

2024 INFRASTRUCTURE SOLUTIONS TEAM REPORT AND ACTION PLAN



Message from Mayor Cherelle L. Parker	3
Introduction	4
Infrastructure Solutions Team Goals	6
Overview of the Bipartisan Infrastructure Law	7
Where We Are Now: Millions Secured for Philadelphia Infrastructure	9
Equitable Implementation: Economic Growth through the Bipartisan Infrastructure Law	10
Workforce	10
Philadelphia's Equitable Infrastructure Workforce Strategies in 2024	14
Business Participation	17
Philadelphia's Equitable Infrastructure Business Strategies in 2024	19
Transportation	21
Highways	21
Bridges	24
Streets: Bicycle and Pedestrian	26
Airports	29
Electric Vehicles	30
Partner Highlight: SEPTA	32
Climate, Energy, and the Environment	34
Water	35
Resiliency	37
Clean Energy	38
Partner Highlight: PECO	40
Broadband and Digital Infrastructure	42
Appendix: IST Goals and Strategies	43
Appendix: BIL Grant Award List	44



Dear Fellow Philadelphians,

This report outlines our organizational approach, our successes in securing grants, and our plans to continue these efforts throughout the life of the BIL – the largest long-term infrastructure investment in our nation's history.

I believe the work of the Infrastructure Solutions Team (IST) will be key to the success of multiple long-term visions of my Action Plan.

The pillars of the Parker administration will be a city government citizens can see, touch, and feel - visible actions that help people see their tax dollars at work in their neighborhoods. This includes federal tax dollars. I believe this report will give all Philadelphians a chance to preview how BIL funding has and will continue to directly impact neighborhoods across the City.

In Service,

Kulle I

100th Mayor

In my 100-Day Action Plan, I shared my vision for a safer, cleaner, and greener Philadelphia, with economic opportunity for everyone. While we face many challenges, the Bipartisan Infrastructure Law (BIL) represents real support toward achieving a wideranging set of this administration's long-term goals.

We have an unprecedented opportunity to prioritize environmental sustainability and resiliency with a direct focus on environmental justice and economic equity for underserved and under-resourced communities.

Cherelle L. Parker City of Philadelphia

Introduction

In addition to the BIL. **the Inflation Reduction Act** (IRA) provides a \$370 billion investment to and accelerate the clean good-paying jobs, and new IRA and BIL strategies are

The City of Philadelphia is utilizing historic levels of funding from the federal Bipartisan Infrastructure Law (BIL) to upgrade infrastructure systems used by people every day. Philadelphia's streets, bridges, airports, water systems, trail networks, and open spaces are being invested in to be safer, more accessible, and more resilient.

Ensuring these investments grow generational wealth for Philadelphians, especially people of color who have historically been excluded from opportunity, is central to our strategy.

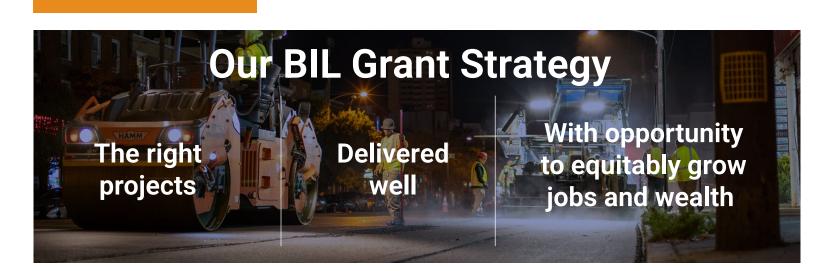
To meet the moment and capitalize on this once-in-a-generation federal investment, the City created the Infrastructure Solutions Team (IST), a cross-departmental group led by the Office of Transportation, Infrastructure, and Sustainability (OTIS) dedicated to advancing racial equity with the BIL funding. This involves both increasing the number of City contracts awarded to historically underutilized businesses (HUBs) and ensuring that the workforce across all infrastructure projects, spanning from planning to construction, reflects the demographic makeup of Philadelphia's population.



Members of the IST in June 2023 at a cross-departmental visit to the Montgomery Avenue Bridge and the Martin Luther King Drive Bridge construction sites. Both projects are funded by the Bipartisan Infrastructure Law. The site visit was hosted by the Department of Streets and included staff teams from OTIS, Commerce, Commercial Law, Labor Standards, Office of Economic Opportunity, Office of Human Resources, Procurement, Rebuild, and PhilaWorks Each City department in attendance plays a part in implementing the BIL in Philadelphia, from planning to construction.

The City's strategy aims to secure maximum resources to build high quality infrastructure projects that invest in neighborhoods. The City is also preparing Philadelphia's workforce for an influx in infrastructure jobs. The City and its partners are engaged in understanding and addressing the training needs of residents and employers, enabling a diverse, skilled workforce to access both private and public sector jobs, particularly positions in organized labor. Additionally, the City is focused on opportunities for HUBs, such as certified Disadvantaged Business Enterprises (DBEs), to obtain contracts, grow their business, and provide meaningful value to projects as subcontractors or prime contractors.

This report provides an overview on the implementation of investments from the Bipartisan Infrastructure Law in Philadelphia and looks ahead to upcoming projects and programs.



INFRASTRUCTURE SOLUTIONS TEAM GOALS

Secure \$1 Billion in federal BIL funding to build Philadelphia infrastructure by 2026

Ensure that infrastructure workers,

from planning to construction, look more like the population of Philadelphia Increase participation of historically underutilized businesses on City contracts 2.

Overview of the Bipartisan Infrastructure Law On November 15, 2021, President Biden signed the Bipartisan Infrastructure Law (BIL) – a **\$1.2 trillion investment in our nation's infrastructure and communities**. The BIL includes approximately \$550 billion in new federal funding to rebuild roads, bridges, and rails, expand access to clean drinking water, ensure access to high-speed internet, and to tackle the climate crisis and advance environmental justice, while investing in communities that have too often been left behind.

The BIL, also known as the Infrastructure Investment and Jobs Act (IIJA), aims to create good-paying jobs with high labor standards that can be accessed by all workers and grow the economy both sustainably and equitably for decades to come.

The BIL includes over 380 distinct programs across more than a dozen federal departments and agencies. To date, **over 40,000 projects** have been awarded funding nationwide.

The BIL contains multiple types of funding and financing. Formula funding is distributed to states based on formulas specified in Federal law. Discretionary funding is made available through competitive grants by U.S. agencies to eligible applicants in a nationwide process based on qualifications and merit. Financing and low interest loans are also included in the BIL and are having an impact on City's enterprise funds like the Philadelphia Water Department.



2024 Infrastructure Solutions Team Report and Action Plan **7**

NATIONAL FUNDING AMOUNTS IN THE BIL

	\$91.2 billion	to repair and upgrade aging transit infrastructure, modernize bus and rail fleets, ensure station accessibility for all users, and expand transit service to new communities.
	\$66 billion	in rail to eliminate the Amtrak maintenance backlog, modernize the Northeast Corridor, and bring world-class rail service to areas outside the northeast and mid-Atlantic.
(((0	\$65 billion	to help ensure that every American has access to reliable high-speed internet through broadband infrastructure deployment.
	\$55 billion	investment in drinking water, wastewater, water reuse, conveyance and water storage infrastructure, including dedicated funding to replace lead service lines and address the chemical PFAS (per- and polyfluoroalkyl).
	\$40 billion	in dedicated funding for bridge repair, replacement, and rehabilitation.
	\$7.5 billion	in electric vehicle charging to help build out the first-ever national network of electric vehicle (EV) chargers.

Where We Are Now: Millions Secured for Philadelphia Infrastructure

As of early 2024, \$14.4 billion in Bipartisan Infrastructure Law funding has been announced for Pennsylvania with over 379 specific projects identified for funding.¹ Currently, nine billion of this funding has been received through formula funding.² The City of Philadelphia has already been awarded approximately \$350 million in discretionary funding to date. In addition, \$750 million of funding was announced in Fall 2023 for the Mid-Atlantic Clean Hydrogen Hub (MACH2), which includes the City of Philadelphia as a central partner.

\$352.6M **City Awarded Discretionary Funding**

PROJECT SELECTION

To select projects, the City agencies that build and maintain infrastructure are tapping into prior planning analysis, foundational documents, and capital plans. Meanwhile, staff are looking at their infrastructure systems with fresh eyes given the new parameters of the BIL and identifying opportunities to tackle big infrastructure projects. City infrastructure teams are selecting projects using stronger equity approaches than ever before in response to both federal policy, like Justice 40, and local achievements, like the City's Racial Equity Action Plan and Dashboard.

For more information on BIL in the United States, please visit The White House Briefing Room.

For more information on BIL in Pennsylvania, please visit The White House State Fact Sheet

FIGURE 1 | Topline above-baseline spending in IIJA (billions of USD) Legacy Pollution \$21 Western Water Transportation Broadband Power & Grid Water Resiliency \$283.8 \$55 \$47.2 \$8.3 \$65 \$65 100 400 200 300 500 Airports Low-Carbon and Passenger and Freight Rail Zero-Emission Ports and School Buses Roads Bridges Waterways Electric Vehicle and Major Projects Safety and Charging Public Transit Research Reconnecting Communities

https://www.brookings.edu/articles/america-has-an-infrastructure-bill-what-happens-next/



¹ Pennsylvania-Fact-Sheet.pdf (whitehouse.gov) ² Pennsylvania-Fact-Sheet.pdf (whitehouse.gov)

Equitable Implementation: Economic Growth through the Bipartisan Infrastructure Law



To ensure the impact of the BIL is felt by all Philadelphians, the IST has established a two-pillar approach focusing on equitable workforce and diverse business participation. See the Appendix for a full list of IST Goals and Strategies.

WORKFORCE

Recent job growth has been four times greater than previous trends, reaching 2,800 jobs per month compared to an average of 700 jobs per month from 2011 to 2019.³

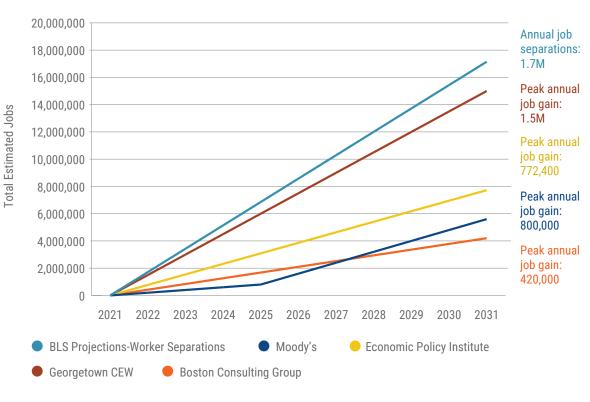
Over the next 10 years, national forecasts indicate strong job growth in infrastructure jobs in occupations ranging from construction, to engineering, to maintenance.

Recent reports provide evidence that these forecasts are holding true. Between early 2021 and late 2023, the Highway, Street, and Bridge Construction industry saw a surge of 37,600 jobs nationwide following the signing of the Bipartisan Infrastructure Law. The pace of job growth in this sector has seen a particularly strong uptick. Recent job growth has been four times greater than previous trends, reaching 2,800 jobs per month compared to an average of 700 jobs per month from 2011 to 2019.3

To meet the workforce needs of BIL-funded projects, Philadelphia's infrastructure industries will require an additional labor supply for crucial infrastructure occupations. These infrastructure projects provide a critical opportunity for a diverse workforce to access good quality, familysustaining occupations, including union jobs. Transitioning into these infrastructure occupations would require short or moderate-term job training, and in some cases certifications or licensing.

³ https://www.whitehouse.gov/briefing-room/blog/2023/11/15/job-gains-inconstruction-after-two-years-of-the-bipartisan-infrastructure-law/

FIGURE 2 | Estimated new infrastructure job creation vs. infrastructure jobs that need to be filled due to worker separations



https://www.brookings.edu/articles/infrastructure-workforce/

Using industry analysis from PhilaWorks, we identified the top 6 infrastructure industries in Philadelphia - Building Equipment Contractors; Nonresidential Building Construction; Electric Power Generation, Transmission, and Distribution; Foundation, Structure, and Building Exterior Contractors; and Utility Systems Construction. These occupations pay a living wage, according to MIT's Living Wage Calculator⁴, require little to no prior experience or secondary education, and offer on-the-job trainings or apprenticeships. We anticipate that these occupations will continue to increase in demand as the City receives more funding and begins construction on BIL projects.

TABLE 1 Occupations in Philadelphia's top infrastructure industries that were in highest aggregate demand in 2022. PhilaWorks 2023. Data pulled from Lightcast November 2023.

OCCUPATION	MEDIAN HOURLY WAGE	TYPICAL ENTRY LEVEL EDUCATION	WORK EXPERIENCE REQUIRED	TYPICAL ON -THE-JOB TRAINING (OJT)
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	\$31	Postsecondary nondegree award	None	Long-term on- the-job training
Plumbers, Pipefitters, and Steamfitters	\$34	High school diploma or equivalent	None	Apprenticeship
Electricians	\$35	High school diploma or equivalent	None	Apprenticeship
Construction Laborers	\$23	No formal educational credential	None	Short-term on-the- job training
First-Line Supervisors of Construction Trades and Extraction Workers	\$41	High school diploma or equivalent	5 years or more	None
Carpenters	\$26	High school diploma or equivalent	None	Apprenticeship
Operating Engineers and Other Construction Equipment Operators	\$31	High school diploma or equivalent	None	Moderate-term on- the-job training

Today, these infrastructure industries in Philadelphia lack racial, ethnic, and gender diversity and include a significant proportion of mature workers likely to retire in coming years. Employees overwhelmingly identify as white and male, and more than two-fifths were 45 years of age or older in 2019. Yet, Philadelphia's population looks much different. Only 37% of the population identifies as white and less than 50% identify as male.5

⁴ https://livingwage.mit.edu/counties/42101 ⁵ https://www.census.gov/quickfacts/fact/table/philadelphiacitypennsylvania/RHI325222#RHI325222

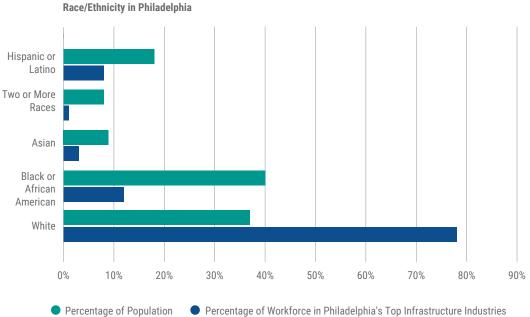
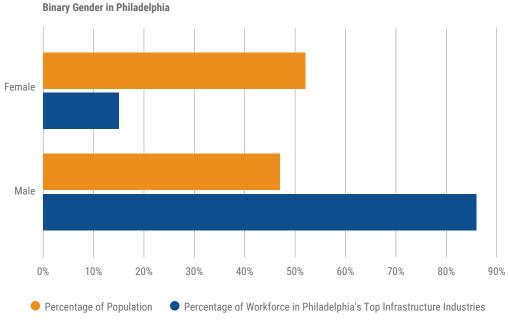


FIGURE 4 | Comparison of 2020 census data and the binary gender make up of Philadelphia's infrastructure workforce. Workforce data was calculated using the average from the top infrastructure industries previously identified for Table 1 (PhilaWorks 2023).





Increased funding for infrastructure projects gives Philadelphia opportunities to develop a more inclusive workforce across these industries. To assist women and minority workers prepare for infrastructure careers, the City is partnering with the following agencies and exploring the following tools:

PHILADELPHIA'S EQUITABLE INFRASTRUCTURE WORKFORCE STRATEGIES IN 2024







RIDE AND DRIVE ELECTRIC

In January 2024, OTIS was awarded \$1,470,995 through the Ride and Drive Electric grant program to fund **Plug In Philly**. Plug In Philly is a workforce development program to recruit and train diverse Philadelphians for careers in electric vehicle supplies and equipment (EVSE). The City will lead the initiative in partnership with International Brotherhood of Electrical Workers (IBEW) Local 98 and their training arm, ATEI. Additional partners include PhilaWorks, Community College of Philadelphia, School District of Philadelphia, and the National Association of Women in Construction Philadelphia branch who will help recruit participants, develop curriculum, and provide training.

PENNDOT'S ON-THE-JOB TRAINING

PennDOT's **"On-the-Job" Training Program (OJT)** provides training and supportive service opportunities for underserved and disadvantaged workers to help advance in highway construction trades. The City of Philadelphia, in partnership with PennDOT, includes OJT goals on select projects, often including large dollar projects with federal funding.

LOCAL AND ECONOMIC HIRING

BIL section 25019 authorizes the use of a **local and economic hiring preference** when procuring contractors and consultants for the development and construction of public work projects in accordance with local, state, and federal regulations. Such preferences are a mechanism to bolster pathways for individuals residing where construction projects are taking place or those who are economically disadvantaged to gain access to jobs and training opportunities presented by such projects. Currently, the City of Philadelphia is exploring how to implement such hiring practices for BIL-funded public works contracts especially given the Parker administration's vision to ensure that federally supported infrastructure projects benefit local workers.



GOOD JOBS CHALLENGE

Philadelphia Works Incorporated's Good Jobs Challenge, funded by the U.S Economic Development Administration, aims to connect over 3,000 jobseekers across Southeastern PA to good jobs in the healthcare, energy, and **building and construction sectors** between September 2022 and September 2025. Philadelphia Area Labor Management Committee (PALM) is the infrastructure sector partner that leads the BUILT-RITE program, a coalition of contractors, unions, and construction users.

TRAINING PROGRAMS

Meaningful training opportunities combined with hands-on experience that replicates the workforce is made possible through quality **pre-apprenticeship and workforce development programs**. Examples include the City's own **Rebuild initiative**, whose paid training programs provide people of color and women new pathways to skilled trade union apprenticeships. Providing wrap around support like assistance with childcare, transportation, and housing is best practice to ensure program completion.

COMMONWEALTH WORKFORCE TRANSFORMATION PROGRAM

Governor Shapiro's administration in Harrisburg has created the first-in-the-nation **Commonwealth Workforce Transformation Program**, investing up to \$400 million of federal funding in on-the-job training over the next five years for BIL and IRA projects across the Commonwealth. The City is already coordinating with the state as this program is established and will continue to ensure Philadelphia workers and the construction industry as a whole benefits from these resources.



SUPPORTING OUR PARTNERS

Other notable programs include **Everybody Builds**, a nonprofit organization with the mission to diversify Philadelphia's construction industry and build sustainable capacity for growth among diverse businesses and workers. Everybody Builds has established partnerships and is working in collaboration with the city's major contractors, developers, anchor institutions, and trade unions and associations to align market opportunities and prepare diverse workers, contractors, and sub-contractors to play a substantial role in Philadelphia's growth. Everybody Builds is strengthening pipelines to union construction and apprenticeship, as well as supporting entrepreneurship and industry growth of diverse workers and contractors. Another prominent non-profit is the **National Association of Women in Construction (NAWIC) Philadelphia Foundation**. NAIWCPF partners with local companies, trade unions, and educational leaders to encourage students in elementary, middle, and high school to learn about careers in construction as an alternative to college.

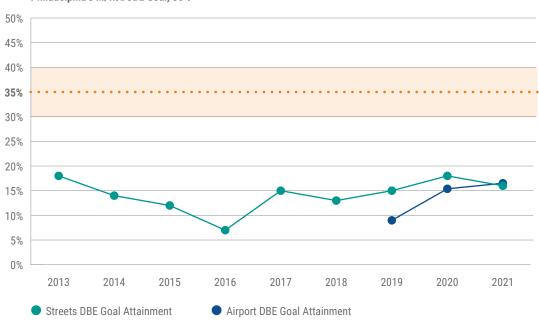


BUSINESS PARTICIPATION

The City is taking action to support the growth of diverse businesses owned and controlled by socially and economically disadvantaged individuals in industries that participate in public works projects. One of the largest agencies allocating BIL funding is the U.S. Department of Transportation (USDOT). Projects funded by USDOT utilize the Disadvantaged Business Enterprise (DBE) program, which requires contracting agencies to take all necessary affirmative steps to assure that minority businesses and women's business enterprises are used, including by setting DBE contract goals. Businesses can become DBE-certified through the Pennsylvania Unified Certification Program (PAUCP). For Philadelphia Municipal projects let between 2017 to 2021, the average credited DBE Goal Attainment was 15.73%, with the highest attainment occurring in 2020.

FIGURE 5 | Average Credited DBE Goal Attainment

Philadelphia's M/W/DSBE Goal, 35%



*Only using data where final payments have been made

City policy does not specify a citywide goal for DBE participation, however it does state the goal to fill at least **35%** of all contracts through minority, woman, or disabled-owned enterprises (M/W/DSBEs).⁶ While both the DBE and M/W/DSBE programs support historically underutilized businesses, they are different programs that require their own certifications. The City's Office of Economic Opportunity maintains a registry of M/W/DSBEs and certified businesses.





The IST completed an analysis of City's public works contracts for fiscal year 2021 (FY2021) and confirmed that the City's infrastructure projects are led by the Water, Aviation, Streets, Public Property, and Parks and Recreation Departments.⁷ Three industries account for 80% of Public Works contract awards: Electrical Contractors and Other Wiring Installation Contractors; Commercial and Institutional Building Construction; Highway, Street, and Bridge Construction. Availability of M/W/DSBEs in these industries is low statewide. The City is taking action to support the growth of M/W/DSBEs in industries that patriciate in public works projects by using the following tools and initiatives.

PHILADELPHIA'S EQUITABLE INFRASTRUCTURE **BUSINESS STRATEGIES IN 2024**

PROCUREMENT BEST PRACTICES

The City announced its first ever **Public Works Procurement Forecast** at the inaugural Infrastructure Mixer networking event on October 24, 2023. The forecast pulls together a list of more than 300 different anticipated public works contract opportunities from three City agencies: Department of Streets, Philadelphia Airport (PHL & PNE), and Water Department.

The procurement forecast includes expected projects over the next 18-24 months, and the list will be refreshed every six months. Accounting for over \$340 million of upcoming work, the scope of work crosses multiple trades especially for prime contractors and subcontractors in fields such as:

- Highway and Bridge Construction,
- · Electrical Installation,
- Water and Sewer Structures,
- Manufacturing, Trucking and Warehousing, and
- · General Labor and Equipment Operation.



Panel speaking at the Infrastructure Mixer networking event, where the City released its first ever Public Works Procurement Forecast.

EXPLORING ALTERNATIVE CONTRACTING METHODS

The most common procurement method awards contracts to the lowest responsive and responsible bidder. Referred to as "lowest bid" and "competitive bidding", this method is thought to be cost-effective and potentially reduce favoritism and subjectivity in the evaluation process. Yet, the City recognizes that goods and services that provide the best values for Philadelphia cannot always be selected on the basis of lowest prices.



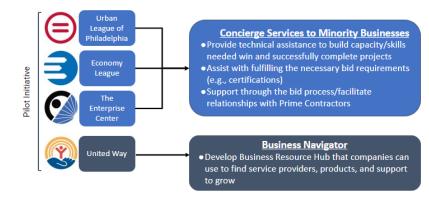




Secretary of Transportation, Pete Buttigieg speaking at the 2023 Small Business Symposium in Philadelphia Alternative Contracting Methods (ACMs) take other factors into consideration like time, experience, past performance, M/W/DSBE participation, and technical qualifications - in addition to cost when awarding highway construction projects. Using the Forecast, the City hopes to explore ways to utilize ACMs for BIL-funded projects with the overall goal of delivering the best projects for Philadelphia while also ensuring equitable implementation policy goals are met.

SUPPLY PHILLY

Three nonprofits -the Urban League of Philadelphia, the Economy League of Greater Philadelphia, and The Enterprise Center - are partnering with the City of Philadelphia to create Supply Philly. Supply Philly's mission is to empower historically disadvantaged businesses by enhancing their capabilities to engage in public works projects in Philadelphia. By connecting businesses with major procurement opportunities and fostering an environment of support and inclusive growth, Supply Philly aim to build businesses and contribute to a flourishing local economy.



OWNER CONTROLLED INSURANCE PROGRAM

Sometimes referred to as "Wrap Up Insurance," an Owner Controlled Insurance **Program (OCIP)** is when the owner of a public works project provides the necessary insurance coverage for the contractors and subcontractors on the project. For public works projects procured by the City of Philadelphia with costs in excess of \$75 million, the City can create and manage an OCIP. The IST, in partnership with the Risk Management Division, is looking to bundle upcoming public works projects to participate in an OCIP.

PA DBE SUPPORTIVE SERVICES CENTER

Pennsylvania Department of Transportation (PennDOT) has contracted with ProRank Business Solutions to deliver DBE Supportive Services. The mission of the DBE Supportive Services Center is to provide the training, technical assistance, and business development services to DBE firms to enable them to acquire the proficiency, experience, and expertise necessary to compete on an equal basis with non-DBE firms for federally assisted PennDOT contracts and subcontracts. Services, often free of charge, can be accessed at https://penndbe.prorankllc.com/.

Transportation

HIGHWAYS

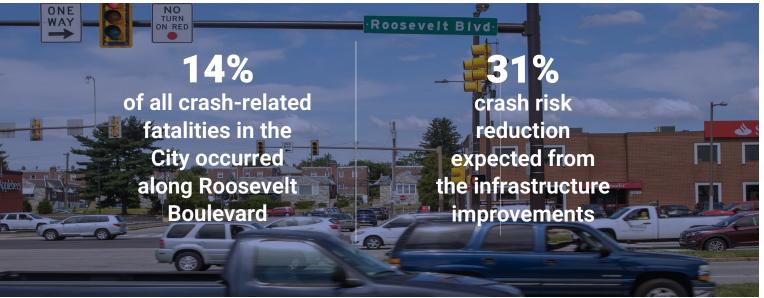
listed here.

ROOSEVELT BOULEVARD MULTIMODAL PROJECT

One out of three people in Philadelphia live within a mile of the Boulevard, with the corridor serving thousands of riders per day on 10 major SEPTA bus routes. Yet, those who use the Boulevard each day face challenges in safety, accessibility, and congestion no matter their mode of transportation.

With a goal of reducing the number of traffic fatalities to zero, the Roosevelt Boulevard Multimodal Project will make improvements along approximately 12.3 miles of the Boulevard to improve transportation safety and accessibility for all modes of travel, including walking, transit, and cycling.

The project aims to improve multimodal and transit access across disadvantaged neighborhoods. The City is also committed to incorporating an "On-the-Job" Training Program (OJT) during construction, anticipating offering anywhere from 10,000 to 15,000 hours of work for OJT participants throughout the project's life.





The Bipartisan Infrastructure Law is a historic opportunity to repair roadways and bridges, rebuild and reinvest in our railways, public transit infrastructure, and the safety of our transportation system, and invest billions in transformational projects. These investments will not only upgrade infrastructure - they will create good-paying union jobs, grow the economy, and make our transportation system safer and more resilient. Highlights of the funding secured for transportation infrastructure are

CHINATOWN STITCH

Construction of the Vine Street Expressway was completed in 1991, producing a physical barrier between the Chinatown and Chinatown North communities and creating high-speed thoroughfares. Houses, businesses, sidewalks, and amenities such as the local community garden were replaced with highway lanes. Today, immigrant communities and communities of color, especially those identifying as Chinese and Asian, remain disproportionately impacted by the Expressway.

The Reconnecting Our Chinatown: Reclaiming Philadelphia's Vine Street Expressway initiative aims to reconnect the Chinatown neighborhoods by capping the Vine Street Expressway between Broad Street and 8th Street, creating equitable mixed-use development opportunities and inclusive mobility options.

The City, in partnership with Philadelphia Chinatown Development Corporation (PCDC) and PennDOT, is committed to using a community-centered approach to redress inequities created by the Expressway and harms imposed on Chinatown. Informed by PCDC's deep community network and thorough understanding of the project area, Chinatown Stitch is intended to empower the community to guide decision-making throughout the project.

The study partners heard from thousands of residents who overwhelmingly support the project's vision:

Reimagine the Vine Street corridor to improve neighborhood connection, create equitable mixed-use development opportunities and inclusive mobility options



Chinatown community members have been actively engaged in transportation advocacy since the 1966 "Save Chinatown Movement," which emerged in response to the threat posed to the immigrant community by the pending Vine Street Expressway construction. Plans to reconnect the Chinatown communities has been in the making for years, as seen in the images here from Rethink Vine Street Expressway USDOT Every Place Counts design Session hosted in 2016.

Survey conducted in March 2023

BRIDGES



Secretary Buttigieg at MLK Bridge announcing federal dollars to fix bridges in Pennsylvania, 2022.

MARTIN LUTHER KING BRIDGE PROJECT

The BIL includes the nation's single-largest investment in bridges since construction of the interstate system, with \$1.6 billion for Pennsylvania to rehabilitate aging bridges. The Martin Luther King Bridge Project is fully funded using federal formula dollars and involves rehabilitation work on the bridge superstructure and substructure, painting of the steel girders, roadway approach work, street lighting, and implementation of ADA curb ramps. Reconstruction of the bridge was awarded to Haines & Kibblehouse, Inc. Contractors. Prior to its temporary closure 25,000 vehicles traveled along MLK Bridge daily, and it is estimated it will create nearly 200 direct construction union jobs and about 80 indirect jobs through the supply chain. "Dr. Martin Luther King often spoke of building bridges between all Americans. Both literally and symbolically, we've got a lot of bridges to repair as well as build."

Pete Buttigieg,
 Secretary of Transportation



OVERHEAD BRIDGE REHABILITATION PROGRAM

The City of Philadelphia owns or maintains approximately 27 bridges that traverse electrified passenger rail lines. Many of these bridges are in poor condition and need replacement or rehabilitation now or in the near future.

The Philadelphia Overhead Bridge Rehabilitation Program will evaluate 18 bridges in or at risk of being in poor condition, 16 of which are located in census tracts designated by USDOT as historically disadvantaged communities and areas of persistent poverty.

This planning grant will allow the City to work with Amtrak and SEPTA to develop a comprehensive strategy for improving the condition of aging bridges as well as prioritize and bundle bridges for future grant funding opportunities.

Construction on MLK Bridge is expected to yield: 200 direct construction jobs and 80 indirect jobs



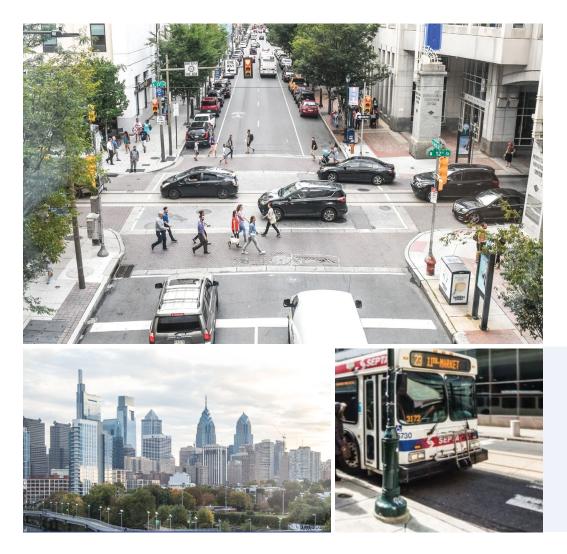
STREETS: BICYCLE AND PEDESTRIAN

DIGITAL ROW IMPROVEMENTS

The City of Philadelphia was one of the recipients to receive the maximum funding allocation for the USDOT's Strengthening Mobility and Revolutionizing Transportation (SMART) grant.

The Philadelphia Digital Right-of-Way and Mobility (ROW) Improvements Project will test leading-edge technologies to manage the ROW digitally and improve the user experience of everyone using the streets.

This project is funded through the SMART Grant, the first "collaborative" grant awarded by USDOT, allowing several cities across the US to partner and learn from each other as each goes through their own independently crafted projects.



"We had two scholars that were hit by a car as they were trying to leave our school safely to get back to their homes. So, we know firsthand how important this grant will be."

-Aliya Catanch-Bradley, Principal, Mary Mcleod Bethune School

NORTH PHILADELPHIA SCHOOL ZONES TRAFFIC SAFETY PROJECT

The North Philadelphia School Zones Traffic Safety Project will construct multimodal, accessibility, and mobility improvements around six schools and high injury corridors.

The work includes raised crosswalks at Neighborhood Slow Zone gateways, redesigned Slow Zone advisory signage for drivers, curb extensions at key community locations and hazardous crossings, installation of continental crosswalks, ADA ramps, pavement resurfacing, and traffic signals and communications upgrades.



Project corridors between 2017 and 2021 have noted:

418 reported crashes

156 injuries









GREAT STREETS PHL

Great Streets PHL: Revitalizing Philadelphia's Local Roadways will implement critically needed transportation safety improvements along seven high crash corridors located in historically disadvantaged communities and areas of persistent poverty.

The project also seeks to create good-paying jobs by advancing workforce training programs that will provide more employment opportunities for Philadelphians, especially those too often underrepresented in transportation and construction.



AIRPORTS

The City of Philadelphia Department of Aviation has been awarded \$54 million total in Federal Aviation Administration (FAA) grants to support PHL Restroom Renovation Program and Terminal Energy **Optimization Program (TEOP).**

Since 2012, the Philadelphia International Airport has been modernizing 48 sets of passenger-facing restrooms to improve quality and comfort, accommodate more travelers, expand accessibility for persons with disabilities, and implement sustainability measures. PHL received \$15 million to support Phases 5-9 of the airport's Restroom Renovation Program. The modernization project, which is scheduled to be completed in 2028, also received \$24 million from the FAA Airport Terminal Program in FY2022. PHL's Restroom Renovation Program includes smart restroom technology to optimize maintenance schedules, private nursing suites, service animal relief areas, and adult changing rooms. PHL's Terminal Energy Optimization Program also received \$15 million to improve energy efficiency, replace aging infrastructure, reduce carbon emissions, and benefit local air quality.







ELECTRIC VEHICLES



President Biden observes an electric vehicle charging demonstration by electrician's apprentice Abigail Jean-Baptiste at the Infrastructure Talent Pipeline Challenge, November 2022. (Official White House Photo by Adam Schultz).

NATIONAL ELECTRIC VEHICLE INFRASTRUCTURE

Pennsylvania's National Electric Vehicle Infrastructure (NEVI) funds are being allocated through a plan developed by PennDOT, establishing priority areas to ensure continuous fast-charging infrastructure throughout the state to reduce range anxiety. Several interchanges along interstate roads in Philadelphia have been designated as priority zones for the \$5 million funding announced in the latest round of the Electric Vehicle Charger Reliability and Accessibility Accelerator program, aimed at installing fast chargers.

CLEAN FLEET

In 2021, the Office of Sustainability, in partnership with the Department of Fleet Services, released Philadelphia's Municipal Clean Fleet Plan, providing the City with a strategy to replace over 5,000 municipal vehicles with clean and electric vehicles (EV).

Currently, the Clean Fleet Plan is being implemented with mostly non-federal resources; however, the BIL provides Philadelphia with the potential for upgraded charging networks. The City hopes to utilize these opportunities to expand public EV charging options throughout Philadelphia including for our own fleet.





PARTNER HIGHLIGHTS: SEPTA

LOW OR NO EMISSION VEHICLES

In an effort to modernize transit facilities and enable them to support clean energy buses, SEPTA was awarded \$80M from the U.S. Department of Transportation's (DOT) Low or No Emission Vehicle Program.

The purpose of which is to provide funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities





"SEPTA's trolley system is a vital part of our region's transportation network, serving tens of thousands of customers every day"

–Leslie S. Richards, SEPTA General Manager and CEO

TROLLEY MODERNIZATION

SEPTA's trolleys use vehicles that are nearly 40 years old and nearing the end of their useful life.

Through Trolly Modernization, SEPTA and the City are making a commitment to bring new stations and long overdue street improvements along the trolley lines for all travelers.

Last year, SEPTA received a \$25M grant from the USDOT's RAISE program to expand trolley capacity and accessibility and improve service reliability for transit riders living in Southwest Philadelphia. The City, PIDC, and other partner agencies including SEPTA are contributing resources to cover the approximately \$125M project cost.

6.

Climate, Energy, and the Environment



Vice President Kamala Harris delivers remarks on water infrastructure investment, Friday, February 3, 2023, at the Belmont Water Treatment Plant in Philadelphia. (Official White House Photo by Lawrence Jackson).

The Inflation Reduction Act marks the most significant action Congress has taken on clean energy and climate change in United States' history. Complimentary to the work of the IRA, the Bipartisan Infrastructure Law also allocates monumental investments in critical water infrastructure, resilience initiatives, and clean energy. It focuses on enhancing drinking water systems, addressing wastewater concerns, and tackling issues such as lead service lines and PFAS contamination. Recognizing the disproportionate impact of climate change on vulnerable communities, the law allocates over \$50 billion to protect against droughts, heatwaves, floods, wildfires, and cyber threats. Additionally, it prioritizes weatherization efforts and promotes energy efficiency upgrades across various settings while supporting innovative clean energy technologies to expedite the transition to a zero-emission economy.

"I know that the nation was long overdue for a landmark investment in water infrastructure."

-E. Hayman, Philadelphia Water Department Commissioner and CEO

WATER

As of 2023, Philadelphia is receiving \$700 million in funding for water, sewer, and stormwater service upgrades. Approximately \$340 million in funding is being provided via the EPA's Water Infrastructure Finance and Innovation Act ("WIFIA") as well as \$370 million in funding provided via Pennsylvania Infrastructure Investment Authority (PennVEST), Pennsylvania's revolving fund program. Both funding sources will come in the form of low-interest loans to support projects related to water treatment and conveyance including several projects contained within Philadelphia Water Department's Water Revitalization Plan.

The Philadelphia Water Department has successfully received \$97M federally backed loans since 2021 to aid in the City's efforts to create a green legacy for future generations of Philadelphians to come including a low-interest \$100 million loan to modernize the Philadelphia Water Department's Baxter Water Treatment Plant, helping protect and secure Philadelphia's water supply.

The Water Department reported the overall highest minority utilization spending at \$63.8M, the highest amongst all city departments and achieved minority participation rate of 38.3% for FY21 as reported by the City's Office of Economic Opportunity.⁷



⁷ FY-21-Disparity-Study-Employment-Report-Dec-2022.pdf (phila.gov)





FLAT ROCK DAM

The Flat Rock Dam Betterment project is a \$16.3 million investment to reconnect the Manayunk Canal with the Schuylkill River at Flat Rock Dam to improve local water quality and assist Philadelphia in meeting the Clean Water Act and source water protection obligations. The improvements will demolish and rehabilitate portions of the Feeder Gate House and Canal Intake Channel Wall along the Manayunk Canal. These improvements will provide major upgrades to the stormwater collection and conveyance systems by addressing the discharges of stagnant canal water, preventing pathogens, organics, and other contaminants from entering the City's water treatment system.

TORRESDALE FILTERED WATER PUMPING STATION

The Torresdale Filtered Water Pumping Station was awarded an \$80.8 million loan to fund what amounts to its biggest makeover since it was constructed more than 70 years ago.

Reconstruction at Torresdale will result in direct health and safety benefits by increasing reliability for water customers and critical facilities. The Torresdale Filtered Water Pumping Station supplies nearly one quarter of the city with millions of gallons of clean drinking water each day.

RESILIENCY

COHOCKSINK FLOOD MITIGATION

The Northern Liberties, Ludlow and South Kensington neighborhoods have been heavily impacted by an increasing number of intense rain events, especially during the summer months. The Cohocksink Flood Mitigation Project, the final phase of a six-phase flood mitigation project, proposes to double conveyance capacity of the combined sewer system through the construction of new sewer infrastructure and green stormwater infrastructure systems in the flood prone Northern Liberties, Ludlow and South Kensington commercial and residential neighborhoods.



WINGOHOCKING CREEK FLOOD RISK REDUCTION PROJECT

In the 18th and 19th centuries, creeks and streams were polluted with household and industrial waste, posing a massive public health crisis. In 1897, the City began enclosing the Wingohocking Creek, converting the polluted waterway into a sewer pipe; but with increased heavy rainstorms due to climate change, the Wingochocking area is prone to urban flash flooding.

The Germantown Wingohocking Creek Flood Risk Reduction Project Scoping will advance the Tacony Tunnel alternative identified in the Germantown Flood Risk Reduction Study. The project will evaluate hydraulic optimization, operation and maintenance considerations, climate resiliency, stakeholder engagement and partnership building, residual risk mitigation, and cost estimation and benefit cost analysis.



CLEAN ENERGY

"This hub alone is going to produce 100,000 tons of hydrogen per year. The same communities that were once thriving coal mining and power plant towns will now be the center of our new clean energy economy"-

-President Joe Biden

With funding of up to \$750 million allocated through the Bipartisan Infrastructure Law, the Regional Clean Hydrogen Hubs Program (H2Hubs) aims to expedite the large-scale implementation of clean hydrogen. This initiative will play a pivotal role in generating clean, dispatchable power, establishing a new energy storage method, and driving the decarbonization of heavy industry and transportation.

The Mid-Atlantic Clean Hydrogen Hub (MACH2), covering the region across the Delaware River, encompasses Pennsylvania, Delaware, and southern New Jersey.

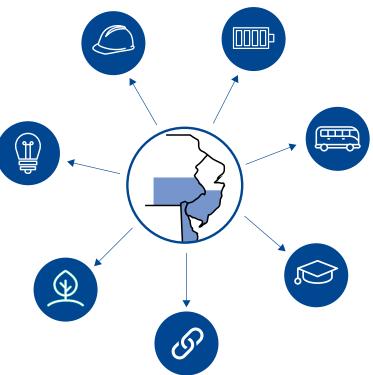
MACH2 is designed to facilitate the adoption of hydrogen-based decarbonization in the Mid-Atlantic area, leveraging existing rights-of-way and repurposing historic oil infrastructure.

By expanding hydrogen infrastructure, this initiative aims to decrease storage and distribution expenses, ultimately reducing the overall cost of hydrogen and achieving the projected reductions in emission.

In line with its dedication to the local workforce, MACH2 intends to secure Project Labor Agreements for all its projects and allocate nearly \$14 million to regional Workforce Development Boards. These boards will collaborate with community colleges to offer training programs and pre-apprenticeships. For example, to overcome barriers faced by underrepresented groups, MACH2 plans to provide an additional \$10 million for technical and professional development initiatives, such as an on-site, hands-on hydrogen training program at Cheyney University, the oldest HBCU in the country.

20,800 direct jobs are anticipated to be created by MACH2





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H₂ Producers &

Innovators

• Air Liquide

• PBF Energy

• PGW

• Enbridge

Versogen

Holtec

• PSE&G

• Chesapeak

Transportation

Applications

• NJ Transit

• SEPTA

• DART

Utilities

Boom Energy

• Monroe Energy



Labor, Workforce & **Community Outreach**

- PA AFL-CIO • DE AFL-CIO
- Building Construction
- Pipefitters & Steamfitters
- DE Workforce Development
- Board
- Philadelphia Works
- University of Deaware
- Rowan
- Upenn
- Drexel

• DESCA

- Delaware State University
- sHYp Hydropore



Education, Research &

- Development
- University of Delaware
- Rowan
- UPenn • Drexel
- Philadelphia Municipal
- Delaware State University • DESCA
- Fleets

38 2024 Infrastructure Solutions Team Report and Action Plan





Feedstock Diversity & Infrastructure

- PECO
- PSE&G
- US Wind
- Buckeye
- IRPL
- Orsted



H₂ Supply Chain

- Chemours
- DuPont
- WL Gore
- MDavis
- Compact Membranes

Incorp

Industrial & Commercial Applications

- Monroe Energy
- Braskem
- DuPont Experimental
- Station
- PSE&G
- Enbridge
- Hilco HyAxiom
 - 2024 Infrastructure Solutions Team Report and Action Plan **39**

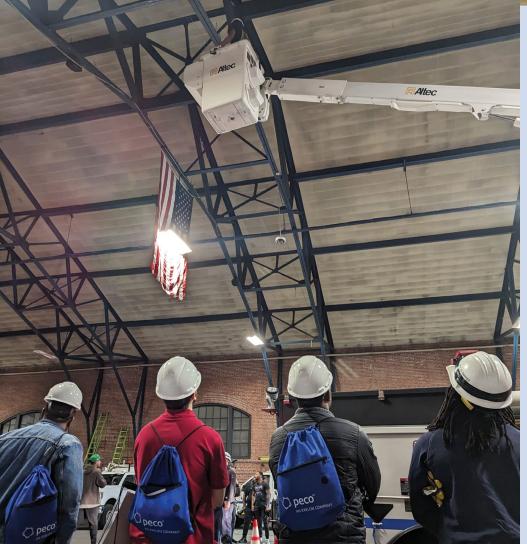
PARTNER HIGHLIGHTS: PECO

GRID RESILIENCE AND INNOVATIVE PARTNERSHIPS

PECO was selected to receive a maximum program grant of \$100 million for Creating a Resilient, Equitable & Accessible Transformation in Energy (CREATE) Greater Philadelphia.

Submitted as part of the Grid Resilience and Innovative Partnerships Program, the "CREATE" initiative, presents a strategic portfolio of resilience and clean distributed energy investments throughout southeastern Pennsylvania, including the Philadelphia Navy Yard, PhilaPort, Bellwether District, and the Philadelphia International Airport. CREATE is expected to generate over 2,600 employment opportunities across the region.





"We want to put people on a path to Self-sufficiency" - Mayor Cherelle Parker at the 2023 PECO Infrastructure Academy

PECO'S 5TH ELECTRIC AND GAS INFRASTRUCTURE ACADEMY PECO's Infrastructure Academies offer 175 participants, many from community partner referrals, the opportunity to experience a glimpse into the essential work that goes into keeping the lights on and natural gas flowing across southeastern Pennsylvania.

PECO provides training and insights on entry-level careers available within their company. Career seekers that participate in the academies experience sessions that include company overviews, mock interviews, and hands on physical activity demos for many apprentice roles. This year participants also had opportunity to network with PECO partners and hear from various guest speakers such as then Mayor-elect Cherelle Parker.



7• Broadband and Digital Infrastructure

By expanding access to affordable, highspeed internet to every Pennsylvanian, we can create real opportunities for our students, our businesses, and our communities to learn, grow, and thrive."



In Pennsylvania, \$1.2 billion has been allocated through the Broadband Equity, Access, and Deployment Program (BEAD) and additional funds through the state Digital Equity Capacity grants will go to extend high-speed internet access to unserved and underserved communities and anchor institutions and the devices and digital skills needed for communities to adopt broadband. This funding will go to the Pennsylvania Broadband Authority and be distributed to different eligible entities within Pennsylvania.

The City is focused on utilizing these investments to advance the priorities in the City's 2022 Digital Equity Plan.

In particular, the City is interested in leveraging available funds for anchor institutions to enable every Recreation Center to be a "Digital Anchor Institution" with a fiber network and ubiquitous Wi-Fi to the surrounding campus. Plans are underway to optimize how the City might build out this network that would reach to every neighborhood and optimize the City's own broadband backbone to enable the city to have the infrastructure needed for future smart city applications or core operations that would require broadband in the future.

Appendix

GOALS & STRATEGIES

The IST's mission is to advance racial equity and grow generational wealth with the BIL funding.

 Secure \$1 Billion in federal BIL funding to build Philadelphia infrastructure by 2026 						
IST St Actior	rategy 1 Item					
Goal 1) Secure	e \$1B in federal BIL funding	to build Philad			
	1.1.1	Identify projects that are co documents, and Justice40	onsistent with o			
	1.1.2	Implement a competitive gr discretionary and formula E				
	1.1.3	Support infrastructure partı Philadelphia	ners such as S			
	1.1.4	Advocate to federal elected	officials and l			
	1.1.5	Ensure that the City has suf	fficient capital			
Goal 2	2) Ensure	e that infrastructure workers	, from plannin			
	1.2.1	Assess labor market, foreca	ast future dem			
	1.2.2	Incorporate workforce polic funded projects	cy into City con			
	1.2.3	Encourage Philadelphia's la apprenticeship classes to r				
	1.2.4	Recruit, train and prepare P	hiladelphia job			
	1.2.5	Use City and partner agenc	ies as model e			
	1.2.6	Secure specific resources f	or workforce d			
Goal 3		se participation of historical pation as primes	lly underutilize			
	1.3.1	Remove barriers in contract infrastructure	ting for Philade			
	1.3.2	Utilize procurement best pr	actices to bols			
	1.3.3	Track data on historically u	nderutilized bu			

ure that infrastructure kers, from planning to struction, look more the population of adelphia Increase participation of historically underutilized businesses (HUBs) on City contracts

Description

delphia infrastructure by 2026

our values, our strategic goals, our fundamental planning

for BIL funding across multiple City departments for

SEPTA, PECO, etc. to secure as much BIL funding as possible for

USDOT for Philadelphia grant applications

I and operating funds to win grants and deliver projects

ng to construction, look more like the population of Philadelphia

nand, and track data for Philadelphia's infrastructure jobs

ntracting so more Philadelphia residents participate on BIL

increase membership % of Philadelphia residents and target ersity of Philadelphia residents.

b seekers for infrastructure jobs

employers to grow infrastructure job opportunities

development in infrastructure

ed businesses (HUBs) on City contracts including greater

lelphia-based historically underutilized businesses in

ster historically underutilized business participation

usinesses participation on City contracts

ppend	XIL				Federal Fiscal Year	Grant Program Name	Project Name	Project Description	Award Amount
	AWARD ded Discretionary Grant Program Name	y Spending Project Name	Project Description	Award Amount	FY2022	USDOT Reconnecting Communities Program	Reconnecting Our Chinatown: Reclaiming Philadelphia>s Vine Street Expressway (I-676)	Studying how to reconnect Chinatown across I-676 through community capacity building and engagement, planning and feasibility activities, PE and design studies, and to develop an Equitable Outcomes Action Plan. Lead Agency: Office of Transportation, Infrastructure, and Sustainability	\$1,800,000
021	Department of Homeland Security FEMA Building Resilient Infrastructure and Communities (BRIC))	The Cohocksink Flood Mitigation Project	Doubling conveyance capacity of the combined sewer system through the construction of new sewer infrastructure and green stormwater infrastructure systems in the flood prone Northern Liberties, Ludlow and South Kensington commercial and residential neighborhoods. Lead Agency: Philadelphia Water Deptartment	\$25,000,000	FY2022	USDOT Strengthening Mobility and Revolutionizing Transportation (SMART)	Philadelphia Digital ROW and Mobility Improvement Project	Funding the Philadelphia Digital Right-of-Way and Mobility (ROW) Improvement Project which addresses increased demand for street, sidewalk, and curbside space. Lead Agency: Office of Innovation and Technology	\$2,000,000
21	Department of Homeland Security FEMA Building Resilient Infrastructure and Communities (BRIC)	The Germantown Wingohocking Creek Flood Risk Reduction Project Scoping	Advancing the planning elements of the Tacony Tunnel alternative identified in the Germantown Flood Risk Reduction Study. Lead Agency: Office of Emergency Management.	\$104,000	FY2022	USDOT Federal Aviation Administration Airport Terminal Program (Restroom Renovation Program)	Philadelphia International Airport	Renovating 30 existing restrooms; constructing two new additional restrooms, five mothers> nursing rooms, four service animal relief areas (SARAs), gender-neutral restrooms, and three adult assisted care restrooms. Lead Agency: Department of Aviation	\$24,000,000
2	Department of Homeland Security FEMA Building Resilient Infrastructure and Communities (BRIC)	Eastwick Flood Resiliency Strategy Technical Assistance	3 years of in-kind technical assistance for developing funding applications for Eastwick: From Recovery to Resilience initiative. Lead Agency: Office of Sustainability.	Non-financial assistance	FY2022	Department of Homeland Security FEMA Flood Mitigation Assistance (FMA))	Eastwick Flood Resilience Project Scoping	Addressing the flooding hazards caused by sea level rise in Eastwick. The Eastwick neighborhood is the city's lowest lying neighborhood and experiences a high flood risk. Lead Agency: Office of Sustainability	\$450,000
	FHWA Bridge Investment Program (Planning Grant)	Philadelphia Overhead Bridge Rehabilitation Program	Planning and feasibility study to rehabilitate 18 bridges located over electrified rail lines primarily operated by Amtrak and SEPTA. Lead Agency: Department of Streets.	\$1,560,000	FY2022	Department of Homeland Security FEMA Flood Mitigation Assistance (FMA)	City of Philadelphia - 21st Street Flood Hazard Mitigation Project (Over Match)	Philadelphia will begin Phase 2 of an ongoing project to increase the sewer conveyance capacity on 21st Street in the neighborhoods of Germantown and Ogontz. Lead agency: Office of Emergency Management	\$5,400,000
	USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	Great Streets PHL: Revitalizing Philadelphia>s Local Roadways	«Making improvements along seven high-crash corridors totaling approximately five miles. Proposed improvements include traffic safety treatments, signal modernization, ADA improvements, and roadway upgrades. Lead Agency: Department of Streets.	\$25,000,000	FY2022	USDOT Pipeline and Hazardous Materials Safety Administration (PHMSA) Natural Gas Distribution Infrastructure Safety and Modernization	Natural Gas Distribution Infrastructure Grant: City of Philadelphia, Philadelphia Gas Works	The goal is to replace approximately 23.81 miles of cast iron pipe with PE pipe. The proposal consists of 39 discreet projects scheduled over a five-year performance period. The proposal accelerates the applicant's existing cast iron main replacement program by %16. Lead agency: City of Philadelphia and PGW	\$10,000,000
	USDOT The Mega Program (National Infrastructure Project Assistance program)	Roosevelt Boulevard Multimodal Project	Funding improvements along 12.3 miles of Roosevelt Blvd, from North Broad St to the Bucks County line. Lead Agency: Department of Streets.	\$78,000,000	FY2022	Department of Homeland Security FEMA Building Resilient Infrastructure	Philadelphia Water Department Updates Queen Lane Water Pump Generator	The project includes installing two 2,500-kilowatt generators at the 500-year-floodplain elevation level. These will provide power resiliency and utility protection against multiple hazards.	\$6,080,000
22	USDOT Safe Streets and Roads for All (SS4A)	Philadelphia Vision Zero Capital Plan Implementation	Implementing multimodal safety improvement projects along N. Broad Street and Cecil B. Moore Avenue.	\$30,000,000		and Communities (BRIC)		Lead agency: Philadelphia Water Department	

Project

Lead Agency: Office of Complete Streets.

Federal Fiscal Year	Grant Program Name	Project Name	Project Description	Award Amount
FY2022	Department of Homeland Security FEMA Building Resilient Infrastructure and Communities (BRIC)	Philadelphia Water Department Pump Station Mitigation	The new station will pump treated water to the Delaware River during peak wet weather events and high tidal conditions. This project will reduce flood risk and improve water quality and quality of life throughout the City. Lead agency: Philadelphia Water Department	\$50,000,000
FY2023	USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	North Philadelphia School Zones Traffic Safety Project	Constructing multimodal, accessibility, mobility improvements around six schools and high injury corridors. Lead Agency: Department of Streets; Office of Complete Streets	\$25,000,000
FY2023	USDOT Federal Aviation Administration Airport Terminal Program	Restroom Renovation Program	Providing 13,000SF of additional restroom space and 35 more stalls throughout the terminals. New construction of terminal restrooms, adult assisted care, mother>s rooms and Service Animal Relief Areas (SARAs). Lead Agency: Department of Aviation	\$15,000,000
FY2023	USDOT Federal Aviation Administration Airport Terminal Program	Terminal Energy Optimization Program (TEOP)	Replacing and upgrading Pre-Conditions Air (PCA) units and Ground Power Units (GPUs) at 25 gates, terminal/roadway lighting, and HVAC upgrades. Lead Agency: Department of Aviation	\$15,000,000
FY2023	USDOT Safe Streets and Roads for All (SS4A)	Complete & Safe Streets Philadelphia: Vision Zero High Injury Network Corridors	Two high-injury corridors, will receive major safety upgrades. Additional funding will go towards the City's Bicycle Capital Plan and bicycle improvement demonstration projects. Lead agency: Office of Transportation, Infrastructure, and Sustainability	\$16,420,904
FY2023	The Joint Office of Energy and Transportation Ride and Drive Electric	Plug in Philly	Plug in Philly is a workforce development program to recruit and train diverse Philadelphians for careers in electric vehicle supplies and equipment (EVSE) by building an initiative between the City and IBEW Local 98 to run an EVSE focused pre- apprentice program. Lead agency: Office of Transportation, Infrastructure, and Sustainability	\$1,470,995
FY2024	USDOT Federal Aviation Administration Airport Terminal Program	Philadelphia International Airport	This award partially funds improvements under the Terminal Energy Optimization Program which includes HVAC and electrical efficiency upgrades and improvements.	\$20,400,000
			Lead agency: Department of Aviation	

Appendix

GRANT AWARD

Non-City Partner Agencies Awarded Discretionary Funding

Federal Fiscal Year	Grant Program Name	Project Name	Project Description	Award Amo	
FY2021	USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	19th & 37th Street Trolley Station Improvements	«Renovations and improvements at the 19th and 37th Street Trolley Subway Stations to ensure that they are ADA accessible, in a state of good repair, and are ready for the Authority>s Trolley Modernization Program. Lead Applicant: SEPTA	\$15,000,000	
FY2021	USDOT INFRA (the Nationally Significant Multimodal Freight & Highway Projects program)	Southport Berth Development and Port Expansion	Construction of a new approximately 1,056 linear foot multi-use berth to accommodate roll-on/roll- off (RO/RO) vessels at the Southport facility of the Packer Avenue Marine Terminal. This project involves dredging for the berth and aims to expand the terminals capabilities by reducing the distance vehicles need to be transported for processing and storage. It will also eliminate the necessity to move RO/RO units on public streets. This development will enable the Packer Avenue Marine Terminal to handle more containerships while facilitating Pier 122 to manage bulk cargo. Lead Applicant: Philadelphia Regional Port Authority	\$49,000,000	
FY2021	USDOT Federal Transit Administration Low or No Emission Vehicle Program»	SEPTA	The Southeastern Pennsylvania Transportation Authority will receive funding to construct two new bus transportation centers in South Philadelphia. This project will create dedicated end-of-line bus facilities for up to 9 routes, featuring ADA accessible bus stops with critical infrastructure and safety enhancements. Lead Applicant: SEPTA	\$20,300,000 \$20,300,000	
FY2022	USDOT INFRA (the Nationally Significant Multimodal Freight & Highway Projects program)	Tioga Marine Terminal Access and Capacity Enhancements Project	The Tioga Marine Terminal Access and Capacity project will construct an approximately 100,000-square-foot warehouse with rail access, employee parking, and loading docks at the Tioga Marine Terminal. The project will also relocate and construct a new modernized gate complex and relocate an existing maintenance facility. Lead Applicant: Philadelphia Regional Port Authority		
FY2022	USDOT Federal Transit Administration Low or No Emission Vehicle Program»	SEPTA	The Southeastern Pennsylvania Transportation Authority will receive funding to improve bus depots, including redundant power feeders, backup generators, and electrical substations. This project will support its transition to a fleet of entirely zero- emission vehicles. Lead Applicant: SEPTA	\$23,400,000	

SDOT Federal ilroad Iministration te Corridor entification and evelopment orridor ID) rogram SDOT Federal ilroad Iministration te Corridor entification and	Reading- Philadelphia-New York Corridor Vermonter Corridor	The proposed corridor would connect Reading with Philadelphia, PA, and New York, NY, with new intermediate stops at Pottstown, Phoenixville, and potentially Norristown, PA, then using the Northeast Corridor between Philadelphia and New York. The proposed corridor would provide new service (four to eight daily round trips) on an existing alignment that last hosted passenger trains in 1983. Lead Applicant: Schuylkill River Passenger Rail Authority The proposed corridor would provide improvements	Up to \$500,000	FY2023	USDOT Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	SW Philadelphia Trolley Modernization and Complete Streets Project	The project will implement trolley modernization and complete streets improvements on approximately 3.85 miles of streets. The complete streets portion of the proposed project will be implemented over a 1.5-mile corridor that spans from the intersection of South 49th	\$25,000,000
ilroad Iministration le Corridor entification and	Vermonter Corridor	The proposed corridor would provide improvements					Street and Woodland Avenue. The trolley modernization portion will be implemented on an approximately 2.75- mile corridor from South 49th Street and Woodland Avenue. Lead Applicant: SEPTA	
evelopment orridor ID) Program SDOT Federal	Daily Cardinal	to the existing Amtrak Vermonter service between Washington, D.C., and St. Albans, VT, via Philadelphia, PA, New York, NY, Hartford, CT, Springfield, MA, and other intermediate points by adding frequencies, reducing travel time, improving reliability and extending service north to Montreal, Quebec, Canada. Lead Applicant: Vermont Agency of Transportation The proposed corridor would provide improvements to	Up to \$500,0000 Up to	FY2023	USDOT Federal Transit Administration Low or No Emission Vehicle Program	SEPTA	The Southeastern Pennsylvania Transportation Authority will receive funding to make improvements at six bus maintenance facilities, which house 67 % of its fleet, to support its transition to zero-emission vehicles. It will upgrade power systems, modernize electrical infrastructure and install safety systems, part of its work to improve safety, state of good repair and ensure SEPTA is prepared as it transitions to a zero emission fleet.	\$80,000,000
ilroad Iministration e Corridor entification and evelopment orridor ID) ogram	Service	the existing Amtrak Cardinal service between New York City, NY, and Chicago, IL, via Philadelphia, PA, Baltimore, MD, Washington, D.C., and the States of Virginia, West Virginia, Kentucky, Ohio, Indiana, and Illinois by increasing service frequency from three days per week to daily. Lead Applicant: Amtrak	\$500,000	FY2023	US Environmental Protection Agency Brownfields Program	Brownfields Job Training: Energy Coordinating Agency	Lead Applicant: SEPTA The Energy Coordinating Agency plans to train 120 students and place at least 119 in environmental jobs. The training program includes 258 hours of instruction in 40-Hour HAZWOPER, Soil Sampling and Analysis, Bioremediation, Stormwater Management, Solar PV Installation, and Lead Renovation, Repair, and Painting.	\$500,000
SDOT Federal ilroad Iministration e Corridor entification and evelopment orridor ID) Program	Keystone Corridor: Pittsburgh to Philadelphia	The proposed corridor would provide improvements to the existing Amtrak Keystone and Pennsylvanian services between Philadelphia and Pittsburgh, PA, via Lancaster, Harrisburg, Altoona, and Johnstown, PA, and other intermediate points by adding frequencies, reducing end-to-end travel time, and improving reliability. Lead Applicant: PennDOT	Up to \$500,000				Students who complete the training will earn up to two federal certifications. The Energy Coordinating Agency is targeting students within the City of Philadelphia, specifically unemployed and severely underemployed individuals, dislocated workers, low-income, minority groups, those with justice system involvement, veterans, and individuals with little to no advanced education past the high school level.	
SDOT Federal iilroad Iministration deral-State irtnership for cercity Passenger iil Program for the prtheast Corridor	Multi-State – NEC South End Infrastructure Renewal and Speed Improvement Planning Study	The proposed project is for a planning study to identify needs and opportunities to improve service, including increasing operating speeds, along the Northeast Corridor between Washington, D.C., and northern New Jersey. The study will inform the planning of improvements to benefit Amtrak's intercity services, with potential benefits to commuter service operators in Maryland, Delaware, Pennsylvania, and New Jersey. Amtrak will provide \$5,400,000 in matching funds.	Up to \$21,600,000	FY2023	National Fish and Wildlife Foundation (NFWF) Delaware Watershed Conservation Fund (DWCF)	Shedbrook Creek Restoration and Sedge Meadow Improvement to Create a Climate- Resilient FDR Park (PA)	Restore and enhance in-stream habitat, establish 6 acres of riparian habitat, increase tree canopy along the stream and convert fragmented, low-quality wetlands into a higher functioning, emergent wetland/ sedge meadow ecosystem at FDR park in Philadelphia, Pennsylvania. Project will create and enhance fish and wildlife habitat, provide new public access and opportunities for water-based recreation, and increase the park's flood storage capacity and climate resiliency	\$1,500,000
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Federal Fiscal Year	Grant Program Name	Project Name	Project Description	Award Amount	Federal Fiscal Year	Grant Program Name	Project Name	Project Description	Award Amount
FY2023	USDOE Grid Deployment Office Grid Resilience and Innovation Partnerships (GRIP) Program	Creating a Resilient, Equitable, and Accessible Transformation in Energy for Greater Philadelphia (CREATE)	The grant will enable PECO to implement its comprehensive strategy, known as the CREATE Plan (Creating a Resilient, Equitable, and Accessible Transformation in Energy), to improve reliability and resiliency in the face of a changing climate. The plan seeks to modernize aging infrastructure, relocate substation equipment away from flood-prone areas, and install microgrid and battery storage technology to support utility storm response.	\$100,000,000	FY2023	National Fish and Wildlife Foundation (NFWF) Delaware Watershed Conservation Fund (DWCF)	Pachella Gully Restoration and Public Access Improvements (PA)	Restore an actively eroding 500-foot gully through implementation of green stormwater infrastructure in the Wissahickon Valley Park, Philadelphia. Project will install green stormwater infrastructure that will both improve water quality in Wissahickon Creek and restore access to the Pachella access trail for the park's over 2 million annual visitors. Lead Applicant: Friends of the Wissahickon	\$569,100
FY2023	USDOE Office of Clean Energy Demonstrations Regional Clean Hydrogen Hubs	Mid-Atlantic Hydrogen Hub	Lead Applicant: PECO The Mid-Atlantic Hydrogen Hub, spanning the Delaware River across Pennsylvania, Delaware, and southern New Jersey, aims to revolutionize decarbonization in the region. Leveraging existing oil infrastructure and rights-of-way, it plans to establish renewable hydrogen production facilities using innovative electrolyzer technologies powered by renewables and nuclear electricity. This approach aims to cut costs and promote technology adoption. Targeting heavy transportation, manufacturing, industrial processes, and combined heat	Up to \$750 million	FY2023	National Fish and Wildlife Foundation (NFWF) Delaware Watershed Conservation Fund (DWCF)	Youth Workforce Development Pilot in Ecosystems Management on the Tidal Schuylkill River (PA)	Create a one-year pilot of a paid youth workforce development program focused on preparing local high school students for careers in wetland and riparian management, ecology and horticulture. Project will develop a curriculum by professional staff horticulturists in keeping with best practices for managing and maintaining a range of habitats present within Bartram's Garden and other regional ecosystems, including wetlands, riparian buffers, living shorelines and pollinator habitat. Lead Applicant: John Bartram Association	\$251,300
FY2023	National Fish and	Designing and	and power, the initiative aims to slash carbon emissions by about 1 million metric tons annually, akin to the yearly emissions of 220,000 cars. Lead Applicant: Mid-Atlantic Clean Hydrogen Hub (MACH2) Complete the environmental assessments and	\$150.000	FY2023	Consumer and Governmental Affairs Federal Communications Commission (FCC) Affordable	Technology Learning Collaborative	This project will conduct digital campaigns, door-to-door canvassing, operate phone banks, distribute direct mail, host ACP application enrollment and outreach events. Lead Applicant: Technology Learning Collaborative	\$300,000
F12023	Wildlife Foundation (NFWF) Delaware Watershed Conservation Fund (DWCF)	Designing and Planning for the South Philadelphia Wetlands Park (PA)	permitting activities needed to advance the conceptual South Philadelphia Wetlands Park into final construction documents. Project will lay the groundwork for an innovative park that will feature restored wetlands set amidst disused pier structures in the heavily urbanized Upper Estuary of the Delaware River, which will offer a test bed for new ecological restoration techniques in a hardened and heavily modified urban waterfront context. Lead Applicant: Delaware River Waterfront Corporation	\$150,000	FY - 2023 2024	Connectivity Program USDOT INFRA (the Nationally Significant Multimodal Freight & Highway Projects program)	Packer Avenue Marine Terminal Connector Bridge Project	This project will construct a new two lane bridge to connect Packer Avenue Marine Terminal to an adjacent site. The bridge's load bearing capacity will be designed to accommodate the heavier loaded reach stackers. Additionally, an aging terminal trestle road will be demolished to accommodate the new bridge. Lead agency: Philadelphia Regional Port Authority (PhilaPort)	\$13,017,024
FY2023	National Fish and Wildlife Foundation (NFWF) Delaware Watershed Conservation Fund (DWCF)	Building Capacity for Cobbs Creek Watershed Coalition Efforts (PA)	Develop a formal support structure for the Cobbs Creek Watershed in the form of a coalition to build capacity and better coordinate efforts that improve the watershed and reduce barriers to residents accessing Cobbs Creek Park in Philadelphia, Pennsylvania. Project will engage residents through community-led programming, activities, and stewardship of the watershed leading to increased use of the park, reduced pollution and improved water quality.	\$266,500	FY2024 FY2025 and Partial Year 2026	USDOT Federal Transit Administration Rail Vehicle Replacement Program	SEPTA	The Southeastern Pennsylvania Transportation Authority (SEPTA) will receive funding to buy up to 200 new rail cars to replace older rail cars that have been in service for nearly 25 years, operating along the Market Frankford Line, the most heavily used line in SEPTA's system. Lead Applicant: SEPTA	\$317,160,000

Office of Transportation, Infrastructure & Sustainability

City of Philadelphia 1401 JKF Boulevard Suite 1430 Philadelphia, PA 19102

