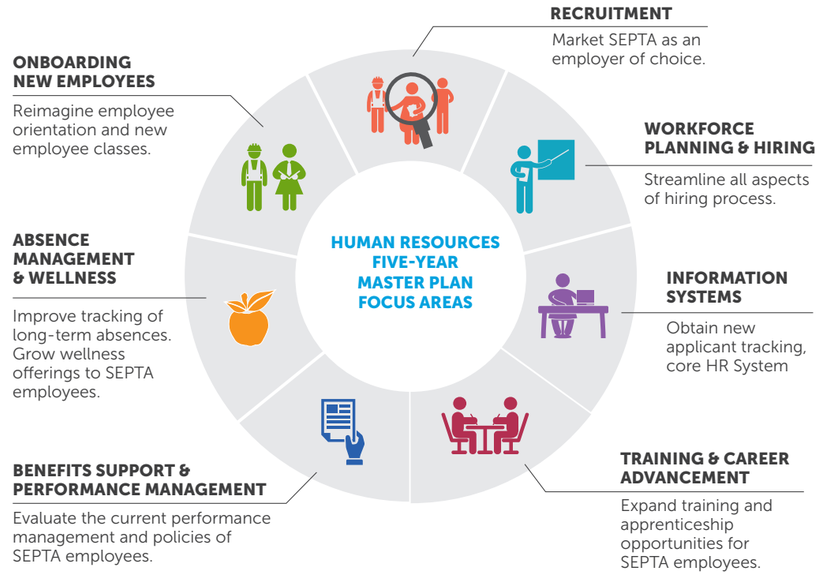
DEVELOP A HIGHLY SKILLED, HEALTHY & VERSATILE WORKFORCE

IMPLEMENT **FIVE-YEAR** HUMAN RESOURCES MASTER PLAN

HOW WE'RE DOING:

SEPTA has begun implementing a comprehensive Human Resources Master Plan.

In FY2018, SEPTA made progress towards implementing a comprehensive Human Resources Master Plan, with seven focus areas:



Key Initiatives include progress towards restructuring SEPTA's New Employee Orientation program and streamlining the recruitment process that enables SEPTA to hire new employees.

A key theme in the master plan is transitioning Human Resources operations at SEPTA from "transactional" to "strategic". The HR Master Plan will help attract and retain a healthy and versatile workforce in addition to streamlining business processes associated with maintaining talent at SEPTA, working to ensure it remains an employer of choice for the next generation of transit professionals. The master plan is structured based on mapping the "employee experience" and recommends initiatives to close gaps between existing and leading industry practices.

TRAINING & CAREER ADVANCEMENT

13 employees completed their degrees in FY 2018

SEPTA has partnerships with more than **40** **COLLEGES AND UNIVERSITIES**

172 **FRONT-LINE EMPLOYEES** have been coached and counseled on interview preparation and resume writing

RECRUITMENT

779 SEPTA hired employees in FY 2018

8 high school interns are studying at the automotive repairs and elevator escalator training

32 boot camp graduates have applied for the bus operator and conductor positions

8 collegiate consortium graduates may seek employment in the maintenance fields

SEPTA VOLUNTEERS

FLOWER SHOW	231
PHILABUNDANCE	112
SPRING CLEAN UP	150
SUPER BOWL PARADE	539

CAREER RESOURCE CENTER

The Career Resource Center (formerly known as the Testing Center) was created to serve the next generation of transit professionals. The CRC has modernized test and testing procedures, hosts private interviews, provides career coaching sessions, and New Employee Orientation. It is the hub of the new employee experience and a place for current employees to gather information, which will assist in their career path growth

VOLUNTEER OPPORTUNITIES

SEPTA has continuously established a culture of volunteerism by providing opportunities for employees to service the community. In 2018, approximately 2300 SEPTA employees volunteered in 18 different events throughout the region, such as the Philly Spring Clean-Up, the NFL Draft, the Eagles Super Bowl Parade, the Villanova parade, a Philabundance food drive, and the Flower Show.

APPRENTICESHIPS

Recently, it has become more challenging to fill trade positions at SEPTA. To address this challenge SEPTA has ramped up its hiring effort through the use of various campaigns; apprenticeships, high school internships, trade school initiatives, collegiate consortium and boot camps have been used to attract the next generation of skilled SEPTA employees.

CAREER COACHING

In 2018, the Employee Development and Relations team launched a new Resume Writing and Interviewing program geared to front-line employees and supervision within the operating districts. The program is on-going on a monthly basis and sense the program was launched more than 170 employees have taken advantage of the program.

GOAL 9

SUPPORT REGIONAL BUSINESS EQUITY

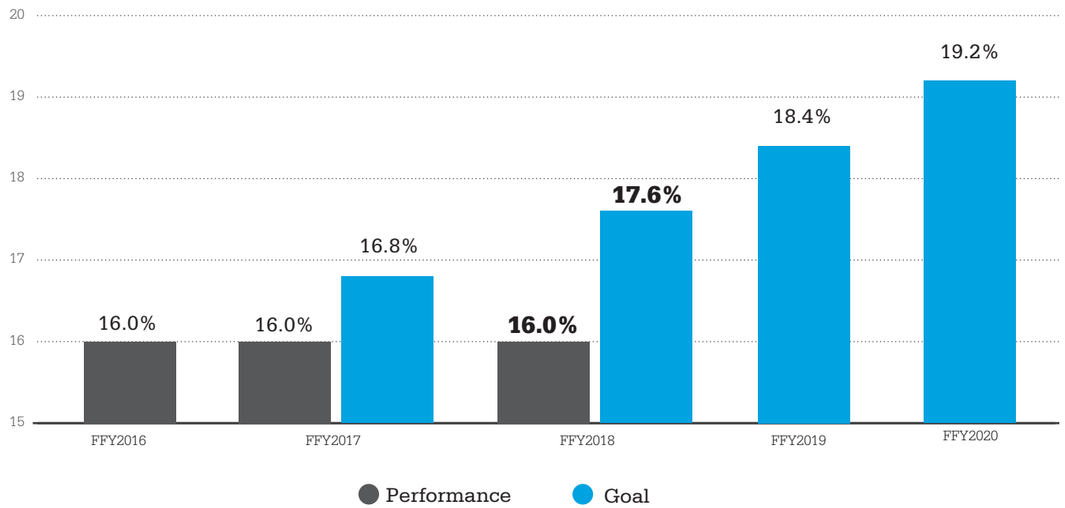
INCREASE FFY 2016 BASELINE OF CONTRACTING DOLLARS COMMITTED TO SMALL, MINORITY AND WOMEN-OWNED COMPANIES BY **20%**

HOW WE'RE DOING:

In FFY 2018, SEPTA awarded 16% of its contracting dollars to DBE's.

SEPTA is committed to expanding opportunities for small, minority and women owned businesses through the Disadvantaged Business Enterprise (DBE) program. This program is intended to create an even playing field for these businesses by reducing burdens and fostering equal opportunity for the award of SEPTA contracts. SEPTA's DBE office is one of only five DBE certification agencies in the state, making it an essential resource for small, minority and woman-owned businesses in Pennsylvania. By providing DBE certifications and committing to award a certain percentage of SEPTA's annual contract dollars to DBEs, SEPTA is able to provide support to regional small businesses.

DBE CONTRACTING DOLLAR PERCENTAGE



OUTREACH EVENTS

SEPTA's DBE Program Office participated in 11 outreach events and activities in FFY 2018. Among them, staff hosted two major events. The first, "All Roads and All Modes: Roads to Inclusion in Multi-Modal Transportation Projects", held in conjunction with the City of Philadelphia's Annual Minority Enterprise Development Week (MEDWeek) celebration, highlighted the various projects in SEPTA's Rebuilding the System initiative. The second, "Taking Care of Business", provided our small, minority and woman-owned business executives with resources and strategies for growing their business and sustaining it long term.

NUMBER OF NEW DBE CERTIFICATIONS AWARDED IN FFY2018:
61

TOTAL CONTRACT DOLLARS COMMITTED TO SMALL, MINORITY & WOMEN-OWNED COMPANIES IN FFY2018:
$23,649,017

AVERAGE NUMBER OF DBE APPLICATIONS PROCESSED PER STAFF MEMBER IN FFY2018:
140

NUMBER OF NEW DBE FIRMS GRANTED CONTINUED ELIGIBILITY IN FFY2018:
498

EDUCATION & AWARENESS

In FFY 2018, SEPTA sent more than 30 email notices alerting small, minority and women-owned businesses of upcoming contracting opportunities. These emails, in combination with the two quarterly DBE e-newsletters that SEPTA published and the five business development conferences that SEPTA participated in, help to ensure that DBE's are continually made aware of SEPTA contracting opportunities.

In addition to making DBE's aware of contracting opportunities SEPTA helps to educate potential and currently certified DBE's about the certification process by participating in certification workshops.

ECONOMIC VITALITY

SEPTA is a business that supports vitality and economic growth throughout southeastern Pennsylvania. The Economic Vitality chapter of this Annual Report provides an update on progress towards positive economic impact. Institutionalizing sustainability best practices, increasing ridership throughout the region and growing positive financial impact of sustainability will support a fiscally efficient organization.

ECONOMIC VITALITY 2020 GOAL	GOAL 10 Increase Passenger Trips Per Capita 6% By 2020	GOAL 11 Outperform Industry Annualized Growth Rate	GOAL 12 Achieve ISO-14001 At Two Shops	GOAL 12 Institute An Environmental Management Checklist For Capital Projects	GOAL 13 Grow Positive Financial Impacts Of Sustainability Initiatives Annually
Baseline (FY2015)	80.6 UPT per capita	$3.90 ($0.50 below most recent industry data)	1 Shop Certified	n/a	Grants: $122,600,000 Revenue: $418,696 Savings: $218,265
FY2016	79.9 UPT per capita	$4.04 ($0.36 below most recent industry data)	1 Shop Certified	Checklist models evaluated	Grants: $2,600,000 Revenue: $278,675 Savings: $1,559,939
FY2017	75.3 UPT per capita	$4.39 ($0.15 better than most recent industry data)	1 Shop Certified	Checklist models evaluated	Grants: n/a Revenue: $1,761,475 Savings: $14,207,700
FY2018	**73.5 UPT per capita**	**$4.56 ($0.09 better than the most recent industry data)**	**2 Shop Certified**	**Checklist models evaluated**	**Grants: n/a Revenue: $1,902,530 Savings: $820,101**
FY2019	n/a	n/a	n/a	n/a	n/a
FY2020	n/a	n/a	n/a	n/a	n/a
2020 Target	84.8 UPT	n/a	2 Shops Certified	All Capital Projects Evaluated With Checklist	n/a

GOAL 10

INCREASE RIDERSHIP

INCREASE PASSENGER TRIPS PER CAPITA BY **6%** BY 2020

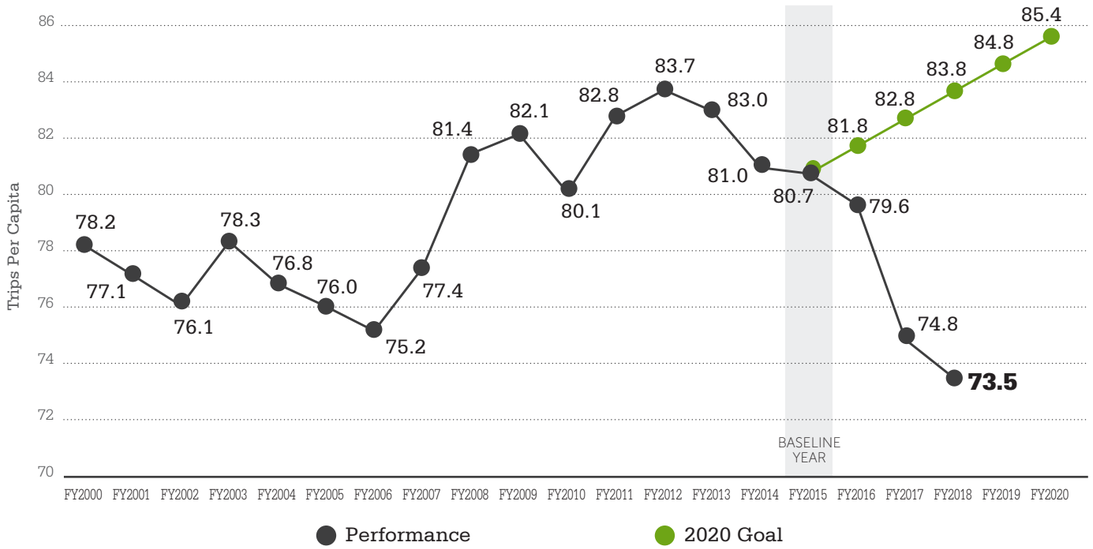
HOW WE'RE DOING:

From baseline year FY2015 to FY2018, SEPTA's normalized ridership decreased by 8%. This is consistent with trends across the transit industry.

SEPTA is responsible for transporting 1.1 million passenger-trips across southeastern Pennsylvania each weekday. Growing ridership makes both SEPTA and the region more sustainable. For SEPTA, ridership growth means more cost-effective service. For the region, ridership growth means lower emissions from fewer cars on the road and reduced traffic congestion.

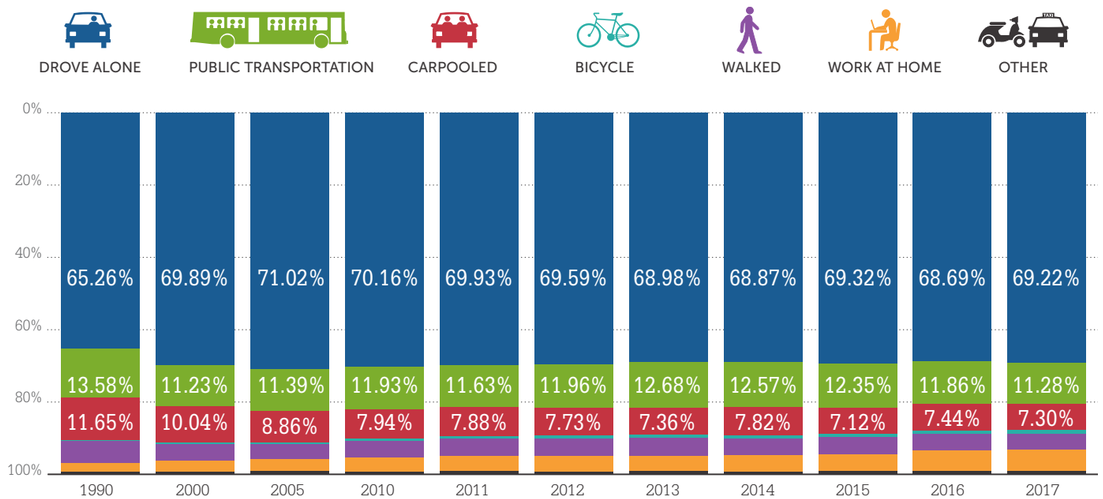
Unfortunately, SEPTA has been experiencing bus ridership loss since 2012. This is consistent with trends across the transit industry. SEPTA is committed to developing programs and initiatives that make public transit easier, simpler, greener, and more attractive; making a sustainable choice the preferred choice.

AVERAGE NUMBER OF ANNUAL SEPTA RIDES FOR EACH RESIDENT OF SE PA



In the United States, vehicle miles traveled has increased from 20.6 in 1990 to 26.2 in 2015, marking a 27% increase. Over this period, the vehicle miles traveled for Philadelphia remained flat at 9.7 and increased 3% in Southeastern PA from 15.7 to 16.4. Both Philadelphia and Southeastern PA's vehicle miles traveled remains lower than the national average. This is a function of land use policies that promoted high density in the five-county region.

COMMUTE-TO-WORK SHARE, SOUTHEASTERN PENNSYLVANIA



This density depends on transit and creates more transit usage. Over the last few years it has led to record-breaking levels in SEPTA's Regional Rail ridership. In FY2016, Regional Rail set a new ridership record with 37.7 million trips. This increase was followed by increases in other rail modes such as subway, trolley, and high-speed lines. Although rail modes have increased, bus ridership has plateaued from the FY2012 peak. Looking ahead, SEPTA is examining ways to grow ridership across all modes.

SEPTA MODES TRAVELED FY2018

BUS
465,501,851

REGIONAL RAIL
436,335,049

NHSL / MFL / BSL
359,405,111

TROLLEY
57,709,428

CCT CONNECT
11,118,969

REAL TIME INFORMATION

The official SEPTA apps for iPhone & Android take the real-time tools found on the septa.org website and make them available on mobile devises. This year a new feature was added that allowed customers to customize alerts for their favorite routes. Additionally customers can visually track the location of more SEPTA vehicles than ever using TrainView and TransitView features.

SEPTA plans to launch a real time campaign in January 2019 to further promote all the ways customers can access real time information, both via the septa.org website or SEPTA apps.

ON ROUTE REAL TIME INFO

SEPTA continues to improve vehicle status communication on route with the addition of real time information screens and message boards. All new buses are outfitted with digital screens that communicate arrival time at upcoming stops. Additionally SEPTA has procured real time displays for the Broad Street Line. The displays, which will be installed in 2019, will communicate information like arrival times and delay information, similar to Regional Rail real time boards. Lastly SEPTA is working to expand on-route real time communication for bus service on Roosevelt Boulevard.

RIDERSHIP GROWTH INNOVATION TEAM

In 2018, SEPTA launched an internal Ridership Growth Innovation Team tasked with executing programs and partnerships to increase passengers per revenue hour by 5%. Currently, the multidisciplinary team is working to address needs identified in the 2018 customer satisfaction survey. By growing ridership through making existing services more attractive and useful, these initiatives also encourage more efficient travel: full transit services create less emissions per passenger than empty transit vehicles.

GOAL 11

IMPROVE OPERATING EXPENSE PERFORMANCE

OUTPERFORM INDUSTRY ANNUALIZED GROWTH RATE

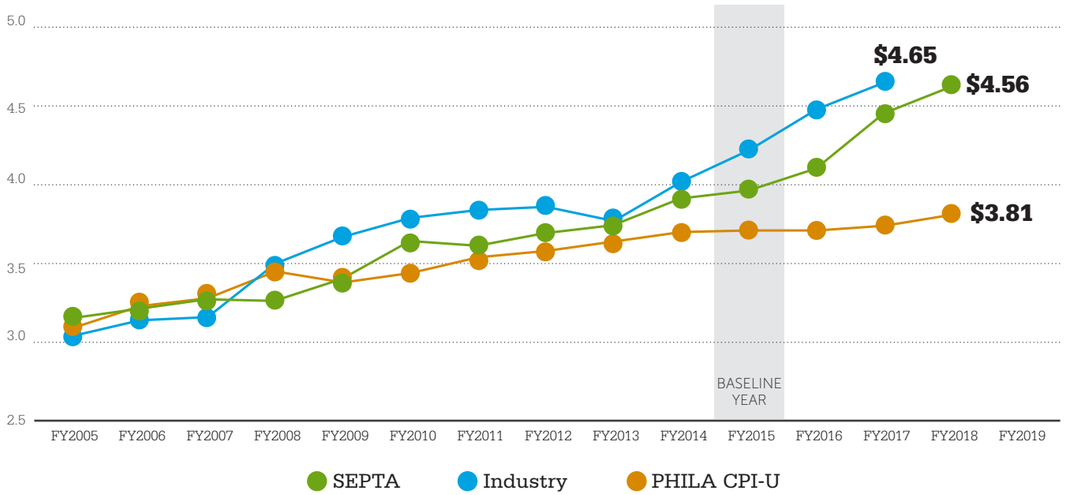
HOW WE'RE DOING:

SEPTA spends $0.09 less per unlinked passenger trip than the industry average.

Operating expense per trip is used as a measure of SEPTA's economic efficiency and can be evaluated by comparing the cost of SEPTA's operations to the transportation industry. SEPTA has traditionally spent less money to operate services for unlinked passenger trips than peer agencies in the United States, and SEPTA is committed to continuously outperform the industry in the future.

SEPTA's sustainability programs and initiatives yield savings that assist in lowering operating costs, which is important to ensure that SEPTA remains economically viable and to allow SEPTA to continue to offer low cost fares to customers.

OPERATING EXPENSES OUTPERFORM INDUSTRY GROWTH RATE



** Phila CPI-U measures the Consumer Price Index for Urban Consumers as a measure of inflation.*
*** Industry data is based on National Transit Database (NTD) information. NTD is published on a one to two year lag.*

From FY2016-FY2018, SEPTA's first **ESCO PROJECT SAVED SEPTA MORE THAN $400,000 IN UTILITY EXPENSES.** This was accomplished through energy and water efficiency projects **AT FIVE BACK SHOPS AND MAINTENANCE FACILITIES**.

In FY 2018 SEPTA reduced diesel fuel consumption by more than 250,000 gallons as compared to the previous year. Even with increased fuel cost, SEPTA realized a **SAVINGS OF MORE THAN $480,000.**

HEATING SYSTEM UPGRADES

In FY 2018, SEPTA converted the fuel source of several heating systems from heating oil to natural gas. By make the switch from heating oil to natural gas SEPTA is not only reducing its carbon foot print but also reducing costs. At one location SEPTA was able to reduce winter heating costs by more than $20,000.

INVENTORY MANAGEMENT

Businesses can reduce operating expenses by examining goods and material inventories for inefficient spending patterns. SEPTA is currently undergoing an Inventory Management system upgrade which will allow the authority to better manage the purchase of materials and eliminate unnecessary spending.

ENERGY PROCUREMENT

One way that SEPTA is controlling cost is through procuring energy in a new way. In FY 2017 SEPTA signed its first ever renewable power purchasing agreement (PPA). A PPA allows SEPTA to lock in an electricity price with a predictable escalator over a 20 year period. SEPTA is exploring a second renewable PPA in the upcoming year. The goal of the PPA is to lock in a price that is less than SEPTA's current cost per kilowatt hour of electricity.

GOAL **12**

INSTITUTIONALIZE ENVIRONMENTAL MANAGEMENT PRACTICES

1. ACHIEVE **ISO 14001 CERTIFICATION** AT **2** SEPTA FACILITIES
2. **INSTITUTE AND COMPLETE AN ENVIRONMENTAL MANAGEMENT** CHECKLIST FOR CAPITAL PROJECTS BY 2020

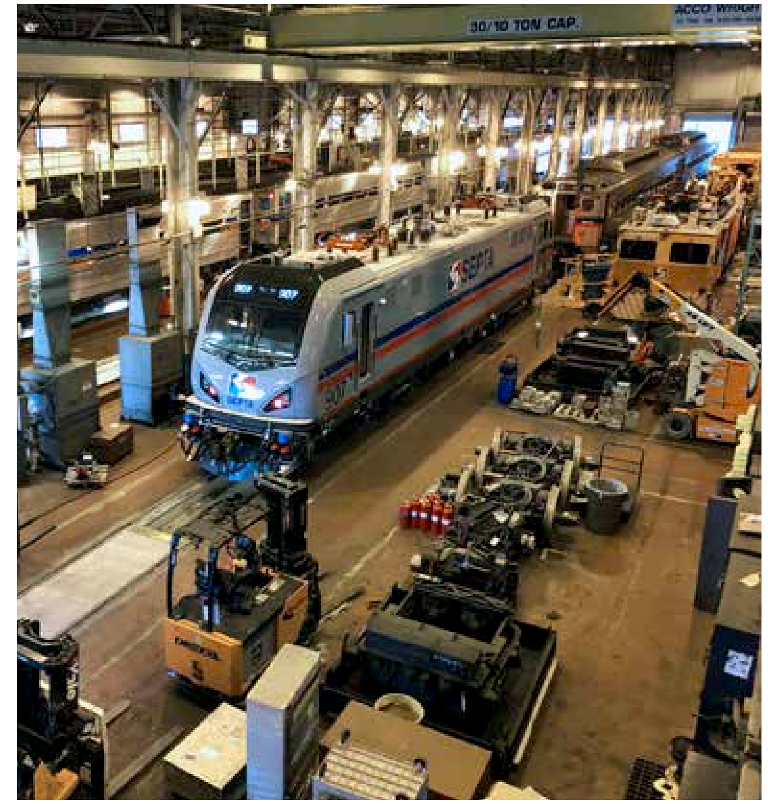
HOW WE'RE DOING:

SEPTA has achieved ISO 14001 Certification at 1 shop. SEPTA's second location received ISO certification in 2019.

Successful environmental management practices mitigate risks to employees and the natural environment. They are also a way to formalize best practices that reduce both financial and material waste. SEPTA's Environmental and Sustainability Management System (ESMS) provides tools to ensure successful business operations while meeting or exceeding all of our environmental compliance obligations.

ISO 14001 is the international standard for environmental management. Achieving ISO 14001 certification is a signal to regulators, vendors, legislators, and community members that SEPTA takes our commitments to the environment seriously. SEPTA is on the way to meeting the goal of achieving ISO 14001 Certification at two SEPTA facilities by 2020. Berridge Bus Backshop was recertified in 2016. SEPTA pursued and was awarded a second ISO certification at Wayne Rail Shop in 2019.

SEPTA continues to evaluate design standards and construction guidelines in order to strengthen language that promotes building efficiency and waste reductions in both construction and operations.



ISO 14001 CERTIFICATION

ISO 14001 provides SEPTA with a framework to improve the environmental performance of operations. Improved operations can lead to more efficient workflow processes and hazard mitigation, which ultimately have a financial benefit. At SEPTA's ISO 14001 certified Berridge Shop, better record keeping and proper hazardous material disposal have made SEPTA less vulnerable to regulatory fines. At ISO 14001-recommended Wayne Shop, multiple remediation and hazard-abatement projects are making operations safer for workers and the environment. We are hard at work streamlining the ISO 14001 certification process to facilitate additional site certifications.

EFFECTIVE ESMS TRAINING

With two successful ISO 14001 sites, SEPTA is working on deploying lessons learned system-wide, and that begins with our employees. Representatives from 18 backshops attended introductory ISO 14001 training in May 2018. An ESMS training series for shop workers was developed and deployed at Wayne Shop. Improved training for shop Location Environmental Officers (LEOs) was first offered in December 2018.

GCAL 13

FINANCIAL VALUE OF SUSTAINABILITY

GROW POSITIVE FINANCIAL IMPACTS
OF SUSTAINABILITY INITIATIVES

HOW WE'RE DOING:

From FY2016 to FY2018, SEPTA generated more than $22 million from revenue and savings related to sustainability.

One of SEPTA's guiding principles as part of its Strategic Business Plan is to operate as a business. SEPTA's Sustainability Program advances this principle. By tracking the positive financial impacts of sustainability initiatives at SEPTA, which are evaluated based on the principle of "budget neutrality," SEPTA is able to develop and scale programs that provide the greatest financial yield. Having this information allows SEPTA to continue to grow its environmental and social impact while simultaneously improving its economic position.

Fiscal Year	GRANTS	REVENUE	SAVINGS
FY2009	$-	$-	$-
FY2010	$-	$70,207	$-
FY2011	$27,640,000	$123,780	$-
FY2012	$-	$179,675	$-
FY2013	$1,280,000	$273,312	$726,650
FY2014	$-	$322,263	$583,501
FY2015	$86,800,000	$418,696	$73,449
FY2016	$2,600,000	$278,675	$1,061,124
FY2017	$-	$1,761,475	$14,207,700
FY2018	n/a	$1,902,530	$820,101
TOTAL	**$118,320,000**	**$5,330,614**	**$17,472,525**

TOTAL POSITIVE FINANCIAL IMPACT

$141,123,139

*FTA's Resilience Grant

GRANTS

- Pennsylvania Energy Development Authority (PEDA) - for first Wayside Energy Storage System
- FTA's Low and No Emission (LoNo) Funding Program - for incremental costs of battery-electric buses
- FTA's TIGGER Program - for second Wayside Energy Storage System
- FTA's Clean Fuels Program - for incremental costs of hybrid buses
- FHWA CMAQ – for locomotive engine repower

REVENUE

- ACT 129 – rebates
- WESS – compensations from PJM for frequency regulation of electric grid
- Waste oil – resale
- Metal recycle revenue
- Print shop recycling revenue
- Gov Deals

SAVINGS

- Facility Energy Retrofit Savings
- Stormwater Fee Reduction
- Recycling – hauling savings

SURPLUS EQUIPMENT AUCTION

In August 2017, SEPTA began utilizing a new auction liquidation service to auction surplus items to the public. The program was so successful that SEPTA continued with the program in 2018. Auction items include things like parts for buses SEPTA no longer has in the fleet and retired vehicles. Auctioning surplus not only provides a revenue source for SEPTA but promotes reuse.

RECYCLING REVENUE AND SAVINGS

The changing recycling market has made it more challenging realize savings. In order better align itself with the market SEPTA has started the process of reexamining its recycle program. This includes finding new sources to recycle material and looking for ways to reduce the amount of waste that the Authority produces.

FTA GRANT

In August 2018 SEPTA was awarded a Federal Transit Administration (FTA) Low or No Emission Program grant for the purchase of 10 new electric buses. The new buses will be part of a pilot program evaluating the viability of battery-electric buses on SEPTA's diverse service territory. Grants such as these help SEPTA to innovate and test new technologies. Because this grant was awarded after the close of FY 2018, it is not reflected in the summary table.

FUEL SAVINGS

Since the beginning of FY2010, SEPTA have enhanced its fuel-savings initiatives by procuring more hybrid buses, and improving anti-idling efforts. To date, more efficient vehicles and operational efficiencies have yielded more than $16M in fuel savings. Future savings are expected to result from gradual arrival of 525 new hybrid buses and 25 battery electric buses. Additionally, SEPTA's enhanced anti-idling efforts will further decrease idling time and fuel consumption.

SEPTA GHG EMISSIONS OVERVIEW

CALENDAR YEAR	EMISSIONS PRODUCED BY SEPTA	EMISSIONS PREVENTED BY SEPTA	EMISSIONS SAVINGS MULTIPLIER
CY2006	1,016,293,166	2,616,358,006	2.57
CY2007	1,005,017,053	2,704,226,835	2.69
CY2008	1,004,573,763	2,810,186,803	2.80
CY2009	953,200,977	2,832,515,631	2.97
CY2010	975,643,194	2,903,907,804	2.98
CY2011	974,878,950	2,973,724,850	3.05
CY2012	861,322,296	2,944,100,753	3.42
CY2013	863,234,605	2,866,109,250	3.32
CY2014	852,772,372	2,809,782,695	3.29
CY2015	836,177,876	2,826,628,117	3.38
CY2016	791,018,343	2,702,445,512	3.42
CY2017	764,455,048	2,541,863,829	3.33

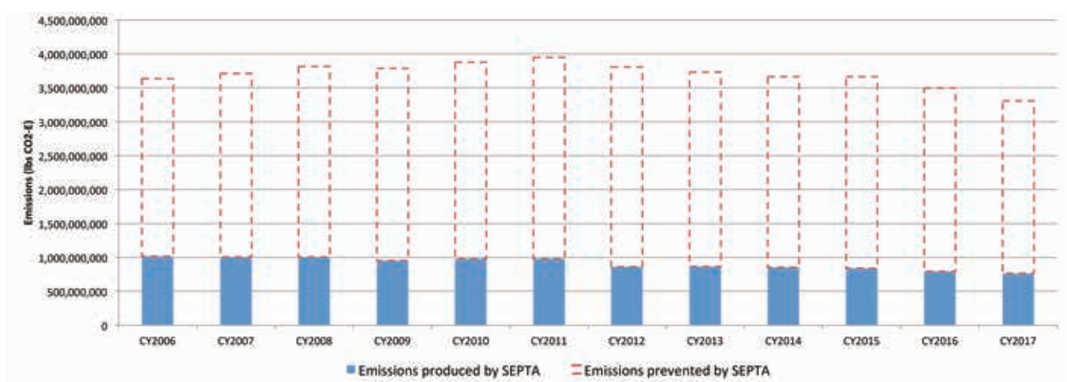
EMISSIONS PRODUCED BY SEPTA

CALENDAR YEAR	EMISSIONS (LBS CO2-E)	PER VM	PER RVH	PER PMT
CY2006	1,016,293,166	10.97	153.68	0.71
CY2007	1,005,017,053	10.73	150.47	0.68
CY2008	1,004,573,763	10.51	146.98	0.65
CY2009	953,200,977	9.82	138.00	0.61
CY2010	975,643,194	10.01	141.03	0.61
CY2011	974,878,950	9.94	139.28	0.60
CY2012	861,322,296	8.72	123.63	0.53
CY2013	863,234,605	8.65	123.38	0.55
CY2014	852,772,372	8.48	119.04	0.55
CY2015	836,177,876	8.29	114.18	0.54
CY2016	791,018,343	7.88	107.48	0.54
CY2017	764,455,048	7.68	103.37	0.56

EMISSIONS PREVENTED BY SEPTA

CALENDAR YEAR	EMISSIONS SAVINGS DUE TO CONGESTION RELIEF (LBS CO2-E)	EMISSIONS SAVINGS DUE TO MODE SHIFT (LBS CO2-E)	EMISSIONS SAVINGS DUE TO LAND USE (LBS CO2-E)	TOTAL EMISSIONS SAVINGS (LBS CO2-E)
CY2006	132,456,100	LBS	LBS	LBS
CY2007	136,130,924	602,164,856	1,881,737,050	2,616,358,006
CY2008	141,568,680	622,575,755	1,945,520,156	2,704,226,835
CY2009	142,723,301	646,945,052	2,021,673,071	2,810,186,803
CY2010	144,885,790	652,078,251	2,037,714,079	2,832,515,631
CY2011	148,363,894	668,861,395	2,090,160,619	2,903,907,804
CY2012	148,280,932	684,943,745	2,140,417,212	2,973,724,850
CY2013	144,467,677	677,782,176	2,118,037,644	2,944,100,753
CY2014	141,563,015	659,799,367	2,061,842,206	2,866,109,250
CY2015	142,659,535	646,848,459	2,021,371,222	2,809,782,695
CY2016	138,644,689	650,666,417	2,033,302,165	2,826,628,117
CY2017	132,292,746	650,666,417	2,033,302,165	2,826,628,117

GHG EMISSIONS OVERVIEW



GHG INVENTORY BY SOURCE

SOURCE	EMISSIONS PRODUCED (LBS CO2-E)	PERCENTAGE OF TOTAL EMISSIONS
REVENUE VEHICLES	330,891,034	41.83%
MAINTENANCE VEHICLES	20,210,315	2.55%
ON-SITE NATURAL GAS	28,332,822	3.58%
HEATING OIL	4,897,111	0.62%
STEAM	286,485,771	36.22%
PROPULSION ELECTRICITY	75,900,815	9.60%
BUILDING ELECTRICITY	3,685,384	0.47%

SEPTA ENERGY CONSUMPTION

	MMBTU	MMBTU PER VM	MMBTU PER RVH	MMBTU PER PMT
FY2007	4,305,974	46.13	647.94	3.01
FY2008	4,335,844	46.14	645.87	2.83
FY2009	4,447,115	45.80	639.26	2.88
FY2010	4,324,309	44.56	630.54	2.78
FY2011	4,319,489	44.15	619.03	2.66
FY2012	4,203,948	42.76	598.78	2.58
FY2013	4,175,984	42.10	604.11	2.62
FY2014	4,244,172	42.24	599.38	2.74
FY2015	4,206,252	41.77	580.40	2.75
FY2016	3,993,605	39.51	539.67	2.55
FY2017	4,028,214	40.37	550.37	2.89
FY2018	3,980,783	40.05	532.75	2.99

EMISSIONS PER PASSENGER MILE BY MODE

MODE	EMISSIONS (LBS CO2-E) PER PMT
NHSL/MFL/BSL	0.33
REGIONAL RAIL	0.40
TROLLEY	0.38
BUSES	0.60
SINGLE OCCUPANCY VEHICLE	0.87

FY2018 ENERGY CONSUMPTION BREAKDOWN

SOURCE	MMBTU	% ENERGY MAKEUP
DIESEL	1,746,974	43.37%
GASOLINE	280,100	6.95%
ELECTRICITY	1,615,194	40.10%
79% USED FOR PROPULSION		
21% USED IN BUILDINGS		
NATURAL GAS	271,487	6.74%
HEATING OIL	31,484	0.78%
STEAM	35,543	0.88%

WATER USE PERFORMANCE

FISCAL YEAR	CCF	GALLONS	GALLONS PER VM	GALLONS PER RVH	GALLONS PER PMT
FY2009	162,409	121,481,784	1.25	17.46	0.079
FY2010	169,286	126,625,900	1.30	18.46	0.081
FY2011	152,575	114,126,440	1.17	16.36	0.070
FY2012	144,417	108,023,598	1.10	15.39	0.066
FY2013	150,445	112,533,194	1.13	16.28	0.071
FY2014	157,180	113,931,756	1.13	16.09	0.074
FY2015	192,940	144,319,457	1.43	19.91	0.094
FY2016	186,391	139,420,244	1.38	18.84	0.089
FY2017	163,074	121,979,267	1.22	16.67	0.088
FY2018	139,694	104,491,368	1.05	13.98	0.079

ANNUAL STORMWATER FEES

FISCAL YEAR	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
STORMWATER FEE	$785,287	$859,673	$939,988	$1,031,736	$1,003,449	$1,056,583	$953,572	$950,735

SEPTA CITY OF PHILADELPHIA ANNUAL STORMWATER FEES

AUTHORITY-WIDE WASTE & DIVERSION

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
TRASH	9,543	6,841	5,966	5,776	7,808	8,504
RECYCLING	14,500	12,398	13,711	15,734	7,373	15,263
TOTAL WASTE	24,043	19,239	19,677	21,510	15,181	23,767
DIVERSION	60.30%	64.40%	69.70%	73.10%	48.57%	64.22%

EMPLOYEE GENERATED WASTE

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
TRASH	3,238	2,262	2,736	1,481	2,055	2,334
RECYCLING	372	342	347	328	377	330
DIVERSION	10.30%	13.13%	11.27%	18.11%	15.50%	12.39%

PASSENGER GENERATED WASTE

	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
TRASH	2,847	2,448	2,155	2,151	2,041	2,070
RECYCLING	572	525	674	757	753	629
DIVERSION	16.72%	17.65%	23.82%	26.04%	26.96%	23.30%

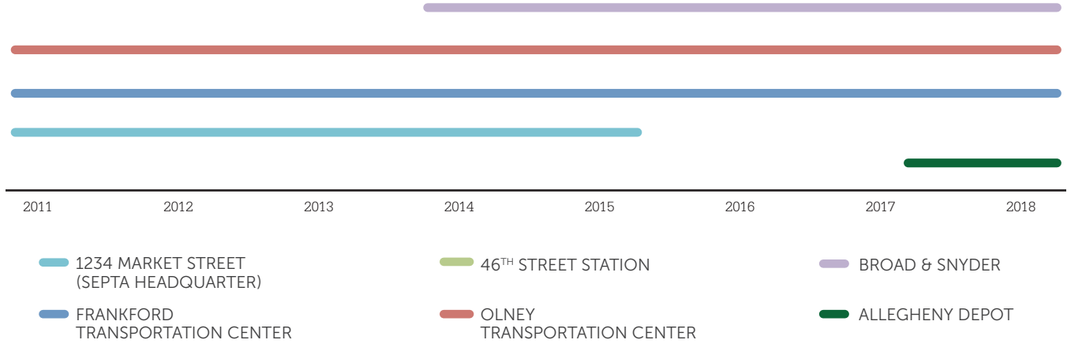
COLLABORATIVE PLANNING EFFORTS		FY 2016	FY 2017	FY 2018
BICYCLES ACCESS & TRAILS	Abington Township Bike Plan	X		
	Bike MontCo		X	X
	Cobbs Creek Trail Study		X	
	Cynwyd to Parkside Rails to Trails			X
	Delaware County Bike to Transit			X
	Forge to Refuge Trail Feasibility Study	X	X	X
	Fox Chase Lorimer Trail Feasibility Study	X	X	X
	High Trail Study		X	
	Manayunk Bridge Trail Lighting			X
	Mantua Greenway	X	X	
	Market/JFK Protected Bike Lanes			X
	Octoraro Greenway Feasibility Study	X	X	
	Parkside Cynwyd Trail Feasibility Study	X		
	Spruce/Pine Bike Lane Coordination			X
	Trail Access to Wawa Station Feasibility Study	X		
COMPLETE STREETS AND STREETSCAPE STUDIES	DRWC Waterfront Transit Study			X
	Frankford Avenue/ Arrott Transportation Center Streetscape Plan	X		X
	Market Street Transformation Study		X	
	North American Street Corridor Study		X	
	Oregon Avenue Transit First Study			X
	Reviving Vine			X
	Route for Change – Roosevelt Boulevard Study	X	X	X
	Tacony Connector Street Study	X		
	Torresdale Station / Glen Foerd Access		X	
	West Girard Avenue Streetscape Plan	X		
	Wyoming Avenue Streetscape Plan	X		
OTHER	America 250			X
	City of Philadelphia Connect Transportation Plan			X
	City of Philadelphia Vision Zero Plan			X
	Connections2045		X	
	I-95 Corridor Improvements		X	X
	Lansdale Borough Comprehensive Plan		X	X
	Lower Eastwick Public Land Strategy		X	
	Media Economic Development Strategy & Implementation Plan		X	
	NEC FUTURE		X	X
	North Central Choice Viaduct Treatments			X
	Northeast Corridor Through-Ticketing Study		X	
	Old City Vision 2026	X		
	University City Transportation Study	X		
	Upper Merion Comprehensive Plan		X	X
	Walk Park Train Abington		X	

COLLABORATIVE PLANNING EFFORTS (CONT.)		FY 2016	FY 2017	FY 2018
PHILADELPHIA 2035 DISTRICT PLANS AND FOLLOW-UP STUDIES	52nd Street Gateway		X	X
	Broad & Erie Task Force		X	X
	Far Northeast District Plan	X	X	
	Lower Southwest District Plan	X		
	North Delaware District Plan	X		
	North District Plan		X	
	Tioga Goals & Strategies Report	X		
	Transportation and Community Development Initiative Intersection Studies: 20th & Moyamensing; 40th & Market	X		
	Upper North District Plan	X	X	X
	West District Plan		X	X
	Wissahickon Gateway		X	X
SERVICE EXTENSIONS	MARC/SEPTA Commuter Rail Service Extension Ridership Analysis		X	X
	Paoli/Thorndale Regional Rail Extension Forecast Memo		X	X
	Philadelphia Zoo Passenger Rail Study	X	X	
	Regional Rail Service on the Northeast Corridor from Maryland	X		
TOD & STATION AREA PLANS	30th Street Station District Plan	X	X	X
	Abington Township Walk, Park, Train			X
	Access the Keystone		X	
	Building on our Strengths: Evaluating Transit-Oriented Development (TOD) Potential in Greater Philadelphia	X		
	Conshohocken Station Area Improvements	X	X	
	Darby Transportation Center – Access & Development Opportunities Study	X		
	Eastwick Inter-Modal Center		X	X
	Exton Station – Phases II & III	X	X	X
	Hughes Park Safe Routes to Transit			X
	Ivy Ridge: Creating a Multi-Modal Hub	X	X	
	King of Prussia Rail Station Area Planning		X	X
	Middletown TRID			X
	Radnor Station Connectivity Study		X	
	South Philadelphia Transportation Center Study		X	X
	ULI North Philadelphia Station			X
TROLLEY MODERNIZATION	Centennial District: Trolley Service Evaluation		X	X
	I-95 Richmond Street Improvements	X	X	X
	Island Avenue Reconstruction	X	X	X
	Light Rail on Delaware Avenue: a Renewed Look	X		
	Modern Trolley Station Design Guide: City Routes	X	X	X
	Modern Trolley Station Design Guide: Media / Sharon Hill Lines	X	X	X
	Route 15 Trolley Modernization and Operations Analysis			X
	Transit on Delaware Avenue		X	X

FY18 FARMERS MARKETS

	PRODUCE SOURCING	SEPTA ROUTES	ADDRESS
FRANKFORD TRANSPORTATION CENTER	Root Mass Farm	3, 5, 8, 4, 19, 20, 24, 25, 26, 50, 58, 59, 73, 84, 66, 67, 88, R, MFL (Frankford TC)	Bustleton Ave. & Frankford Ave.
OLNEY TRANSPORTATION CENTER	McCann Farms	6, 8, 16, 18, 22, 26, 55, 80, L, BSL (Olney TC)	Broad St. & Olney Ave.
46TH STREET STATION	On-site (Walnut Hill Community Farm)	21, 31, 64, MFL (46th St. Station)	4610 Market St
BROAD & SNYDER	Solly Bros. Farm	4, 37, 79, BSL (Snyder Station)	Broad St. & Snyder Ave.
ALLEGHENY DEPOT	McCann Farms	32, 54, 60	26th & Allegheny

TIMELINE OF SEPTA FARMERS MARKETS



NUMBER OF SEPTA VOLUNTEERS

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
SPRING CLEAN-UP	675	650	630	697	729	634	712	150*
FLOWER SHOW	208	211	241	222	224	222	165	231

**Rescheduling of Philly Spring Clean-Up due to inclement weather effected SEPTA participation levels.*

UNLINKED TRIPS PER CAPITA

FISCAL YEAR	REGIONAL POPULATION	UNLINKED PASSENGER TRIPS	UPT PER CAPITA
FY2000	3,849,647	300,707,480	78.1
FY2001	3,868,053	305,171,840	78.9
FY2002	3,882,567	295,270,159	76.1
FY2003	3,896,671	298,325,816	76.6
FY2004	3,914,630	301,018,217	76.9
FY2005	3,929,505	298,730,503	76
FY2006	3,946,328	296,587,290	75.2
FY2007	3,969,582	307,188,000	77.4
FY2008	3,991,897	325,118,000	81.4
FY2009	4,012,573	329,581,000	82.1
FY2010	4,008,994	320,984,000	80.1
FY2011	4,033,874	333,966,000	82.8
FY2012	4,053,776	339,288,000	83.7
FY2013	4,067,946	337,314,000	82.9
FY2014	4,081,026	330,155,000	80.9
FY2015	4,093,906	330,119,000	80.6
FY2016	4,095,710	326,085,000	79.7
FY2017	4,119,268	308,300,000	74.8
FY2018	4,119,268	302,702,000	73.5

***Lag time for FY2017 Regional Population*

FY2018 RIDERSHIP BREAKDOWN

MODE	UNLINKED PASSENGER TRIPS	VEHICLE MILES TRAVELED	PASSENGER MILES TRAVELED
REGIONAL RAIL	32,245,981	20,148,229	436,335,049
DEMAND RESPONSE	1,554,597	12,513,364	11,118,969
NHSL/MFL/BSL	94,005,114	17,139,715	359,405,111
TROLLEY	31,634,284	4,072,251	74,462,503
BUS	161,454,460	45,625,992	455,192,052

GOAL 11

OPERATING EXPENSES OVERVIEW

YEAR	OPEX	UPT (IN MILLIONS)	OPEX/UPT	INDUSTRY OPEX/UPT	PHILADELPHIA CPI-U
FY2005	$923,369	298.73	$3.09	$3.04	$3.09
FY2006	$933,904	269.59	$3.15	$3.14	$3.23
FY2007	$985,146	307.19	$3.21	$3.16	$3.28
FY2008	$1,041,623	325.12	$3.20	$3.50	$3.45
FY2009	$1,101,497	329.58	$3.34	$3.67	$3.38
FY2010	$1,147,754	320.98	$3.58	$3.79	$3.44
FY2011	$1,184,551	333.97	$3.55	$3.84	$3.54
FY2012	$1,232,262	339.29	$3.63	$3.86	$3.58
FY2013	$1,239,886	337.31	$3.68	$3.77	$3.64
FY2014	$1,270,436	330.16	$3.85	$4.02	$3.70
FY2015	$1,287,658	330.12	$3.90	$4.22	$3.71
FY2016	$1,318,576	326.09	$4.04	$4.48	$3.71
FY2017	$1,353,073	308.3	$4.39	$4.65	$3.74
FY2018	$1,378,936	302.7	$4.56	$-	$3.81

** Two year lag in industry performance information*

GOAL 13

GRANTS

FY2011	EPA National Clean Diesel Campaign	$1,200,000
FY2011	FTA State of Good Repair (Hybrid Buses)	$15,000,000
FY2011	FTA Livability (33rd & Dauphin Loop)	$5,000,000
FY2011	FTA Clean Fuels (Hybrid Buses)	$5,000,000
FY2011	FTA TIGGER (Waysise Energy Storage)	$1,440,000
FY2013	FHWA CMAQ (Locomotive Engine Repower)	$1,280,000
FY2015	FTA Resilience Grant	$86,800,000
FY2016	FTA NoLo (Electric Bus)	$2,600,000
TOTAL		**$118,320,000**

REVENUE

FY2010	Waste Oil Resale	$70,207
FY2011	Waste Oil Resale	$123,780
FY2012	Waste Oil Resale	$144,969
FY2012	ACT 129 Rebate	$34,706
FY2013	Waste Oil Resale	$139,597
FY2013	ACT 129 Rebate	$133,715
FY2014	Waste Oil Resale	$148,169
FY2014	ACT 129 Rebate	$29,383
FY2014	WESS: grid regulation	$144,711
FY2015	Waste Oil Resale	$93,462
FY2015	ACT 129 Rebate	$2,712
FY2015	WESS: grid regulation	$322,522
FY2016	Waste Oil Resale	$21,006
FY2016	ACT 129 Rebate	$29,123
FY2016	WESS: grid regulation	$228,546
FY2017	Waste Oil Resale	$24,976
FY2017	ACT 129 Rebate	$181,471
FY2017	Print Shop Recycling Revenue	$2,047
FY2017	Gov Deals	$41,052
FY2017	Metal Recycling Revenue	$1,434,444
FY2017	WESS: grid regulation	$77,486
FY2018	Waste Oil Resale	$35,112
FY2018	Print Shop Recycling Revenue	$2,404.50
FY2018	Asset Recovery	$93,791
FY2018	Metal Recycling Revenue	$1,733,869
FY2018	WESS: grid regulation	$37,354
TOTAL		**$5,330,614**

GOAL 13

SAVINGS

FY2013	Hybrid/Electric Bus Fuel Savings: 2012 vs. 2013	$694,378
FY2013	Savings from Recycling	$32,272
FY2014	Hybrid/Electric Bus Fuel Savings: 2013 vs. 2014	$539,532
FY2014	Savings from Recycling	$43,883
FY2014	Stormwater Fee Savings	$86
FY2015	Savings from Recycling	$73,449
FY2016	Hybrid/Electric Bus Fuel Savings: 2015 vs. 2016	$986,200
FY2016	Savings from Recycling	$74,924
FY2017	Savings from Stormwater	$2,031
FY2017	ESCO #1*	$-
FY2017	Savings from Recycling	$148,699
FY2017	Savings from Paper Reduction	$2,000
FY2018	ESCO #1	$288,662
FY2018	Savings from recycling	$50,658
FY2018	Savings from Hybrid-Electric vs Diesel Buses	$480,780
TOTAL		**$3,417,555**

GLOSSARY

American Public Transportation Association (APTA): a non-profit organization that advocates for the progression of public transit in the US

British Thermal Unit (BTU): a standard unit of energy

Combined Sewer System (CSS): a sewage collection system that collects both sewage and surface runoff

Combined Sewer Overflow (CSO): occurs when system's capacity is exceeded and overflow sewage is released in the natural environment instead of reaching the sewage treatment plant

Construction and Demolition (C&D) waste: waste material produced at SEPTA's construction and demolition sites

Centum Cubic Feet (CCF): one hundred cubic feet; standard unit of water consumption

Carbon Dioxide Equivalent (CO2e): a measure of carbon dioxide equivalents used to measure greenhouse gas emissions; determined by converting the global warming potential of various greenhouse gases to the equivalent amount of CO2 with the same global warming potential

Climate Change: changes in global and regional climate patterns in response to increased levels of atmospheric greenhouses gases produced by the use of fossil fuels

Climate Resilience: the ability of a system to manage stresses and maintain function despite external changes imposed by climate change

Disadvantaged Business Enterprise (DBE): a small, minority or woman-owned businesses

Energy Savings Company (ESCO): a company specializing in the implementation of energy efficient technologies that develop contracts with organizations, like SEPTA, providing them with private capital and savings guarantees for the implementation of energy reduction solutions

Environmental and Sustainability Management System (ESMS): Internal SEPTA program based on the principles of the ISO 14001 Standard

Federal Transit Administration (FTA): offers financial and technical assistance to US public transportation agencies

Green Acre: an area equivalent to one acre that consists of pervious surfaces, semi-impermeable surfaces, and/or surfaces fitted with other stormwater infrastructure

Greenhouse Gas (GHG): contributes to the atmospheric greenhouse effect, the leading cause of climate change; sources of which include fossil fuel consumption

Impervious Surface: a surface, typically man-made, that does not allow liquid or precipitation to pass through

International Organization for Standardization (ISO): ISO 14001:2004 – Standard for environmental management

Kilowatt Hours (KWH): standard unit of energy; used specifically to measure energy that is being transmitted at a constant rate over a period of time

Miles per Gallon (MPG): a standard unit of fuel efficiency; measures vehicular miles traveled per gallon of fuel

Operational Expenditure (OpEx): money spent on a day-to-day basis to maintain operations

Passenger Miles Traveled (PMT): cumulative sum of distances ridden by each passenger; used as an efficiency metric

Pervious Surface: a surface that allows liquid and precipitation to pass through

Planning Effort: collaboration with community projects involving SEPTA; can include participation in TOD or area study plans with external parties

Planning Study: a comprehensive analysis of an aspect of SEPTA's system. Planning studies may be Station Area Plans evaluating the impacts of a specific station on the surrounding community, or a Long-Range Transit Plans analyzing service routes and ridership trends

Revenue Vehicle Hours (RVH): hours traveled by vehicle while in revenue service; used as an efficiency metric

Sanitary Sewage: liquid waste produced by homes and commercial buildings

Semi-Impermeable Surface: a surface that allows some liquid or precipitation to pass through

Single Occupancy Vehicle (SOV): a non-commercial car whose only occupant is the driver

Social Justice: equitable distribution of wealth, opportunity, privilege, and fairness within a society

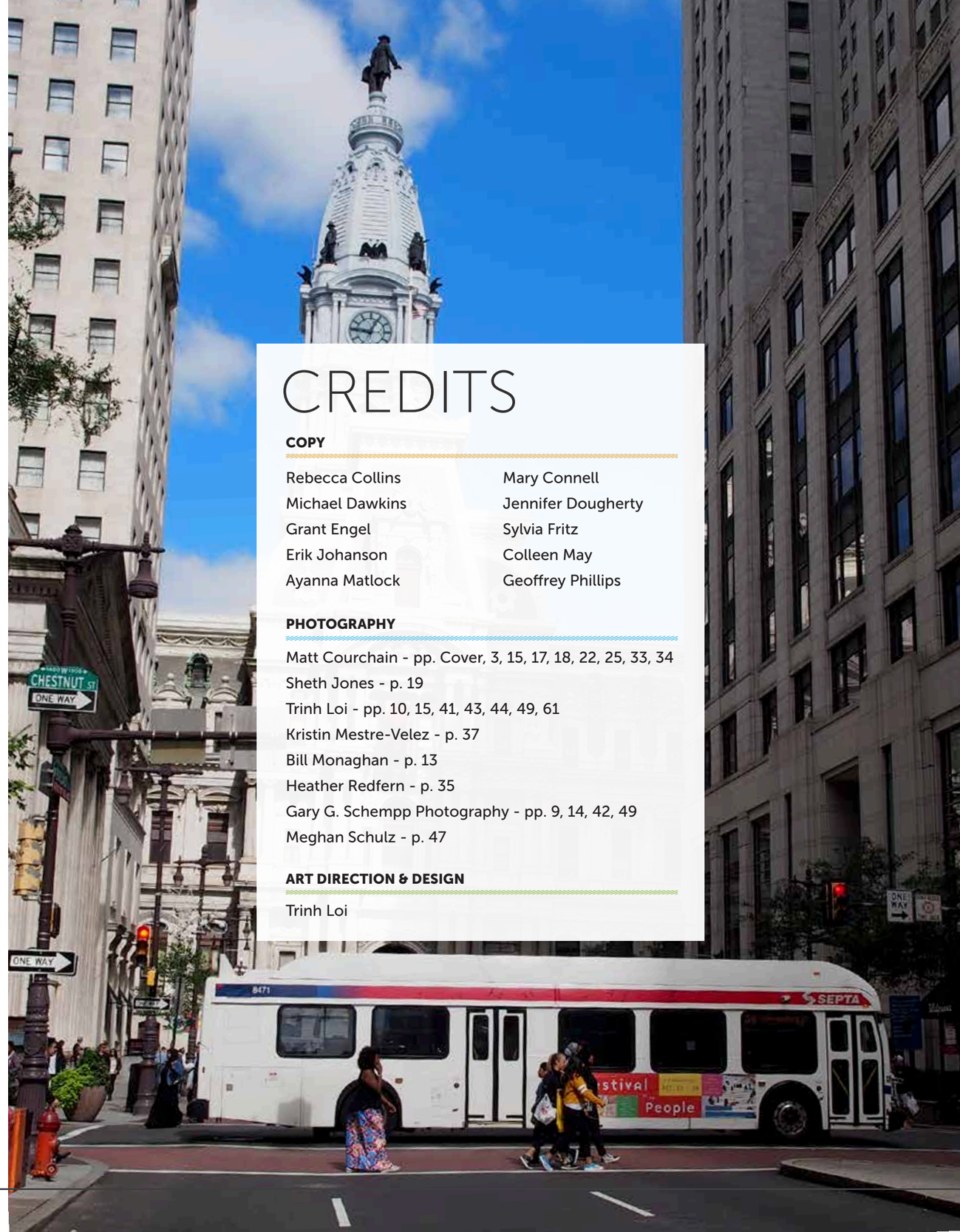
Stormwater Fees: fee at an annually increasing rate charged to property owners in Philadelphia county based off of their area of impervious surface; goal of these fees is to reduce the amount of runoff pollution to Philadelphia's sewer system and waterways and implement more stormwater management systems throughout the city

Transit Oriented Development (TOD): a type of community development that includes a mixture of housing, office, retail and/or other commercial development and amenities integrated into a walkable neighborhood and located within a half-mile of quality public transportation.

Unlinked Passenger Trips (UPT): a trip on one transit vehicle regardless of the type of fare paid or transfer presented

Vehicles Miles (VM): total mileage traveled by vehicles including miles traveled while out of service; used as an efficiency metric

**Definition courtesy of the Center for Transit-Oriented Development www.ctod.org*



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