PHILADELPHIA PEDESTRIAN& BICYCLEPLAN



2016-2021 PROGRESS REPORT



ACKNOWLEDGEMENTS

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Cover Photo: Broad St. & Chestnut St., Crossing, Source: Urban Engineers

Midblock Crossing, 1700 block of Arch St., Source: PCPC

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INTRODUCTION & BACKGROUND

The Philadelphia Pedestrian & Bicycle Plan was adopted by the Philadelphia City Planning Commission (PCPC) in April of 2012. An update was released three years later in 2015, documenting the City's work towards expanding the pedestrian and bicycle networks and creating policies for safety and traffic. This 2021 Progress Report is a further update on the goals adopted by the City in 2012.

Purpose

The Plan was a recommendation of Philadelphia2035, the 2011 Comprehensive Plan of the City of Philadelphia, in the Connect section under Goal 4.2 Complete Streets: Balance use of roadways to ensure safe and efficient travel by all modes. The Pedestrian & Bicycle Plan, with funding from Get Healthy Philly, was the first citywide pedestrian plan and served as an update to the 2000 Citywide Bicycle Network Plan. The plan has five goals related to: Safety, Encouragement, Connectivity, the Public Realm, and Recognition. The analysis and recommendations included in the 2012 plan were the result of four years of public outreach and stakeholder meetings, from 2008-2012. The plan included inventories of the existing pedestrian and bicycle networks, recommendations for policies and programs affecting bicyclists and pedestrians, a citywide sidewalk conditions inventory, new street types and sidewalk designs standards, and recommended pedestrian and bicycle network improvements. The 2015 update to the plan documented progress made since the 2012 plan's release, re-evaluated the original plan's goals and objectives in the context of new local and national trends, and detailed network improvements goals. This update evaluates progress made from 2016-2021 and lays out the City of Philadelphia's goals for pedestrian and bicycle network development and improvements.

Walking & Cycling Since 2016

Since the release of the 2012 Pedestrian and Bicycle plan, resources for creating safe, equitable, and accessible pedestrian and bicycle networks have proliferated at the national level, as the importance of active transportation and Vision Zero have gained national attention. Issues related to health, access, climate change, and emissions have all become part of the conversation around pedestrian and bicycle infrastructure. National organizations such as the Federal Highway Administration (FHWA), United States Department of Transportation (USDOT), American Association of State Highway and Transportation Officials (AASHTO), and the Institute of Transportation Engineers (ITE) have produced new and updated guidance on the importance of pedestrian and bicycle facility design, and the importance of incorporating pedestrian and bicycle facilities into all roadway design projects, especially in urban contexts.

As part of these national conversations, over 50 cities and counties across the United State – including Philadelphia – have adopted Vision Zero policies. First adopted as a national policy in Sweden in 1997, Vision Zero is a strategy to eliminate all traffic-related deaths and severe injuries, while increasing safety, health, and mobility for all. Successful Vision Zero programs recognize that there is safety in numbers, that increasing numbers of people walking and biking make these activities safer, as well as improve the health of a city. The 2021 Philadelphia Pedestrian and Bicycle Plan Progress Report draws on Vision Zero strategies and best practices to ensure that our streets are safe for everyone, no matter how they get around.

Further establishing and encouraging walking and bicycling as alternative modes of transportation can lead to positive outcomes in the realms of public health, equity, environmental sustainability, and economic efficiency. By building on Philadelphia's already strong pedestrian and bicycle cultures, there is significant potential to grow walking and bicycling in the city. The impact of COVID-19 however, was an unforeseen obstacle to roadway safety that now must be addressed directly. Undeterred, the City remains committed to implementing new policies, programs, and projects that lead people to make trips by walking or biking, the City can improve health, sustainability, and even congestion in Philadelphia.

Pedal Assist Electic Indego Bicycles

GOALS & MEASURES

The 2012 plan listed four key measures with targeted outcomes. Included is a status update for each of the measures.

An evaluation of the number of bicycle and pedestrian crashes, and the number of fatalities and severe injuries that result, provides a critical understanding of the on-street environment for pedestrians and bicyclists. The caveat is that providing year-over-year trends is difficult due to the short time period and small sample size. Crash data trends are typically reported in five-year averages to allow regression towards the mean, which prevents incorrect interpretation of the data. As the Pedestrian and Bicycle Plan for Philadelphia was first published in 2012, we now have the ability to evaluate five-year-averages of pedestrian and bicycle crash data. While Philadelphia saw a steady reduction in reported bicycle crashes that caused injuries (down from 544 in 2015 to 195 in 2021), we continue to see minimal changes annually to both bicyclist deaths and severe injuries. In this same time period, the number of vehicular crashes involving pedestrians has been steady at approximately 1600 in 2018 but the five-year average number of pedestrian deaths has increased by 12 percent. Pedestrian crashes continue to be a major concern as we have made headway on the goal of 50 percent reduction by 2020, but conversely have seen an actual increase in pedestrian fatalities of 61% from 2010-2020.

With the adoption of a Vision Zero policy in 2016, the City of Philadelphia has a focus of eliminating vehicular crashes that result in deaths and severe injuries by 2030. This policy has led to additional investments in roadway improvements and enforcement and to look beyond the 50 percent reductions that were originally called for in the Pedestrian and Bicycle Plan.

The U.S. Census American Community Survey 5-year Estimates provides information on the mode of transportation used by Philadelphia residents as they arrive to work. Bicycle use had increased since 2010 from 1.6 percent to 2.1 percent before dropping back to two percent in 2021. Most notably, South Philadelphia (7.1 percent) has achieved and exceeded the bicycle commute mode share goal of 6.5 percent. However, University City/Southwest retreated down to 4.1 percent in 2021 from nearly achieving this goal in 2014 at 6.2 percent. Only six of the 18 planning districts are above the city-wide average of two percent, and 10 districts, mainly the farthest from employment centers, remain below one percent. This reflects the geographic obstacles that exist towards achieving the city-wide goal for bicycle commute mode share. Pedestrian commute mode share dipped due to COVID-19 to 7.63 percent and 12 of 18 districts saw small decreases over the past five years instead of the anticipated increases. Walking to work depends on close proximity to employment centers, so districts closest to major employment nodes in Center City, University City, and Temple University have higher pedestrian mode shares.

IMPACT OF COVID-19

The COVID-19 pandemic altered transportation patterns and commuting habits for people throughout the country and Philadelphia was no exception. Every mode of transportation was impacted by the pandemic including transit service, transit ridership, traffic volumes, and bicycle and pedestrian volumes.

In 2020, traffic volumes and the number of vehicular crashes decreased while more people worked from home. However, the number of fatalities involving a vehicle increased, which suggests that vehicles were traveling at higher rates of speed with lower traffic volumes. Transit ridership decreased during the pandemic, but Indego noted an increase in bike-share use for commuting. Bicycle and pedestrian use of major multi-use trails increased in 2020 especially in the immediate months after the start of the pandemic and the city-wide shutdown.

The city responded to the COVID-19 pandemic by expanding temporary outdoor dining for restaurants through the Streeteries program, which streamlined the process of obtaining sidewalk café permits. The city also increased access to outdoor recreation for residents by temporarily closing MLK drive to cars and making it easier for residents to turn their block into a play space through the City's Playstreets program.

At the onset of the pandemic, many planners, advocates and enthusaists envisioned an opening for a major paradigm shift in active transportation, however many of the pre-pandemic travel patterns have returned, for better or worse, such as reliance on single occupancy vehicles, increasing transit ridership, and higher levels of downtown pedestrian activity.

Status on Targeted Outcomes

	Measuring Outcomes						
	Measure	Target Outcomes by 2020	2020 Outcomes (unless otherwise noted)				
Safety	Number of bicycle and pedestrian crashes	Reduce fatalities 50%Reduce injuries 50%	 Bicyclist fatalities increased by 11% Bicyclist injuries reduced by 42% Pedestrian fatalities increased by 12% Pedestrian injuries reduced by 21% Source: PennDOT 2010-2020 				
	Increase in the commuting mode share	 Bicycling, increase from 1.6% to 6.5% Walking, increase from 8.6% to 12% 	2012 2015 2019 2021 Bicycle 1.95 2.06 2.12 1.99 Walk 8.61 8.5 8.53 7.63				
Encouragement	Regular pedestrian and bicyclist counts	 Triple bicyclist volume at key locations Increase pedestrian counts at key locations for Complete Streets decision making 	 New permanent counting locations installed on Pine & Spruce Streets 3 count locations funded by the Bloomberg Philanthopies. (See page 20.) 				
	DVRPC Household Travel Survey	 Increase total of Walk, Bike, and Transit by 10% 	• The 2012 Household Travel Survey showed a 7.4% increase from 2000. The next Household Travel Survey is expected to be conducted in 2025. <i>Source: DVRPC, 2012 Household Travel Survey</i>				

Playstreets



Source: City of Philadelphia

Spruce Street Bicycle Counter



Source: DVRPC

2016 - 2021 ACHIEVEMENTS

Vehicle commuting increased, pedestrian and bicycle commuting decreased, work from home jumped and transit dipped.

Philadelphia's Commute **Mode Share**



Source: 2017-2021 US Census ACS 5-year Estimates



Pedestrian and Bicycle Commute Mode Share by Planning District

		Pedestrian	Bicycle	Other	
	Central	25.3%	4.8%	69.9%	
	Central Northeast	3.2%	0.4%	96.4%	
	Lower Far Northeast	1.2%	0.5%	98.3%	
	Lower North	8.2%	2.6%	89.2%	
	Lower Northeast	2.9%	0.1%	97.0%	
	Lower Northwest	3.3%	1.0%	95.7%	
	Lower South	5.3%	2.6%	92.1%	
	Lower Southwest	1.9%	0.1%	98.0%	
	North	5.0%	0.4%	94.6%	
2	North Delaware	1.7%	0.3%	98.0%	
	River Wards	6.0%	2.3%	91.7%	
	South	8.7%	7.1%	84.1%	
	University Southwest	22.8%	4.1%	73.1%	
	Upper Far Northeast	1.5%	0.1%	98.4%	
	Upper North	1.6%	0.1%	98.3%	
	Upper Northwest	2.7%	0.7%	96.6%	
	West	4.0%	1.2%	94.8%	
	West Park	5.0%	0.1%	94.9%	
	TOTAL	6.7%	1.6%	91.7%	



Increases since 2015 Decrease since 2015 No change since 2015

Pedestrian Crashes & Fatalities 5 Year Averages

Source: OTIS Vision Zero Action Plan

of Pedestrian Fatalities





Year

BICYCLE LANE INVESTMENTS

The Philadelphia City Planning Commission (PCPC) staff produced the map below to establish an understanding of how new bicycle lanes built between January 2016 and December 2021 compared to a neighborhood's demographic data. It is important not to assume that this correlation represents an equitable outcome as there are many dimensions to equity that cannot be represented in the overlay of demographic statistics and new infrastructure investments. This is simply a baseline picture of how the racial, ethnic, and income makeup of an area correlates to bicycle infrastructure and should be used as one aspect of understanding Capital Budget investments.



All Bicycle Facilities Installed (2016-2021)

Source: PCPC



Score Category

New Separated Bicycle Facilities (2016-2021)

Source: PCPC



To create the map, Planning Commission staff evaluated each census tract in the city based on median household income and percentage of nonwhite residents and assigned it an score. A census tract with high income and low percentage of nonwhite residents was assigned a low score. Census tracts with low scores are in many neighborhoods in Center City, the Upper Northwest, and Northeast. At the other end of the score scale, census tracts with low median household income and a high percentage of nonwhite residents were assigned a high score. Census tracts with an above average score are in neighborhoods in the Southwest, West, North, and Lower Northeast parts of the city. The map on page 10 depicts these tracts and color-codes their scores.

Planning Commission staff then determined how many miles of new bicycle lanes (overlaid on the map in yellow lines) have been installed per score category. They evaluated all new bicycle lanes as well as separated bicycle lanes. (Separated bicycle lanes are those that are separated from passing motor vehicle traffic by a buffer of reflective paint or flexible bollards. They are considered to be high quality bicycle infrastructure.) Future *Pedestrian and Bicycle Plan Progress Reports* will continue to review equity in bicycle lane investments.

Going forward, conversations with residents and policy makers about investment in bicycle infrastructure should acknowledge that different communities have different needs. Some neighborhoods may have specific safety needs that include separated bicycle facilities while others may have different ideas about bike lanes entirely. PCPC will continue to strive to understand community needs and to recommend transportation infrastructure that will lead to safer transportation options for all road users.

ADVANCING PEDESTRIAN & BICYCLE PLANS

Trail Master Plan Advancements

The *Trail Master Plan* process began in the spring of 2011 as a joint effort of the Philadelphia City Planning Commission (PCPC) and Philadelphia Parks & Recreation (PPR), in collaboration with the Office of Transportation, Infrastructure, and Sustainability (OTIS). The *2021 Philadelphia Trail Plan Update* builds on the Philadelphia Trail Master Plan adopted by the PCPC in 2013. The *Trail Master Plan* outlines four overarching goals of the Philadelphia trail network: connectivity, safety, encouragement of physical activity, and open space. Each year, PCPC works on a holistic overview of trail planning in the City, provides an updated prioritization of proposed trail projects, as well as works on individual planning studies for trail segments. During 2021, PCPC advanced the trail planning of the Lower Poquessing Creek Trail. This proposed trail in the Far Northeast will connect Junod Recreation Center to Glen Foerd on the Delaware. This trail feasibility study will be released in 2023 and will help guide the build out of the proposed trail by implementing agencies such as Philadelphia Parks & Recreation and the Streets Department.



Lewis & Richmond Streets, Source: PCPC

A shared use path is a sidewalk designated by the Department of Streets to support multiple uses, such as walking, biking, and in-line skating, and marked with appropriate signs. Shared use paths must be presented to the Philadelphia Planning Commission during conceptual design so that the Department of Streets can move forward with approval of the shared use path final design. While more detailed guidance for shared use paths located on or beneath bridges will be included in an upcoming Complete Streets Handbook update, eight segments of new sidewalks were designated as shareduse paths between 2017-2021, including:

- 2017 Frankford Creek Greenway, Phase 1
- 2018 Cobbs Creek Trail D Delaware River Trail Spring Garden Street to Washington Avenue
- 2019 Island Avenue
- 2020 Henry Avenue Washington Avenue Connector
- 2021 Martin Luther King Jr. Drive Bridge South Broad Street

The Frankford Creek Greenway, Phase 1 is a 1.2 mile shared-use path trail in the Frankford neighborhood that connects Aramingo Ave and Wheatsheaf Lane to Delaware Ave and Lewis St and the East Coast Greenway/Port Richmond Trail. It is the first phase in a multi-phase project that will ultimately provide bicycle and pedestrian connections from the Tacony Creek Park Trail to the East Coast Greenway along Delaware Avenue. The \$1.4 million dollar project was completed in 2018 by Philadelphia Parks & Recreation with assistance from the Philadelphia Streets Department.

Shared Use Path Applications - Frankford Creek Greenway

Vision Zero and Crashes / National Trends

By adopting Vision Zero, the City of Philadelphia rejected the status quo that traffic deaths are "accidents." Instead, the City acknowledged traffic deaths as preventable incidents that can be systematically addressed. By applying Vision Zero's core principles, investments in traffic safety can save lives and prevent severe injuries while enhancing the quality of life for all Philadelphians.

Philadelphia laid the foundation for safe streets through a *Vision Zero Action Plan*. Highlights include:

- Announcing the inagural Neighborhood Slow Zone awards
- Mayor Kenney signing Roosevelt Boulevard speed camera legislation into law
- Victims of traffic violence and families established Families for Safe Streets Greater Philadelphia chapter to advocate for life-saving changes
- Parking-seperated bike lane pilot projects, including on Market Street / JFK Boulevard in Center City

Traffic deaths and severe injuries in traffic crashes are preventable. Funding through Vision Zero initiatives builds safer streets, protect those who are most vulnerable and enhance transparency and system-wide improvements.

Vision Zero Pedestrian Safety Study

The Vision Zero Pedestrian Safety Study and Action Plan was a project that embraced a Safe System approach to encourage design of City's transportation system that makes crashes less severe and reduces fatalities. The project focused on analyzing city-wide pedestrian crash data to identify trends and potential systemic solutions, based on analysis of current best practices and technical expertise. The study was funded by the DVRPC Transportation and Community Development Initiative program and was completed in May 2021.





53rd Street and Baltimore Avenue

To improve walkability and conditions for Philadelphia youth, PWD partnered with the Streets Department to prioritize green storm water infrastructure investments around Philadelphia schools. As shown in the rendering (right), a green stormwater infrastructure project was installed in 2021 next to Harrington Elementary School at S 53rd Street and Baltimore Avenue. The project aims to improve safety for children walking to school by removing right turn lanes on to, and off of, Baltimore Avenue, where high driver speeds were observed.



Rendering of Baltimore Avenue at S 53rd Street, Source: PWD

CONNECT Plan

CONNECT is the City of Philadelphia's Strategic Transportation Plan for 2019 to 2025. CONNECT is informed by insights from data analysis and civic engagement that highlight the transportation opportunities and challenges that Philadelphia faces.

Goal 2 in CONNECT - Great Streets, has strategies to build a High Quality Bike Network, creating Neighborhood Slow Zones, and Ensuring a Walkable City.

CONNECT aims to achieve the following outcomes by 2025:

1. Increase the percent of residents living within 1/4 miles of a protected bike lane or trail from 16% to 28%.

2. Double the percentage of commuters who travel by bike

3. Increase the total percentage of commuters who either walk, bike, or use transit by five percentage points from 36% to 41%.

4. Increase annual paving to 131 miles or more.

Our Goals		Our Strategies		
Goal O Vision Zero	Working toward the goal of zero traffic-related deaths by 2030	Engineer Streets for Safety Educate Residents and Schools about Traffic Safety Enforce Regulations to Deter Dangerous Behaviors Evaluate Strategies to Ensure Results		
Goal 1 Transit First	Moving people equitably, affordably, and reliably around a growing city	Transform Bus Service Develop a City Transit Plan Modernize the Trolley Fleet Expand Indego Bike Share Stabilize and Grow Regional Transit Funding		
Goal 2 Great Streets	Investing in well-maintained streets to serve people using all modes of transportation	Achieve a State of Good Repair Ensure a Walkable City Croate Keighborhood Slow Zones Develop a High Quality Bike Network		
Goal 3 A Competitive City	Supporting communities and commerce with a reliable and efficient transportation system	Manage Congestion Manage the Curbside and Parking Urgdate the Truck Network Pursue Sustainability for Competitiveness		
Goal 4 Efficient Government	Delivering transportation services and projects efficiently and transparently for residents	Engage Communities and Build Coalitions Streamline Project Delivery and Prioritization Modernize Asset Management innovate with Technology Plan for a Clean Fleet		

Front and Erie

The intersection of Front Street and Erie Avenue received traffic safety upgrades in 2016. The intersection improvements included removing the northbound slip lane, adding curb bump outs, improved pedestrian islands and cross walks.

Before 2016



After 2016



Source: Nearmap



SEPTA Cycle-Transit Plan

SEPTA continued to invest in bicycle infrastructure at Regional Rail, Market-Frankford Line, Norristown Highspeed Line, Broad Street Line and Trolley stations. Bike parking at SEPTA stations, which includes approximately 1,000 bike racks across 282 stations, helps promote multi-modal access to public transportation. Newly purchased vehicles, including accessible vehicles that will be part of SEPTA's Trolley Modernization program, include interior designated space for bicycles. All SEPTA buses can accommodate bicycles on the front racks, and bicycles are permitted on all of SEPTA's Metro lines with some restrictions during peak hours.

Tasker Morris Bicycle Racks. Source: SEPTA

SEPTA's Micromobility Playbook, an update to the Cycle Transit Plan of 2015 will be released in 2023. The Playbook is organized around improvements to the entire system, vehicles and services, stations, connections to the community, and to the surrounding streets and trails.

This planning document calls for bicycle parking at 100 percent of SEPTA stations, some of which will offer sheltered and secure parking and repair stations. Other recommendations include a streamlined micromobility policy and better communications to relay that policy, technological tools to assist with multi-modal trip planning, vehicle retrofits, and better integration with Indego bikeshare and the surrounding street and trails networks. Together with transit, facilitating bicycle use is an important way to promote equity, create more sustainable and inclusive communities, and ensure that everyone has access to affordable, efficient, and environmentally-friendly transportation.



Indego Bikeshare Expansion

Since its inception in 2015, Indego, Philadelphia's bike share program, has more than doubled the number of stations and bicycles from 60 stations to over 165 and from 600 bicycles to more than 1,500. The program has also added a fleet of 350 electric assist bicycles to the program. In 2020, the Indego launched a 5-year expansion plan which will among other things increase the fleet of bicycles to 3,500, increase the number of stations to 350, expand to more neighborhoods throughout the city and continue to focus on serving lowincome and communities of color.



Source: City of Philadelphia

ADVANCING PEDESTRIAN & BICYCLE POLICIES

Separated Bike Lanes and Legislative Action (2016-2021)

The goal of Vision Zero is to dramatically reduce the number and severity of traffic crashes. Separated Bicycle lanes that have a physical barrier between cyclists and motor vehicle traffic have been proven to create safer road conditions for all users. The City's goal is to build a high-quality bicycle network of separated bike lanes throughout the city, ensuring that there are safe routes for Philadelphians of all ages and abilities. Over the last several years, priority bicycle safety projects have been identified along the City's High Injury Network. These corridors that have the highest rates of fatalities and severe injuries can significantly benefit from improved road safety projects.

Role of City Council & Legislation

Often, City Council action is necessary to build safer bicycle and pedestrian infrastructure. Legally, when a project includes converting a vehicle or parking lane, the project must be approved by City Council. The Office of Transportation, Infrastructure & Sustainability (oTIS) and the Streets Department lead the development of these projects, working closely with City Council to craft legislation. OTIS also leads the City outreach to community groups, residents, businesses, and other stakeholders, which happens before and after legislation is considered by City Council. In 2018 though 2021, City Council enabled 18 bicycle & pedestrian safety projects listed to the right. These projects include roadway redesign elements that reduce driver speeding, improve pedestrian visibility and crossings. Many convert vehicle and parking lanes to separated bicycle lanes, providing safe infrastructure for all road users

City Council-Enabled Safety Projects

2018

- Race St, 8th 5th Sts: vehicle lane conversion to parking separated bike lane
- Parkside Ave, 52nd St Bryn Mawr Ave: vehicle lane conversion to parking separated bike lane
- Lansdowne Dr: parking removal for paint buffered bike lane
- PennDot Pilot Parking Separated Bike Lanes 10 state routes: vehicle lane conversion to parking separated bike lane.

2019

- Market St / Blvd Vision Zero Safety Project, 15th 20th Sts: vehicle lane conversion for parking separated bike lane
- South St, 21st 27th Sts: No Stopping regulation for separated bike lane
- Columbus Blvd, Tasker Swanson Sts: parking removal for separated bike lanes
- Richmond St, Berkshire Lewis Sts: parking lane conversion for separated bike lanes
- 10th St, Spring Garden Callowhill Sts: vehicle lane conversion for separated bike lane
- Germantown Ave Flood Relief & Safety Project, Master 2nd Sts: vehicle lane, parking, and one-way conversion for raised 2-way bike lane
- 2nd St Protected Bicycle Lane, Wood Race Sts: vehicle lane conversion to separated bike lane (with peak hour parking clearance)
- 11th St Repaving & Safety Project, Catharine Webster Sts: truck parking conversion to school parking only
- 13th St, Spring Garden Buttonwood Sts: parking lane conversion to separated bike lane (2023 project)
- 13th St, Spring Garden South Sts: parking conversion to separated bike lane (2023 project to move to other side of the street)

2020

- Passyunk Ave / Essington St, 61st 63rd St parking conversion for separated bike lane, since reversed and redesigned to include parking lane
- 8th St, Vine Race Sts: vehicle lane conversion to separated bike lane
- Spruce / Pine Sts, Front 22nd Sts: vehicle lane conversion

2021

- 13th St between Brandywine & Spring Garden Sts: parking lane conversion for paint buffered bike lane
- Race St. between 4th and 5th Sts: parking lane conversion for separated bike lane (2022 project)

Sidewalk Inventory Priority Areas

There are many areas for improvement in pedestrian policy and infrastructure, from filling high priority sidewalk gaps and increasing ADA accessibility citywide to standardizing construction zone pedestrian measures. The 2012 Pedestrian and Bicycle Plan identified several high priority sidewalk gaps by measuring proximity to pedestrian demand generators such as senior centers, schools, and high use transit stops and provided a methodology for the prioritization of sidewalk improvements.

An analysis of sidewalk construction and rehabilitation reviewed various sources of investment, including new private developments, Philadelphia Water Department green stormwater infrastructure projects, Commerce Department commercial corridor improvements, and Philadelphia Housing Development Corporation projects. The sidewalk priority map shows the high priority areas for future sidewalk investment. The sidewalk project prioritization analysis was updated in 2019 to include Center City sidewalks as well as an enhanced analysis of sidewalks adjacent to transit stations.

In addition, a new income and racial equity metric prioritized areas that were in census tracts with higher percentages of non-white and lower income population. The result is that high priority areas are often in lowincome communities, that historically experience less investment and subsequently have more deteriorated sidewalks. Further, sidewalk conditions in low-income areas are an equity issue, as access to education, transit, and jobs is required via often-substandard sidewalks for those with mode-choice limitations.

Broad and Carpenter

The Lincoln Square mixed-use development at 1000 South Broad Street transformed a vacant parcel into a vibrant and accessible block with residential units and shopping opportunities that were supported by complete repair of sidewalks, relocated utilities, and bicycle parking.





Source: City of Philadelphia

Priorities for the Future

There are many areas for improvement in pedestrian policy and infrastructure, from filling high priority sidewalk gaps and increasing ADA accessibility citywide, to standardizing construction zone pedestrian measures.

The 2012 plan identified several high priority sidewalk gaps by measuring proximity to pedestrian demand generators such as senior centers, schools, and high use transit stops and provided a methodology for the prioritization of sidewalk improvements. In 2015, an analysis of new private developments, Philadelphia Water Department green stormwater infrastructure projects, Commerce Department commercial corridor improvements, and other projects that required the construction or replacement of sidewalks showed that the number of miles of missing or very poor sidewalks decreased from 61 to 42.

In 2019, PCPC updated this analysis and included Center City for the first time, plus updates from various outlets, including Philadelphia2035 district plan analysis. The updated analysis shows 83 miles of missing or very poor sidewalks.

The High Priority Sidewalk Gaps 2019 map (next page) shows prioritized areas around missing and very poor sidewalks. These high priority areas are often in low income communities, where new development is not rehabilitating deterioratied sidewalks.

PCPC will continue to update the sidewalk inventory periodically. With the amount of private investment

that occured over the past five years due to record low interest rates, as well as a future infusion of federal funding from the Infrastructure Investment and Jobs Act (IIJA), sidewalk conditions will likely improve. With a focus on equity, the prioritized sidewalk gap areas should remain the focus for new grant funded improvements.

Philadelphia needs a reconstruction strategy for sidewalks, particularly in areas of the city where pedestrian mode share and activity are highest. Currently, sidewalk maintenance is the responsibility of the adjacent property owner, which is an issue in neighborhoods where vacant land is prevalent. For sidewalks adjacent to private property in lowincome areas, absent a significant public incentive program, opportunities for sidewalk improvements are significantly constrained. A 2018 study, funded by the DVRPC Transportation and Community Development Initiative identified possible strategies to improve the City's sidewalk repair system.

The City and PennDOT continue to coordinate on high profile roadway reconstruction and bridge rehabilitation projects. Two upcoming projects will address sidewalk improvements needs, including the MLK Jr Drive Bridge reconstruction that will increase the width of the bridge to better accomodate pedestrians and bicyclists, and the Delaware Avenue Extension Phase 2, which will extend a shared use path farther along the Delaware River north of Orthodox Street.

MLK Shared Use Path Rendering

Source: City of Philadelphia

High Priority Sidewalk Gaps 2019

High Priority Area

PEDESTRIAN NETWORK ADVANCEMENTS

Pedestrian Counting Program

Through a grant from the Bloomberg Partnership for Healthy Cities, the Philadelphia Department of Public Health (PDPH) initiated a project to conduct regular pedestrian counts in Philadelphia neighborhoods. Six permanent counters were placed in neighborhoods outside of Center City, all of which are in pedestrianoriented commercial corridors and within two blocks of two or more segments on the High Injury Network. Data from these counters are publicly available via DVRPC's website and will be used in a variety of applications, including transportation planning, understanding exposure to traffic crashes, measuring success of physical activity encouragement programs, and supporting retail development.

Supporting More Walkable Communities

Since 2017, Get Healthy Philly has partnered to promote and increase walking through training, engagement, and programming. Walking promotion includes the WeWalkPHL program, in partnership with the Fairmount Park Conservancy. Over a dozen locations have regular walking groups during the spring and fall seasons.

A partnership between PDPH and Asociación de Puertorriqueños en Marcha (APM) engages Community Connectors and others in Eastern North Philadelphia to conduct "walk audits" in the neighborhood, including engagement with community members around traffic safety at Rainbow de Colores Playground and other community destinations. A forthcoming storymap will demonstrate results, themes, and opportunities from these efforts.

A newer partnership with Feet First Philly, the Clean Air Council's pedestrian advocacy group, will expand Get Healthy Philly's capacity to provide training and technical assistance to community groups to conduct walk audits and understand the toolbox of solutions and to start a walking group.

Source: Ecocounter

Source: Asociación Puertorrigueña en Marcha

Source: Feet First Philly

Regional Sidewalk Inventory

The Delaware Valley Regional Planning Commission (DVRPC) created a pedestrian facilities network map for the Greater Philadelphia region. This GIS dataset inventoried existing sidewalks, as well as locations where curb ramps and crosswalks are or should be. This inventory allows DVRPC and its planning partners to map and measure the mileage and connectivity of sidewalks in the region or a local area, identify gaps in sidewalk infrastructure, set grounded targets for sidewalk network buildout, and serve as a starting point for the development of priorities to address sidewalk gaps in the most appropriate places.

DCRPC shares the data through the Greater Philadelphia Pedestrian Portal, a website that also allows for the collaboration between local, regional, and state planning partners working on pedestrian improvements, shares the pedestrian facilities inventory by local entities, and allows local and regional planning partners to share their pedestrian facility priorities.

https://walk.dvrpc.org/

Street Smart PHL

In Winter 2019, the Streets Department launched an online streets and sidewalk closure permit map. This web-based tool provides city residents and visitors with greater access to active street closure permits and related information. Detailed data for most active and future closure permits issued by the Streets Department is available online at

https://streetsmartphl.phila.gov/

BICYCLE NETWORK ADVANCEMENTS

Developing a High Quality Bicycle Network

The High Quality Bicycle Network (HQBN) is a vision for the year 2040 to create a network of safe bike routes in Philadelphia. High Quality refers to bikeways that focus on the safety and comfort of those who cycle, whether for transportation or recreation. Separated bikeways, trails, and neighborhood bikeways are all types of high quality facilities.

The High Quality Bike Network builds on Philadelphia's strong bicycle ridership and culture. As of 2021, people in Philadelphia traveling to work chose to bicycle more often than in any other large city in the United States. There are 20 miles of separated bike lanes, over 280 miles of painted bike lanes, and more than 100 miles of bikeable trails. But, gaps in the network are barriers for those who may not be "confident" or "fearless" while riding a bike.

Still, many Philadelphians are hesitant about bicycling due to traffic safety concerns. One nationwide survey shows that 50% of people are "interested, but concerned" about biking for transportation. Building high-quality, safe facilities could encourage bicycling for transportation. Biking has positive impacts on public health, equity, environmental sustainability, and the economy.

Best practice design in bike facilities emphasizes the separation of bikes and cars on-street and off-street. Since the adoption of the City's *2012 Pedestrian and Bicycle Plan*, the City has worked to build out the separated trail and bikeway network. Since 2016, the City added 40 miles of new, 35 miles upgraded, and 60 miles of restriped or repaved bikeways. Twenty miles of bikeways in the City are high quality, separated from vehicle traffic lanes.

Source: PCPC

High Quality Bicycle Network Analysis

The entire High Quality Bike Network proposes to include 543.1 miles of bicycle facilities, of which 84 miles are already constructed. The entire network overlaps with 27 percent of the original recommendations shown in the 2012 *Pedestrian & Bicycle Plan.* The HQBN Analysis looks at where the existing HQBN routes are located and examines which routes and areas of the city should be included in the network. The maps display where the existing HQBN routes are located and the planned and recommended routes for expansion of the network. There are Bikeway Search Corridors that connect major destination points but aren't yet tied to specific roadways or routes. The analysis also breaks down which HQBN routes are roadways and trails.

City staff will update the HQBN map as projects move from concept to construction. City agencies will work together with City Council and community organizations prior to designing and building bikeways on the HQBN in each area of the city.

High Quality Bike Network (2022) By Type

High Quality Bike Network By Recommendaton Source

New High Quality Bikeway AnalysisOriginal: 2012 Ped Bike Plan

Existing vs Upcoming Bicycle Network

The Complete Street projects that are planned for completion over the next ten years include bicycle facilities like climbing lanes, conventional lanes, seperated bike lanes, neighborhood bikeway treatments, and sidepaths. These are typically funded by PennDOT, local state and federal sources. Several of these projects are described in this section.

PennDOT is responsible for upgrading state-owned infrastructure in the City, including roadways, bridges, and interstates. Several major improvement projects are on-going or planned within the near-term, including the reconstruction of Interstate 95, Vine Street Expressway, and major Center City bridge projects. These vehicularoriented projects also impact neighborhood streets and the pedestrian and bicycle networks.

An example of a major PennDOT project that has major implications to the pedestrian and bicycle built form is the work at I-95 interchanges from Girard Avenue to Princeton Avenue. This ongoing work will include pedestrian, trolley, bicycle, and trail infrastructure as part of the major reengineering of the interchange areas. Plans for JFK Boulevard, Chestnut Street, Grays Ferry Avenue, and Passyunk Avenue bridges include various bicycle and pedestrian improvements, including separated and buffered bike lanes and non-skid plates over bridge grates, a first for Philadelphia.

Major pedestrian and bicycle transportation safety projects currently in planning and design include the Chestnut Walnut Repaving and Complete Streets Safety Project, Parkside Avenue Traffic Safety Project, and Spring Garden Street Improvement Plan. The Chestnut Walnut Repaving and Complete Streets safety project will improve safety along this well travelled corridor. The project will decrease speeding and aggressive driving, create shorter and safer pedestrian crossings, improve parking and loading, and increase safety for people riding bikes by separating them from motor vehicle traffic on Chestnut Street from 63rd/Cobbs Creek Parkway to 34th Street and Walnut Street from 63rd/Cobbs Creek Parkway to 22nd Street.

Pedestrian and bicycle infrastructure investments will be made on Parkside Avenue from Girard Avenue to Bryn Mawr Avenue.

The Spring Garden Street Improvement Project will support bicycle and pedestrian safety and address stormwater management. This project improves a key bicycle corridor in Philadelphia as it serves as a connection between the Delaware and Schuylkill Rivers in Central Philadelphia and is part of the East Coast Greenway.

At the Broad Street Line's Erie Station, where Broad Street, Germantown, and Erie Avenues come together, the City is addressing pedestrian and bicycle safety by transforming existing traffic triangles into public plazas with improved ADA-compliant transit shelters, reducing pedestrian crossing distances, removing old trolley tracks, and adding sidewalk-level bike paths.

Trail Under I-95

COMPLETE STREET ADVANCEMENTS

The Office of Complete Streets started in 2016 as part of the Office of Transportation, Infrastructure, & Sustainability in the Managing Director's Office. Complete Streets are those that are safe, comfortable, and convenient for all users.

While complete streets come in many shapes and forms, they share the same principles. Complete streets:

- Accommodate all users.
- Are designed for safety and to prevent fatal crashes.
- Prioritize pedestrian movements.
- Consider the context of surrounding buildings, activities, environment, and community.
- Incorporate sustainability principles.
- Create public spaces that maximize social and economic activity.

Philadelphia's Complete Streets design standards identify street types and establish requirements that provide suitable treatments for pedestrians, sidewalk furnishings, bicycle infrastructure, curbside management, and other infrastructure elements. In 2023, the sidewalk dimensions for new development were updated. (See table below)

There are many ways that the City of Philadelphia fulfills the goals of the Complete Street policy. City staff review development projects and policies for complete streets elements, including routine paving packages, Vision Zero capital planning, and civic design review.

The Office of Complete Streets runs the Vision Zero initiative, public space programs (plaza, parklets, and street furniture) and bicycle network implementation. Each of these are vital to pedestrian and bicycle safety.

Future complete streets projects will include concrete pedestrian islands, varied separated bikeway treatments, and intersection redesign projects.

			SIDEWALK ZONES				
Street Type	Minimum lotal Sidewalk Width (4.3.1)	Furnishing Zone (4.4.2)		Walking Zone (4.3.2)		Duilding Zong (4.4.1)	
		Minimum	Recommended	Minimum	Recommended	Building Zone (4.4.1)	
	3.1 High-Volume Pedestrian	≥16′	≥4′	≥6′	≥8′	≥12′	No min.***
	3.2 Civic/ Ceremonial Street	≥20′	≥5′	≥8′	≥10′	≥14′	No min.***
	3.3 Walkable Commercial Corridor	≥12′	≥4′	≥6′	≥6′	≥8′	No min.***
	3.4 Urban Arterial	≥12′	≥4′	≥6′	≥6′	≥8′	No min.***
	3.5 Auto-Oriented Commercial/ Industrial	≥12′	≥5′	≥6′	≥6′	≥8′	No min.***
	3.6 Park Road	≥8′	≥3′	≥5′	≥5′	≥10′**	≥3′
	3.7 Scenic Drive	≥9′	≥3′	≥5′	≥6′	≥10′**	≥3′
	3.8 City Neighborhood	≥12′	≥4′	≥6′	≥6′	≥8′	No min.***
	3.9 Low-Density Residential	≥10′*	≥3.5′	≥4′	≥5′	≥6′	Building setback
	3.10 Shared Narrow	≥5′	No min.	≥4′	≥5′	≥6′	No min.***
	3.11 Local	≥10′*	≥3.5′	≥4′	≥5′	≥6′	No min.***
	* Minimum width refers to new development only	** Recommended wi	dth refers to a shared-use path fa	acility *** Minimum	1.5' required from a vertical build	ing face or fence	

Complete Street Standards (2023 update)

Minimum width refers to new development only

* Minimum 1.5' required from a vertical building face or fence

JFK Blvd After 2018

Source: City of Philadelphia

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Bicycle Facility Types

Since 2015, national standards for bicycle facility types have changed significantly. This improved design guidance will support the development of bicycle facilities on Philadelphia's streets. Each Pedestrian and Bicycle Progress Report provides an update for terminology. Since 2015, Philadelphia has updated standard and terminology for separated bicycle lanes as well as various intersection treatments that are now regularly incorporated into Streets Department reviews. The infographics below serve as an update to the 2012 document and as a guide to the terminology that is currently used by City agencies.

Separated Bicycle Lanes

Separated Bicycle Lanes

Intersection Improvements

2-Stage Left Turns

Conflict Zone

Bicycle Lanes

Raised Separated Bicycle Lanes

IMPLEMENTATION & PARTNERS

PennDOT

Partner agencies have large ongoing planning and development projects in the public right-of-way. City staff coordinate on these projects to ensure the inclusion of high quality infrastructure for people who walk, take transit, and bicycle when projects are reconstructed. Major partner agencies include PennDOT, the Philadelphia Water Department, and private developers. PennDOT is in the design and construction stages on sections of Interstate 95 along the Delaware River as well as major bridge projects, such as JFK Boulevard and Market Street over the Schuylkill River. Three examples of successful projects completed by PennDOT include:

The ramp and staircase from JFK Boulevard to 22nd Street that was installed as part of the JFK Bridge Rehabilitation Project in 2019.

PennDOT installed a segment of the Frankford Creek Greenway during construction of the Adams Avenue Connector as part of the rehabilitation of the I-95 Betsy Ross Bridge Section. This new roadway and adjacent sidepath creates a pedestrian and bicycle link between the communities of Frankford, Port Richmond, and Bridesburg between Torresdale Avenue and Aramingo Avenue.

PennDOT's work on the Chestnut Street Bridge project extended the separated bike lane from 33rd Street eastward into Center City. In addition, the maintenance and protection of traffic as part of the active construction project included separated bike lane protection for the first time in Philadelphia along 30th Street and Market Street.

PHILADELPHIA WATER DEPARTMENT

The Philadelphia Water Department designs and constructs major stormwater management and water and sewer reconstruction projects and there are significant opportunities to improve the public right-ofway as part of these projects. During the design phase, the City identifies projects and design features that can benefit both water management goals and infrastructure for people who bicycle and walk.

One example of this successful partnership is the Germantown Avenue Flood Relief and Safety Project. This project will reconstruct Germantown Avenue from Master to 2nd Street and update water and sewer infrastructure to the corridor. In addition, due to partnership with the Streets Department during design, the project will connect the American Street separated bicycle lanes to 2nd Street with a new two-way separated bikeway and add a traffic signal to the intersection of Girard Avenue and Germantown Avenue.

DVRPC

In 2020 the City and the Delaware Valley Regional Planning Commission (DVPRC), installed the first in-street bicycle counters in the region on Spruce and Pine Streets. These counters detect the number of bicycles passing a specific location. Gathering data on bicycle numbers helps City staff and planning partners to monitor seasonal and time-of-day trends, particularly on high-use corridors. With those counts on hand, the City can make decisions about traffic flow and infrastructure improvements.

Since 2016, DVRPC supported the City of Philadelphia with many pedestrian and bicycle studies, which can be found in the Appendix.

PUBLIC & PRIVATE PARTNERSHIPS

Non-profit partners and private developers often improve the public right-of-way significantly during design and construction of new facilities. The Delaware River Waterfront Corporation constructed an off-road sidepath for people who walk and bicycle along Delaware Avenue between Spring Garden and Washington Avenue. A private developer will extend that facility to the south between Tasker and Reed Streets by adding a raised separated bikeway and trail connections to the Delaware River Trail along this Vision Zero High Injury Network Corridor.

PCPC RECOMMENDATIONS

Refresh Pedestrian and Bike Plan Outcomes

Over the past ten years, PCPC has tracked the expected outcomes for this plan (see page 7). However, based on the trends of pedestrian and bicycle mode share, crashes, and other data, the measurables could benefit from an update to identify relevant outcomes so that better guidance is given for proposed improvements and investments that may happen in the next 10 years.

Transportation Demand Management Strategy

Create a strategic plan for implementation of a transportation demand management plan to support companies and employees throughout Philadelphia. This strategic plan will promote transportation alternatives for commuting instead of relying on single occupancy vehicles to support recently passed legislation that requires employers to provide a transit benefit at companies with 50 or more employees. Institutions could provide subsidized Indego Bikeshare and SEPTA Key Advantage to employees.

Permanent Bike Counters for Significant Infrastructure Projects

Large-scale infrastructure projects that include separated bicycle lanes should include placement of permanent bicycle counters. These embedded or permanent counters will help the City understand the impact of the investment.

Expand Efforts for Safe Routes to School and Transit

Continue to plan for additional opportunities for safe walking and biking to schools and transit stops. This effort could help PennDOT, the Streets Department, the School District of Philadelphia and/or SEPTA understand if additional investment is needed at intersections or for crossing guards, signals, or other safety improvements.

Identify Pedestrian and Bicycle Improvements in Fairmount Park

Over the past ten years, Parks & Recreation and non-profit partners have worked on various pedestrian and bicycle access plans for Fairmount Park. Expansion of these efforts to create a unified plan to identify strategic improvements for pedestrian and bicycle access should include a long-term maintenance strategy.

Improve Designs for Pedestrian Access Throughout Philadelphia by Complying with Local, State, and Federal Regulations

Update the Complete Streets Handbook by incorporating regulatory best practices to address pedestrian safety on all infrastructure and development projects.

Strategize for Safe Travel by E-Bikes

Create a strategic plan for projected expansion of e-bike travel on-street and along trails that includes a review of national and international best practices.

Expand Operation of Open Streets

Study national and international examples of Open Streets / Ciclovias and expand on current and previous efforts to close streets on seasonal weekends and holidays.

CONCLUSION

The 2022 Pedestrian and Bicycle progress plan evaluates the goals of the previous plans (2012 and 2015), documents what progress has been made, and raises awareness of the significant work that is still necessary over the coming years to reach those goals.

Since the last report was released, the City created the Vision Zero High Injury Network, which identifies 12 percent of Philadelphia's streets responsible for 80 percent of all traffic deaths and severe injuries that occurred from 2014 to 2018. Using this information, the city can focus infrastructure safety improvements on roadways that are most dangerous.

Currently, the City of Philadelphia holds a Silver designation by the Pedestrian and Bicycle Information Center (PBIC) as a Walk Friendly Community and a Silver designation from the League of American Bicyclists as a Bicycle Friendly Community. The City of Philadelphia continues to identify opportunities to improve on this designation to Gold or Platinum status.

To improve the safety of pedestrians and bicyclists, the City continues to prioritize the implementation of safety improvements on roadways to effect a change in unsafe driving behaviors.

In 2020, during the COVID-19 pandemic, traffic volumes and crashes decreased in the City while traffic deaths increased. Since 2020, traffic volumes have increased towards pre-pandemic levels and may match those levels in the coming years, which may impact the trend in traffic crashes and deaths that we have seen on the City's roadways since then.

The 2021 Pedestrian and Bicycle Plan Progress Report updated the guide and terminology for separated bicycle facilities. The guide now defines a separated bicycle facility as a bike lane that is physically separated from the travel lane by a parked vehicle, delineator post and/or raised curb. Implementation of separated bike lanes is one strategy that will support the creation of the High Quality Bike Network.

The City expects to release another progress report in four to six years with continued evaluation of our progress in becoming a safer city for bicycle and pedestrian activities leading Philadelphia towards a healthier and more accessible city.

APPENDIX

MAJOR TRANSPORTATION SAFETY PROJECTS AS OF THE TME OF PUBLICATION

In Progress

Broad, Germantown, and Erie (BGE)

Safe Route to Transit - Broad Street Line Erie Station

Chestnut Walnut Repaying and Complete Streets Safety **Project**

Parkside Avenue Traffic Safety Project

Spring Garden Street Improvement Project

10th and 13th Streets Protected Bike Lanes (South to Spring Garden)

East Falls Roundabout (Fox Street and Queen Lane)

Germantown Avenue Flood Relief and Safety Project (Master to 2nd)

Grays Avenue, Lindbergh Boulevard, Passyunk/Essington **Repaving and Safety Projects**

Mantua Traffic Safety Project

Roosevelt Boulevard: Route for Change Report

Ivy Ridge Station: Creating a Hub for Multimodal Development

PennDOT Connects Bike-Friendly Resurfacing Program -Ongoing

DVRPC Regional Bike Share Strategy Developments -Ongoing

13th Street South - Spring Garden

2nd Street Race - Market Street

Complete

Washington Avenue Repaying and Improvement Project

Market Street and John F. Kennedy Boulevard Bus-Only Lane Pilot

Market Street and John F. Kennedy Boulevard Vision Zero Pilot Project (15th to 20th Streets)

Race Street Safety Project at Franklin Square (5th to 8th

Streets)

2nd, 5th, and 6th Streets Protected Bike Lanes

11th Street Repaying and Safety Project (Bainbridge to Reed)

13th Street/Yorktown Protected Bike Lane (Girard to Cecil B. Moore)

22nd Steet Protected Bike Lane (South to Market)

27th/South Protected Bike Lane (21st to 27th Streets)

Broad Street Median and Corridor Safety Project

Chestnut Street Loading/Parking Pilot

Chestnut Street Parking Protected Bike Lane (33rd to 45th Streets)

Spruce/Pine Repaying and Safety Project (Front to 22nd Streets)

Cobbs Creek Parkway Corridor Study

COMPLETE STREET DOCUMENTS

2021

Frankford Ave Multimodal Study

Vision Zero Pedestrian Safety Study

2020

Assessing Openness to Biking to Transit at Three Regional Rail Stations in Delaware County

2019

Guidance for Pedestrian and Bicycle Facilities at Expressway Interchanges in Southeastern Pennsylvania

2018

Identifying Neighborhood Greenway Possibilities in **Philadelphia**

Curbless Streets: Evaluating Curbless and Shared Space Concepts for use on City and Philadelphia Streets

DVRPC Reviving Vine: Improving Multimodal **Connections on Vine Street**

