



# VISION ZERO

CITY OF PHILADELPHIA



# What is Vision Zero?

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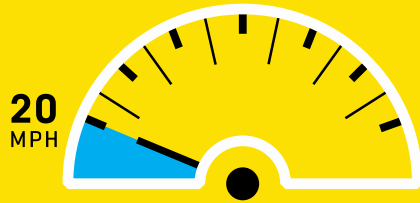
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*A policy that states clearly that traffic deaths are preventable and unacceptable.*

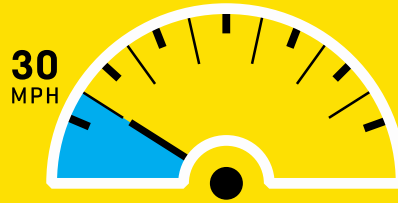
## **CORE PRINCIPLES:**

- 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.

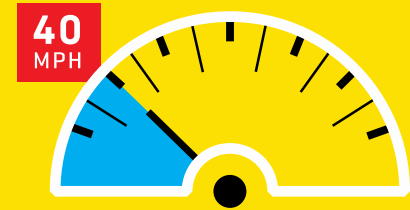
# WHEN A PERSON IS HIT BY A DRIVER AT...



**1** OUT OF **10** DIE



**5** OUT OF **10** DIE



**9** OUT OF **10** DIE

*Slowing down saves lives.*

# Where has Vision Zero been adopted?

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*First adopted as a national policy in Sweden in 1997, over 25 cities across the U.S. have since adopted Vision Zero.*

## U.S. CITIES WITH VISION ZERO POLICIES:

- Chicago;
- Boston;
- New York City;
- Los Angeles;
- San Francisco;
- Seattle, and more

# Why Vision Zero in Philadelphia?

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

## 5-YEAR TREND:

- 2012: 95 killed / 250 severely injured
- 2013: 80 killed / 225 severely injured
- 2014: 82 killed / 223 severely injured
- 2015: 83 killed / 250 severely injured
- 2016: 96 killed / 252 severely injured

**100 PEOPLE EVERY YEAR**



100 people are killed in traffic related crashes.

# Why Vision Zero in Philadelphia?

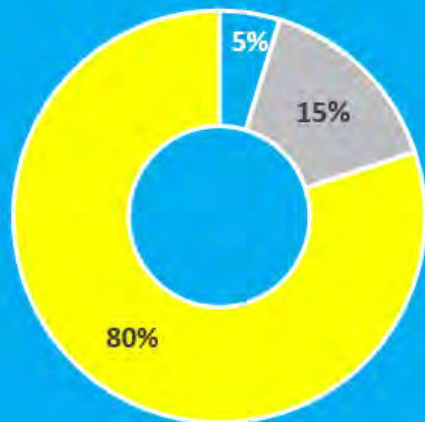
*Every year, there are over 10,000 reported crashes in Philadelphia.*

**4 CHILDREN EVERY DAY**



4 children every day are reported to  
be involved in traffic crashes.

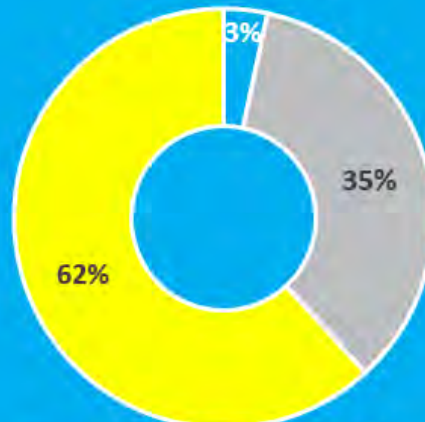
## People involved in crashes



■ Bicycle ■ Pedestrian ■ Vehicle

Data source: [PennDOT](#)

## People killed in crashes



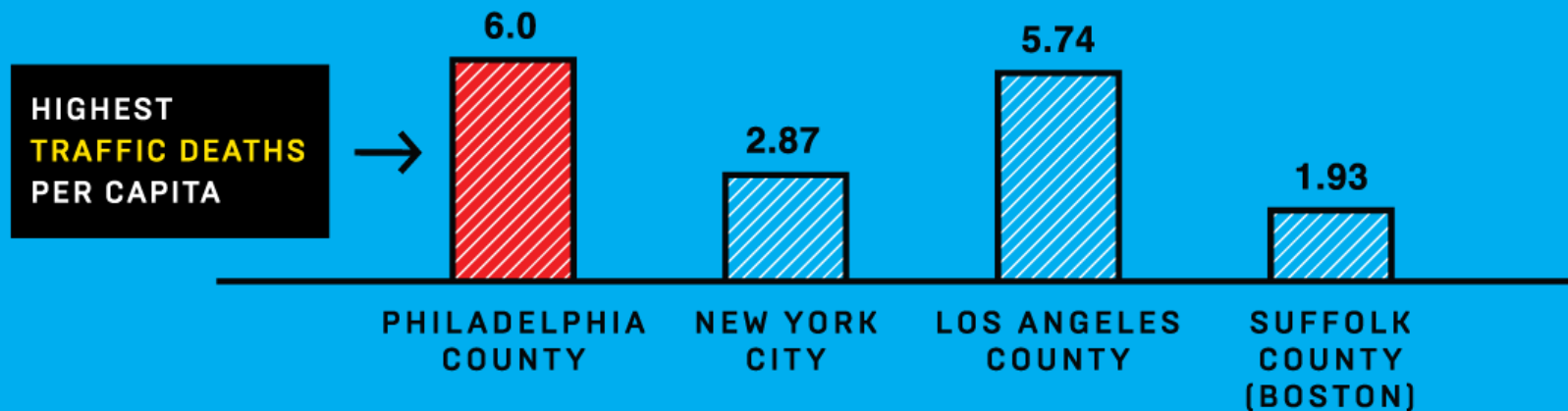
■ Bicycle ■ Pedestrian ■ Vehicle

Data source: [PennDOT](#)



## Traffic-related Deaths:

Total deaths vs. rate of death per 100,000 residents



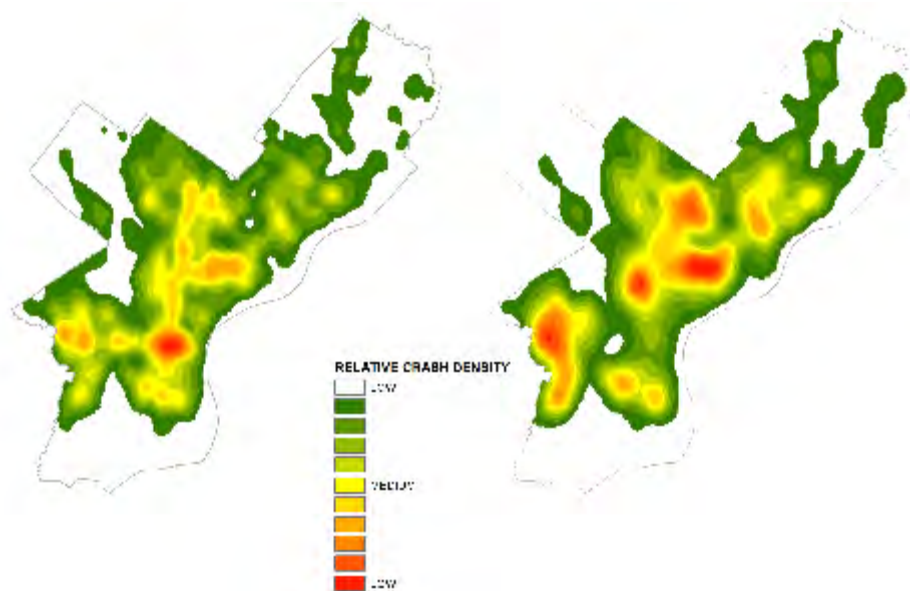
Data source: NHTSA, 2015

# Why Vision Zero in Philadelphia?

*Traffic crashes do not impact Philadelphians the same.*

Pedestrian crashes (>18years)

Pedestrian crashes (<18years)





**VISION  
ZERØ**

CITY OF PHILADELPHIA

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

*Zero traffic deaths by 2030.*

# Vision Zero principles to priorities

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**EQUITY** Identify equitable solutions developed on behalf of all Philadelphians

**ENGINEERING** Engineer streets to reduce the risk of crashes

**ENFORCEMENT** Enforce laws to reduce and prevent unsafe roadway behaviors

**EDUCATION** Educate Philadelphians to promote a culture of safe driving, walking, and biking

**EVALUATION** Evaluate efforts to ensure resources are being used effectively

# High Injury Network

→ 50% of Killed/Serious Injury Crashes on 12% of Streets

**CITY OF PHILADELPHIA**  
**2017 HIGH-INJURY NETWORK**



# JFK & Market Corridor Safety Project





# Project background



# Where is the project area?

- High-rise commercial Center City Corridors
- Buses: 2, 17, 31, 32, 33, 38, 44, 48 (Market only), 62, 124, 125, 414, 417, 555
- Four large residential buildings front the streets
- Over 6 preschools and daycares serve the corridors
- Main east-west streets in Center City







Market Street, looking east



JFK Blvd., looking west

# John F. Kennedy Blvd.



*JFK Blvd., looking east*

2 narrow parking/loading lanes

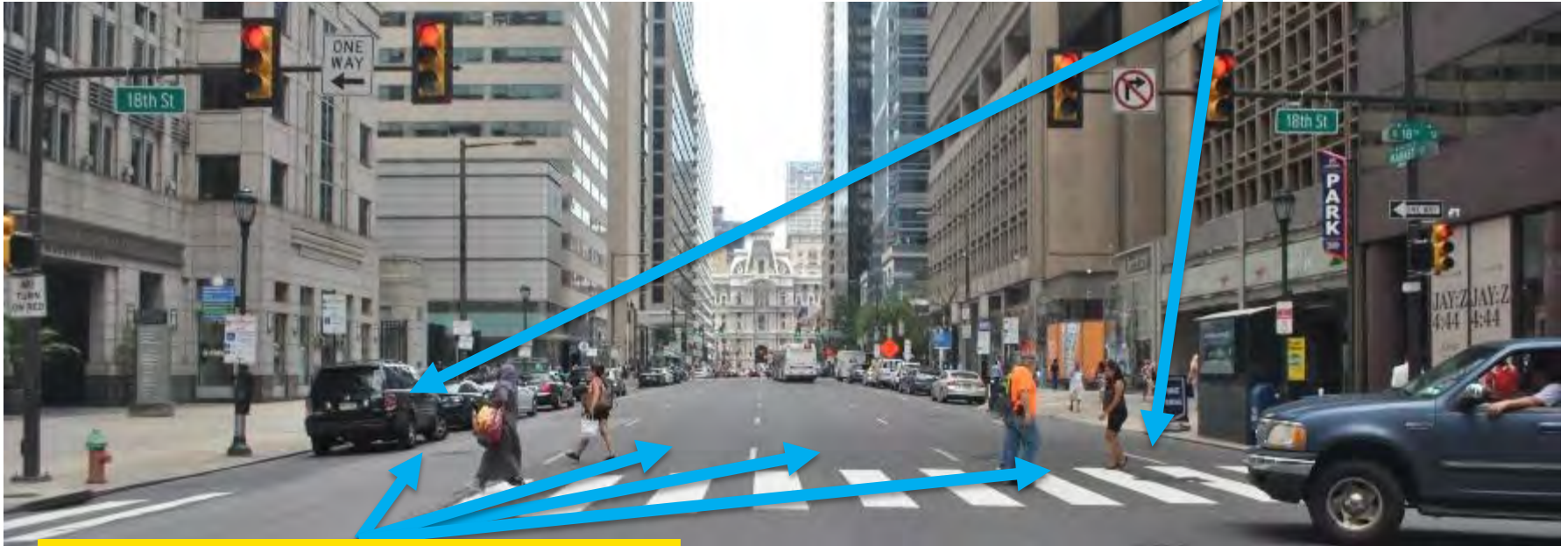


4 extra large motor vehicle lanes

# Market Street

*Market St looking east*

2 parking/loading/turn lanes



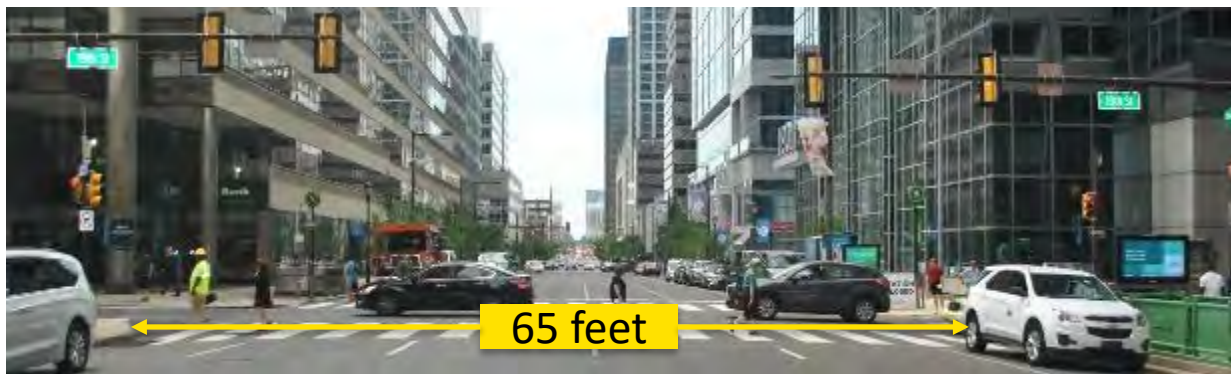
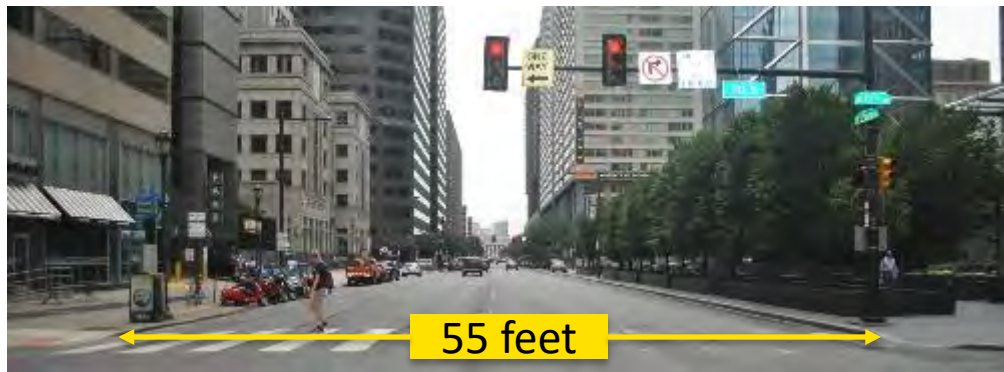
4 standard motor vehicle lanes



# What are the safety issues?

*Long pedestrian crossings*

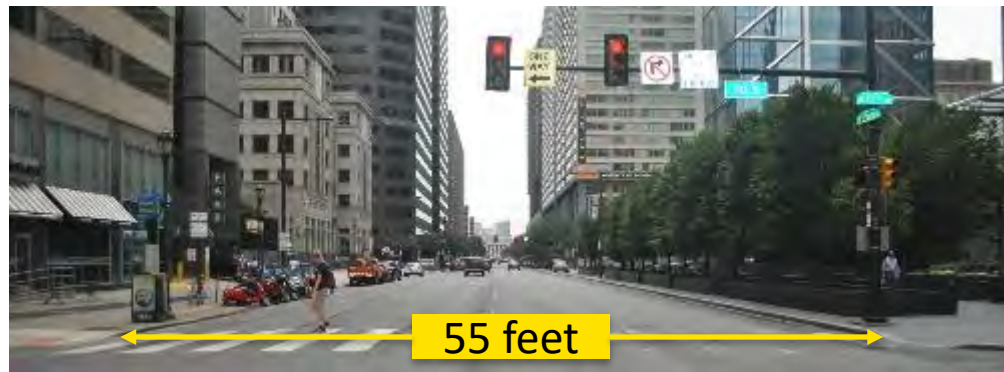
*Ideal maximum pedestrian crossing distance = 33 feet or 3 lanes without median*



# What are the safety issues?

*Long pedestrian crossings*

*Ideal maximum pedestrian crossing distance = 33 feet or 3 lanes without median*



# What are the safety issues?

## *Weaving and speeding motor vehicles*

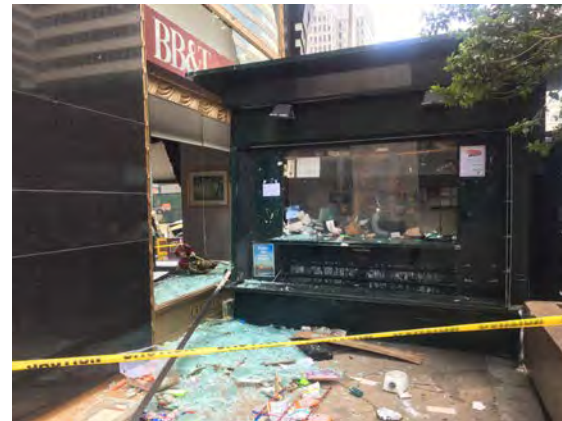
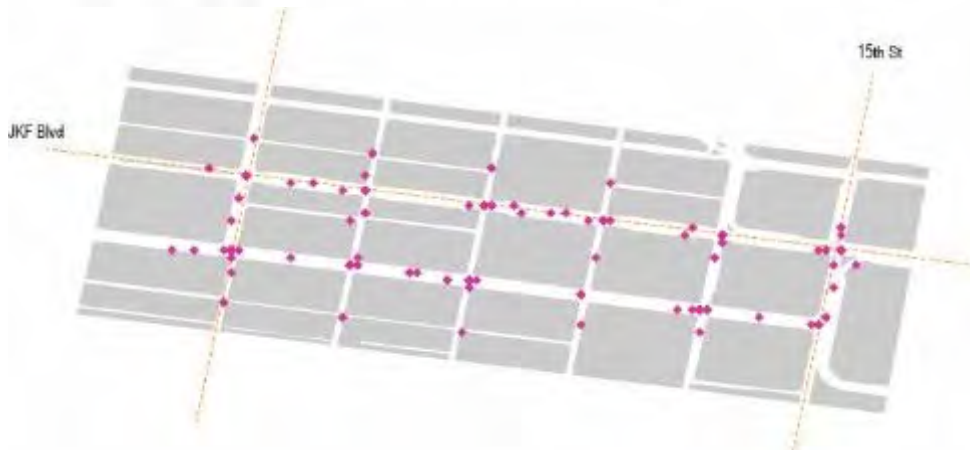
### CRASHES ON JFK AND MARKET

There were 140 crashes on JFK and Market combined between 15th & 20th streets from 2012 to 2016. Data for 2017 is not yet available, but there was at least 1 pedestrian death on JFK last year.

### 154 PEOPLE INJURED



In traffic-related crashes on JFK and Market from 2012 to 2016.



“Police said a woman was driving the van west on JFK Boulevard, and tried to switch from a middle lane to the right-hand lane at the intersection with 16th Street, but instead struck the back of a silver Hyundai Santa Fe sport utility vehicle traveling in the right lane.”

# Past studies

Full project

Protected bike lane, landscaped median, signal work, restripe full roadway

\$18 million



Intermediate

Signal work, protected bike lane, flex posts, restripe full roadway

\$1.5 million



# Pilot project proposal





# Market Street pilot

Existing Market  
St. cross section



Pilot Market St.  
cross section



# JFK Blvd. pilot



Existing JFK  
cross section

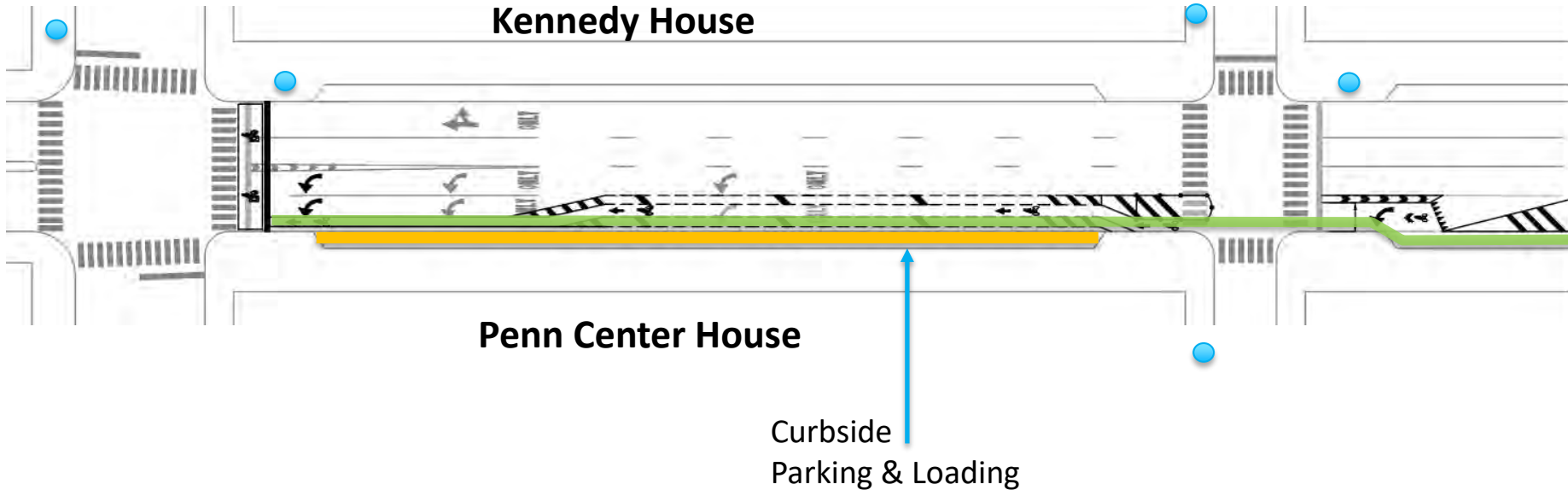


Pilot JFK cross  
section



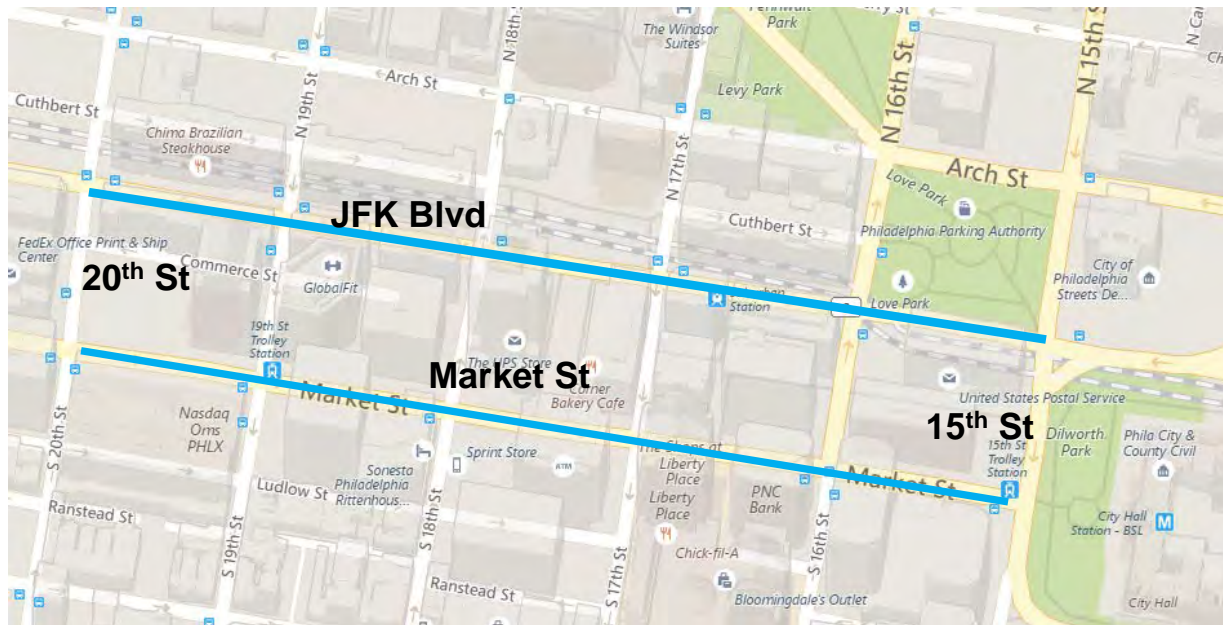
# 1900 Block JFK

Upgraded SEPTA Shelters



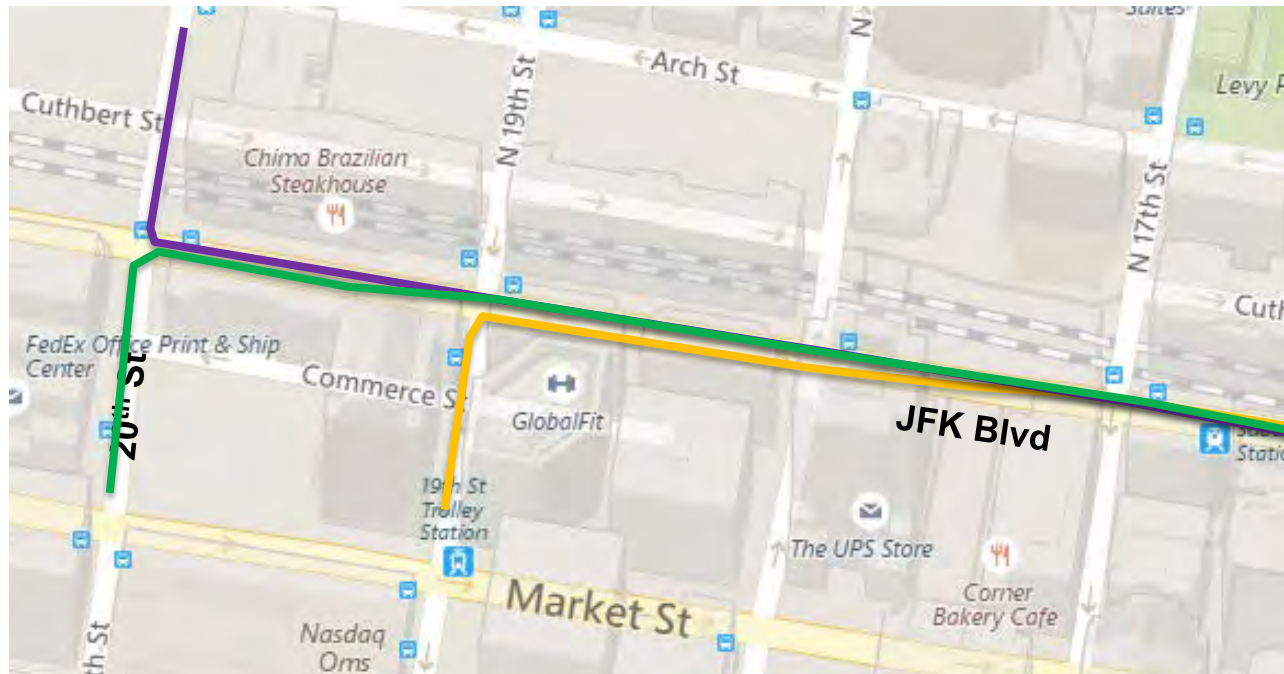
# How will it impact traffic?

- Redesign will have negligible impact on traffic flow
- Left turning lanes will help traffic flow
- Due to construction, LOVE Park, Sterling House and 1500 Market have been 3 lanes



# How will it impact SEPTA?

- Buses: 17, 33, 38, 44, 124, 125



- ## Protected Bicycle Lane Analysis
- # 1. Safety – 3yr After Data
- Protected Bicycle Lanes with  
3 yrs of After Data:  
Before vs After
- 
- | Injury Type                | Before | After | % Change |
|----------------------------|--------|-------|----------|
| Crashes with Injuries      | 508    | 422   | -17%     |
| Pkwy Encroachment Injuries | 233    | 169   | -28%     |
| Pedestrian Injuries        | 258    | 201   | -22%     |
| Cyclist Injuries           | 99     | 96    | -3%      |
| Total Injuries             | 1098   | 879   | -20%     |
- Legend: Before (Green), After (Blue)
- Looking at all corridors combined with at least three years of after data, we find that:
- Crashes with injuries have been reduced by 17%
  - Pedestrian injuries are down by 22%
  - Cyclist injuries show a minor improvement even as bicycle volumes have dramatically increased
  - Total injuries have dropped by 20%
- This report shows information 1 to 3 years after adoption of the following: 01/01/2012 - 01/01/2014. The total number of crashes from 01/01/2012 - 01/01/2014 was 1,098. The total number of crashes from 01/01/2014 - 01/01/2016 was 879. This report shows the difference between the two periods.

# Pilot project timeline

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## Fall/Winter 2017/2018

- Meet with stakeholders seeking support for demonstration
- Finalize plans and secure funding
- Collect baseline data

## Spring 2018

- Install 9 month pilot
- Collect data at two points during pilot to measure impact
- Check in with stakeholders and public

## Late Fall 2018

- Review results of data collection and stakeholder feedback with Council President and public
- Determine next steps



# Measures of success

Goal	Performance Measure	Unit(s) of Measurement
Safety	Collision Rate	Severity and Number of Crashes, Number of Injuries, Crash Rate
	Speeding	Peak and Average Speeds
Mobility	Vehicle Volume	Number
	Vehicle Travel Time	Time from 15 - 20th Streets
	Vehicle Median Speeds	Number
	Bicycle Volume	Number in 2 locations along each street
	Pedestrian Volume	Number in 2 locations along each street
	Bus Speeds	Speed along 1 location along each street
Quality of Life	Employees/Businesses Satisfaction	Percentage
	Roadway User Satisfaction	Percentage
	Testimonials	Comfort Level
	Use of Public Spaces	Usage # of pedestrian refuge areas along roadway, Usage # of public spaces along corridor



# Focused Enforcement Plan

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## Partnership with Police District #9

### 1. Behavior for Motor Vehicles

- Red light running
- Turning vehicles failure to yield to pedestrians
- Motor vehicle and truck double parking
- Mixing/Conflict zone yield behavior

### 2. Behavior for Bicycles

- Conflict zone yield behavior
- Red light running
- Sidewalk and wrong way bicycling

# Meetings to date

Entity	Date(s)	Result
Kennedy House	8/14/17, 10/10/17, 12/12/18 (Board), 12/12/18 (Council)	Neutral
Penn Center House	7/19/17, 10/24/17	Support
Logan Square Civic Association	1/9/18	Support
9 <sup>th</sup> Police District	1/11/18	Support
One Penn Center	12/12/17	Support
1601 Market	2/7/18	Support
1801 Market	2/6/18	Support
Two Penn Center	2/12/18	Support
Center City Residents Association	2/13/18	Support

# Next Steps

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1. Finalize Enforcement, Engagement, and Data Evaluation Plans
  - Final Plans - Late March
2. Finalize Parking & Loading Plan with PPA and Building/Tenant Input
  - Final Plan - Late March
3. Finalize Installation Schedule
  - Target - April

# Thank you



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