

Vision Zero:

Choose your Own Adventure



APAPA CONFERENCE
OCTOBER 22, 2019



VISION ZERO

CITY OF PHILADELPHIA

WHAT
IS
VISION
ZERO?

What is Vision Zero?

A policy that states clearly that traffic deaths are preventable and unacceptable.

CORE PRINCIPLES:

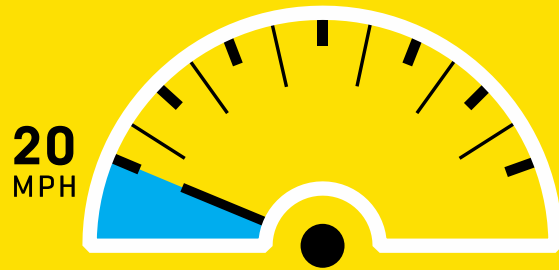
Human life takes priority over mobility;

Human error is inevitable and unpredictable;

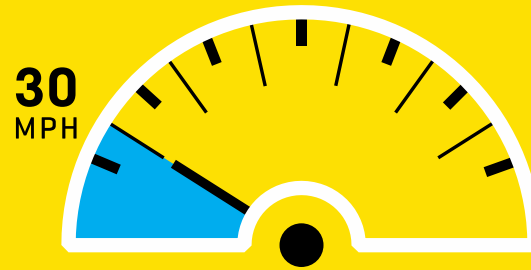
People are inherently vulnerable and speed is a fundamental predictor of crash survival;

Safe human behaviors, education, and enforcement are essential contributors to a safe system.

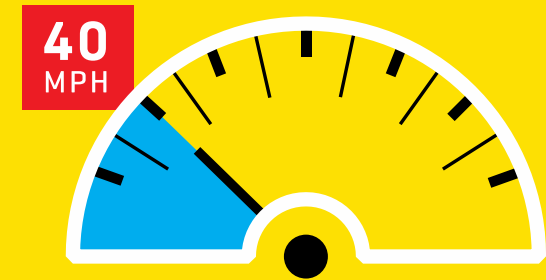
WHEN A PERSON IS HIT BY A DRIVER AT...



1 OUT OF **10** DIE



5 OUT OF **10** DIE



9 OUT OF **10** DIE

Slowing down saves lives.

Why Vision Zero in Philadelphia?

Every year, there are nearly 10,000 reported crashes on Philadelphia streets.

5-YEAR TREND:

2014: 82 killed / 223 severely injured

2015: 83 killed / 250 severely injured

2016: 96 killed / 252 severely injured

2017: 78 killed / 244 severely injured

2018: 91 killed / 249 severely injured

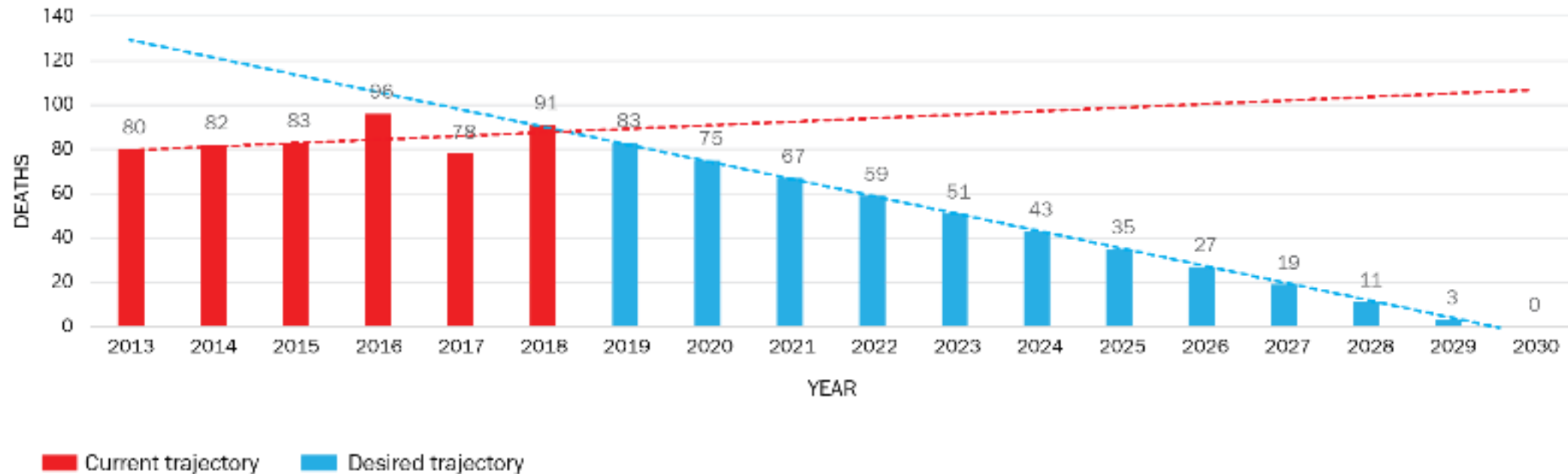
100 PEOPLE EVERY YEAR



100 people are killed in traffic related crashes.

Vision Zero trendline

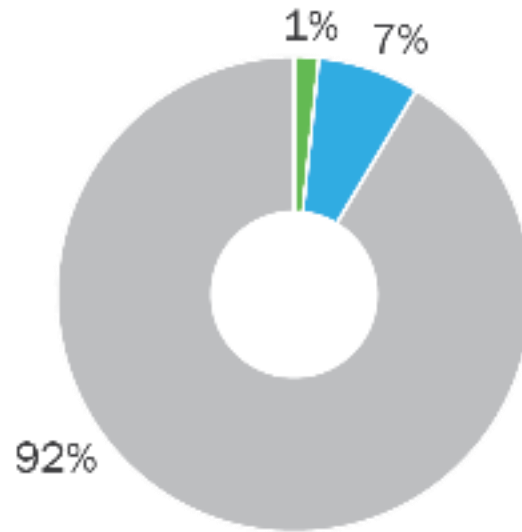
Current & Desired Trendline for Vision Zero in Philadelphia



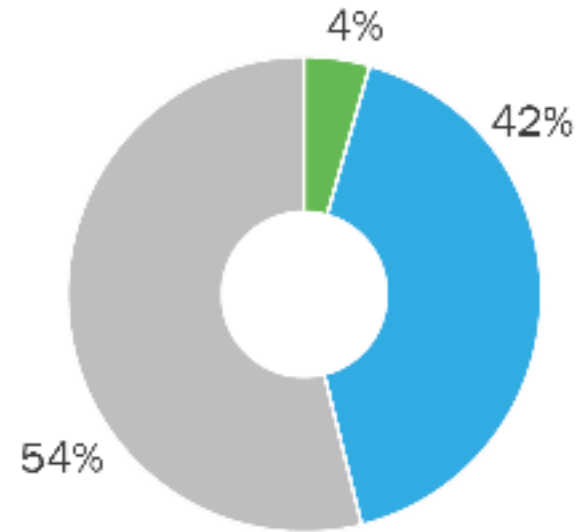
Source: PennDOT, 2013 - 2018

Traffic deaths by mode

People Involved in Crashes
2014 - 2018



People Killed in Crashes
2014 - 2018

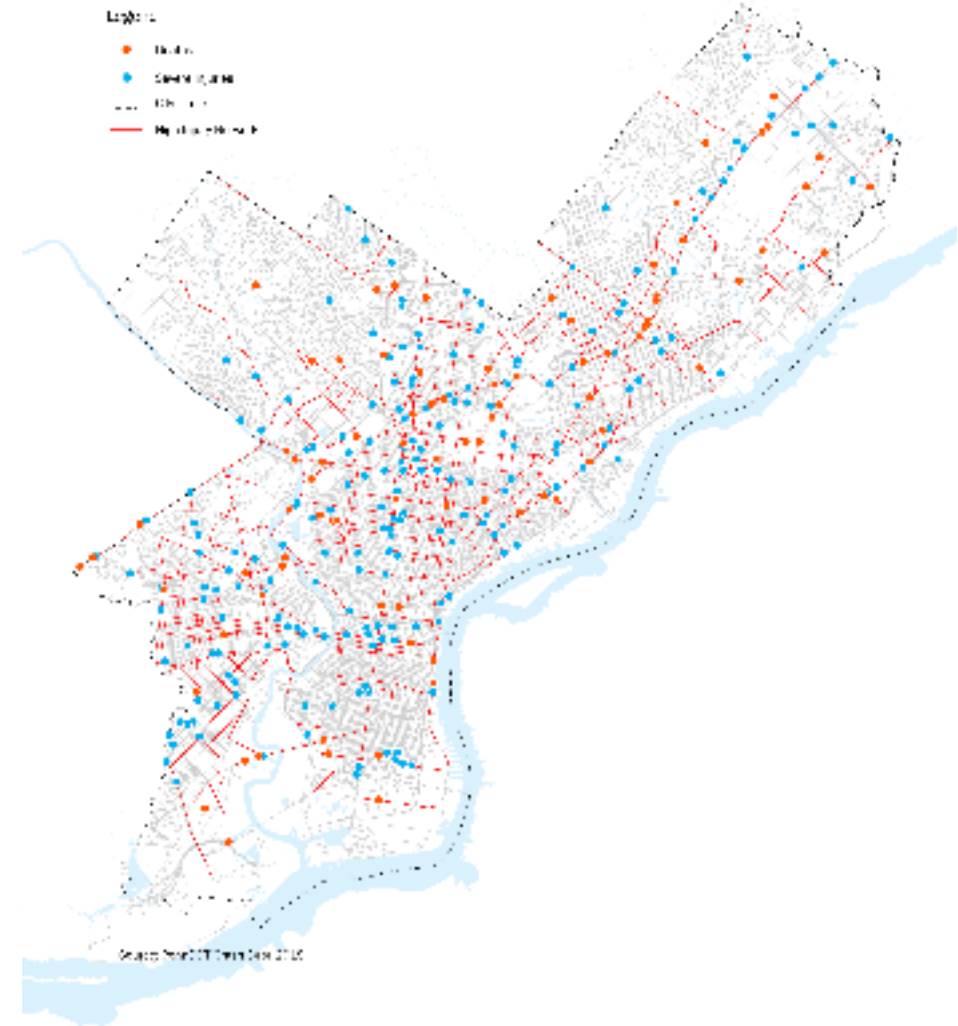


People Walking People Biking People in Motor Vehicles

Source: PennDOT 2014 - 2018

High Injury Network

50% of killed and serious injury **crashes** occur on **only 12%** of city streets





**VISION
ZERØ**

CITY OF PHILADELPHIA

**OUR CITY AND OUR
FAMILIES DESERVE
SAFER STREETS.**

Zero traffic deaths by 2030.

HOW FAR
WE'VE COME
IN OUR FIRST
YEAR

Vision Zero Research Partnership

Neighborhood Pedestrian & Bicycle Counters –Six

Vision Zero project tool – To explore the map, visit

Engineering

Market/JFK Vision Zero Pilot Project

South Broad Street Intersection Safety Modifications

American St construction underway

Lincoln Drive construction underway

Resurfacing & integrated safety upgrades –Each resurfacing project is an opportunity to improve the design of a street.



Education

“We Meet in the Street” public educational campaign – In July 2018, the City launched its first Vision Zero public education campaign “We Meet in the Street,” which aims to educate the public about dangerous driving behaviors that can lead to serious crashes and traffic deaths.

Vision Zero technical education –Vision Zero kicked off “Vision Zero electives” for City employees and Vision Zero sub-committee members.



Fleet management

Upgraded truck safety: Including 360-degree cameras, cross-view mirrors, and sideguard panels.

What are sideguard panels?

Side guard panels are installed between the wheels of large vehicles that prevent anyone walking or biking from being swept under the tires of a truck after a side impact. Side guard panels are proven, simple, and effective pedestrian and bicycle safety tool.



2019 PROJECTS AND PROGRAMS

Neighborhood Slow Zone applications

By the January 18, 2019 deadline, the City received (28) complete Slow Zone applications that were scored.

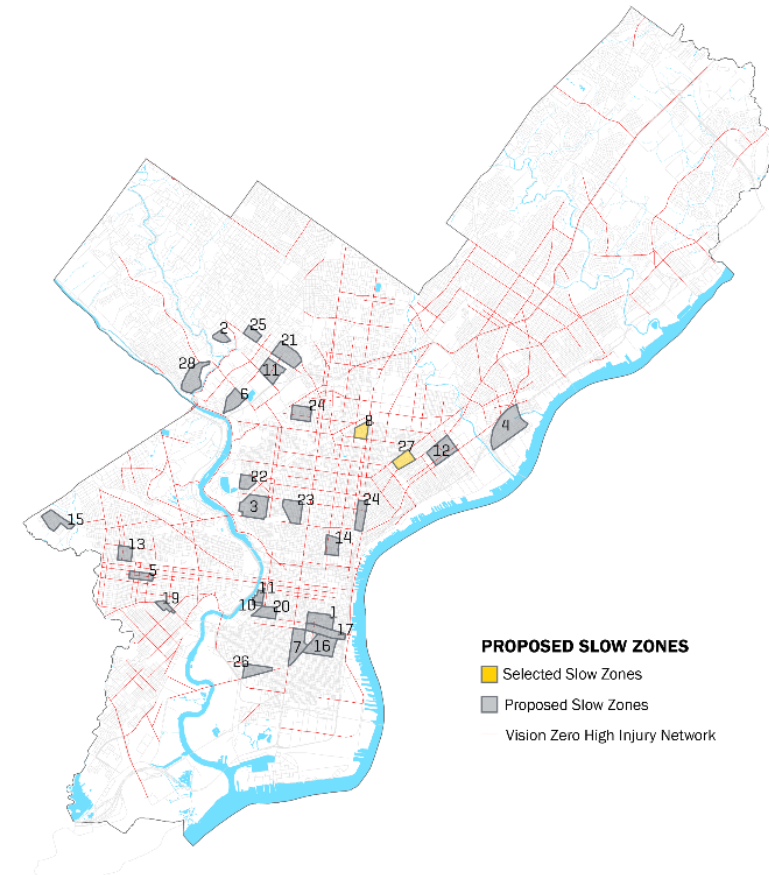
SCORING

Crash history

Vulnerable users

- Percent of households below 18
- Percent of households over 60
- Percent of households living below the poverty line

Community places



What is a Slow Zone in Philadelphia?

A new Vision Zero program that brings 20MPH speed limits and traffic calming to a clearly marked zone of residential streets.

NEIGHBORHOOD SLOW ZONE PROGRAM WILL:

Work with neighbors to develop a plan for traffic calming that responds to critical traffic safety issues

Lower speed limits to 20MPH

Install gateway treatments

Be self-enforced by traffic calming (speed cushions and more)



Our vision for bicycling

Every Philadelphian should have access to a safe and comfortable bikeway within a quarter a mile of their home, whether they're 8 or 80 years old.



Strong and Fearless: People willing to bicycle with limited or no bicycle-specific infrastructure

Enthusied and Confident: People willing to bicycle if some bicycle-specific infrastructure is in place

Interested but Concerned: People willing to bicycle if high-quality bicycle infrastructure is in place

No Way, No How: People unwilling to bicycle even if high-quality bicycle infrastructure is in place

High Quality Bike Network



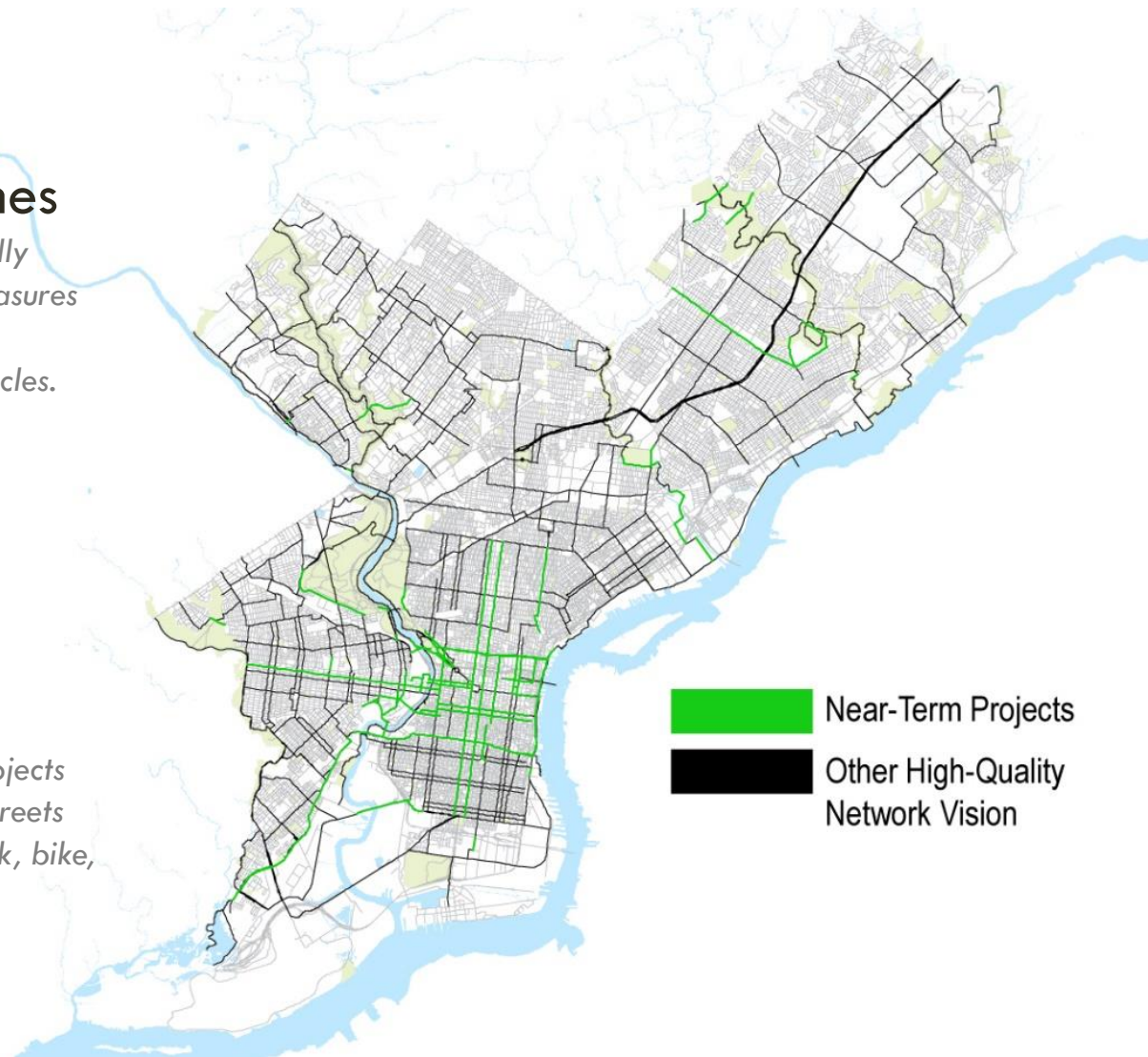
Protected Bike Lanes

Protected bike lanes are physically separated from traffic using measures such as flexible posts, concrete barriers, or lanes of parked vehicles.



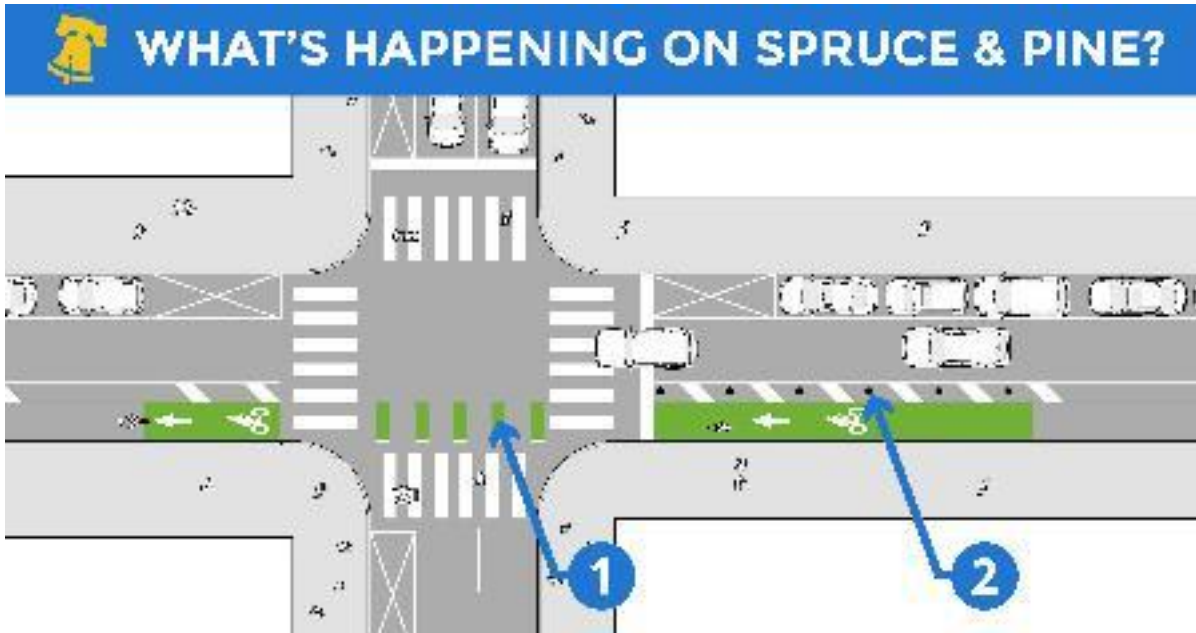
Neighborhood Bikeways

Neighborhood Bikeways are projects focused on making residential streets calmer and more inviting to walk, bike, and spend time on.



Pine and Spruce

Paving and safety project in progress



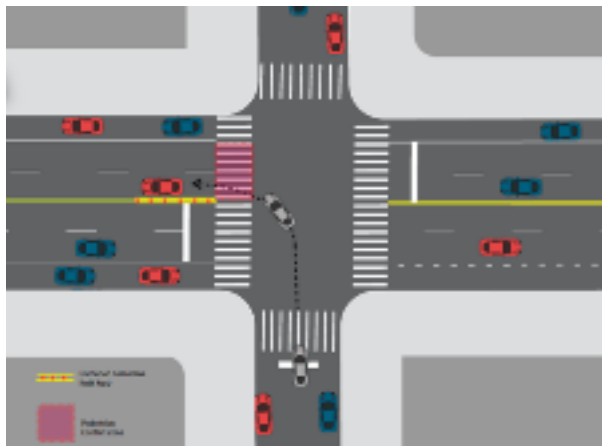
- 1 Green markings through intersections. Drivers should yield to people biking & walking.
- 2 Flexible posts at most intersections to protect people biking from turning vehicles.

N Broad hardened centerlines

The City and PennDOT partnered to pilot hardened centerlines on a segment of High Injury Network corridor, N. Broad from Allegheny to Venango

Hardened centerlines:

- Prevents illegal U-turns
- Slows turning speeds
- Improves driver visibility



What else is on deck?

→ *Zero traffic-related deaths in Philadelphia by 2030.*

More in 2019:

Automated Speed Enforcement on Roosevelt Boulevard

Vision Zero Pedestrian Safety Study and Action Plan

Accelerated designs for:

- Parkside Avenue,
- North Broad St medians,
- Summer/Adams/Roosevelt Boulevard


Vision Zero for Youth Partnership



CHANGE THE CONVERSATION ABOUT VISION ZERO



Sarah Clark Stuart
American Planning Association, Pennsylvania
October 22, 2019

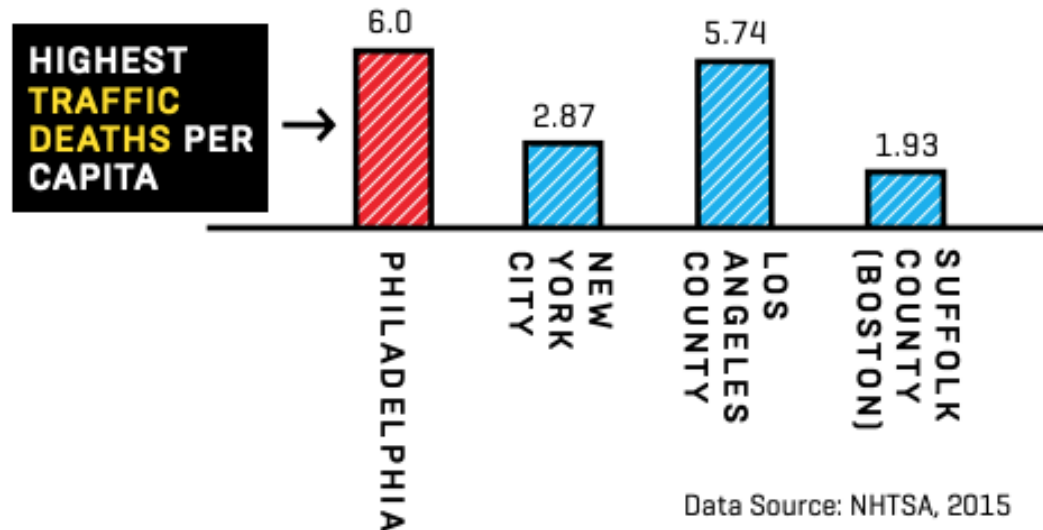


Through advocacy and
education, we lead the
movement to make
bicycling a safe and fun
way to get around for
anyone in Greater
Philadelphia.



RATE OF TRAFFIC-RELATED DEATHS (PER 100,000 RESIDENTS)

Traffic crashes have tragic impacts
on the lives of Philadelphians.



- The Bicycle Coalition of Greater Philadelphia and AARP PA began talking about these listening sessions across Philadelphia neighborhoods in 2018.



CHANGE THE CONVERSATION



By Listening

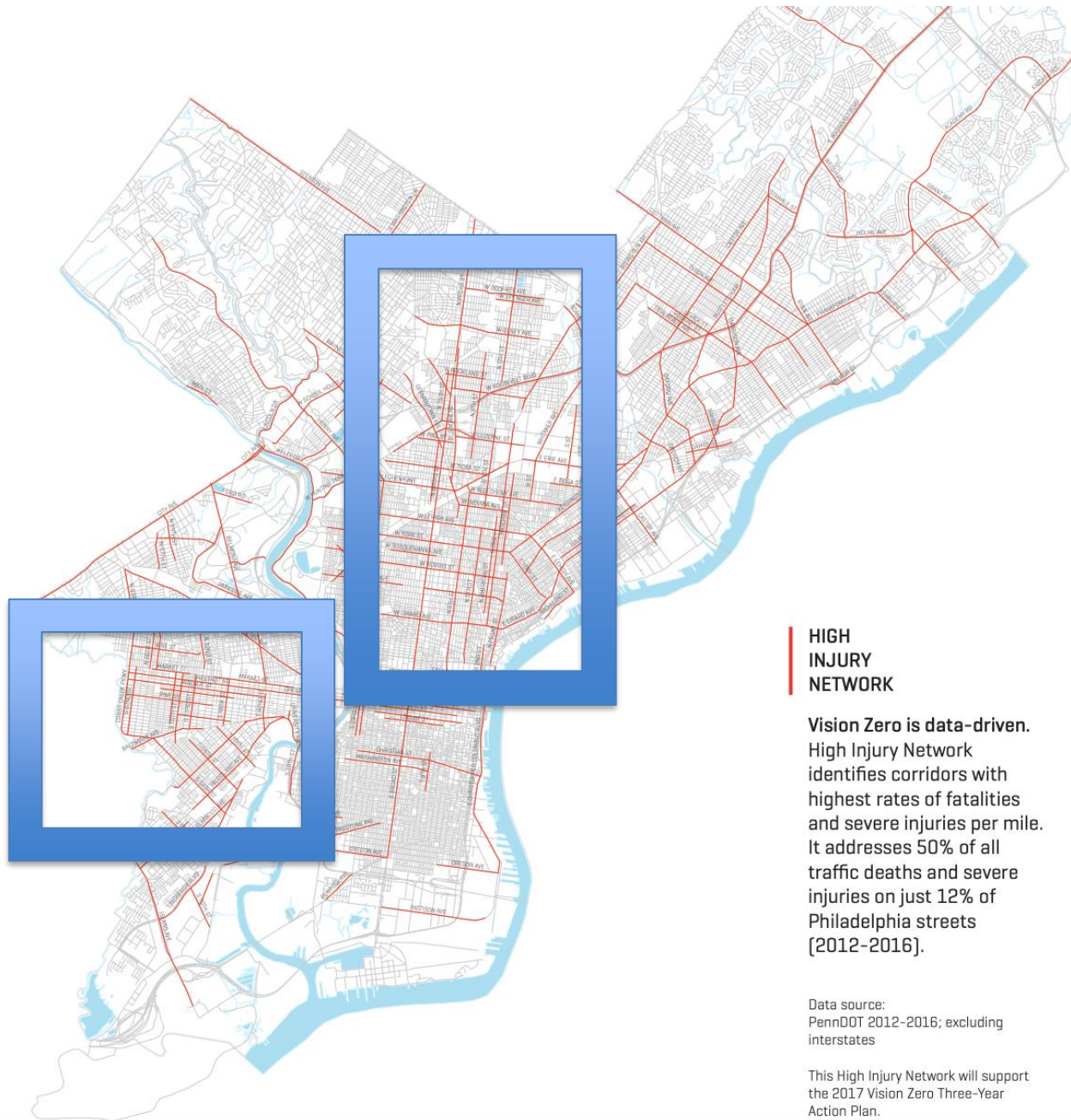


HIGH INJURY NETWORK

Vision Zero is data-driven. High Injury Network identifies corridors with highest rates of fatalities and severe injuries per mile. It addresses 50% of all traffic deaths and severe injuries on just 12% of Philadelphia streets (2012-2016).

Data source:
PennDOT 2012-2016; excluding
interstates

This High Injury Network will support
the 2017 Vision Zero Three-Year
Action Plan.

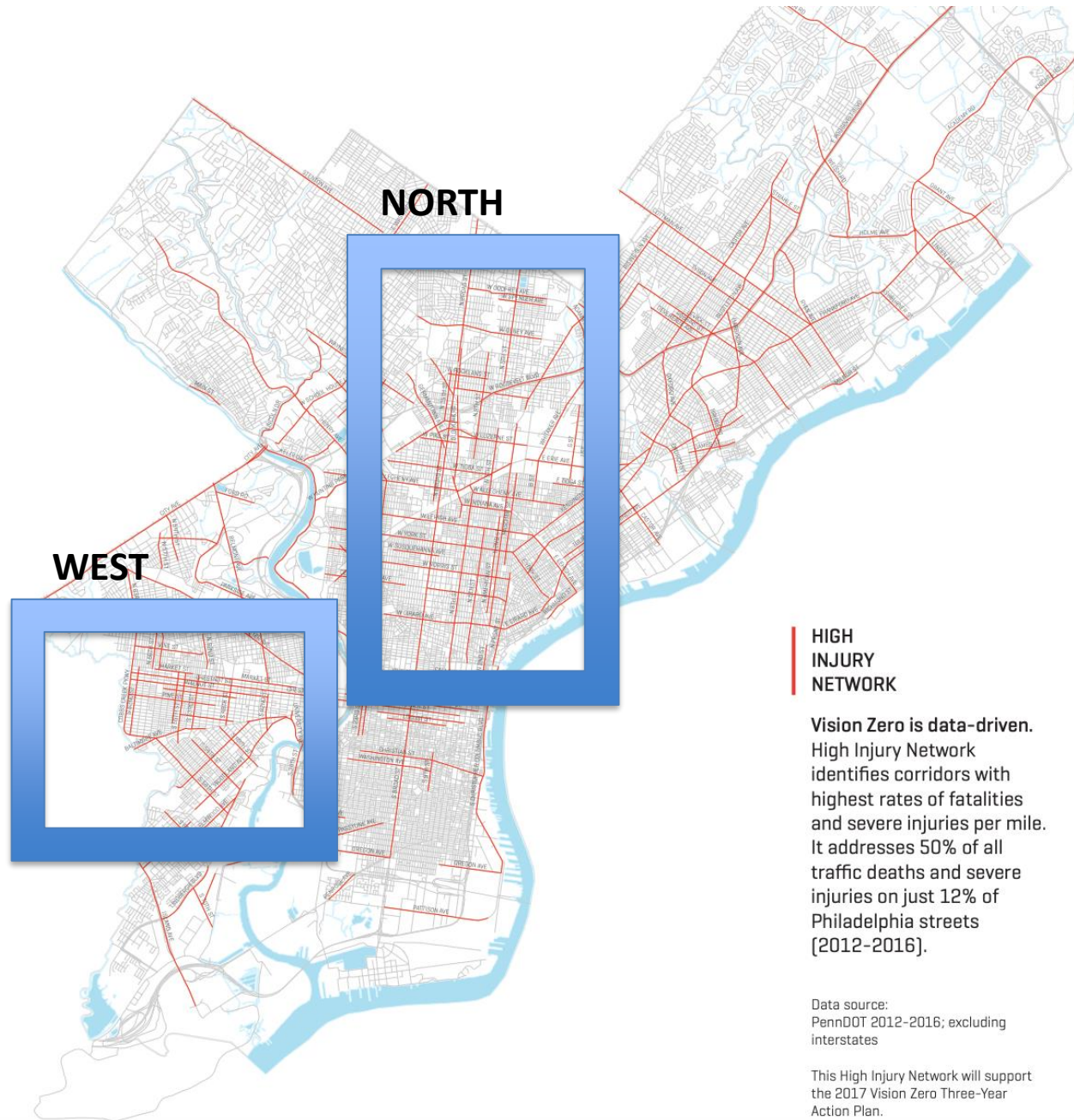


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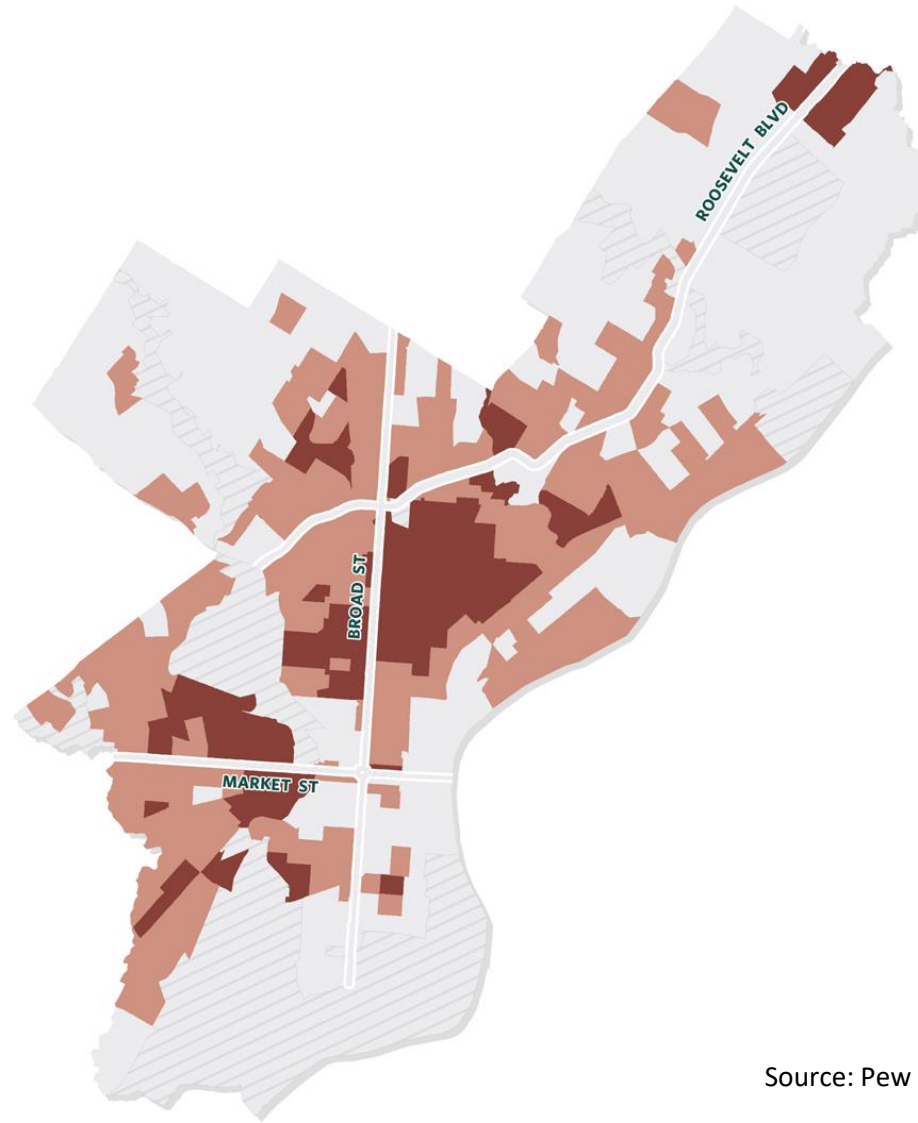
Our goals?



- Address traffic concerns
- Find out the worst problems
- Hear THEIR solutions
- What has the government done for them?
- Have these concerns been voiced before?

Why is this important?

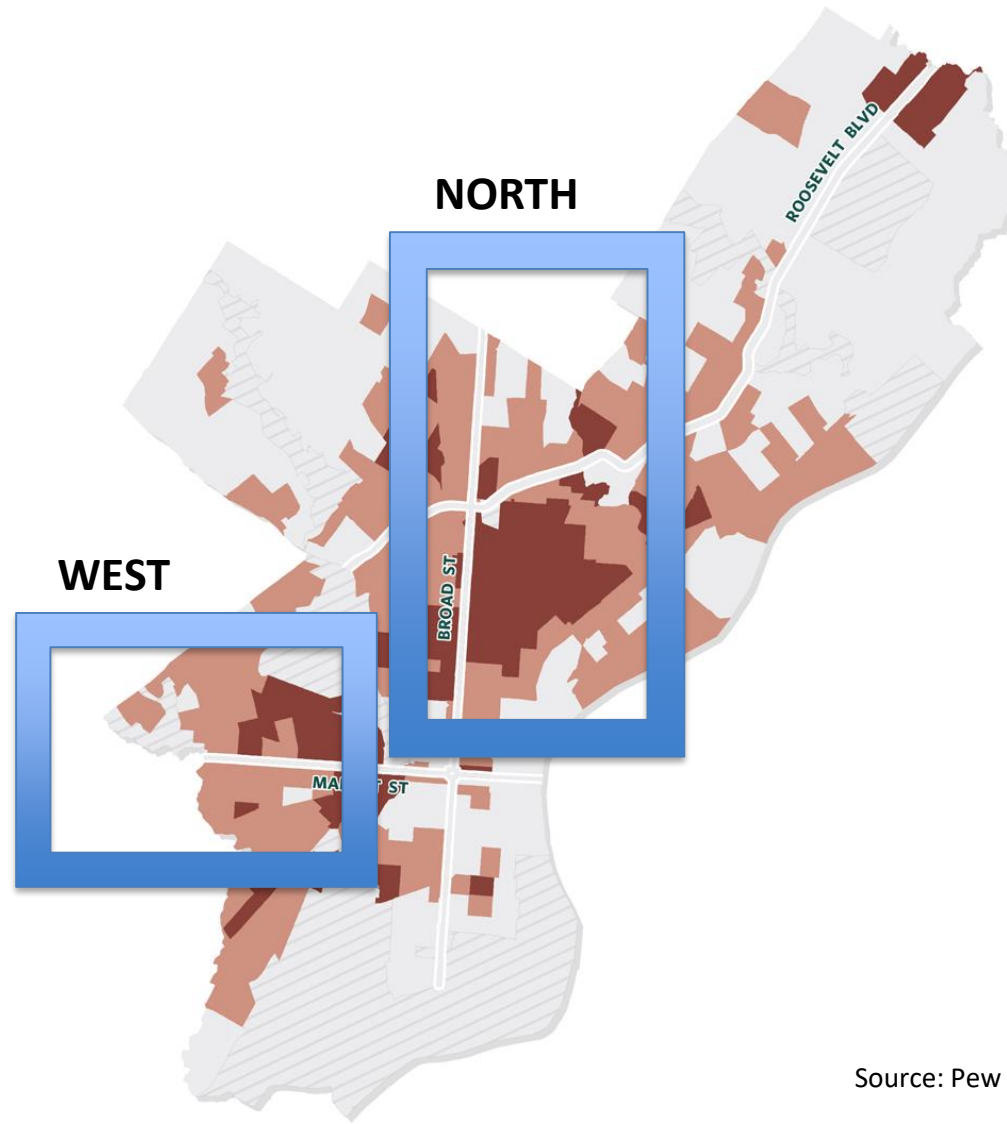
Poverty and High-Poverty Areas in Philadelphia



Source: Pew Charitable Trusts

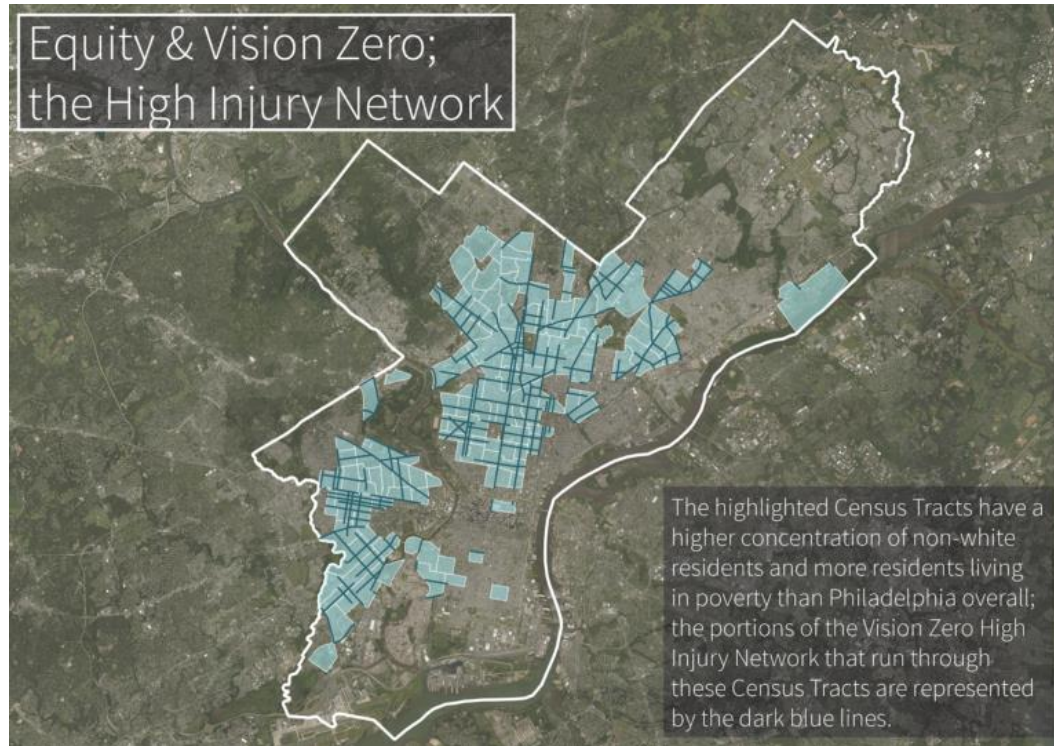
Why is this important?

Poverty and High-Poverty Areas in Philadelphia



Source: Pew Charitable Trusts

Why is this important?



- BCGP Analysis: roughly 35% of Philadelphia's street miles are located in these Census Tracts, 46% of the High Injury Network.
- **Almost half (46%) of the High-Injury Network in Philadelphia lies in impoverished communities of color.**



WHAT WE DID



1. Hired a Professional Facilitator



WHAT WE DID



Yocasta Lora 
@Ylora0211

Follow

What a fantastic night [#fullhouse](#) at the [#PHLvisionzero](#) community listening session. Making the community part of the conversation. [@HACECDC](#) [@bikelanesphilly](#) [@bcgp](#) [@AARPPA](#) [@AARPLivable](#) [@PhillyOTIS](#) [#northphilly](#) [#safestreets](#). [@MrRawle](#) [@billjwpa](#)



10:06 PM - 10 Oct 2018

2. Partnered with local community organizations

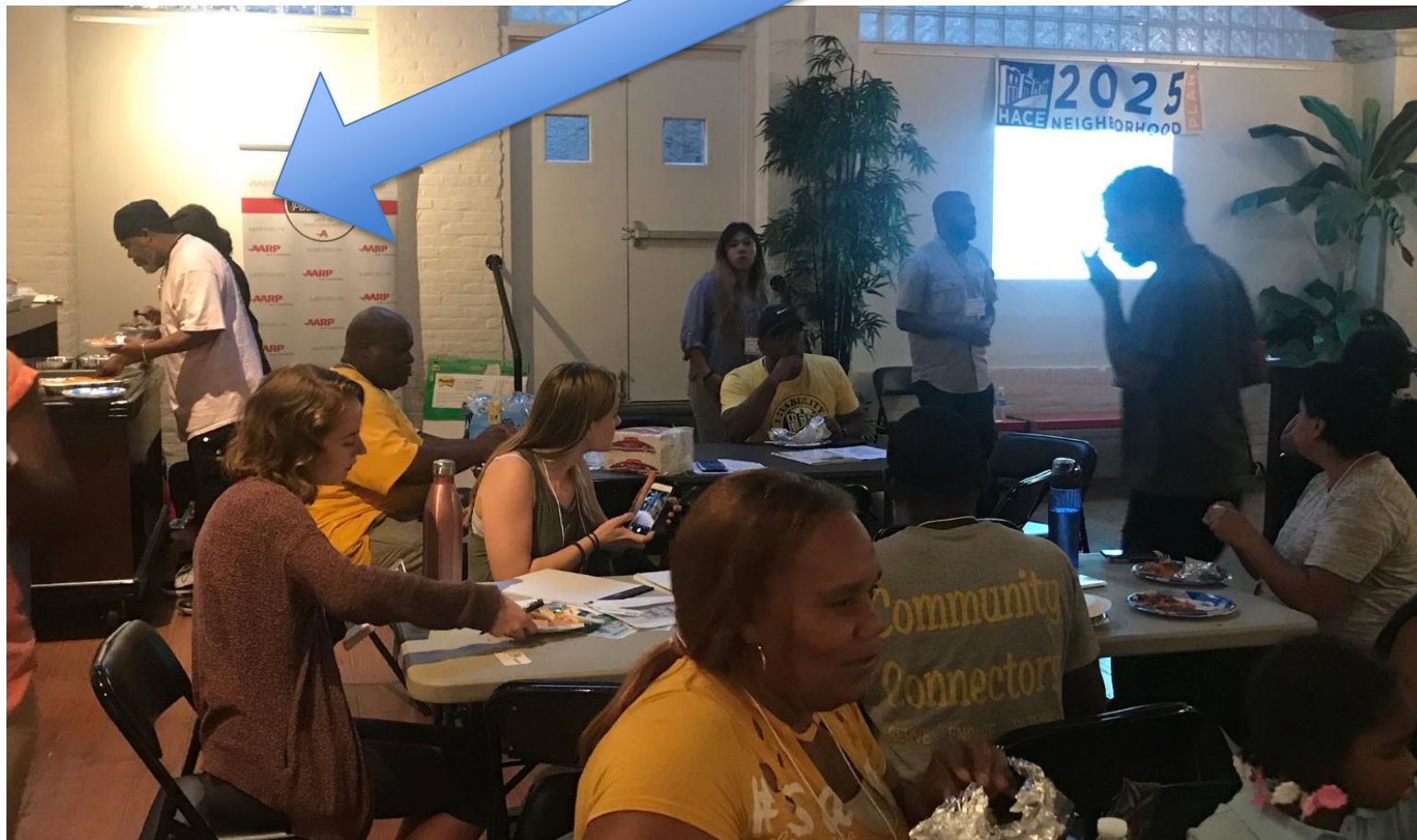
WHAT WE DID



An Exelon Company



WHAT WE DID



3. Provided FOOD



WHAT WE DID

¿Es la seguridad vial un problema en Lehigh Ave?

**Conversación sobre
Tráfico y Seguridad**

**¡Haz que tu
voz se escuche!**



**¿Como harías Lehigh
Avenue una calle más
segura?**



AARP ofrecerá cena

Lunes, 25 de Febrero 5:30-6:45 pm
En la Biblioteca Lillian Marrero
601 W Lehigh Ave, Philadelphia, PA 19133



4. Provided a translation



WHAT WE DID



5. Listened



WHAT WE DID



PREPARED BY



6. Wrote up the Results



WHAT'S NEXT



7. Present Report to City Council Members who represent these districts. And invite constituents!



CHANGE THE CONVERSATION



By Changing the Speaker



WHAT WE DID



1. Advocated for Red Light Cameras



WHAT WE DID



2. Organized & Advocated for Automated Enforcement on Roosevelt Boulevard



What We Did



3. Organized Chapter of Families for Safe Streets



WHAT WE DID

FEBRUARY 2019

SERVING JUSTICE IN FATAL CRASHES IN PHILADELPHIA

An Analysis by:

The Bicycle Coalition of Greater Philadelphia and Families for Safe Streets Greater Philadelphia



4. Recommended Solutions

Results: Real Time Data on Fatal Crashes & Investigative Outcomes

🏠 / Organizations / City of Philadelphia / Fatal Crashes

Fatal Crashes

Followers

2

Organization



City of Philadelphia

TERMS OF USE: Browsing City data on this site constitutes acceptance of the

👤 Dataset

🔗 Topics

🕒 Activity Stream

🖼️ Showcases

Fatal Crashes

This data set shows all fatal crashes and their investigative outcomes from PPD's Accident Investigation Unit (AID) from 1/1/19 to the present. The whole dataset gets refreshed nightly. This means the dataset will show new records the day after the source data has updated.

For those conducting analysis, this dataset by PPD and OTIS' crash data should not be compared, or should be used together cautiously. The same crash may show as in different locations between the two datasets since PPD data represent the location of where crashes are initially *reported* whereas OTIS' crash data involves further investigation to confirm initial reports. If you want to analyze the location of crashes in Philadelphia, use OTIS' dataset. If you want to understand the investigative outcomes of crashes, use the PPD dataset.

Trouble downloading or have questions about this City dataset? Visit the [OpenDataPhilly Discussion Group](#)

Data and Resources



Fatal Crashes (CSV)

🔗 Explore ▾



Fatal Crashes (GeoJSON)

🔗 Explore ▾



Fatal Crashes (API)

🔗 Explore ▾



Results: New tools for Philadelphia Police Dept



Crash Data Retrieval System

The Accident Investigation Division (AID) is responsible for investigating critical injury and fatal crashes. According to PennDOT, between 2013 and 2017 there were an average of 14,213 reportable vehicle crashes per year in Philadelphia, and AID investigated an average of 2,318 crashes in those four years, including an average of 96 fatal crashes per year.

The CDR is a combination of computer hardware and software that enables accident investigators to retrieve, download, and print information recorded in a vehicle's airbag and power train control module for activity which transpired during a crash. This key data is

TOTAL PROJECT COST

\$30,000

DONATE



Results: More Responsive District Attorney





What We Are Doing



**WORLD DAY OF
REMEMBRANCE
PHILADELPHIA**

FOR ROAD TRAFFIC VICTIMS

November 17th, 2019

THE NORTH APRON OF CITY HALL

2:00PM - 4:00PM

WDR

**FAMILIES
FOR
SAFE
STREETS
GREATER PHILADELPHIA**

**BICYCLE
COALITION
OF GREATER
PHILADELPHIA**

**VISION
ZERO
CITY OF PHILADELPHIA**



bicyclecoalition.org

Sarah Clark Stuart

sarah@bicyclecoalition.org



CRASH HISTORY

PennDOT (2013-2017)

139

PEOPLE

WERE KILLED OR
SERIOUSLY INJURED ON
ROOSEVELT BOULEVARD,
BETWEEN 2013 AND 2017

2,695

CRASHES

WERE REPORTED ON
ROOSEVELT BOULEVARD
BETWEEN 2013 AND
2017

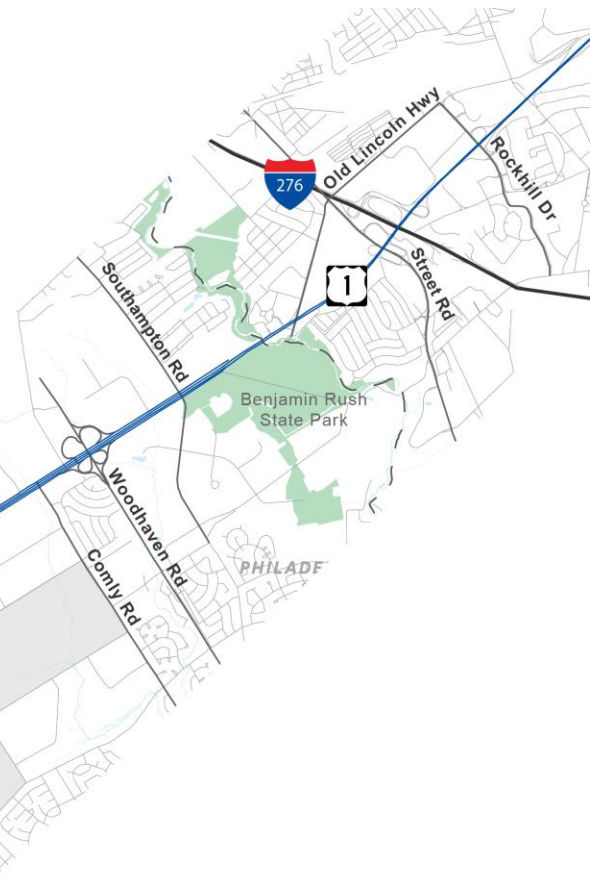
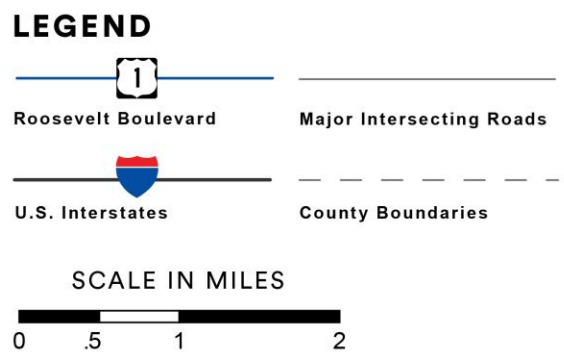
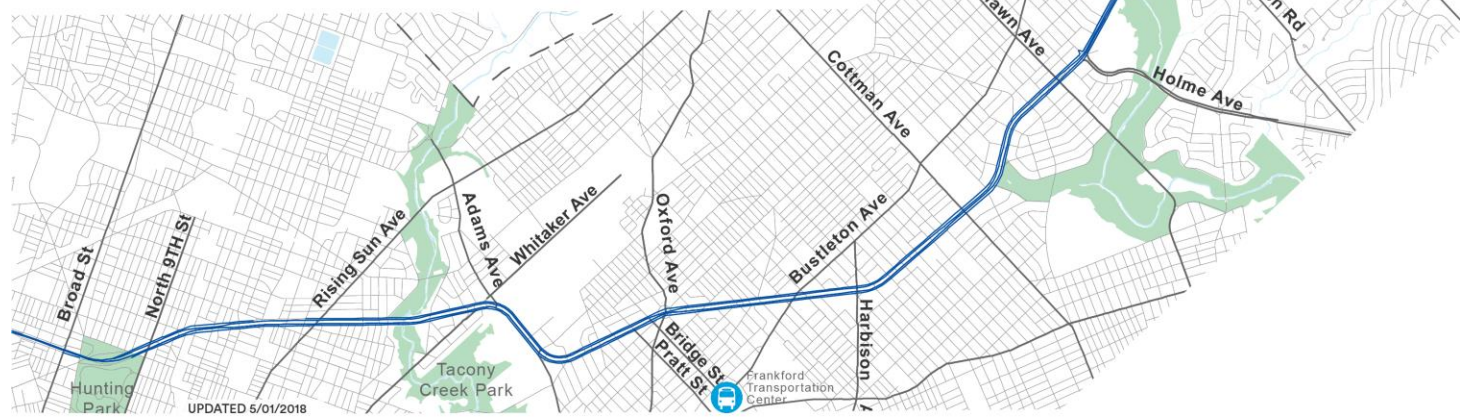


83% of all crashes on Roosevelt Boulevard were driver-to-driver crashes.

Pedestrian deaths and serious injuries make up **30%** of all severe crashes along Roosevelt Boulevard.

25% of all traffic crashes on Roosevelt Boulevard leading to death or serious injuries resulted from vehicle hitting a fixed object.

ROOSEVELT BOULEVARD



Route for Change

Transforming The Boulevard

Developing a series of transformative improvements to create a more inviting corridor that is safe, accessible, and reliable for residents, visitors, employees, and commuters, including those who walk, wheel, transit, bicycle, and drive.

PROJECT PARTNERS



SAFE / Behavior, the interaction of modes, and unusual design characteristics of the Boulevard combine to put the traveling public at greater risk of harm.

ACCESSIBLE / The Boulevard separates local communities because it is difficult for every type of user to cross 12 lanes of traffic to access services, schools, employment, and attractions.

RELIABLE / People who walk, wheel, transit, bicycle, and drive experience unexpected delays, aging sidewalks, narrow medians, and limited bicycle facilities, making travel along the Boulevard unpredictable and frustrating.

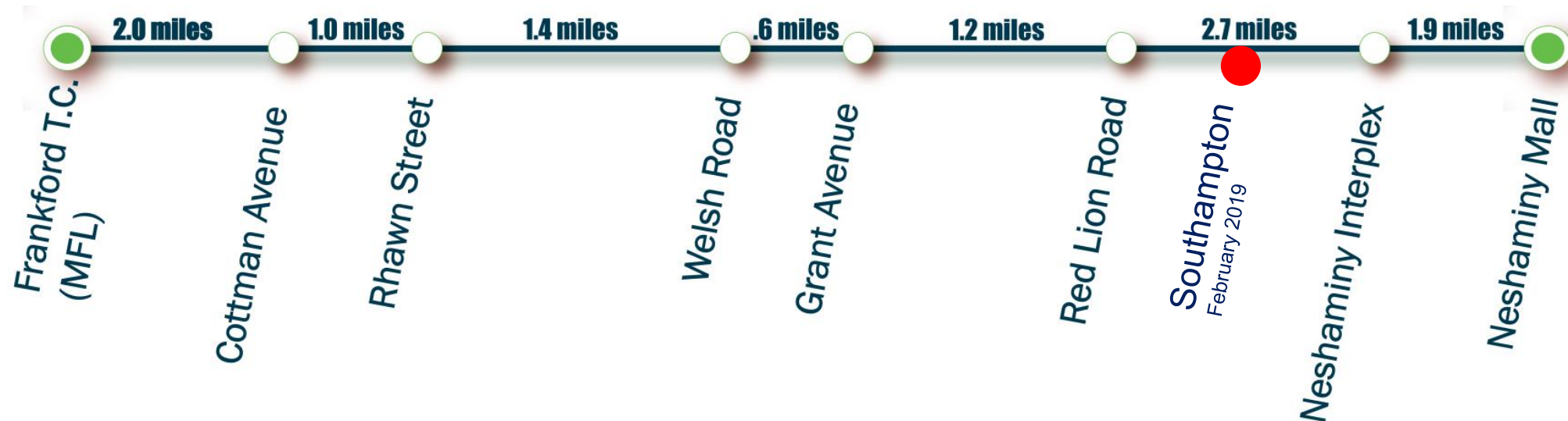
TRANSFORMATIVE / As the defining piece of transportation infrastructure in NE Philadelphia, the Boulevard is not comfortable for every type of user and falls short of its potential to bolster the social and economic vibrancy of neighboring communities.



STARTED OCTOBER 22, 2017

BOULEVARD DIRECT

Serving Roosevelt Boulevard, between Frankford Transportation Center and the Neshaminy Mall, this BRT-type service offers an efficient and reliable travel option, with greater service frequency and fewer stops.





Direct Bus Phase B (Concept)



INTERIM IMPROVEMENTS

Priority on Human Life (Safety)

Improve conditions on the Boulevard for all users

Developed using network traffic modeling



1. Improvements at key intersections
2. Expanded Direct Bus service
3. Bike Network connected to Blvd resources

Boulevard Character Analysis



Character Typology 1

Predominantly fronted by well-established residential neighborhoods.

Based on the Parkway design model, the hierarchy of the existing green spaces are in the wrong places.

The widest of the green spaces should be at the outer medians, which would be compatible with residential frontage and outer lanes that have slower local traffic.

Creating a place of respite in the center median is not recommended.

Character Typology 2

Much more variable in both its physical makeup and development that fronts the roadway, which is predominantly commercial and retail use.

Green space is primarily divided between two medians.

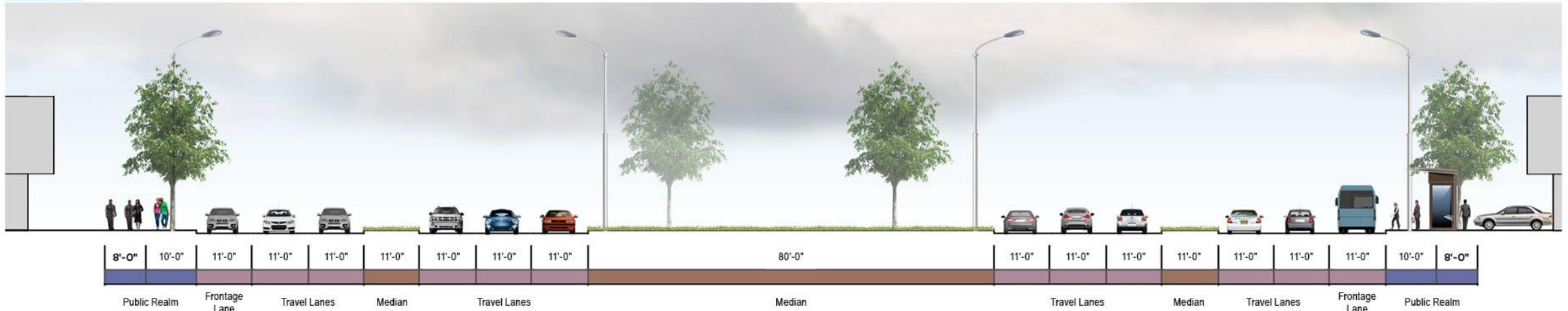
Median width consistency is impacted by increased turning movement lanes.

In many locations, medians narrow to only about 5-feet, which is at best an uncomfortable pedestrian refuge and at worst hazardous.

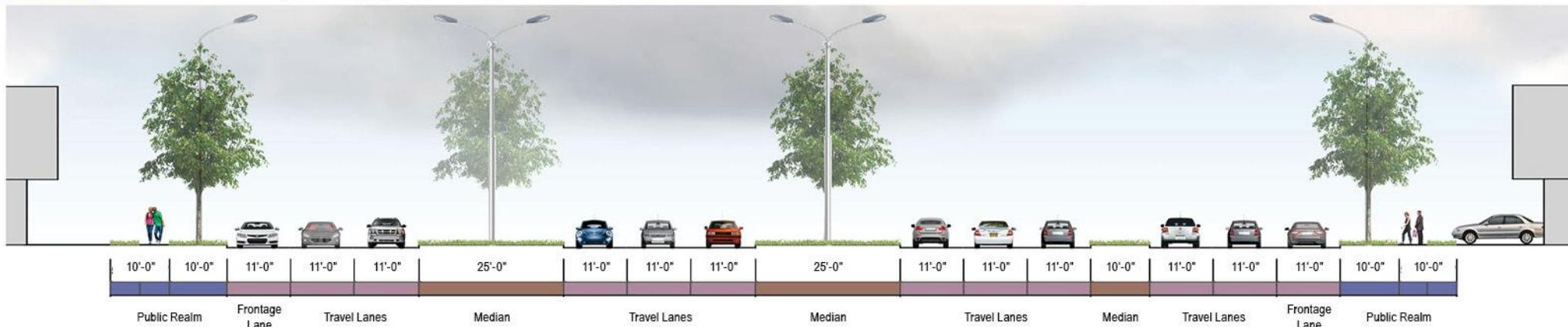
Boulevard Character Analysis

Landscape recommendations should seek to support the intent to slow vehicular speeds.

Character Typology 1



Character Typology 2












GUIDING VISION FOR ROOSEVELT BOULEVARD

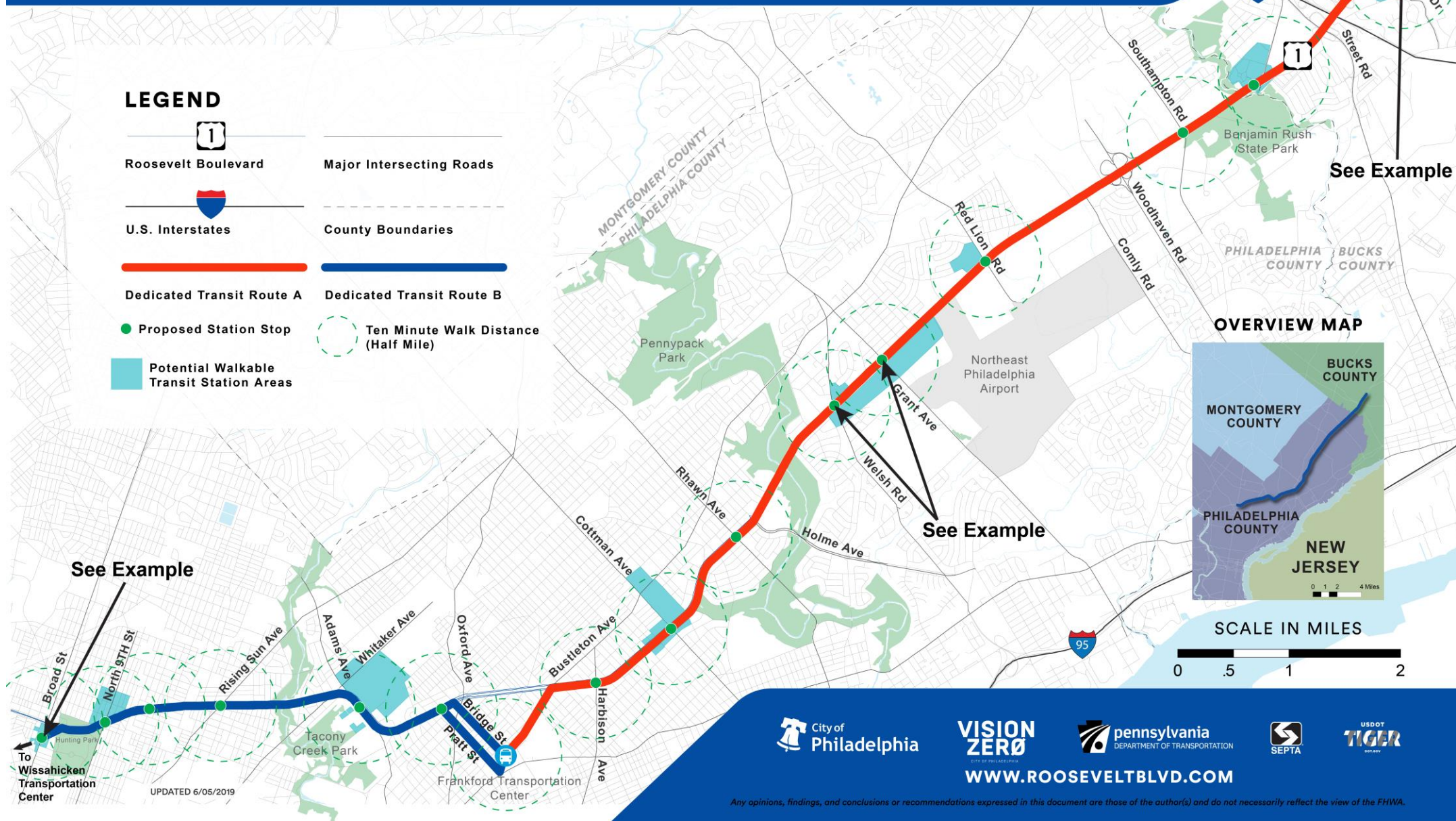


Roosevelt Boulevard is safe, accessible and reliable for all users. It is an attractive and vibrant corridor that unites adjacent communities and offers a diverse and connected network of transportation choices.

Dedicated Transit & Walkable Transit Station Areas

LEGEND

- | | | | |
|---|--|---|--------------------------------------|
|  | Roosevelt Boulevard |  | Major Intersecting Roads |
|  | U.S. Interstates |  | County Boundaries |
|  | Dedicated Transit Route A |  | Dedicated Transit Route B |
|  | Proposed Station Stop |  | Ten Minute Walk Distance (Half Mile) |
|  | Potential Walkable Transit Station Areas | | |



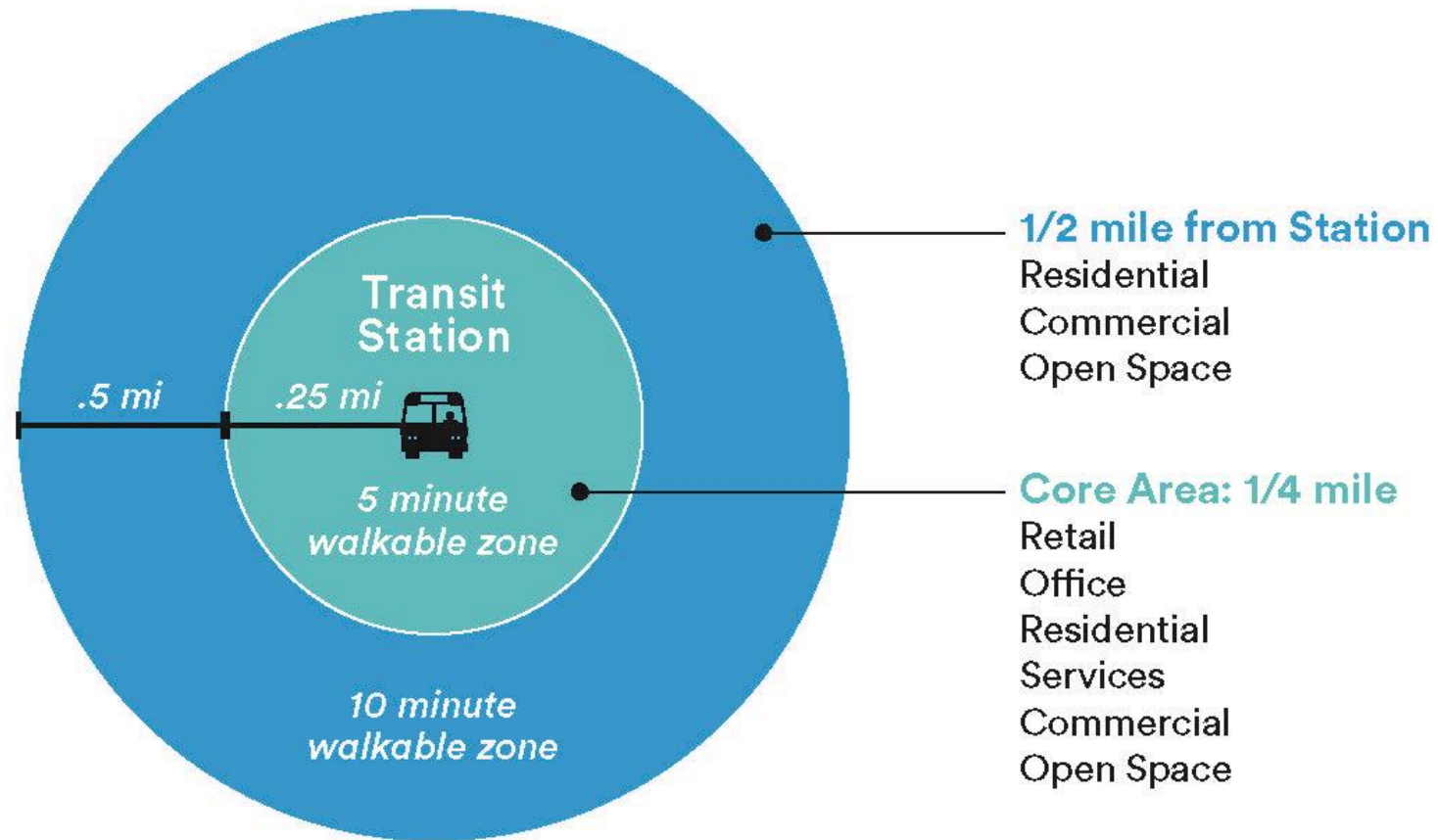
OVERVIEW MAP



SCALE IN MILES



LAND USE MIX



FINE GRAIN STREET NETWORKS



STATION AS A 'PLACE'



- ❖ Comfortable, Safe and Attractive
- ❖ Protected from Weather
- ❖ Well Lit
- ❖ Linked to Walking and Biking Network

WALKABLE STATION AREA TYPES

- ❖ Mixed Use Transit Center
- ❖ Medium Density Center
- ❖ Neighborhood



TWO ALTERNATIVES

**PARTIALLY CAPPED
EXPRESSWAY**

**NEIGHBORHOOD
BOULEVARD**

Vision Zero:

Choose your Own Adventure

KELLEY - Starting up a Vision Zero program

SARAH - Engaging communities in Vision Zero discussions

ANGIE - Planning Vision Zero safety improvements