

Vision Zero Action Plan 2025

November 2020





Zero traffic deaths by 2030.

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Letter from the Mayor James F. Kenney

Fellow Philadelphians,

Over the past three years, the Vision Zero Task Force has brought state and local government officials side-by-side with community and advocacy groups to work towards a goal of zero traffic deaths. Building on that progress, the Task Force has outlined Philadelphia's path forward to Vision Zero in this next Five-Year Action Plan. These efforts build on the establishment of the Office of Complete Streets, as well as the work of my colleagues in City Council and the State Legislature, who have championed efforts towards making the streets safer. Our accomplishments this past three years include the installation of automated speed cameras on Roosevelt Boulevard, the addition of over 37 miles of new and upgraded bike lanes, including over 10 miles of protected bike lanes, and over 58 miles of improved streets.

This year, a combination of the global pandemic, an escalating economic recession, and unrest tied to systemic racism and police brutality have all taken a toll on Philadelphia. We have also seen a dramatic increase in traffic deaths. The month of July 2020 was the worst single month during my administration as 24 Philadelphians lost their lives in crashes. These deaths are unacceptable and preventable.

When I took office in 2016, I pledged my commitment to making Philadelphia streets safe for everyone, regardless of age, physical ability, or choice of transportation. The path to achieving Vision Zero is not accomplished easily and requires a fundamental and widespread commitment to systemic change from how we design our roads, to how we teach our kids to walk to school, to how we design vehicles. It will take all of us to reach zero.

This Vision Zero Action Plan 2025 is an important step towards reaching our goal of zero road deaths. We all have a part to play. With the support of each and every Philadelphian, we can save lives and make our city's streets safer.

I recognize the traffic crashes that result in lives lost or severe injuries are preventable. It is our shared responsibility to build a transportation system that prioritizes safety on our streets. By focusing on system-wide improvements, we can stop traffic-related deaths. We can save lives.

Sincerely,

Janes F. Kerney

Mayor James F. Kenney

WE PLEDGE,

as the Vision Zero Task Force, to incorporate the Vision Zero Action Plan goals, principles, and values into everything our departments, agencies, and organizations do. We commit to zero traffic fatalities by 2030.



MORE THAN A STATISTIC



"On April 16, 2016, Jamal Charlton Morris (27) was killed by a hit and run driver when riding his bicycle on a Philadelphia street. He was an only child and an engineer. Upon his death, his organs and tissues were donated to more than 50 recipients. Our family, through our grief and shattered lives in the absence of our son, continue to advocate for the safety of others as they bike on Philadelphia's roads. To learn more about Jamal and this work visit www.jamalcmorrisfoundation.org."

- Charlton Morris and Channabel Latham-Morris

VISION ZERO PLEDGE

I pledge to recognize that crashes are avoidable and my choices matter to the lives of others.

I pledge to slow down, focus on driving, and put my phone away while behind the wheel.

I pledge to use safer transportation options, such as walking, biking or taking transit, whenever possible.

I pledge to bike predictably and stop at signals.

I pledge to spread the word about Vision Zero in my neighborhood.



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Opposite image: Walking to City Hall Cover images (clockwise): Walk to School Day, Safe Routes Philly, 2019; Spruce & Pine Streets bike lane, 2019; Sansom & 13th Streets COVID-19 Outdoor Dining, 2020

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PHILADELPHIA 3 YEAR SNAPSHOT 2017-2020

D miles of future High Injury Network safety projects programmed

locations with speed cameras installed on Roosevelt Boulevard **121** pedestrian head start signals **& 119** speed cushions

456 e-bikes added to Indego

10 miles of protected bike lanes & 45 miles of total bike lanes



via social media & **1,000** ads are placed on radio and throughout the city

8



safety improvements

\$20m+

of safety investments using fees from red light camera tickets

Banner image:Logan Square, 2020

Executive Summary VISION ZERO AT A GLANCE

VISION ZERO GOALS



Save lives by reducing the number of severe traffic crashes on **Philadelphia streets**



Improve the overall performance of the street system, and prioritize those using our streets who are the most vulnerable



Ensure equitable traffic safety investments in neighborhoods needing them most



Reduce Philadelphians' risk for developing chronic diseases by promoting active transportation



Shift trips from motorized to active modes of transportation to reduce congestion, improve air quality, and improve health

and preventable. Together, we can save lives.

Opposite image: Walk and Bike to School Day, Safe Routes Philly, 2018



A life lost on Philadelphia's streets is unacceptable and preventable. Our city, our families, and our children deserve safer streets.







People every year are killed in traffic crashes.

Source: PennDOT

Why Vision Zero in Philadelphia?

Compared to our peer cities with established Vision Zero policies, Philadelphia has one the highest rates of traffic-related deaths per 100,000 residents. Philadelphia's traffic-related death rate is over two times as high as that of New York City. Traffic crashes are not accidents; they are preventable incidents.



In Philadelphia, neighborhoods with higher proportions of residents living in poverty or higher proportion of residents of color are subjected to a disproportionate number of fatal and serious injury traffic crashes. Traffic crashes do not affect all Philadelphia neighborhoods equally. Together, we can ensure equitable access to safer streets.

Philadelphians are worth it. A life lost on Philadelphia's streets is unacceptable



Renewing our Commitment to Vision Zero in Philadelphia

On November 7, 2016, Mayor James F. Kenney signed Executive Order 11-16, committing to reduce traffic deaths to zero by 2030. On October 1, 2017 the City released the first Vision Zero Three-Year Action Plan. 2020 marks the culmination of the first phase of Vision Zero work in Philadelphia, which will serve as the foundation for ongoing efforts. This gives us a chance to reflect on what was achieved, reassess what has worked and what has not worked, and renew our commitment to reducing traffic deaths to zero by 2030. Vision Zero is a challenging goal, but a goal worth pursuing because all Philadelphians deserve safe streets.

VISION ZERO PRIORITIES

EQUITY Ensure equitable traffic safety investments in neighborhoods needing them most

SAFE SPEEDS Prevent fatal crashes by managing vehicle speeds

SAFE STREETS Create roads that are predictable and aren't confusing to anyone using them

SAFE PEOPLE Empower Philadelphians to spread Vision Zero messaging, take community action, and promote a culture of safe driving, walking, and biking

SAFE VEHICLES Support all Philadelphians to use the safest vehicles possible for daily trips - with transit, biking, and walking as the priority

SAFETY DATA Use quality data and the latest analytical tools to prioritize actions and track Vision Zero progress

VISION ZERO FOR YOUTH Invest in the transportation safety of young Philadelphians as they grow in schools and neighborhoods

Vision Zero Capital Plan 2025

To accelerate Philadelphia's progress towards Vision Zero, the City has identified 10 priority corridors and 10 priority intersections for safety improvements. For each location, this Capital Plan provides a crash analysis, a list of potential engineering solutions, and a high level cost estimate to build the improvements. These corridors and intersections have been selected because they are some of the most dangerous places on the High Injury Network and because projects here would meet other City goals including equity, transit or bike network priority, economic development, and youth safety. Over the next five years, the City will endeavor to fund, design, and build safety improvements at these priority locations. To learn more see pages 34-35.

TRANSFORMATIVE POLICY GOALS

Expand Automated Speed Enforcement Set Speed Limits by Municipal Authority



Pass The Curb Bill To Allow Safe Street Design



Adopt Vision Zero Ordinance

To learn more see pages 30-31

Three Year Overview

In our first three years, from late 2017 -2020, Vision Zero Philadelphia has laid the foundation for safe streets. Together, we can build a transportation system that promotes safety and enables healthier living.



By adopting Vision Zero, the City of Philadelphia rejects the status quo that traffic deaths are "accidents." Instead, we accept traffic deaths as preventable incidents that can be systematically addressed. We can save lives and prevent serious injuries on our streets by applying Vision Zero's core principles, while enhancing the guality of life for all Philadelphians.

In our first three years, Vision Zero Philadelphia has laid the foundation for safe streets throughout the city. Highlights include:

- Mayor Kenney announcing the Vision Zero for Youth pilot project
- Installing automated speed cameras at eight • locations along Roosevelt Boulevard
- Installing transformative safety improvements on streets across the city including Chestnut Street, Market Street & JFK Boulevard, and 11th Street
- Installing 119 speed cushions, 121 pedestrian head • start signals, and 2 raised intersections

- Over 10 miles of new protected bike lanes
- Installing 58 miles of safety improvements over the last 3 years
- Planning 31 miles of upcoming projects on the High Injury Network in the next two years including corridors like Washington Avenue and intersections like Frankford, Trenton, and York, and Broad, Germantown, and Erie
- Launch of the Neighborhood Slow Zone program with three neighborhood slow zones in progress
- Upgraded City fleet vehicles with sideguards, • 360-degree cameras, and cross over mirrors
- Reached over 250,000 people through social media, and placed over 1,000 ads on radio and throughout the city

Vision Zero continues to prioritize traffic safety in transportation program investments that save lives and promote healthier living. Using data-informed decisions, Vision Zero will ensure equitable traffic safety investments in neighborhoods needing them most.

OUR PROGRESS: SAFETY PROJECTS ON THE HIGH INJURY **NETWORK**



Action Plan Progress YEAR THREE HIGHLIGHTS



Boulevard and Market Street including new bike lane/ conflict zones at intersections

Three Year Overview

Current and Desired Treadline for Vision Zero in Philadelphia

Where We Are Now

Vision Zero recognizes that humans will make mistakes, including while using our streets. That means not every crash can be prevented, but it is possible to eliminate serious injuries and the loss of life. Instead of focusing on preventing all crashes, Vision Zero focuses on reducing the severity of crashes, and on saving lives. If we design our streets for the safety of those most vulnerable on our streets—people walking—we can improve safety for everyone living, working, and traveling on them.

Philadelphia saw a dramatic decrease in 2017 (-19 percent), an increase in 2018 (+17 percent), and a slight decrease in 2019 (-9 percent) in traffic deaths compared to the previous year. This is why best practice tells us not to look at any single year in isolation. We should look at crash data over a span of several years, so we refer to crash data in five-year intervals to tell the most complete story. From 2015 to 2019, the number of people killed on Philadelphia streets has a flat to slightly decreasing trend. If we are to reach our goal of zero traffic deaths on Philadelphia streets by 2030, we need to accelerate that decreasing trend over the next decade. If we continue our current trend, we will not reach our goal by 2030.

Speed is the number

ONE contributing factor in determining if a crash is fatal.

Contributing Factors In Fatal And Serious Injury Crashes (2015-2019)

To understand crashes and how to prevent them, it is critical to analyze critical pre-crash events underlying the crash. The Federal Highway Administration has identified a list of contributing factors related to drivers, vehicles, roadways, and the environment. The chart above shows the most common contributing factors in fatal and serious injury crashes in Philadelphia. Aggressive driving is the most common contributing factor and it includes a number of dangerous maneuvers like speeding, running a red light, and careless passing or lane change.

Fatal Crashes And Serious Injury Crashes

While traffic fatalities decreased slightly in 2019, the new statewide standards in how injury types are coded number of serious injuries increased significantly in 2019. and reported by police and first responders. A similar The outsized increase in serious injuries in a single year increase in serious injury crashes was also reported in is striking, especially when compared to the relatively other counties in Pennsylvania and New Jersey when steady number of fatalities. This abnormality in the crash the new crash codes were adopted there. data can be explained by Philadelphia's adoption of

Fatalities Serious Injuries

Top Contributing Factors in Fatal and Serious Injury Crashes

Total Fatalities and Serious Injuries

*Note: In 2019, Philadelphia adopted new statewide standards in how injury types are coded and reported, leading to an increase in serious injuries reported that year.

Data Source: PennDOT (2015-2019)

SPEED KILLS

WHEN A PERSON IS HIT BY A DRIVER AT...

Slowing down saves lives.

By the Numbers

Over the past ten years, Philadelphia's traffic death patterns have been slightly increasing while Pennsylvania as a whole has seen a decreasing trend. In the United States, there have been larger swings from the decrease in deaths around the last recession, to a large increase during the recovery and a relative plateau in recent years.

Vision Zero in 2020

In July 2020, Philadelphia reached the highest number of traffic fatalities in a single month since the City committed to Vision Zero four years ago. Twentyfour people were killed in crashes over thirty-one days. Although it is too soon to draw definite conclusions, the COVID-19 stay at home order in March 2020 reduced the average number of vehicles on the road. This can have the effect of encouraging speeding. This coincided with other strains on communities and individuals that could contribute to increased aggressive and impaired driving including economic hardship, physical and mental health challenges, and civil unrest. This alarming spike comes at a time when increased numbers of Philadelphians are walking and biking to social distance and get outside.

Cumulative Crash Fatalities by Month in Philadelphia 2018, 2019, and 2020

Data Source: PennDOT (2018-2019) & PPD (2020)

Traffic Deaths Pennsylvania

Traffic Deaths United States

Data Source: PennDOT and NHTSA (2015-2019)

Three Year Overview

MORE THAN A STATISTIC

"On November 28, 2017, Emily Fredricks lost her life while cycling at the corner of Spruce and 11th Street in Philadelphia. She was killed by someone driving a private sanitation truck. She was kind, funny, creative, and she was not afraid to love or be loved. Our hearts are forever broken and we miss Emily every second of every day. We do this advocacy work in honor of Emily; we know it is too late to save her. The beneficiaries of our work are the living."

> - Rich and Laura Fredricks (Emily's parents) and Michael and Jack (Emily's brothers).

People Involved in Crashes

People Killed in Crashes

Data Source: PennDOT (2015-2019)

People walking, people riding motorcycles, and people biking

are more likely to be killed or seriously injured in a crash

Drivers by Age Group Involved in Fatal and Serious Injury Crashes

Vulnerable Users

While people walking, riding motorcycles, and biking were involved in a small percent of the total crashes reported (10 percent), they made up a disproportionately large percentage of those killed in crashes on Philadelphia streets (46 percent) (PennDOT 2015-2019; excludes interstates). Without the protection of a vehicle and safety features like airbags and seatbelts, the human body cannot withstand the force of many crashes.

Non-Drivers by Age Group Involved in Fatal and Serious Injury Crashes

Comparing Gender of Pedestrians, Passengers, and Drivers Involved in Fatal and Serious Injury Crashes

Data Source: PennDOT (2015-2019)

Understanding the Demographics

Every day in Philadelphia, an average of five children are involved in a traffic crash and one child each week is involved in a serious injury or fatal crash. While younger adults ages 25-40 years old are the most frequent age group behind the wheel in fatal or serious injury crashes, people of all ages suffer from traffic violence. Men are more likely than women to be driving in crashes that kill or seriously injure someone, though men and women passengers or people walking are equally likely to be involved.

Equity in Vision Zero

Pursuing Vision Zero means making changes to the streets most impacted by traffic crashes. In Philadelphia, that means recognizing that crashes disproportionately impact neighborhoods where a majority of residents live in poverty or a majority of residents are people of color. Therefore traffic safety investments must be prioritized in these locations, and the City's work on enforcement must be sensitive to historic and current patterns of racialized policing. **There is an urgency to ensure that Vision Zero is responsive to the long-stated needs for greater equity in Philadelphia.** The concentration of traffic safety problems in lower income communities and communities of color is not accidental, but reflects disinvestment. Throughout many parts of the city, demonstrated infrastructure needs exceed the available funding. Municipal efforts, especially in recent years, have endeavored to make more equitable investments in streets and transportation infrastructure. **We acknowledge that these efforts have not yet achieved equity among Philadelphia neighborhoods.**

Fatal or serious injury crashes are

30% more likely to

occur in areas of the city

where most residents are people of color compared to areas where most residents are

white.

Data Source: PennDOT (2014-2018); ACS (2014-2018)

Equity in Vision Zero means avoiding simplistic approaches. For example, allocating purely equal shares of resources all around the city ignores the fact that not all areas are confronting the same levels of risk. **Therefore, this plan commits to focusing Vision Zero efforts in the next five years in neighborhoods where a majority of residents are either people of color or people living on low incomes where data shows the impact of traffic crashes is highest.**

While the current available data indicates the location of a crash, what is less clear is the relative number of Black and Brown people who are victims of traffic violence. In part, this is due to the variation in how race data in traffic crashes is collected and tracked. **This plan renews the City's commitment to working with PennDOT and other partners to create consistent procedures to collect the data necessary to complete a Vision Zero racial equity analysis.** The City's goal is to have race data collected for every crash and of all people involved.

Communities where a majority of residents are living in conditions of stress, often means traffic violence is only one of many pressing concerns. **This plan commits to increasing automated traffic enforcement while reducing police-led enforcement that has unjustly been concentrated among Black, Brown and immigrant communities.**

Fatal or serious injury crashes are

three times more likely

to occur in areas of the city

where most residents are living on low incomes

compared to areas where fewest residents are living on low incomes.

Equity in Vision Zero

of

We recognize that equitably planning for Vision Zero means community partnerships and dialogue are essential. A fundamental principal of CONNECT: Philadelphia's Strategic Transportation Plan is that residents should have a say in the infrastructure decisions that affect their lives. Just as physical improvements to transportation infrastructure should be long lasting and sustained, community engagement should also build relationships. Multilingual community engagement, as well as in person, online, and postal mail methods aim to ensure that information about transportation safety is accessible to all members of the community. When the City and our partners are planning changes to transportation design or programming, we commit to transparent processes that are grounded in community dignity.

Opposite top image: Memorial to Avante Reynolds, Cobbs Creek 2020

Moving Forward A SAFE SYSTEMS **APPROACH**

Vision Zero Action Plan 2025 recommits to ending all traffic deaths and serious injuries in Philadelphia by 2030. In developing this plan, the Vision Zero Task Force and its member agencies took time to reexamine the areas of progress and the challenges from the first action plan.

The City continues to build on many achievements such as the expansion of the protected bikeway network, improved city fleet safety, and the installation of speed cameras on Roosevelt Boulevard. There are also many challenges including capacity for project delivery, capital funds for engineering improvements, concerns related to equity and enforcement, and the lengthy process on some legislative initiatives. With these achievements and challenges in mind, OTIS staff has worked with the Vision Zero Task Force to focus and refine the City's approach to Vision Zero in this new Action Plan.

The City is reaffirming our commitment to Vision Zero by moving forward with a safe systems approach. This Action Plan embraces a framework of safe speeds, safe streets, safe people, safe vehicles, and safety data.

Image: Kids Playing Tabletop Traffi Safety Game, Safe Routes Philly, 2019

Moving Forward - A SAFE SYSTEMS APPROACH

Safe Systems Compared To Traditional Road **Safety Approach**

The next phase of the City's Vision Zero work will use a safe systems framework¹. This approach to transportation safety looks beyond the immediate conditions of a crash and focuses across connected systems to prevent all fatal crashes. In comparison to a traditional approach that designs roadway environments to function best when users follow precise rules, a safe system approach accounts for human error. People are not perfect, and will always make mistakes. However, when they do, our safety systems should be in place to prevent traffic-related deaths.

While a traditional approach focuses on shifting people towards safer behaviors (e.g. driver's education) and relies on enforcement to manage people who break rules (e.g. speeding), a safe systems approach manages all risks inherent in the transportation system and eliminates conditions that could be deadly. In addition, a safe system promotes the safest and healthiest options for people to get around such as taking transit, walking, or biking.

Rebalancing the Road Injury Prevention Effort

Behavioral Source: Towards Zero Foundation

The City acknowledges that:

- Traffic deaths are preventable and unacceptable.
- Human life is our highest priority.
 - » Preserving human life takes priority over level Improvement is essential. Improved street design, of service. safe human behaviors, safe vehicle design, and Philadelphia's transportation system should be ensuring safe operating speeds are essential » safe for all of its users, in every neighborhood. contributors to a safe transportation system.
- Human error is inevitable and unpredictable. Our transportation system should be designed to anticipate human error, so the consequence is not death or serious injury.

priority

People are inherently vulnerable, and speed is a fundamental predictor of crash survival. Our transportation system should be designed to protect human life.

1 Kumfer, W., LaJeunesse, S. et al.. "Speed, Kinetic Energy, and the Safe Systems Approach to Safer Roadways." Institute of Transportation Engineers. ITE Journal 89.4 (2019): 32-36.

Image: Walk To School Day, Safe Routes Philly, 2019

Prioritizing Safety – An Updated High Injury Network

80 percent of all traffic deaths and serious injuries occurred on just 12 percent of Philadelphia streets. This 12 percent of streets comprises the High Injury Network. Using five-years of crash data (PennDOT, 2014 - 2018; excludes interstates), this High Injury Network (HIN) was developed using an updated methodology. This new methodology is more precise and has captured a greater amount of the fatal and serious injuries than the previous HIN, which accounted for 50 percent of fatal and serious injuries on 12 percent of streets. By analyzing crash data, the Vision Zero Task Force partners can prioritize investments along these corridors to save lives and prevent serious injuries. More detailed information about the HIN, a dynamic version of the map, and the full methodology are available at www.visionzerophl.com.

This High Injury Network will serve as the focus of the Vision Zero strategies outlined in this Five-Year Action Plan.

HIGH INJURY NETWORK MAP

of our streets.

Data Source: PennDOT (2014-2018)

Aligning Vision Zero with Complementary Initiatives

To reach Vision Zero by 2030, we must align all complementary City goals including supporting families to access education and economic opportunity, creating inclusive and resilient neighborhoods, and recognizing the struggle to create a more racially just Philadelphia. In 2018, Mayor Kenney adopted CONNECT: The City of Philadelphia's Strategic Transportation Plan. **The plan recognized that over 30% of Philadelphia households don't have access to car and the high cost of being involved in a crash can be destabilizing for most Philadelphia families**. In order to support a more resilient and safe transportation system, CONNECT committed the City and its partners to working towards making transit, walking, and biking the fastest, safest, and most convenient options to travel.

Mayor Kenney outlined his priorities of equity and opportunity for all at the beginning of his second term in office. While the world has changed with the COVID-19 pandemic, working towards these goals for Philadelphia has become even more important. With rising traffic-related fatalities and shrinking City and State budgets being impacted by the pandemic, it is more important than ever for actions to affect outcomes greater than the sum of their parts.

QUALITY EDUCATION FOR ALL

The best way to promote lasting equity in Philadelphia is to ensure that all of our city's children and youth—regardless of where they live—have access to quality schools in their neighborhood. **Vision Zero is committed to planning for safer streets and slower speeds around all schools, and developing quality safe transportation curriculum for all Philadelphia children.**

SAFER AND MORE JUST PHILADELPHIA

Mayor Kenney is leading on police reform and reducing the violence that tears communities apart—leaving deep scars and lasting trauma in its wake. **Traffic-crashes are a form of violence and the trauma of a senseless loss of life affects any family deeply. The impacts of heavy traffic enforcement can have the similarly traumatic impacts. Vision Zero supports creating a more just Philadelphia where traffic safety does not rely on traffic stops, but rather on creating a safe system to prevent fatal crashes.**

HEALTH EQUITY FOR ALL

Philadelphia's response to COVID-19 is not an ad-hoc reaction. Rather, it is emblematic of a larger effort to ensure access to health care regardless of immigration status, insurance status, or language spoken. **Preventing chronic health conditions and eliminating health inequities also aligns with Vision Zero's goal to improve access to healthy transportation options. Preventing traffic crashes resulting in death and serious injury will improve lasting health outcomes for those involved and their families.**

INCLUSIVE ECONOMY AND THRIVING NEIGHBORHOODS

The Kenney Administration is committed to growing quality jobs and building wealth in low income communities by increasing investment in commercial corridors, supporting a transportation system that is safe, affordable, accessible and reliable, and addressing climate change. The Administration is committed to attracting and maximizing recovery funds to support residents and businesses. **Vision Zero is focused on bringing complete streets to neighborhoods and commercial corridors and providing safe, clean, and green transportation options so people can get to jobs and schools. Vision Zero is supporting Philadelphians travel by the safest modes available, improving transit, upgrading our bike network, and prioritizing pedestrians throughout the city.**

MORE THAN A STATISTIC

"On July 16, 2013, Samara Banks and three of her four sons lost their lives when hit by two people drag racing on Philadelphia streets. Saamir was in her arms that night, Saasean in his stroller, and Saadeem holding on to the stroller. Samara was a young mother who cherished her kids and loved working with children. She was full of life! Samara's spirit will live on through her one son who survived the crash."

- Latanya Byrd (Samara's aunt)

Transformative Policies

Getting to zero will require political will and public support for ambitious and transformative policies.

These transformative policies for Vision Zero 2025 for City and State partners:

- require legislative authority,
- are evidence-based to reduce severe and fatal injuries, and
- are high-impact initiatives that will significantly move Philadelphia towards its Vision Zero goal.

Pass The Curb Bill To Allow Safe Street Design

Dedicated infrastructure improves safety, encourages a wider variety of users, and supports vibrant complete streets.

The implementation of parking protected bike lanes and parking protected plazas in our City are needed to further Vision Zero objectives to create safe streets where everyone has space to travel. Parking protected bike lanes not only provide a safe space to cycle, but also improve safety for pedestrians and motorists by shortening crossing distances and calming excessive speeds.

NEEDED LEGISLATIVE CHANGE

Senate Bill 565 and House Bill 792 came before the State Legislature in 2019-2020. This State legislation is needed to resolve a technical issue in the existing motor vehicle code related to the definition of a curb.

IMPACT

Philadelphia has implemented parking protected bicycle lanes as pilot projects on JFK Boulevard, Market Street, Chestnut Street. Initial evaluation of these roadway realignments that included a reduction of vehicular lanes, demonstrates that they have slowed speeding and increased the number of people biking on that street. People walking benefit when vehicle speeds are reduced and when their exposure to moving automobiles is reduced. People biking also experience safety gains as protected bike lanes have been found to be the most effective tool for reducing crashes that injure people cycling.²

Adopt Vision Zero Ordinance

Update the Philadelphia Code with a Vision Zero Ordinance to provide administrative ability to implement key actions for eliminating traffic fatalities and serious injuries.

A Vision Zero Ordinance would include a policy statement setting the City's goal of achieving zero traffic fatalities and serious injuries by 2030. The Ordinance would require action by City Departments responsible for improvements to the public right-of-way to conduct a crash analysis and develop a crash mitigation plan as a primary factor in the design, construction, or maintenance of transportation infrastructure. The legislation would also provide the ability for City Departments to make safety improvements to the right of way by administrative action.

NEEDED LEGISLATIVE CHANGE

City Council action is needed to adopt a Vision Zero Ordinance in the Philadelphia Code.

IMPACT

Setting Vision Zero as a part of the City's Code strongly commits current and future decision-makers to prioritizing the lives of Philadelphians in transportation investments.

²Teschke, Kay. "AJPH." American Public Health Association (APHA) Publications, 1 Dec. 2012, https://ajph.aphapublications.org/doi/ abs/10.2105/AJPH.2012.300762.

Expand Automated Speed Enforcement

Installing automated speed enforcement cameras is proven to reduce traffic fatalities and injuries.

In 2020, speed cameras were installed on Roosevelt Boulevard because they effectively reduce speeding

- one of the leading factors in fatal or serious injury The state motor vehicle code requires Philadelphia crashes. As an enforcement tool, speed cameras are to set speed limits using a method known as 85th percentile in most situations. However, this sets the efficient and reduce the potential for bias in traffic stops. norm with driver behavior, rather than a defined safety NEEDED LEGISLATIVE CHANGE target or the safest operating speed for the road design. This can mean that speed limits - and speeding State enabling legislation is needed to allow the use of behaviors – actually increase over time, resulting in automated speed enforcement within ¹/₄ mile of schools more deadly crashes. Local control of speed limits will and on all High Injury Network corridors with approval allow the City to look at a variety of factors, including the from PennDOT. survivable speed of crashes, to determine appropriate speed limits.

State legislation is needed to make the existing fiveyear Pilot program of automated speed enforcement on Roosevelt Boulevard permanent, which will culminate in 2023.

IMPACT

Speed is a fundamental predictor of crash survival - no matter how you choose to travel.

Automated enforcement saves lives by reducing dangerous driving behaviors. After installation of speed cameras in Washington DC, there was a 73 percent reduction in fatalities and a 34 percent reduction in injuries.

Following the installation of an automated speed enforcement program, New York City reduced speeding at camera locations by 63 percent and fatal crashes by 55 percent (NYCDOT Automated Speed Enforcement Program Report 2014-2017).

Transformative Policies

Set Speed Limits by **Municipal Authority**

Setting or lowering default citywide speed limits is an inexpensive, scalable way to quickly reduce top-level speeding and improve safety outcomes. Philadelphia needs State permission to set City speed limits.

NEEDED LEGISLATIVE CHANGE

State enabling legislation is needed for Philadelphia to set speed limits with a safe systems approach.

IMPACT

Speed management and speed limit reductions can substantially reduce speeding overall and the amount of high-end speeding. Because it is so effective, many states have allowed cities to begin to set their own default citywide speed limits. In Boston, reducing the

- citywide speed limit to 25 mph from 30 mph resulted in 29 percent reduction in episodes of excessive speeding. After passage of state enabling legislation, Minneapolis
- and St. Paul established new speed limits in 2020. requiring maximum speeds of 25 mph on arterial streets and 20 mph on residential streets. Seattle passed an ordinance to lower the speed limit from 25 mph to 20 mph on 2,400 miles of neighborhood streets and changed the default city speed limit from 30 mph to 25 mph on arterial streets. Seattle has seen a significant reduction in crashes as a result.

Vision Zero Capital Plan 2025

This companion plan is released at the same time as the Vision Zero Action Plan 2025

> VISION ZERØ

The Vision Zero Capital Plan 2025 identifies priority locations on the High Injury Network where the City aims to begin the planning and implementation process for safety improvements over the next five years. To determine the highest priority, all the streets on the HIN were first ranked based on the number of seriously injured or killed (KSI) crashes. Then, the locations were scored for alignment with other City plans and policies including CONNECT: The City of Philadelphia's Strategic Transportation Plan. If the location meets equity goals or is proximate to schools, priority transit corridors, commercial corridors, or has already undergone preliminary analysis, it was given higher consideration. Locations on Roosevelt Boulevard were removed since that corridor has its own planning and implementation process (see pgs. 50-51).

The Vision Zero Capital Plan provides an overview of each priority corridor and intersection including crash analysis, potential engineering solutions, and estimates of what the project could cost to implement.

While improvements on all locations are unlikely to be built by 2025, this high-level capital plan sets a pathway for targeted Safe Streets improvements in the coming years. The City is committed to robust community engagement for each of the projects. The next steps for each project will include securing resources such as grant funding and staff time to conduct an inclusive planning process and prepare concept designs.

HIGH INJURY NETWORK

						me
able 1. Safety Priorities for all c	orridors a	ind interse	ections			
	BIKE NETWORK	COMPETITIVE	EFFICIENT GOVT	EQUITY	SCHOOL	TRAI FIR
Subcorridors						
Allegheny 5th St to 2nd St	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	,
Broad Lehigh Ave to Allegheny Ave		\checkmark	\checkmark	\checkmark	\checkmark	,
Cecil B Moore Willington St to 10th St	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	,
Cobbs Creek Market St to Spruce St		\checkmark	\checkmark		\checkmark	,
Frankford Arrott St to Bridge St	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	1
Hunting Park/Roosevelt Blvd Germantown Ave to Broad St		\checkmark	\checkmark	\checkmark	\checkmark	,
Lehigh American St to B St	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	,
Market Juniper St to 6th St	\checkmark	\checkmark	\checkmark		\checkmark	``
Market 23rd St to 20th St	\checkmark	\checkmark	\checkmark		\checkmark	,
Wissahickon Roosevelt Blvd to Roberts Ave	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	
Intersections						
N 15th St & Vine St		\checkmark	\checkmark		\checkmark	
38th St & University Ave	\checkmark	\checkmark	\checkmark			`
59th St & Lancaster Ave	\checkmark	\checkmark	\checkmark		\checkmark	,
62nd St & Walnut St	\checkmark		\checkmark		\checkmark	,
B St & Ontario St	\checkmark		\checkmark	\checkmark		
Belfield Ave & Ogontz Ave	\checkmark		\checkmark	\checkmark	\checkmark	
Belmont Ave & W Girard Ave	\checkmark		\checkmark	\checkmark	\checkmark	,
N Broad St & Rockland St		\checkmark	\checkmark	\checkmark	\checkmark	,
N Broad St & Vine St		\checkmark	\checkmark		\checkmark	Y
Old York & Wyoming Ave	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	

Go to <u>www.visionzerophl.com</u> for the full Vision Zero Capital Plan 2025.

Priority Corridors & Intersections

Vision Zero YEAR THREE GRANTS

In the third year since releasing the first Vision Zero Action Plan, the City announced 23 new infrastructure grant awards, totaling \$75,958,672 to support projects along High Injury Network corridors. Many of the grants listed require matching funds in order to complete the project. It is our expectation that construction on each project will begin in the next three to five years. In addition, this year the City was awarded \$1,480,204 in planning and traffic safety education grants.

Safe Streets

In Year Three, the City announced 23 infrastructure grants, totaling \$75,958,672 of investment to support Vision Zero projects on the High Injury Network.

Project name	Lead Agency	Grant program(s)	Grant award	Project description
Roosevelt Boulevard Cross Over Lanes	PennDOT	Congestion Mitigation and Air Quality Improvement Program (CMAQ)	\$1,500,000	Modifying crossover lanes at several locations, offsetting left hand turns at Grant Avenue, and intersection improvements at Woodhaven Road Off Ramp to Roosevelt Boulevard northbound.
Martin Luther King Drive Trail Modernization	City	Act 13 - Greenways, Trails, and Recreation Program (GTRP)	\$120,000	Reconstruct four miles of existing trail along the Schuylkill River from Fall Bridge to MLK Drive Bridge.
		Multimodal Transportation Fund - DCED	\$350,000	
Old City Market Street Enhancements	City	Multimodal Transportation Fund - PennDOT	\$2,650,000	Create complete street with protected bike lanes on Market Street in Old City.
		2019 Automated Red Light Enforcement (ARLE)	\$1,500,000	
Low Cost Safety Improvements 3	City	2019 Automated Red Light Enforcement (ARLE)	\$750,000	Install low cost traffic safety improvements and traffic calming measures at high- crash intersections and along high-crash corridors.
High Quality Bicycle Network	City	2019 Automated Red Light Enforcement (ARLE)	\$750,000	Install protected bicycle lanes and neighborhood bikeways along key bicycle network corridors throughout the City.
Modern Roundabouts 3	City	2019 Automated Red Light Enforcement (ARLE)	\$1,200,000	Install roundabouts, a FHWA proven safety countermeasure, at high-crash intersections.
Intersection Modifications 4	City	2019 Automated Red Light Enforcement (ARLE)	\$1,000,000	Construct intersection modifications, including curb extensions, at high-crash intersections.
LED Street Lighting 4	City	2019 Automated Red Light Enforcement (ARLE)	\$1,000,000	Install LED street lights along high-crash corridors.
5th St.: Spring Garden StHunting Park Ave.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$4,793,814	Install traffic safety countermeasures and modernize traffic signals on 5th Street between Spring Garden Street and Hunting Park Avenue.
63rd St.: Cobbs Creek PkwyLancaster Ave.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$6,432,400	Install traffic safety countermeasures on 63rd Street/Cobbs Creek Parkway from Lancaster Avenue to 62nd Street including modernized signals and a single-lane roundabout at Cobbs Creek Parkway and Spruce Street/Marshall Road.
Broad St.: Alleghany AveRoosevelt Blvd.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$1,075,782	Install traffic safety countermeasures on North Broad Street between Allegheny Avenue and Roosevelt Boulevard including concrete medians with pedestrian refuges.
Castor Ave.: Comly St Rhawn St.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$2,676,000	This project will implement a road diet, upgrade signals, and add left turn lanes to the project area.
Castor Ave. Roundabout	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$2,145,400	Roundabout installation at Castor Avenue (SR 1005) and Wyoming Avenue.

Opposite Image: Logan Square, 2020

Vision Zero - YEAR THREE GRANTS

Project name	Lead Agency	Grant program(s)	Grant award	Project description
E Washington Ln: Stenton Ave. -Cheltenham Ave.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$4,259,844	Install traffic safety countermeasures on E. Washington Lane from Stenton Avenue to Cheltenham Avenue including curb bumpouts, raised crosswalks, flashing beacons, and traffic signal upgrades.
Frankford Ave.: Phase 1	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$2,533,182	Install traffic safety countermeasures on Frankford Avenue from Girard Avenue to Knights Road including signage, pedestrian countdown timers, pavement markings, ADA ramps and intersection lighting.
Frankford Ave.: Phase 2	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$7,806,669	Install traffic safety countermeasures on Frankford Avenue from Oxford Street to Convent Lane including modernized signals, curb extensions, and intersection lighting.
Henry Ave. Corridor Safety Improvements 1	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$16,503,000	Install traffic safety countermeasures on Henry Avenue from Lincoln Drive to Port Royal Avenue.
Henry Ave. Corridor Safety Improvements 2	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$5,952,000	Install traffic safety countermeasures on Henry Avenue from Abbotsford Avenue to Hermit Lane.
University Ave. Safety	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$2,457,528	This project involves intersection improvements including re-aligning the ramp coming off I-76 EB, pedestrian improvements, and upgrades
Veree Rd.: Bloomfield AveRed Lion Rd.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$1,731,458	Install traffic safety countermeasures and modernize traffic signals on Verree Road from Bloomfield Avenue to Red Lion Road.
Vine St.: 7th StBroad St.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$1,634,286	Install traffic safety countermeasures on Vine Street from 7th Street to Broad Street including a road diet, curb protected bike lanes, and traffic signal improvements.
Welsh Rd.: Alburger AveKismet Rd.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$2,290,309	Install traffic safety countermeasures on Welsh Road from Alburger Avenue to Kismet Road including a road diet, pedestrian countdown timers, and signal traffic signal upgrades.
Wyoming Ave.: Roosevelt Blvd Whitaker Ave.	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$2,847,000	Install traffic safety countermeasures on Wyoming Avenue from Roosevelt Boulevard to Whitaker Avenue.

Safe People

In Year Three, the City received one grant, totaling \$230,204 to support Vision Zero education and awareness.

Project name	Lead Agency	Grant program(s)	Total Project Cost	Project description
Vision Zero Community Traffic Safety Education	City	Community Traffic Safety Grant Program (CTSP)	\$230,204	Promote awareness about Vision Zero.

Vision Zero - YEAR THREE GRANTS

Safe Streets (Planning)

In Year Three, the City announced five planning grants, totaling \$1,250,000 of investment to support Vision Zero focused studies.

Project name	Lead Agency	Grant program(s)	Total Project Cost	Project description
Philadelphia Complete Streets Delivery Program	City	Transportation and Community Development Initiative (TCDI)	\$85,000	Update and align key resources guiding the design for Great Streets in Philadelphia: the Complete Streets Design Handbook and the City's Traffic Standards.
Philadelphia Trail and Sidepath Maintenance	City	Transportation and Community Development Initiative (TCDI)	\$60,000	Develop best practices and strategies for maintenance of existing and future trails.
25th St. Corridor Concepts	City	Transportation and Community Development Initiative (TCDI)	\$65,000	Evaluate 25th Street from Washington Avenue to Passyunk Avenue.
North Philadelphia Transit Improvements	City	Transportation and Community Development Initiative (TCDI)	\$90,000	Develop plans for Complete Streets improvements for Olney Avenue.
SR 0001 Roosevelt Blvd. IHSDM Study	PennDOT	PennDOT Highway Safety Improvement Program (HSIP)	\$950,000	This Interactive Highway Safety Design Model (IHSDM) study will look at two sample sections, which are being selected as representative of Roosevelt Boulevard north end and south end of the Boulevard. These two selections have curves and high ADT intersections within them and represent Roosevelt Boulevard as a whole. First area is F Street to Pratt Street. Second area is Grant Avenue to Red Lion Road.

In Progress Construction Grants

The City has 20 projects in progress, totaling \$22,499,934 of investment to support projects along High Injury Network corridors. It is our expectation that construction on each project will begin in the next three to five years.

Project name	Lead Agency	Grant program(s)	Total Project Cost	Project description	Status
Adams Ave./	City	Multimodal Transportation Fund - PennDOT	\$1,100,000	Improve signal timing and intersection geometry at Adams/ Summerdale Avenues & Roosevelt Boulevard.	Design
Summerdale Ave. & City Roosevelt Blvd.	City	Multimodal Transportation Fund - DCED	\$500,000	Improve signal timing and intersection geometry at Adams/ Summerdale Avenues & Roosevelt Boulevard.	
Andrew Hamilton School Vision Zero Safety Improvements	City	Multimodal Transportation Fund - DCED	\$500,000	Install Safe Routes to School safety improvements around Andrew Hamilton Elementary in West Philadelphia.	Design

Vision Zero - YEAR THREE GRANTS

Project name	Lead Agency	Grant program(s)	Total Project Cost	Project description	Status
Roosevelt Boulevard Pedestrian Safety & Direct Bus Improvements	City	Transportation Alternatives Set-Aside Program	\$1,000,000	Sidewalk improvements at six future Direct Bus stations and construction of one Direct Bus station for northbound service at North Broad Street & Roosevelt Boulevard.	Design
South Broad St. & Locust St. Modified Urban Intersection	City	Transportation Alternatives Set-Aside Program	\$1,000,000	Construction of modified raised intersection at Broad and Locust Streets featuring ADA access and improved crosswalks.	Design
Cramp Elementary School Vision Zero Safety Improvements	City	Transportation Alternatives Set-Aside Program	\$995,000	Install Safe Routes to School safety improvements around Cramp Elementary in North Philadelphia.	Construction
North Broad St Vision Zero Priority Corridor	City	Transportation Alternatives Set-Aside Program	\$1,000,000	Install raised medians on North Broad Street, between Girard Avenue to Cecil B. Moore Avenues.	Construction
South Broad St. Sidepath, Phase 1	City	Transportation Alternatives Set-Aside Program	\$997,000	Design and construction of the first phase of a sidepath on the west side of South Broad Street, between Pattison Avenue and the Navy Yard.	Design
Neighborhood Slow Zone Program	City	Automated Red Light Enforcement (ARLE)	\$1,000,000	Establish a citywide program to implement low cost strategies in neighborhoods to slow driver speeds and encourage safe driving behaviors.	Design
Roosevelt Blvd. Pedestrian Safety Improvements	City	Automated Red Light Enforcement (ARLE)	\$500,000	Support critical pedestrian safety improvements along Roosevelt Boulevard to promote safe transit access.	Construction
Citywide Sidepaths	City	Automated Red Light Enforcement (ARLE)	\$500,000	Design and construction of citywide sidepaths.	Design
Roosevelt Blvd. Direct Bus, Phase B	City	Multimodal Transportation Fund - PennDOT	\$900,000	Build eight new bus plazas at four key intersections along Roosevelt Boulevard.	Design
Chestnut Hill Lighting Project	City	Multimodal Transportation Fund - DCED	\$225,000	Update street and pedestrian lighting in Chestnut Hill on Germantown Ave from Mermaid to Chestnut Hill.	Design
Old City Market St. Vision Zero Improvements	City	Multimodal Transportation Fund - PennDOT	\$3,000,000	Create complete street with protected bike lanes on Market Street in Old City.	Design
Parkside Ave. Vision Zero Corridor Project	City	Multimodal Transportation Fund - PennDOT	\$2,682,934	Improve traffic safety and mobility on Parkside Avenue from Girard Avenue to Bryn Mawr Avenue and install protected bike lanes.	Design

Vision Zero - YEAR THREE GRANTS

Project name	Lead Agency	Grant program(s)	Total Project Cost	Project description	Status
Haverford Ave. Intersection Improvements	City	Multimodal Transportation Fund - DCED	\$600,000	Install signals and curb extensions on Haverford Avenue at Rhoades Street and Sherwood Road.	Construction
Neighborhood Slow Zone Program	City	2018 Automated Red Light Enforcement (ARLE)	\$1,500,000	Continue the citywide program to implement low cost strategies in neighborhoods to slow driver speeds and encourage safe driving behaviors.	Design
Modern Roundabouts	City	2018 Automated Red Light Enforcement (ARLE)	\$2,000,000	Install roundabouts, an FHWA proven safety countermeasure, at high-crash intersections.	Construction
LED Street Lighting	City	2018 Automated Red Light Enforcement (ARLE)	\$1,000,000	Install LED street lights along high- crash corridors.	Construction
Cobbs Creek Safety Improvements	City	2018 Automated Red Light Enforcement (ARLE)	\$1,500,000	Improve traffic safety and mobility along Cobbs Creek Parkway.	Design

Completed Planning Grants The City has \$655,805 in grants and completed work for three planning studies to support projects along High Injury Network corridors.

Project name	Lead Agency	Grant program(s)	Total Project Cost	Project description
Vision Zero Pedestrian Safety Study & Action Plan	City	Transportation & Community Development Initiative (TCDI)	\$100,000	Analyze pedestrian-involved injury to identify trends; develop a Pedestrian Safety Action Plan; develop a pedestrian safety workshop in support of the study's findings.
Complete Streets	City	Transportation & Community Development Initiative (TCDI)	\$100,000	Develop recommendations for safety improvements that promote walking and biking: North Broad Street & Olney Avenue; Fox Chase Town Center; Lehigh Avenue from Kensington to Aramingo Avenues.
Vision Zero Community Traffic Safety Education	City	Community Traffic Safety Grant Program - PennDOT	\$455,805	Promote awareness about Vision Zero.

Safe Speeds

In order to reduce traffic fatalities, it is necessary to manage speeds. Vehicle speed increases both the likelihood of a crash, as well as the severity of the crash.

The human body has a limited tolerance to withstand impacts at speeds higher than 20 miles per hour. Crashes at higher speeds are more forceful and thus more likely to be fatal, especially for people walking and biking. In order to reduce traffic fatalities, our transportation system should be designed for reasonable speeds. In Philadelphia, approximately 36% of the city's traffic-related deaths are a result of aggressive driving, which includes speeding and failure to yield.

SPEED KILLS

WHEN A PERSON IS HIT **BY A DRIVER AT...**

Automated Speed Enforcement

In 2018, with support of the State Legislature and City The Slow Zone Program began in 2018 to respond Council and the partnership of the Philadelphia Parking to Philadelphia residents' common concerns about Authority, a five-year pilot program started to install speeding on their neighborhood streets. The program Automated Speed Enforcement on Roosevelt Boulevard. expands traffic calming options from a single block The pilot location is 12 miles along Roosevelt Boulevard, to entire zones of residential streets. In 2019, the City between 9th Street and the City's boundary with Bucks received Slow Zone applications from 40 neighborhoods across the Philadelphia. Two slow zones were chosen County. from applicants in the first year of the program - the Between 2015 and 2019 on this section of the Boulevard, Fairhill neighborhood Slow Zone and the Willard there were 2,575 crashes resulting in 66 deaths and Elementary School Slow Zone. With this Plan, the City is 92 serious injuries. In fact, 9 percent of all fatal crashes announcing two more Slow Zones, Tenth Memorial and in the City happened on this stretch of the Boulevard West Passyunk. Using a co-design process, community during these years. Speed cameras have been shown members and City staff identify specific traffic safety to be an effective crash reduction tool in peer cities, like concerns, analyze potential engineering solutions, in New York City where speeding at camera locations and allocate budget for constructing roadway safety decreased by 63 percent and fatal crashes decreased improvements. An additional Slow Zone is also currently by 55 percent following the installation of an automated being designed surrounding Cramp Elementary School speed enforcement program (NYCDOT Automated with neighborhood residents using grant funding Speed Enforcement Program Report 2014-2017). secured by the Streets Department.

Although still in its first year, the City and the PPA are monitoring the program and will recommend the pilot becomes permanent if it successfully reduces crashes and dangerous driving behaviors.

Safe Speeds

Slowing down saves lives.

Neighborhood Slow Zones

In 2021, the City will launch a new round of Neighborhood Slow Zones to design more traffic calming solutions in partnership with local community members.

MORE THAN A STATISTIC

"On November 11, 2016, Erin Wilson was struck and killed by a reckless driver while crossing a street in Kensington. The driver was speeding and ran the red light. The driver went home but Erin was taken to the City morgue. She was a social worker and was leaving her internship at Episcopal Hospital Psychiatric Unit the day of the crash. Erin was a daughter, a sister and a friend. She was fearless, smart, funny and had her whole life ahead of her." - Elizabeth Daley (Erin's Mother)

Safe Speed Limits

Setting or lowering default citywide speed limits is an inexpensive, scalable way to quickly improve safety outcomes. A growing body of studies show that speed limit changes alone can lead to measurable declines in top level speeding even without enforcement or engineering changes. For example, in Boston reducing the citywide speed limit to 25 mph from 30 mph resulted in 29 percent reduction in episodes of excessive speeding³. Because of this, many cities have begun to set safe default citywide speed limits in an effort to achieve Vision Zero,

Crashes may be the result of mistakes, but death and severe injury can be prevented if we design and manage streets for slower vehicular speeds.

Through a focus on a safe systems approach, we can work to reduce speeding and we can save lives.

Reduced speeds result in lowered injury severity if a crash occurs, and slower speeds reduce the likelihood of crashes occurring at all.

³Vanterpool, Veronica. "Cities Can Look to Boston, IIHS for Inspiration to Reduce Speed Limits - Vision Zero Network." Vision Zero Network | Making Our Streets Safer, Vision Zero Network, https://visionzeronetwork.org/cities-can-look-to-boston-iihs-for-inspiration-to-reducespeed-limits/.

Safe Speeds

SAFE SPEEDS STRATEGIES AND ACTION ITEMS

STRATEGIES:

Reduce speeds to match the survivable design of the street

2 Seek State approvals to implement safe speeds

Safe Speeds Action Item	Descr
Strategy 1) R	educe speeds to match the survivab
1.1.1	Implement signal progression to supp
1.1.2	Design residential streets for 20 mph t measures
1.1.3	Complete a review of traffic calming re communications and user experience incorporate recommended improvem
1.1.4	Evaluate the relationship between traf gun violence to determine relationship
Strategy 2) S	eek State approvals to implement sa
1.2.1	Expand automated speed enforceme schools and all HIN streets, upon pass
1.2.2	Analyze priority locations for expande
1.2.3	Implement local control of speed limit legislation
Strategy 3)	Continue Neighborhood Slow Zones
1.3.1	Continue Neighborhood Slow Zone pr neighborhoods to apply
1.3.2	Pilot a School Slow Zones program to with students, caregivers, teachers, ar

GOAL: Prevent fatal crashes by managing vehicle speeds

3. Continue Neighborhood Slow Zones program

otion	Responsible Agency
e design of the street	
rt a 25 mph citywide speed limit	OTIS/Streets
rget speeds using traffic-calming	OTIS/Streets/PCPC
quest processes, including valuation and work with partners to nts based on the findings	OTIS/Streets/311
c violence, community safety, and and potential solutions	OTIS/Mayor's Office/ Health
e speeds	
program to within ¼ mile of all ge of State enabling legislation	OTIS/Streets
automated speed enforcement	OTIS
, upon passage of State enabling	OTIS/Streets
program	
gram with regular opportunities for	OTIS
esign safer streets in partnership I school administrators	OTIS

Washington Avenue

Washington Avenue had 254 crashes, resulting in four fatalities and seven serious injuries (2012-2018). A disproportionate number of people walking and biking were involved in crashes on Washington Avenue (41 percent) compared with citywide rates (18 percent).

In 2020, the City adapted outreach to obtain public opinion on alternatives while socially distanced. Once the COVID-19 pandemic hit the US, innovative methods were adopted to engage the public including an online survey, videos, printed mailers, and social media in English, Spanish, Chinese, and Vietnamese. Over 5,400 people participated in the public process, a response 18 times higher than typical for this type of project.

As a result of community input, the City has introduced plans to change the existing cross section of Washington Avenue from five vehicle lanes with standard bicycle lanes to three vehicular lanes with a parking protected bicycle lane. This layout will reduce pedestrian exposure to moving automobiles. People riding bicycles will also be better separated from moving automobiles. New parking and loading regulations will help improve both commercial and private vehicle operations.

Above Image: Future Layout of Washington Avenue

MORE THAN A STATISTIC

"On June 13, 2017, Peter Javsicas was waiting to cross a street in Center City, Philadelphia when he was struck by a driver who lost control of a van, jumped the curb and hit him. He died several hours later. Peter was a beloved father, grandfather, husband and friend. He had many careers in his life, but his last one was as a transportation activist who worked to make trains, buses, streets, and sidewalks safer and more accessible for all users."

- Anne, Laura, and Aaron Javsicas (Peter's family)

American Street

The two-mile corridor of American Street between Girard and Indiana Avenues broke ground in 2018 and is scheduled for completion in early 2021. The improvements planned for this historically industrial corridor that connects the Northern Liberties and Fairhill neighborhoods, include rehabilitating sidewalks with extensions at intersections that reduce pedestrian crossing distances, new medians with green stormwater infrastructure, protected bike lanes, new street trees, and new lighting. The street will be resurfaced with new pavement markings and signs installed. This project highlights the possibilities of reimagining a wide roadbed and reallocating space to different uses.

High Quality Bike Network

There are more than 280 miles of on-road bikeways in Philadelphia as of January 2020. Each paving season, there is a series of new, upgraded, and existing bikeways repaved and restriped by City and PennDOT crews. Between 2016-2020, the City of Philadelphia has installed 45 miles of bike lanes, including over 10 miles of protected bike lanes. The new and upgraded bicycle facilities create a network that enables more Philadelphians to bicycle for commuting, transportation, and recreation. Protected bike lanes are effective traffic calming and safety tools – they have been shown to reduce total crash rates by about 50% compared to streets with no bike lanes⁴. Philadelphia is committed to meeting the goal of building 40 miles of protected bike lanes by 2025.

Safe Streets ROUTE FOR CHANGE ON ROOSEVELT BOULEVARD

R HOLME AV

CRASH CLUSTERS

- 01 WHITAKER AVENUE CLUSTER
- 02 5TH STREET CLUSTER
- 03 ADAMS AVENUE (east) CLUSTER
- 04 OXFORD CIRCLE CLUSTER
- 05 TYSON STREET CLUSTER
- 06 COTTMAN AVENUE CLUSTER
- 07 FRONT STREET / RISING SUN AVENUE CLUSTER
- 08a 9TH STREET CLUSTER
- 08b REVERE STREET CLUSTER
- 08c WOODWARD STREET CLUSTER
- 11 SOUTHAMPTON ROAD CLUSTER
- HIGH INJURY NETWORK

W GODFREY AVE

W OLNEY AVE

To achieve Vision Zero in Philadelphia, Roosevelt Boulevard needs significant and sustained effort for improvement. Roosevelt Boulevard has one of the highest rates of crashes in the City. In fact, crashes along this 12-mile corridor (Broad Street to the County line) account for 9 percent of all citywide fatal and serious injury crashes, even though this corridor is less than 0.5 percent of the City's total street miles. People driving cars or traveling as passengers are exposed to high risk of crashes. 60 percent of the crashes on the Boulevard were either speeding-related or a result of aggressive driving. According to crash data, people involved in red light-running, hitting fixed object, or head-on collision crashes were more likely to be seriously injured or killed. The high vehicle speeds are especially deadly for people walking along or across the Boulevard: they are 43 times more likely to be killed in a crash than motor vehicle occupants (Data Source: PennDOT 2015 -2019).

Safe Streets

In 2016, the Roosevelt Boulevard "Route for Change" Program was established in order to identify key recommendations. The City hosted five rounds of public forums, totaling 18 meetings, to gather input. The planning, engineering, and engagement was distilled into two compelling alternatives for the longterm planning horizon of 2040⁵. Between 2017-2020 the program implemented a first phase of safety interventions.

- Automated Speed Enforcement Following the lanes of the Boulevard onto Adams Ave., which approval of Senate Bill No. 172, automated speed will make it easier and safer for pedestrians to cameras were installed in 2020 on Roosevelt cross; Boulevard from 9th Street to the Bucks County line. Realigning the crosswalk so people can walk As this pilot program continues until 2023, the City across the Boulevard and be separated from the will be working with PPA in order to analyze progress high-volume double right turn movement from and determine how the program improves driving Summerdale Ave. onto southbound Boulevard. behaviors and reduces fatalities. (Also see page 43.)
- Improved pedestrian crossings The Boulevard's Boulevard Direct Bus is a bus route that offers unique inner (express) and outer (local) lane more frequent bus service and fewer stops than the configuration results in an extremely wide roadway local Route 14 between Frankford Transportation along much of corridor that is challenging for Center and the Neshaminy Mall. The City installed pedestrians to cross safely. The Route for Change 10 new bus stations—two at each intersection within Program commits to improving pedestrian safety by: Philadelphia—creating safe, dedicated space for SEPTA passengers. These new stations have seen a » Providing adequate pedestrian crossing time by 20% increase in transit ridership since installation.

Future Improvements

- Summerdale & Adams Intersection Safety Project One of the worst concentrations of crashes on the Boulevard is on the S-Curve, where a set of sharp curves between Whitaker Ave. and Godfrey Ave. and the presence of speeding drivers contributes to a disproportionate number of crashes. Based on traffic modeling conducted at Summerdale Ave. & Adams Ave., the City is improving safety by:
- » Making the approaching side streets one ⁵City of Philadelphia, Ofiice of Transportation, Infrastructure, and through lane in both eastbound and westbound Sustainability. "Home | Route for Change." Route for Change, http:// directions; rooseveltblvd.com/

The City will release the complete **Route for Change** plan in early 2021.

Tightening the curb line outside Friends Hospital to slow drivers turning from the northbound

- increasing the existing traffic signal operations from a 90-second cycle to 120-seconds at approximately 25 signalized intersections;
- Straightening or realigning the crosswalks and adjusting curb ramp locations at approximately 11 intersections:
- Extending curbs at approximately 10 intersections to reduce pedestrian crossing distances.
- **Direct Bus B** will build on the successfully collaboration between the City of Philadelphia and SEPTA to expand enhanced bus service. This next phase will connect Frankford Transportation Center to the Broad Street Line and the new Wissahickon Transportation Center via a limited-stop service on Roosevelt Boulevard and Hunting Park Avenue. The service will stop at upgraded stations on both corridors, similar to the Direct Bus stations at now on Roosevelt Boulevard.

Safe Streets

Safe Streets

SAFE STREETS STRATEGIES AND ACTION ITEMS

GOAL: The City implements street designs and policies that maximize safety for the most vulnerable roadway users

STRATEGIES:

1. Invest in safety improvements on the Vision Zero Capital Plan locations	2. Engage with community members proactively on street safety improvements	3. Make cost-effective safety improvements systematically and rapidly on High Injury Streets	4 Incorporate safety improvements into upcoming projects in the street right-of-way
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Safe Streets Action Item	Description	Responsible Agency
Strategy 1)	Invest in safety improvements on the Vision Zero Capital Plan locations	
2.1.1	Seek funding for the planning or construction of at least two High Injury Network corridors every year, using the Vision Zero Capital Plan as a prioritization tool	OTIS
Strategy 2)	Engage with community members proactively on street safety improvements	
2.2.1	Engage with community members in planning for at least two High Injury Network corridors every year for construction in future years, using the Vision Zero Capital Plan as a prioritization tool	OTIS
2.2.2	Building on the successes of COVID-19 street closures to streamline the existing parklet/pedestrian plaza programs and expand community led street improvement opportunities	OTIS/Streets
Strategy 3)	Make cost-effective safety improvements systematically and rapidly on High Inj	ury Streets
2.3.1	 Update the Philadelphia internal and external street design guidance documents to ensure alignment and provide guidance on safety improvements such as: Design standards for protected bike lanes and protected intersections; Design standards for hardened centerlines; Other innovative roadway treatments in conjunctions as they are developed and evaluated 	OTIS/Streets
2.3.2	Upgrade two protected bike lanes to more permanent materials along High Injury Network	OTIS/Street
2.3.3	 Reduce pedestrian crossing distances on at least five High Injury Network intersections per year using proven countermeasures such as: median islands/pedestrian refuge islands, corner radius reductions, narrowed lanes/roadway reallocation, curb extensions 	Streets

Safe Streets Action Item	Des
Strategy 4)	Incorporate safety improvement
2.4.1	Install Leading Pedestrian Intervals on a priority corridors and intersections when
2.4.2	Convert at least 75% of all citywide stre
2.4.3	Continue to install pedestrian countdow 34 feet wide
2.4.4	Install 40 miles of protected bicycle lan
2.4.5	Install four more neighborhood bikeway
2.4.6	Implement a bike green wave program at safe speed via traffic signal timing on corridors
2.4.7	Release a map of the long-term vision f
2.4.8	Continue the routine Streets Departmen pedestrian/bicycle improvements, as ir
2.4.9	Implement one roundabout, mini round
2.4.10	Pilot bus/trolley boarding islands on at
2.4.11	Install and evaluate a protected interse
2.4.12	Install at least three curbless streets fol development review process
2.4.13	Install one segment of sidewalk level pr Network each year via the developmen
2.4.14	Integrate implementation of multi-mod roads and reconstruction of State bridg
2.4.15	Update the City's Complete Streets Che for development review processes, incl
2.4.16	Evaluate TOD Overlay District for ways t biking, and walking
2.4.17	Continue to improve the safety and mu development review processes and eva

scription

Responsible Agency

ts into upcoming projects in the street	right-of-way
all pedestrian priority and safe routes re possible	Streets
et lights to LED	Streets
vn timers at all signalized intersections over	Streets
nes on the High Quality Bike Network	Streets/OTIS
ys on the High Quality Bike Network	Streets/OTIS
to create prioritization for people biking at least two High Quality Bike Network	Streets
for the High Quality Bike Network	PCPC/OTIS
nt resurfacing program and include nformed by CONNECT priorities	Streets/OTIS
labout, or neighborhood traffic circle a year	Streets
least two High Injury Network corridors	Streets/OTIS/ SEPTA
ction	Streets
llowing recommendations from the	PCPC/OTIS
rotected bike lane on the High Quality Bike It review processes	PCPC/OTIS/ Streets
lal safety improvements into paving of State Jes through PennDOT Connects	Streets
ecklists and make a consistent review tool luding Civic Design Review	PCPC/OTIS/ Streets
to strengthen mode shift especially transit,	PCPC/OTIS
ltimodal use of streets through aluating impacts of surrounding land uses	PCPC/OTIS/ Streets

Safe People

Safe People

Philadelphians are at the center of Vision Zero. All **Automated Enforcement** Philadelphians deserve safe streets. We are working to Automated enforcement is one of the most efficient and ensure that all residents and visitors feel part of a traffic equitable ways to reduce dangerous driving behaviors safety culture in Philadelphia. This Vision Zero Action like red light running. This strategy can also help to Plan 2025 commits to making sure people living in every reduce opportunities for bias in officer-initiated traffic Philadelphia neighborhood have access to culturally and stops. In 2020 Philadelphia began the Automated Speed linguistically appropriate resources about traffic safety. In Enforcement (ASE) program, which built on the success partnership with community leaders, local organizations, of the Automated Red Light Enforcement Program (ARLE) and elected officials, the City wants all Philadelphians to launched in 2002. Together, the ARLE and ASE programs create a culture of traffic safety. use cameras at high-volume and high-risk locations to **Communications Campaign** reduce dangerous driving behaviors that are linked to crashes that often result in death or serious injury.

When automated speed enforcement cameras were installed in 2020 along Roosevelt Boulevard from 9th Fees collected from automated enforcement are Street to the Bucks County line, a 60-day warning period invested back into local engineering solutions to ensure allowed residents time to adjust to the new system. road conditions are less likely to induce dangerous During that time the City rolled out a bilingual public behaviors. While the purpose of the program is to information campaign to alert residents and better reduce crashes rather than raise revenues, over \$23 inform the public about the purpose of speed cameras million from state funded ARLE program have been to save lives. In order to reach people living or driving by re-invested in traffic safety improvement projects in the camera locations, a series of videos and blog posts Philadelphia since 2017. In the long-term, automated in English and Spanish were distributed via geo-targeted enforcement reduces dangerous behaviors and the advertising placement in order to reach people living or likelihood of high speed and fatal crashes. Philadelphia driving by each of the camera locations. The campaign aims to expand automated enforcement in more reached over 250,000 people through Facebook, locations by 2025, focusing on high-speed corridors and Instagram, and Twitter. The campaign placed over high-crash intersections. 1,000 ads on radio and throughout the city. Following **Building Awareness in the Media** the campaign, the City conducted focus groups to better understand which elements of the campaign's Researchers at Texas A&M University and Rutgers messaging were effective and will use this information to University have demonstrated that the way the news inform future campaigns about automated enforcement media report on traffic crashes involving people walking and Vision Zero.

Opposite Image: Vision Zero for Youth, 2019 Below Image: We Meet In The Street Campaign, 2018

and biking has a measurable impact on public support for improvements to make our roads safer for everyone⁶. The City, in partnership with the Regional Traffic Safety Task Force, held a panel in 2020 with members of the local press to highlight best practices for reporting on crashes and how to provide context and data the media on the systemic nature of crash problems. Each year leading to 2025, the City will continue to build understanding about Vision Zero among local press as tool to change public perception and better inform Philadelphians about traffic safety.

⁶Goddard, Tara, et al, "Does News Coverage of Traffic Crashes Affect Perceived Blame and Preferred Solutions? Evidence from an Experiment - ScienceDirect." ScienceDirect.Com | Science, Health and Medical Journals, Full Text Articles and Books., Dec. 2019, https://www. sciencedirect.com/science/article/pii/S2590198219300727.

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Safe People

Safe People: **VISION ZERO FOR YOUTH**

Young people have an important role to play in Vision Zero. On average five children in Philadelphia experience a traffic crash every day. Young people deserve to be able to get to school, go to the playground, or walk to a friend's house without fear. Young people are vulnerable roadway users. Slower speeds, safer vehicles, and safer streets - all of these aspects of a safe system can keep children safe.

Understanding Children and Youth Pedestrian Crashes

In 2019, the City was selected for the Vision Zero for Youth Demonstration Project. This two year project is led by the Pedestrian and Bicycle Information Center with funding from the Federal Highway Administration. It emphasizes making Philadelphia safer for walking and reducing deaths and injuries starting with children. The team focused on child pedestrian crashes and found one guarter of Philadelphia's pedestrian crashes involved one or more person under the age of 19.

Crash analysis showed child crashes happen in different places than adult crashes. In particular, rates of child pedestrian crashes are two to three times higher on roads with the following risk variables:

- Posted speed greater than 25 mph;
- AADT of 5,000⁷ or greater;
- More than one vehicle lane in each direction.

The study found that three-quarters of all child pedestrian crashes happen during the day and that children are more likely to be struck mid-block when compared to adults. In addition, the findings showed 78% of child pedestrian crashes occurred within one guarter mile of a school. These findings highlight the importance of proactively implementing countermeasures near schools and in high crash locations to reduce the risk of future crashes that impact children. This study also highlights the importance of continuing to separate data by age and other demographics to better understand how crashes impact different groups.

	City begins partnership with Vision Zero for Youth		City re-launc Safe Routes Philly progra provides tecl assistance to elementary s	
2018	2019	2020	2021	
City hires Safe Routes Philly coordinator		City develops new curriculum for elementary, middle, and high school, develops new brand, and selects 3 schools for walk audits		

Safe Routes Philly

Safe Routes Philly is the City's youth bicycle and pedestria safety education program. Through Safe Routes Philly (SRP), Philadelphia educators receive transportation safety education, teacher training, and walking and biking program support. In addition to classroom learning and ou of school time activities, SRP supports events such as Wal and Bike to School Day, walking school buses, and group bicycle activities.

In 2020, the City achieved major milestones in updating SRP to align with Vision Zero goals. This included creating new elementary and high school curriculum, new brand identity, and selecting three school sites for walk audits. By encouraging youth involvement in traffic safety, these efforts build a better traffic safety culture for future generations, as we achieve Vision Zero on Philadelphia streets.

STE ROUTES PHILLY STEP UP | RIDE ALONG

Timeline and Milestones

ches Safe Routes am & Philly reaches 25% of SDP hnical 12 elementary schools schools 2022-2024 2025 City provides technical assistance to 12 elementary schools per year and conducts additional trainings for pre-K, middle schools and high schools

City develops Vision Zero Youth Ambassador Program

an	The powerful voices of youth are a critical piece to the
	success of in Vision Zero. In D.C., NYC, and Camden,
	youth leaders have led public outreach projects to
l	engage the community in conversations about traffic
ut	safety and have brought innovative ideas to the table.
lk	By 2025, Safe Routes Philly commits to developing a
	Vision Zero Youth Ambassador program to harness
	the leadership and energy of youth to make proactive
	change in their neighborhoods.
)	

Safe People

Safe People

SAFE PEOPLE STRATEGIES AND ACTION ITEMS

GOAL: Empower Philadelphians to spread Vision Zero messaging, reach culture shift goals, and take community action

STRATEGIES:

Prioritize youth in Visior Zero program conversations	Philadelphia n s and	2 Expand access to quality traffic safety education and co- design processes that incorporates input from Philadelphians	3 Amplify Vision Zero communication to build a traffic safety culture and educate Philadelphians about safe behaviors	4. Strategically and equitably expand automated enforcement to reduce the most dangerous behaviors
Safe People Action Item		Descriptio	on	Responsible Agency
Strategy 1) P	rioritize Phila	delphia youth in Vision Zer	o programs and conversations	
3.1.1	Expand Safe prioritizing scl	Routes Philly program to 25% hools near locations with hig	6 of Philadelphia schools by 2024 h rates of crashes involving yout	otis
3.1.2	Develop a Vis that promotes involving yout	sion Zero Youth Ambassador s traffic safety in neighborhoo th	program within Safe Routes Phil ods with high rates of crashes	ly otis
3.1.3	Develop and deliver training to school principals on how to implement safe pick-up and drop-off safety training for School District schools		e OTIS/SDP	
3.1.4	Conduct at le school champ	ast two Safe Routes Philly tra pions, and community leader	aining sessions for educators, rs each year	OTIS
Strategy 2) E in	xpand access acorporate inp	to quality traffic safety ed out from Philadelphians	ucation and co-design process	ses that
3.2.1	Develop a Vis recommenda	ion Zero Leader multilingual tions on how to take action i	l toolkit with specific n communities	OTIS/Safe People Subcommittee
3.2.2	Build a Vision action, partne groups, hospi neighborhood	Zero Philadelphia network t ering with at least two organi tals, insurance companies, fa d businesses	o share resources and take izations per year such as: health aith-based communities, or	Safe People Subcommittee
3.2.3	Organize two staff involved	trainings per year on innova in roadway safety efforts	tive traffic safety topics for City	OTIS
3.2.4	Seek partners school and hig	ships to develop STEM traffic gh school levels for Safe Roi	safety curriculum for middle utes Philly	OTIS
3.2.5	Offer Vision Z	ero module to Citizens Planr	ning Institute course at least twic	e OTIS/PCPC
3.2.6	Conduct train implications, I	ings with Philadelphia Police parriers, and limitations of en	e leadership addressing the forcing against aggressive drivir	OTIS/PPD

Safe People Action Item	Descrip	
Strategy 3) A	mplify Vision Zero communications to ducate Philadelphians about safe beh	
3.3.1	With regional partners, develop worksho media on how to best communicate info Vision Zero	
3.3.2	Continue to provide accurate and timely appropriate reporting on traffic crashes	
3.3.3.	Continue to promote traffic safety comn in the context of specific projects	
3.3.4	Continue to incorporate research on effe communications including campaign ar adjust for effectiveness	
3.3.5	Support transition of crossing guard pro crash data to prioritize guards at high yc	
3.3.6	Based on crash data, roll out yearly Visio to raise awareness about dangerous dri driving and speeding	
3.3.7	Publish a quarterly Vision Zero newslett	
3.3.8	Produce all public Vision Zero education and Spanish, and any other languages v reflecting the neighborhood languages	
3.3.9	Honor traffic violence victims by includir communications messaging in partners	
3.3.10	Support new Traffic Safety Officer position Zero	
3.3.11	Create a mode shift toolkit and impleme employers in Philadelphia's Transportat (TMAs) and Mobility Alternative Program transportation	
Strategy 4) Strategically and equitably expand aut most dangerous behaviors		
3.4.1	Pilot bus lane enforcement through onb	
3.4.2	Expand Automatic Red Light program a locations	
3.4.3	Develop and implement an education c automated enforcement.	

otion	Responsible Agency
build a traffic safety culture and aviors	
op and toolkit for professional ormation about traffic crashes and	OTIS/Regional Safety Task Force
y crash data to local press to aid	OTIS/PPD/Mayor's Office
munications messages citywide and	OTIS/Mayor's Office
ective messaging into Vision Zero nalytics to track performance and	OTIS
ogram to School District and provide outh pedestrian crash intersections	OTIS/MDO/SDP
on Zero public education campaigns iving behaviors such as aggressive	OTIS
ter	OTIS/Safe People Subcommittee
n campaigns bi-lingually, in English whenever possible/whenever	OTIS/Office of Immigrant Affairs
ng their stories in Vision Zero hip with Families for Safe Streets	OTIS/Families for Safe Streets
ion and provide training about Vision	OTIS/Mayor's Office
ent with at least three large tion Management Associations n (MAP) to incentivize active	Clean Air Council/Bike Coalition of Greater Philadelphia/Safe People Subcommittee
tomated enforcement to reduce the	e
poard bus cameras by 2025	OTIS/SEPTA
at highest red light running crash	OTIS/PPA
campaign in advance of any	OTIS

Safe Vehicles

Safe Vehicles

Safe Vehicles are an essential part of a safe transportation system. Building a safe system means making it easy for people to choose to walk, bike, or take transit whenever possible. The City's leadership in Safe Vehicles is most influential as an employer, as the owner of vehicle and bike fleets, and as an advocate for improving vehicle design standards.

Independence 🖶

Transit First

Riding transit is 10 times safer than riding in a motor vehicle⁸. In fact, cities where more people walk, bike and take transit tend to have lower rates of fatalities from crashes. To encourage more Philadelphians to use transit, it needs to be reliable and efficient. In CONNECT: Philadelphia's Strategic Transportation Plan, the City set a goal to improve bus travel times by 5% and increase the number of city residents within 1/4 mile of frequent transit by 10% by 2025. By increasing the transit mode share – the share of transit trips of total trips – Philadelphia will also be working towards a safer transportation system for everyone.

⁸American Public Transportation Association; Vision Zero Network. Public Transit Is Key Strategy in Advancing Vision Zero, Eliminating Traffic Fatalities. 2018, https://www.apta.com.

Riding transit is 10 **times Safer** than riding in a motor vehicle

Advocating for safe vehicles

Safety glass, seatbelts, air bags, and collision warning systems are just a few of the systems that have made the modern automobile much safer than earlier versions and resulted in a decrease in fatalities per vehicle mile traveled. New safety elements such as forward collision warning (FCW), low-speed autobrake, FCW with autobrake, lane departure warning, and side-view assist are all available now and will achieve the safety benefits of autonomous vehicles without the wait. The City of Philadelphia will continue to work through the National Association of City Transportation Officials (NACTO) and with our Federal delegation to ensure that new innovative safety features become mandatory and standard in new vehicles. The City will advocate for features that make auto-pedestrian collisions less dangerous, especially for children.

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Safe Vehicles

Safe Vehicles

Stop Lights for Philadelphia Trolleys

Philadelphia's network of trolleys has been part of the City's landscape for a hundred years. Over the years, many of these routes have been replaced by buses but SEPTA still operates six separate light rail trolley routes through the streets of Philadelphia. Over the past couple years there has been an increase in crashes between Trolleys and privately owned vehicles (POVs). Many of these incidents occur at intersections when the POVs attempt to pass a stopped trolley or attempt to turn in front of a moving trolley at the intersection. These incidents have resulted in a 15% increase in trolley intersection crashes in January – September 2020 when compared to the same months in 2019. While the Pennsylvania Motor Vehicle code prohibits passing a stopped trolley, the current statistics warrant additional mitigation strategies. In 2020, SEPTA started to retrofit their City Trolleys with an enhanced illuminated "Stop, Do Not Pass" sign on the rear panel of each trolley. This engineering safety solution activates when the trolleys are stopped, helping to capture the attention of the motor vehicle driver to take caution and remind them of the law as they approach the trolley. This is one fleet

management enhancement that SEPTA has undertaken to help reduce the number of crashes throughout the City. SEPTA is also working to pilot and evaluate the effectiveness of collision avoidance systems on trolleys and buses to further mitigate the number of crashes involving this iconic mode of transportation.

Autonomous Vehicles

If technological challenges can be overcome, autonomous or "self-driving" vehicles (AV) hold a great deal of promise to reduce traffic fatalities, congestion, and fuel consumption. There is still a great deal of uncertainty around the degree and timing of these benefits. While safely operating in limited driving environments like Interstates seems closer, an AV capable of operating in a complex urban environment seems beyond the time frame of this Vision Zero plan. The year when a substantial portion of the vehicle fleet is composed of AVs is even farther off. But strategies such as improving curbside management and prioritizing the movement of people by transit, walking, and biking will make Philadelphia a safer city, regardless of who or what is behind the wheel.

Indego expansion gives Philadelphia new mobility options

By implementing new programs that encourage more people to try biking, especially for short trips, the City can improve health, sustainability, and even congestion in Philadelphia. Bikeshare provides a safe, convenient, and relatively low-cost way for people to try cycling for the first time or to use a shared bike regularly. Since its launch in 2015, the City's bikeshare system Indego has grown to over 140 stations and is nationally recognized for bike share equity and community engagement through work with the Better Bike Share Partnership. Indego carries more than 2,000 riders on average per day and is an integrated part of Philadelphia's public transportation network.

Indego has played an especially important role in 2020 and going forward as the region is seeing increased demand for biking due to COVID-19. Indego operated continuously through 2020 out of recognition that essential workers rely on bikeshare as a safe means of transportation. Over the next five years, Indego will increase to 350 total stations and grow its service area by over 15 square miles, while significantly densifying stations within its current service area boundaries. The expansion plan also has new goals of tracking service quality and system reliability, as well as a renewed commitment to developing equityfocused strategies, such as funding expansion to underserved communities and ensuring equitable pricing mechanisms for low-income riders.

Indego System Growth

Safe Vehicles

Safe Vehicles

SAFE VEHICLES STRATEGIES AND ACTION ITEMS

GOAL: Support all Philadelphians to use the safest vehicles possible for daily trips – with transit, biking, or even walking as the priority

STRATEGIES:

1 Support transportation options that reduce driving

Pursue the latest safety features in all Vision Zero partner fleet purchases and upgrades **3.** Support safety with new and emerging mobility technologies and targeted messaging about the City's vehicle fleet

Safe Vehicles Action Item	Description	Responsible Agency
Strategy 1)	Support transportation options that reduce driving	
4.1.1	Create City department passes for SEPTA and Indego bike share to allow City employees to travel without using fleet vehicles	OTIS
4.1.2	Work with SEPTA and large employers like universities, hospitals, and the City to develop goals for providing all students/staff with transit passes, or opt-out option	OTIS/SEPTA/Clean Air Council
4.1.3	Improve bus travel times by 5% by 2025	OTIS/SEPTA
4.1.4	Increase the number of city residents within 1/4 mile of frequent transit by 10% by 2025	OTIS/SEPTA/PCPC
4.1.5	Work with Council to expand commercial trash hauling hours as part of the Congestion Omnibus Bill	OTIS
Strategy 2)	Pursue the latest safety features in all Vision Zero partner fleet purchase	es and upgrades
4.2.1	Install hands-free phone/GPS holders in all City vehicles	OTIS/Fleet
4.2.2	 Study impacts and establish funding plan for purchasing additional fleet safety equipment and technology for City vehicles, including: Warning systems Cameras Telematics 	OTIS
4.2.3	Continue to work with national partners to ensure that new innovative safety features become mandatory in new vehicles, such as safety glass, seatbelts, air bags, and collision warning systems	OTIS
4.2.4	Pilot collision avoidance systems on SEPTA trolleys and buses	SEPTA

Safe Vehicles Action Item	Description	Responsible Agency
Strategy 3)	Support safety with new and emerging mobility technologies and target messaging about the City's vehicle fleet	ed
4.3.1	 Integrate Vision Zero messaging and branding into: Risk and Fleet websites and crash related materials MDO Directive governing City vehicle policy City employee newsletter 	OTIS
4.3.2	Incorporate City fleet into citywide Vision Zero media campaign by using vehicles as moving billboards	OTIS/Fleet
4.3.3	Create public service announcement (PSAs) campaign to raise awareness of 'dooring' and install in Taxi & Limousine Division vehicles	OTIS/PPA/Bike Coalition of Greater Philadelphia
4.3.4	Work with school district to pilot automated enforcement of illegal passing of school buses	OTIS/SDP

Safety Data

Eliminating traffic-related deaths on Philadelphia streets by 2030 requires continual, data-informed prioritization of city streets.

Crash data is critical to understand the factors that may have contributed to these collisions, as well as when and where these crashes have occurred. To systemically prioritize safety interventions in 2017 the City developed Philadelphia's the High Injury Network (HIN) with the first Vision Zero Action Plan. The City committed to revising that Network with every plan to track trends in the latest crash data and create objective feedback on the effectiveness of projects.

Vision Zero's data-driven, safe systems approach can also be utilized to center equity within the City's efforts. As Vision Zero brings attention to the systemic nature of crashes, it is important to gather demographic data of all people involved in a crash to understand how transportation safety intersects with other social justice issues.

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Complete Streets Before & After Studies

Studying the safety impacts of engineering improvements is a core commitment of Vision Zero. In addition to analyzing street segments for a reduction in crashes, the City uses data analysis to understand changes in user behavior.

CHESTNUT STREET PARKING-PROTECTED BIKE LANE

SY

In 2017, one of the first parking-protected bike lanes in Philadelphia was installed on Chestnut Street between 45th and 34th Streets. This 1.1-mile stretch of Chestnut Street provides a safe connection for cyclists traveling between West Philadelphia and major employment centers in University City and Center City. This portion of Chestnut Street previously saw three times the number of crashes per mile compared to other Philadelphia streets.

After the installation of the parking-protected bicycle lane, this segment of Chestnut Street saw a 40 percent reduction in the first year and an additional 80 percent reduction in the second year of total injuries resulting from crashes. In addition crash reduction, 47 percent fewer vehicles are exceeding the posted speed limit and 81 percent more people are biking on the newly redesigned street.

MARKET STREET/JFK BOULEVARD PARKING-PROTECTED BIKE LANE

After the installation of the parking-protected bike lane, this segment of Market Street corridor saw a 13 percent reduction in number of vehicles with speeds above posted speed limit. When compared to two years earlier, 21 percent more people biking were observed.

Chestnut Street had 40% fewer injuries in year one and

80% fewer injuries in year two resulting from crashes

after the installation of a new roadway layout and parkingprotected bike lanes in 2017.

Safety Data

Market Street had a 13% reduction of speeding vehicles

after the installation of a new roadway layout and parkingprotected bike lanes in 2018.

University Partnerships

 The University of Pennsylvania and Children's Hospital of Philadelphia Center for Injury Research and Prevention, researchers used eye tracking equipment, to study bicyclists' line of sight and perceived level of safety and comfort while using the Chestnut Street protected bike lane. This study found that the participant's gaze was less fixated straight ahead, allowing the cyclist to perform in safe scanning behavior compared to cyclists on a nonprotected bike lane. The study demonstrated a new tool to gain insight into the user experience of safer bicycling infrastructure. Jefferson University Hospital Center for Injury Research Prevention⁹ is committed to launching a pilot project to gain new insight into the immediate and long-term health outcomes of patients injured in traffic crashes. The project aims to measure both the human and economic costs of crashes in Philadelphia. Researcher-physician teams at Jefferson will analyze a large database of patient healthcare data including mechanisms of injury, types of diagnoses, treatments such as surgeries or disability rehabilitation, and the financial costs of patients' entire treatment related to a crash.

Chestnut Transit Pilot

Transit is an important tool in achieving Vision Zero because riding transit is 10 times safer than riding in a motor vehicle¹⁰. In fact, cities where more people walk, bike and take transit tend to have lower rates of fatalities from crashes. To encourage more Philadelphians to use transit, it needs to be reliable and efficient. To better understand and address congestion affecting SEPTA buses, the City led the Bus Lane Enhanced Enforcement Program in 2018, to study the effects of illegal traffic behaviors on bus delays on Chestnut Street (21st -11th Streets) and Market Street (7th Street - City Hall).

¹⁰American Public Transportation Association; Vision Zero Network. Public Transit Is Key Strategy in Advancing Vision Zero, Eliminating Traffic Fatalities. 2018, https://www.apta.com.

Enhanced enforcement resulted in improved travel times for both buses and people driving. Chestnut Street saw a 6.4 percent improvement in transit travel times during the midday period, resulting in an average 2.5-minute reduction in travel time for buses traveling river to river. To implement more lasting changes, in 2019 the City initiated plans for a loading zone pilot on Chestnut Street with new loading zones implemented on every block of Chestnut Street between 20th and 6th Streets. These 20-minute loading zones allow for shortterm passenger or freight loading. In addition, the 2-hour enforced meter parking time was extended from 6AM – 2AM and two new Indego bike share stations were added.

Safety Data PEDESTRIAN SAFETY STUDY

PEDESTRIAN SAFETY PRIORITY CORRIDORS

Chestnut St Market St Chestnut St S Br

In response to rising pedestrian fatalities and severe injuries, Philadelphia received a \$100,000 Transportation & Community Development Initiative (TCDI) grant from DVRPC to develop a Vision Zero Pedestrian Safety Study and Action Plan. The plan analyzed traffic crashes, which involved at least one pedestrian and at least one injured person. The study found:

- Half of all pedestrian fatality crashes occurred on just 19 percent of street corridors classified as "Urban Arterials & Auto-Oriented Commercial/ Industrial Corridors"
- Two in three of all pedestrian injury crashes occurred at intersections
- Almost a quarter of all pedestrians killed at intersections were crossing Roosevelt Boulevard or its cross-streets

- Over half of all pedestrian fatality crashes occurred at night between 7 PM 6 AM
- The most vulnerable demographic were pedestrians over the age of 50; this demographic makes up almost 50 percent of pedestrians killed, while representing only 30 percent of Philadelphia's population.

The Pedestrian Safety Study and Action Plan identifies trends in contributing crash factors, provides policy recommendations, and a list of engineering solutions to improve Philadelphia's pedestrian safety. It also includes a list of the top priority locations to use these interventions.

CORRIDORS

- 1. Roosevelt Blvd (Schuylkill River to Bucks County Line)
- 2. N Broad St (from City Hall to Glenwood)
- 3. N Broad St (from Glenwood to Windrim)
- 4. S Broad St (from City Hall to Oregon)
- 5. Market St (from City Hall to 2nd)
- 6. Allegheny Ave (from Sedgley to Ridge)
- 7. N Broad St (from Lindley to Montgomery County Line)
- 8. Chestnut St (from Independence Mall to 20th)
- 9. Kensington Ave (from Front to Pacific)
- 10. Chestnut St (from Cobbs Creek to 38th)

Safety Data

Safety Data

GOAL: Vision Zero actions are data-driven, based on quality data, and use the latest technology and analytical tools.

STRATEGIES:

1. Evaluate street safety treatments regularly and consistently and adjust treatments as prudent based on the results

2. Improve the quality and timeliness of relevant traffic safety data

3. Improve internal and public access to safety data

Safety Data	Description	Responsible Agency	
Strategy 1) Evaluate street safety treatments regularly and consistently and adjust treatments as prudent based on the results			
5.1.1	Complete three before/after studies each year to analyze the effectiveness of Vision Zero corridor or intersection safety projects	OTIS/Streets	
5.1.2	Continue to release annual Vision Zero progress reports	OTIS	
5.1.3	Continue to update the High Injury Network with new crash data with every future Vision Zero plan and use it to prioritize safety interventions	OTIS	
5.1.4	Continue to input Vision Zero projects into public-facing GIS layer	OTIS/Streets	
Strategy 2) Improve the quality and timeliness of relevant traffic safety data			
5.2.1	Consistently collect, record, and report race/ethnicity data for all people involved in a crash	PPD/PennDOT	
5.2.2	Evaluate crashes with more precise data for time of crash (precise date) and people involved (zip codes)	OTIS/PennDOT	
5.2.3	Create new database layers of physical street characteristics such as street width and number of lanes to better understand the relationship between crashes and street geometry	OTIS/Streets	
5.2.4	Evaluate hospital data for trauma patients to understand long-term health outcomes and economic impacts of crashes	Jefferson University Hospital	
5.2.5	Work with partners to secure and install additional pedestrian and bicycle counters to allow more tracking of active transportation volumes	OTIS/DVRPC/PCPC/ Health	

Safety Data	Description	Responsible Agency
5.2.6	Support the creation of the Major Crash Investigations Squad to conduct assessments at the scene of fatal crashes and the conditions that contributed to the crash and the fatality	PPD/OTIS/Streets
5.2.7	Procure forensic mapping system and software to virtually assess scenes of fatal crashes	PPD
Strategy 3)	Improve internal and public access to safety data	
5.3.1	Develop a digital curbside management system to reduce unsafe behaviors like illegal parking/loading in the bike or bus lane, double parking/loading	OTIS/PPA/SEPTA
5.3.2	Continue to report analysis of annual PennDOT crash data and identify ways to expedite the release of crash data on an ongoing basis	OTIS/PennDOT
5.3.3	Continue to report monthly City crash data in a publicly accessible database	OTIS/PPD
5.3.4	Develop an interactive, user-friendly, web-based application using standardized metrics for internal and external crash analysis	OTIS

Vision Zero Task Force & Subcommittees

LEADERSHIP

The following officials are responsible for leading and providing feedback on Vision Zero as its Action Plan strategies are implemented:

- Mayor James F. Kenney
- Managing Director Tumar Alexander
- Deputy Managing Director Michael A. Carroll, P.E. (OTIS)
- Vision Zero Task Force

Task Force Structure VISION ZERO TASK FORCE SUBCOMMITTEES

- City of Philadelphia
 - » Mayor's Office
 - » Managing Director's Office
 - » Chair: Managing Director's Office of Transportation & Infrastructure and Sustainability (OTIS)
 - Department of Public Health »
 - Department of Streets »
 - Fleet Management »
 - » Licenses & Inspections
 - » Planning & Development
 - » Philadelphia Police Department
 - Office of Children and Families »
 - Office of Complete Streets »
 - » Risk Management
 - » Water Department
- American Automobile Association (AAA)
- AARP Pennsylvania
- Asociacion Puertorriquenos en Marcha, Inc.
- Bicycle Coalition of Greater Philadelphia

- Center City District (CCD) •
- Children's Hospital of Philadelphia
- . Clean Air Council
- Delaware Regional Valley Planning Commission (DVRPC)
- Families for Safe Streets
- Pennsylvania Department of Transportation (PennDOT)
- People's Emergency Center (PEC) •
- Philadelphia Association of Community **Development Corporations (PACDC)**
- Philadelphia Parking Authority
- Safe Routes Partnership •
- School District of Philadelphia
- Southeastern Pennsylvania Transportation Authority (SEPTA)
- St. Christopher's Hospital for Children •
- Thomas Jefferson University Hospital
- University City District (UCD)

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VISION ZERO CITY OF PHILADELPHIA

