

NJ COMPLETE STREETS SUMMIT 2019



VISION ZERO

Presented by Greater Mercer TMA

THIS PRESENTATION



What's the Problem



Vision Zero-What is it?



Vision Zero Strategies



Getting Started on Vision Zero



What's the Problem

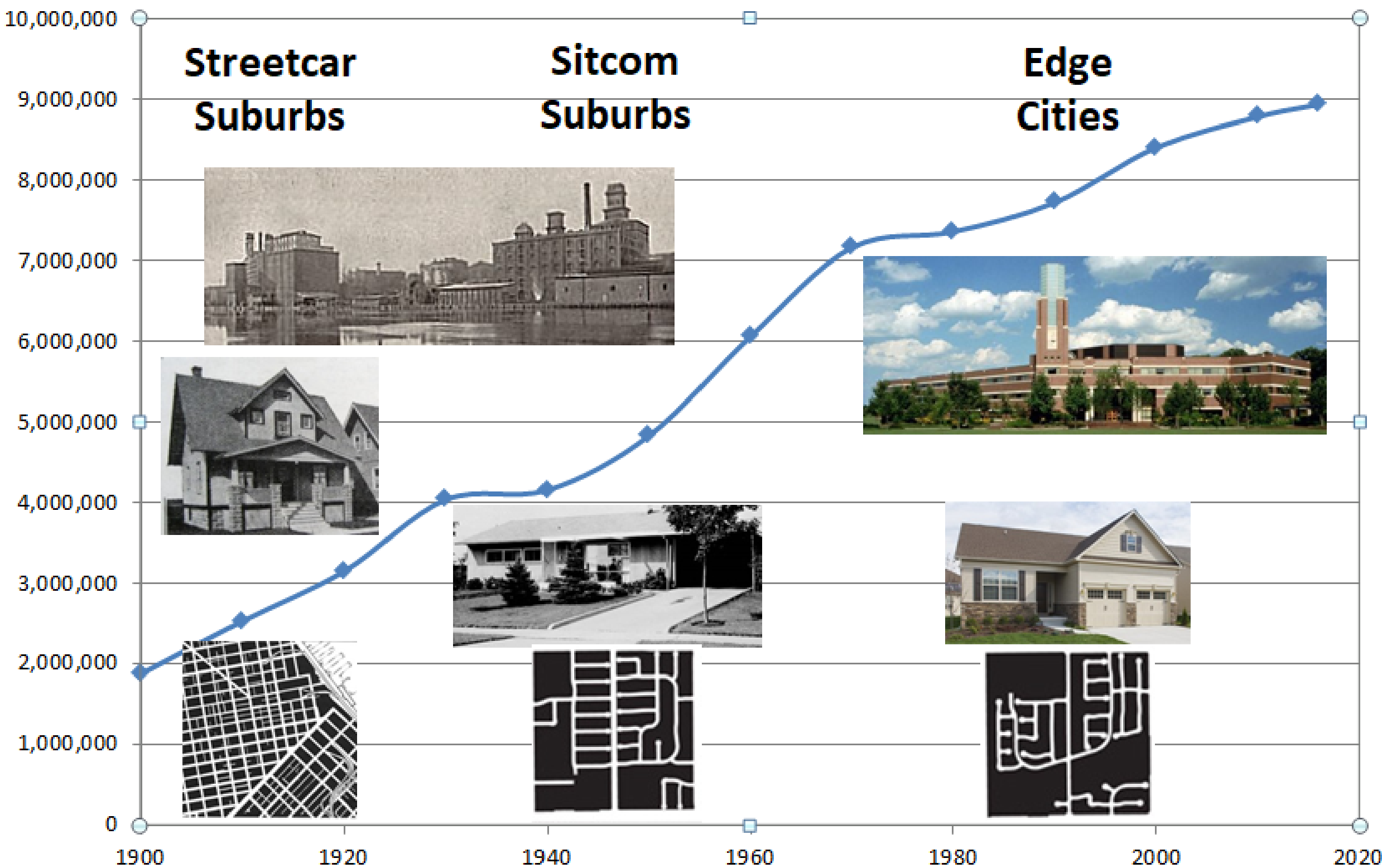


SETTING THE FRAMEWORK





New Jersey Population (US Census)



New Jersey

Population & Economy

37,000+



ON AVERAGE, 100 PEOPLE EACH DAY ARE
KILLED FROM MOTOR VEHICLE CRASHES IN
THE U.S.

NEW JERSEY NUMBERS

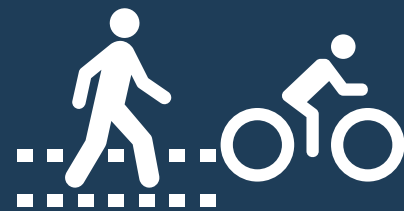


TOTAL FATALITIES

2016 602 FATALITIES

2017 624

2018 565



PEDESTRIAN & BICYCLE FATALITIES

2016 183

2017 200

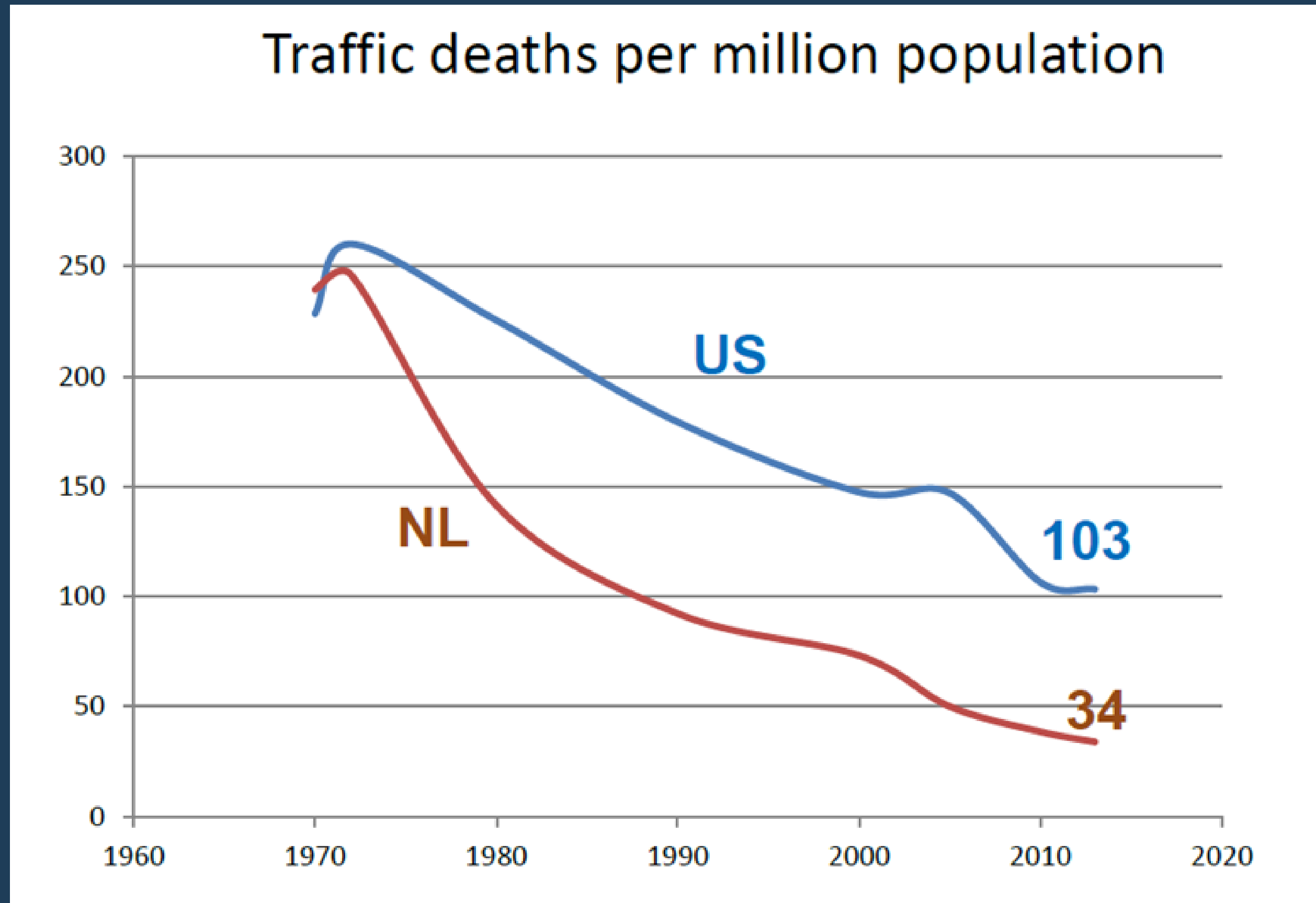
2018 193

Pedestrian and bicycle fatalities are more than 30% of all fatalities



**DO YOU BELIEVE THEY ARE
PREVENTABLE?**

If the U.S. had the same fatality rate as the Netherlands,
we'd save 20,000 lives per year



Vision Zero



WHAT IS IT?



VISION ZERO

A STRATEGY TO ELIMINATE
TRAFFIC FATALITIES AND
SEVERE INJURIES, WHILE
INCREASING SAFETY, HEALTH
AND MOBILITY FOR ALL

CRASH

~~ACCIDENT~~

Vision Zero

Core Principles

- **TRAFFIC FATALITIES ARE PREVENTABLE**

- **PEOPLE MAKE MISTAKES**

The transportation system should be forgiving

- **SAFE TRAVEL IS THE PRIORITY**

Human life is prioritized over swift travel

- **SAFE SYSTEMS APPROACH**

Requires more than individual behavior change

- **SPEED MUST BE MANAGED**

High speeds make crashes more likely and more likely to be deadly

TIERED LEVELS OF RESPONSIBILITY



1. THE DESIGNERS OF THE SYSTEM ARE RESPONSIBLE

for the design, operation
and use of the
transportation system.

2. ROAD USERS ARE RESPONSIBLE

for following the rules of
the transportation system.

3. HUMANS WILL INEVITABLY FAIL

to follow the rules due to
lack of knowledge,
discipline, or
understanding of system.

4. DESIGNERS MUST TAKE THE NECESSARY STEPS

to ensure that the
resulting crashes do not
result in fatalities or serious
injuries.



Safe Systems

People will always make mistakes,
but the system should be forgiving

We can't hope to perfect human
behavior!

Vision Zero



STRATEGIES



MULTI-DISCIPLINARY APPROACH



POLICY



ENGINEERING



EDUCATION



ENFORCEMENT



PROVEN SAFETY COUNTERMEASURES

Refuge Islands

Link: https://safety.fhwa.dot.gov/provencountermeasures/ped_medians/



- Reduces pedestrian crossing distance
- Greater pedestrian visibility
- Narrower lanes reduces driver speeding
- Flashing beacon alerts drivers
- Islands can be landscaped

Clarksville Rd, CR638, West Windsor NJ

Roundabouts

Link: <https://safety.fhwa.dot.gov/provencountermeasures/roundabouts/>



- Raised splitter island raised to form a pedestrian refuge
- Reduction in severe crashes
- Urban, rural, suburban options

George Dye Rd and Estates Blvd, Hamilton NJ

Hybrid Pedestrian Beacon (HAWK Signal)

Link: https://safety.fhwa.dot.gov/provencountermeasures/ped_hybrid_beacon/



- Pedestrians can cross midblock or uncontrolled intersections
- Pedestrians activate the signal
- Motorists stop completely

State Road 35, Seaside Heights NJ

Road Diet

Link: https://safety.fhwa.dot.gov/provencountermeasures/road_diets/



- Reconfigure four general travel lanes:
 - Two general travel
 - Center turn lane
 - Bike lanes

West Windsor, NJ

MANAGE SPEED

- DESIGN STREETS TO REDUCE
SPEED

PRIORITIZE THE HIGH INJURY NETWORK

- LOWER SPEED LIMIT TO FIT
CONTEXT

- CONSIDER AUTOMATED SPEED
ENFORCEMENT PROGRAM

- CREATE NEIGHBORHOOD
TRAFFIC CALMING
PROGRAMS

- CREATE COMPLETE STREETS FOR ALL

HIT BY A VEHICLE
TRAVELING AT:

**20
MPH**

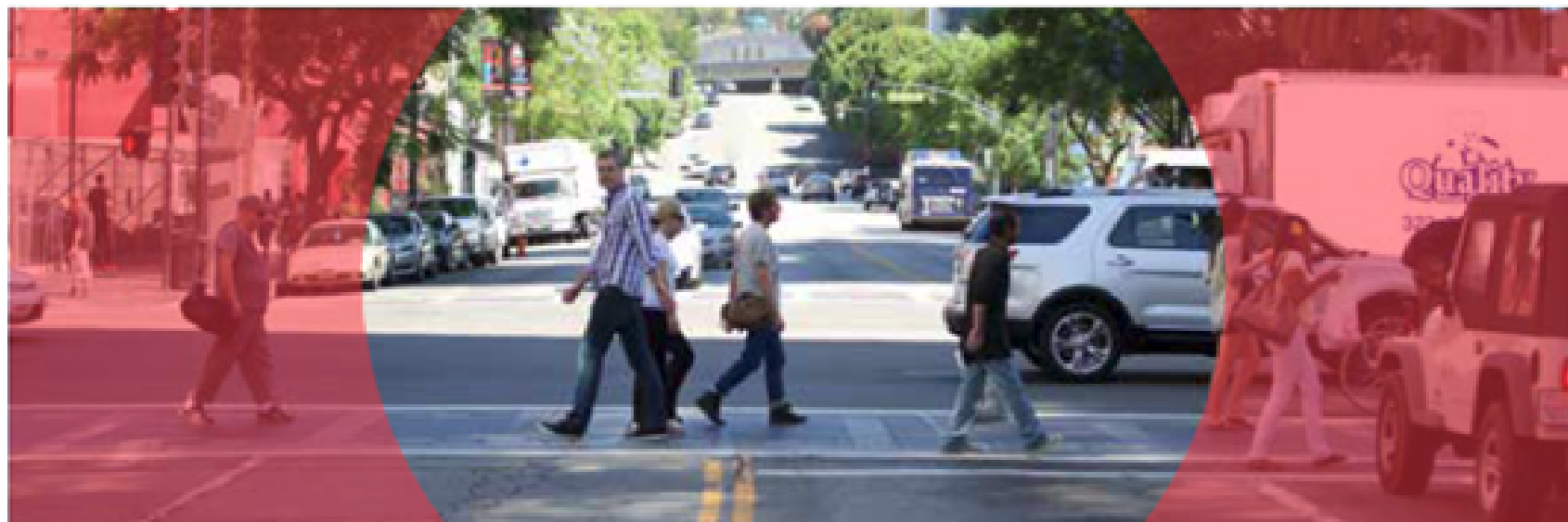
10%
DEATH RISK



HIT BY A VEHICLE
TRAVELING AT:

**30
MPH**

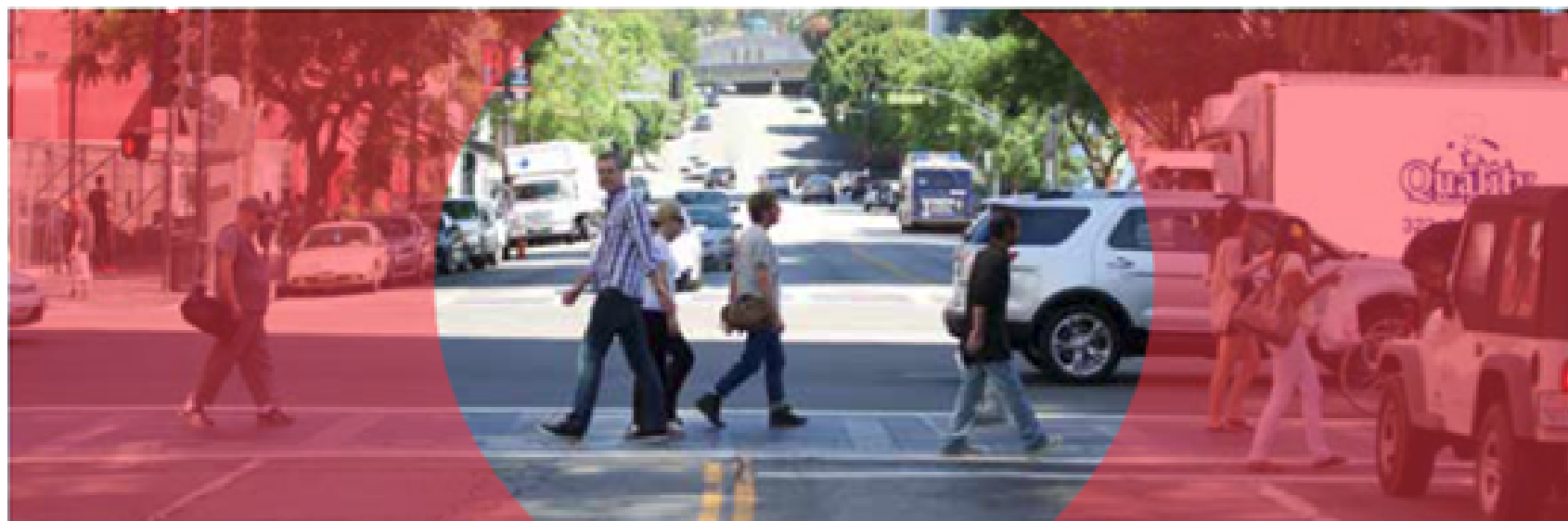
40%
DEATH RISK



HIT BY A VEHICLE
TRAVELING AT:

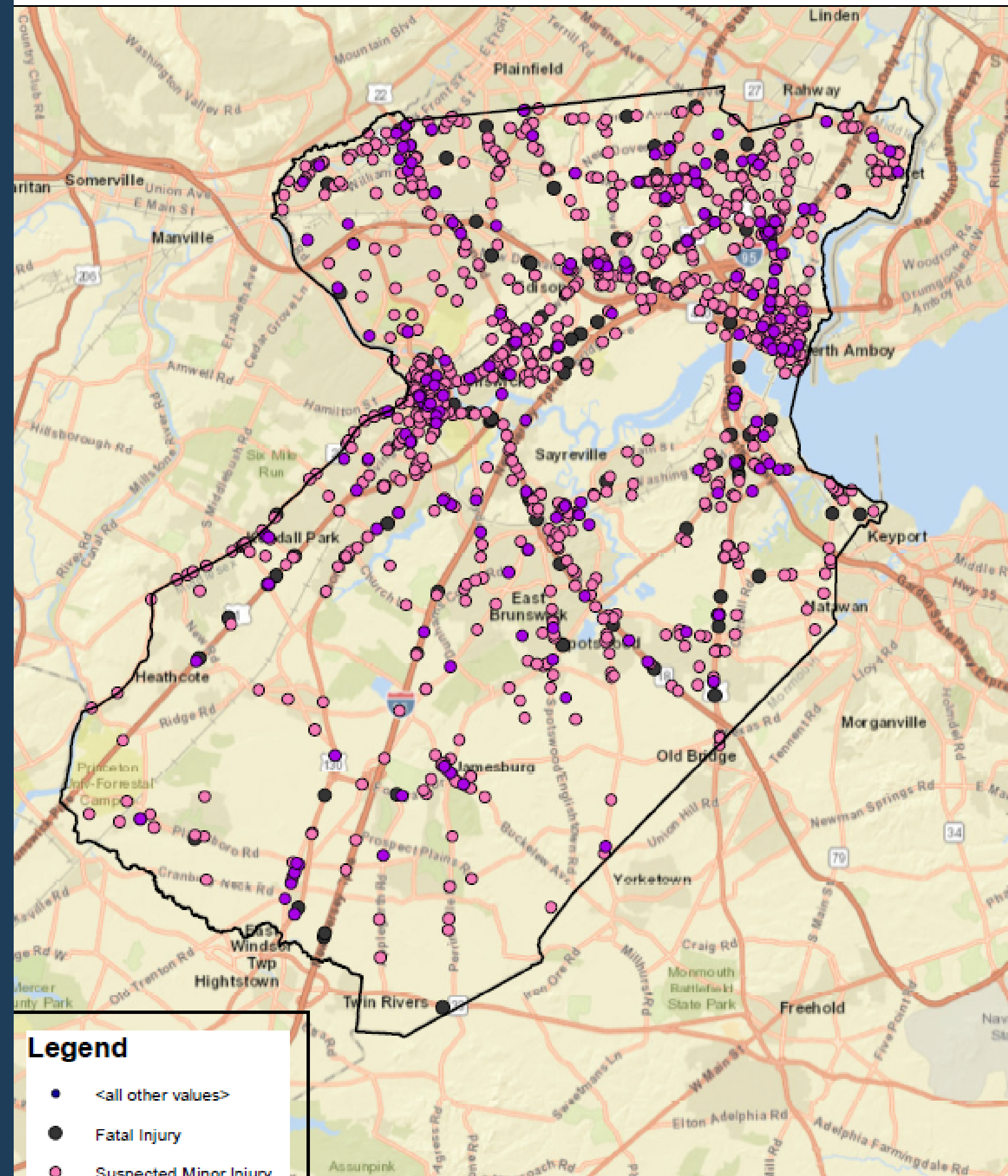
**40
MPH**

80%
DEATH RISK



Speed is especially lethal for vulnerable users, like people walking and biking.

The risk of severe injury or death increases as a driver's field of vision narrows.



BE DATA DRIVEN

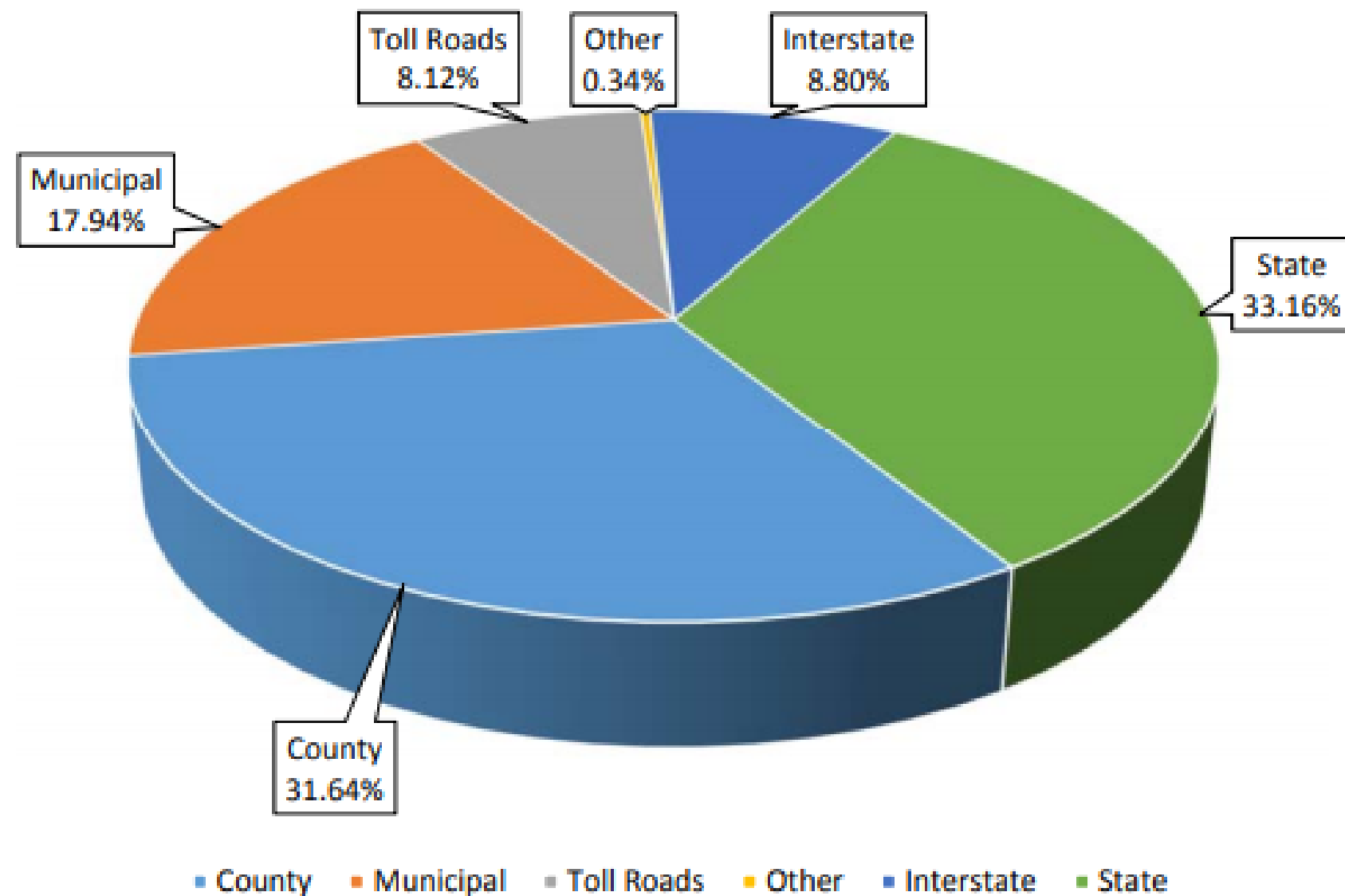
RESPONSIVE HOT SPOT PLANNING

EQUITY FOCUSED ANALYSIS

PROACTIVE, SYSTEMIC PLANNING

**COMPREHENSIVE EVALUATION AND
ADJUSTMENTS**

Breakdown in Percentages of 591 Crashes during 2017



NJ Crashes by Roadway

know where the crashes are occurring

EDUCATION AND ENFORCEMENT

Road Design and Speed Management are Key, but Education
can Bolster the Success of Vision Zero

VISION ZERO CAMPAIGNS

**There's no one
someone won't miss.**



STREET SMART



SAFE ROUTES TO SCHOOL



Vision Zero



GETTING STARTED





Vision Zero-first steps

POLITICAL COMMITMENT

This should include a resolution or policy that commits to goals and a timeline

FORM A VISION ZERO TASK FORCE

Multi-disciplinary team including Office of Mayor, public health, transportation, police and others.

CREATE AN ACTION PLAN

Clear strategies, "owners" of strategies, timeline, performance measures

Thank you!

Questions?

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**VISION
ZERØ**

CITY OF PHILADELPHIA

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

Zero traffic deaths by 2030.



CRASH

~~ACCIDENT~~

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**

PERFECT human behavior

Prevent **COLLISIONS**

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VS

VISION ZERO

Traffic deaths are **PREVENTABLE**

Integrate **HUMAN FAILING** in approach

Prevent **FATAL AND SEVERE CRASHES**

SYSTEMS approach

Saving lives is **NOT EXPENSIVE**

SAFE TRAVEL FOR ALL

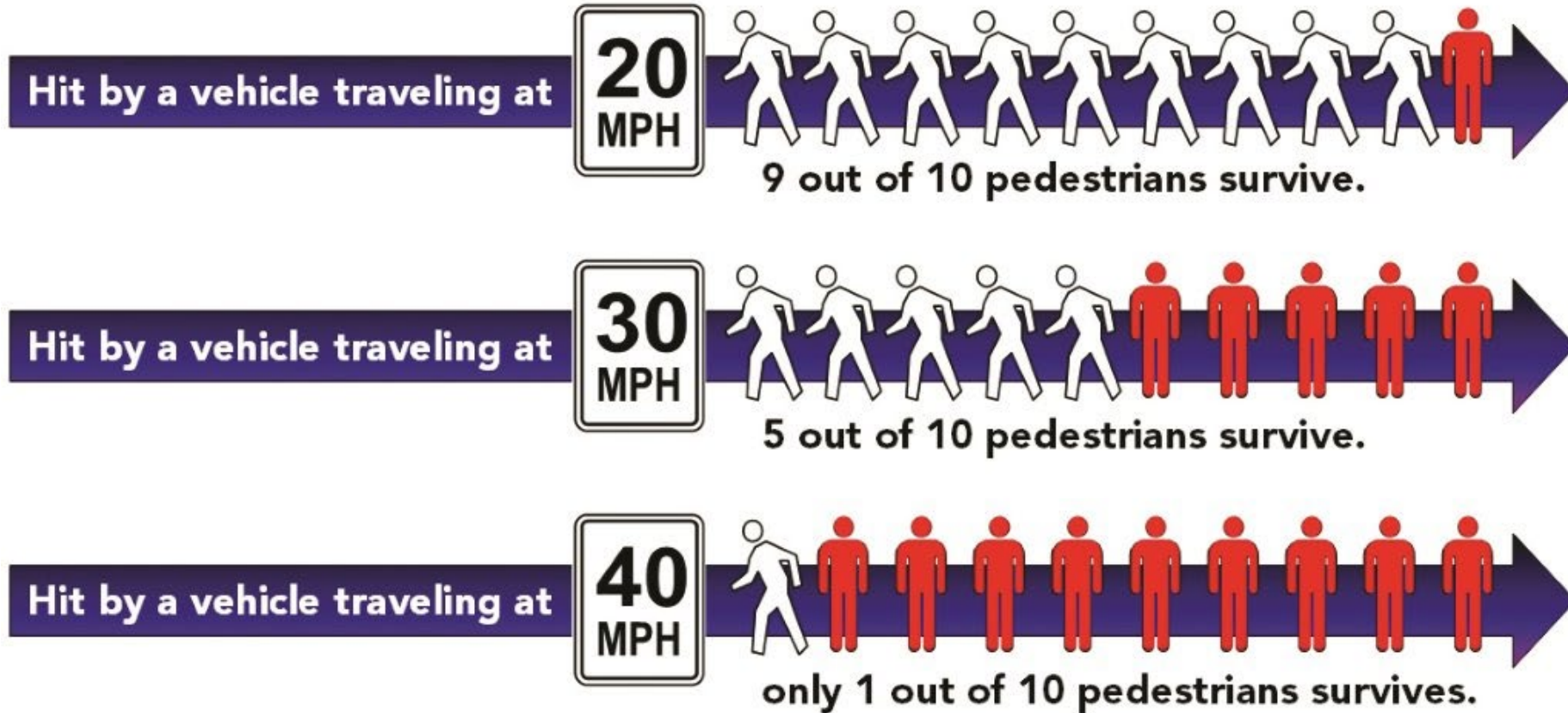
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graph TD; A[SAFE TRAVEL FOR ALL] --> B[SAFE STREETS]; A --> C[SAFE SPEEDS]; A --> D[SAFE VEHICLES]; A --> E[SAFE PEOPLE];
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SAFE STREETS

SAFE SPEEDS

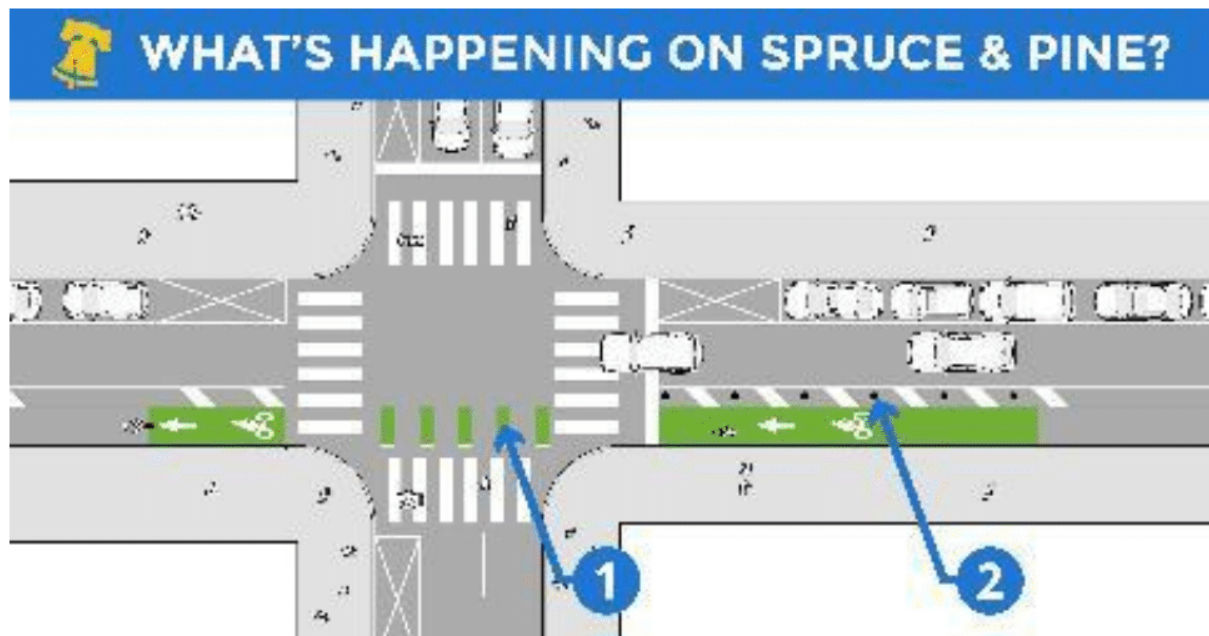
SAFE VEHICLES

SAFE PEOPLE



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.

Fleet management

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

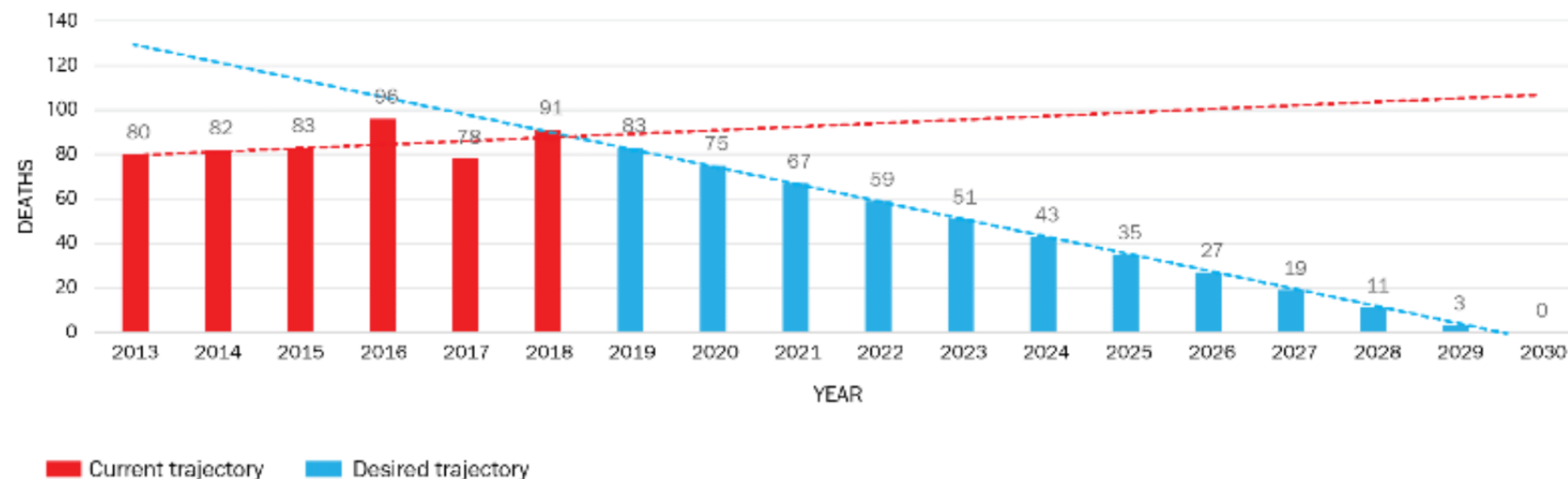
What are sideguard panels?

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.



Vision Zero trendline

Current & Desired Trendline for Vision Zero in Philadelphia



Source: PennDOT, 2013 - 2018

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
- **STAY TUNED:** Vision Zero Year Two update released in October 1, 2019



Emily Fredricks Foundation

The **Emily Fredricks Foundation** exists to remember and honor a wonderful young woman. The Foundation honors the person that Emily was and fosters the people, family values and things that she loved.



www.emilyfredricksfoundation.org

Thank you to Kelley Yemen, Director of Complete Streets of the Office of Transportation, Infrastructure and Sustainability in Philadelphia and Leah Shahum, Founder and Director of the Vision Zero Network for all their help with the factual information.



TRANSPORTATION
ALTERNATIVES

Vision Zero in New York City

Joe Cutrufo
Communications Director, Transportation Alternatives

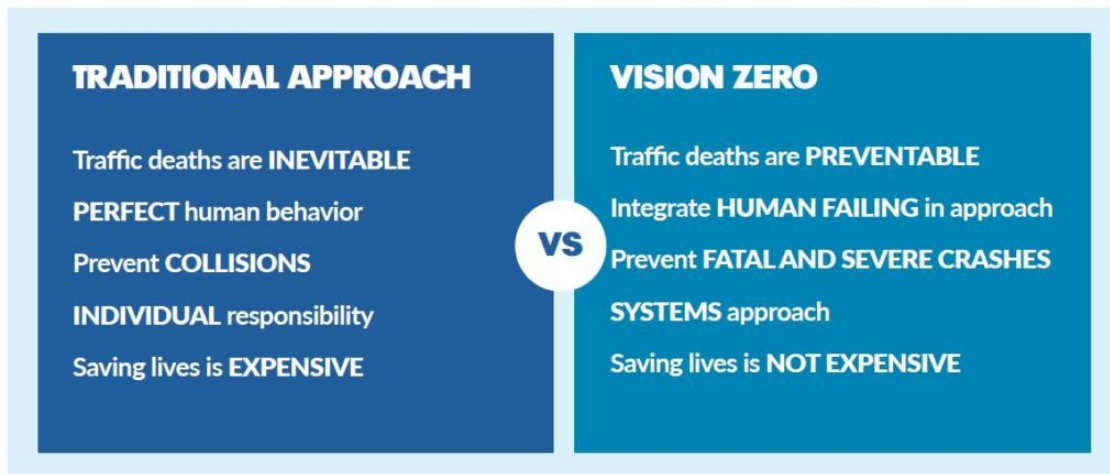
New Jersey Complete Streets Summit
September 24, 2019



TRANSPORTATION
ALTERNATIVES

Transportation Alternatives' mission is to reclaim New York City's streets from the automobile and advocate for better bicycling, walking, and public transit for all New Yorkers.

- Founded in 1973
- Staff of 30 full-time employees + seasonal street team
- 10,000 dues-paying members + 100,000 active supporters
- Volunteer committees working locally in all five boroughs
- Key achievements include
 - Pedestrian plazas
 - 1,300 miles of bike lanes
 - Kicking the cars out of Central Park
 - Winning the fight for congestion pricing
 - **Making New York America's first Vision Zero city**



Why Vision Zero?

Traffic crashes are the leading cause of injury-related death for New Yorkers under 14, second-leading cause of injury-related death for seniors.



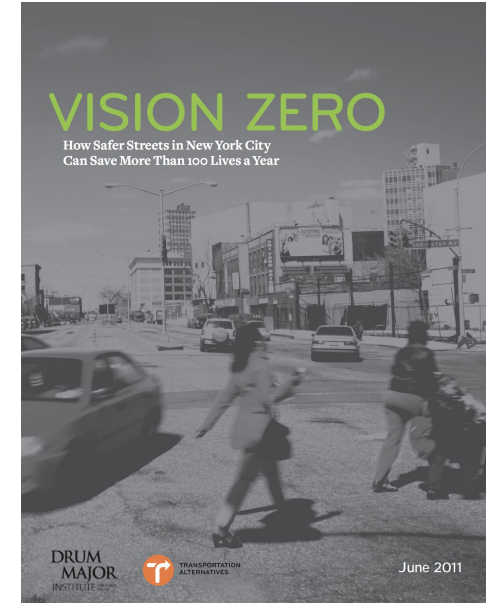
TRANSPORTATION
ALTERNATIVES

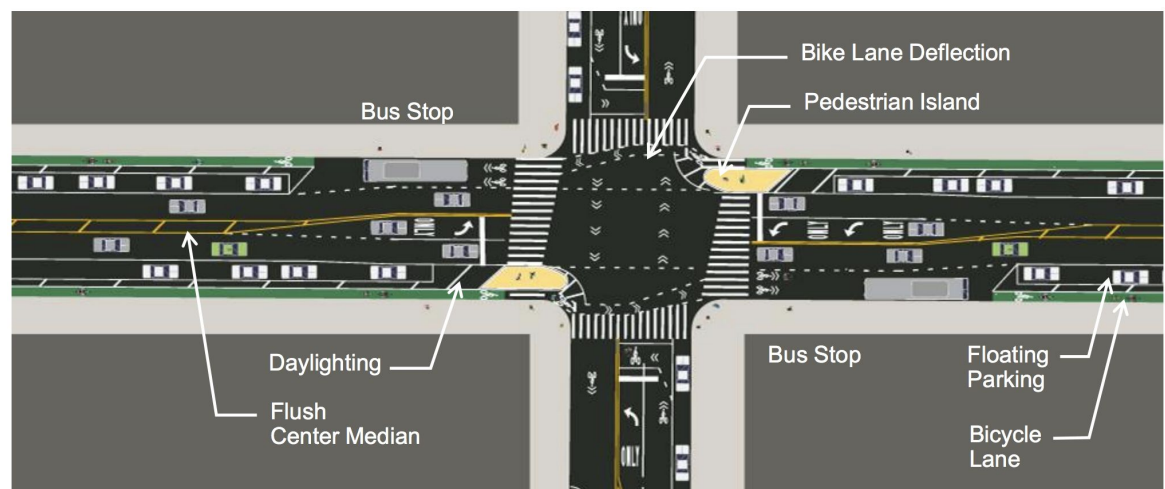
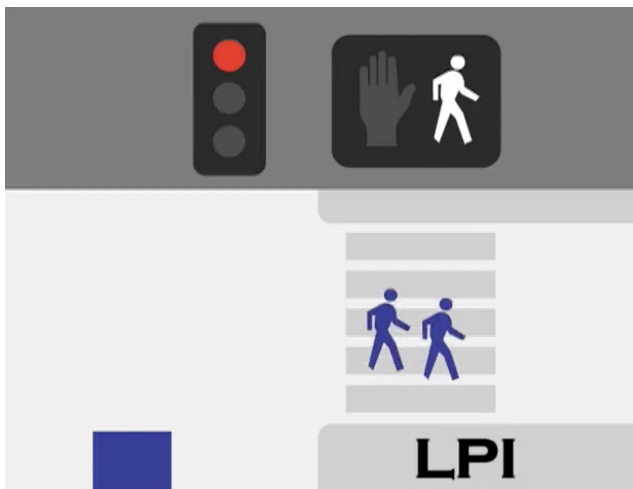
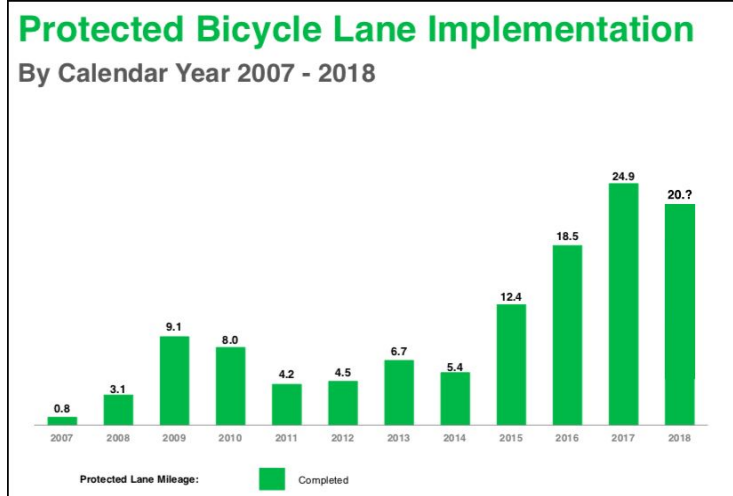
How New York became America's first Vision Zero city

2011: Transportation Alternatives publishes ***Vision Zero: How Safer Streets in New York City Can Save More Than 100 Lives a Year***, recommending the City of New York adopt a Vision Zero policy.

2013: Transportation Alternatives and Families for Safe Streets send more than 4,500 letters to then-mayoral candidate Bill de Blasio, who later announces that, if elected, his administration will launch a citywide Vision Zero initiative.

2014: de Blasio takes office and releases a 63-step Vision Zero Action Plan, with the majority of its recommendations pulled directly from Transportation Alternatives reports, studies and initiatives.







Speed Cameras Will Surround Every New York City Public School

ALBANY — The speed cameras that were installed around many New York City public schools several years ago seemed like an unqualified success: Traffic deaths near the cameras fell by more than half, and speeding was reduced by more than 60 percent.

And yet, last summer, the cameras went dark, a casualty of partisan politicking in Albany and a potent reminder of the capital's reputation for dysfunction.

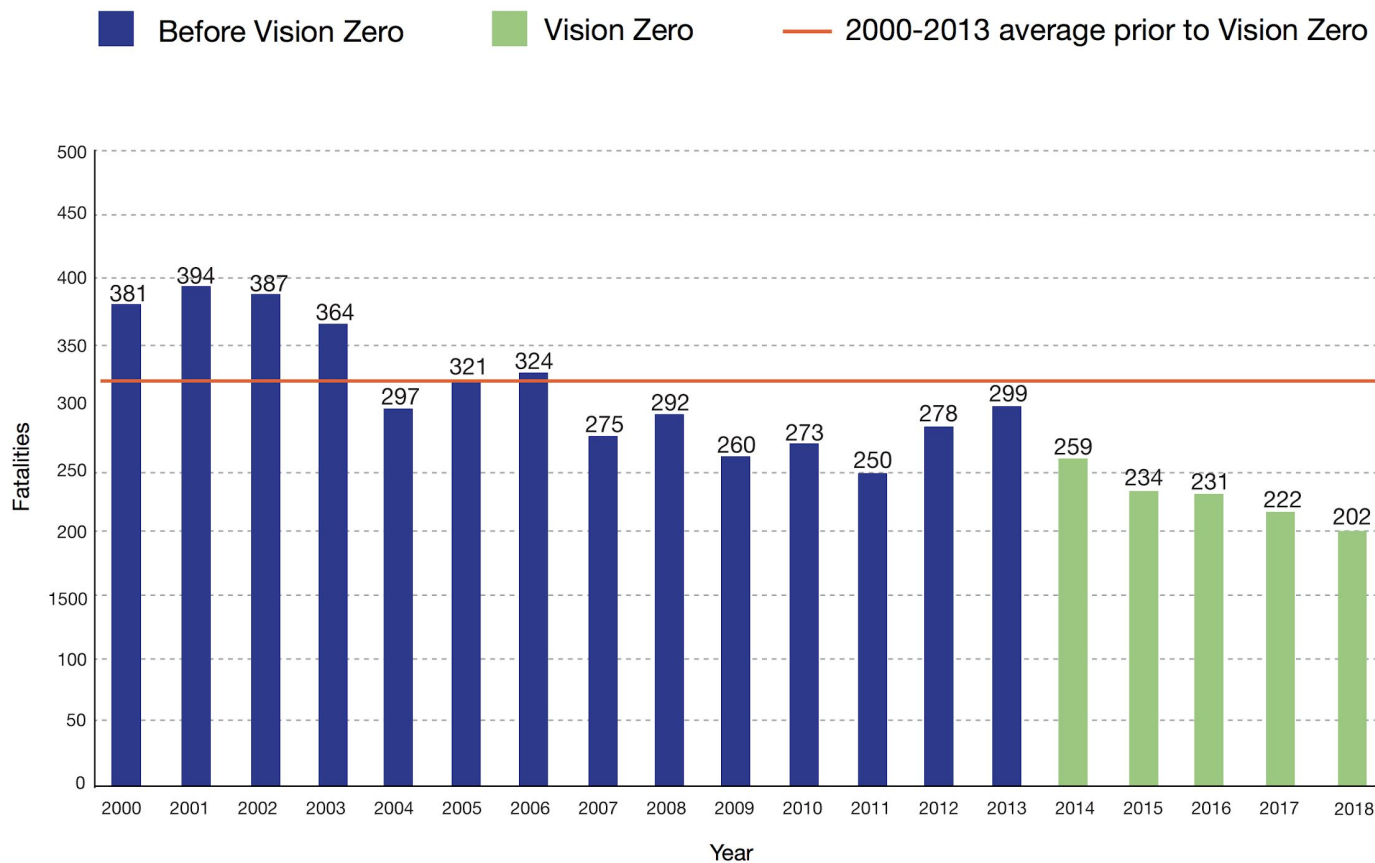
Now they are being revived, and then some: The newly Democratic-led State Legislature on Tuesday voted to renew and vastly expand the speed camera program, in a nearly fivefold increase that city officials say will cover every elementary, middle and high school in the city.

City officials said the authorization to place cameras in 750 school zones would make New York's school speed camera program the most robust in the nation.

Automated enforcement

Unbiased and unflinching, NYC's life-saving speed safety camera program is one of Vision Zero's biggest successes.

Traffic deaths have fallen during the first 5 years of Vision Zero.



We've cut traffic deaths by a third.

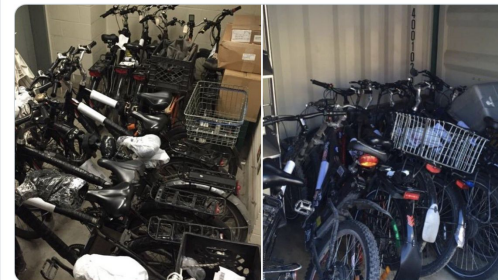
**Here's what's standing in the way
of saving even more lives:**



NYPD 9th Precinct

@NYPD9Pct

Had a successful Ebike operation today issuing multiple summonses & seizing the following bikes
[@NYPDTransport](#) [#VisionZero](#) [#NYPD](#)



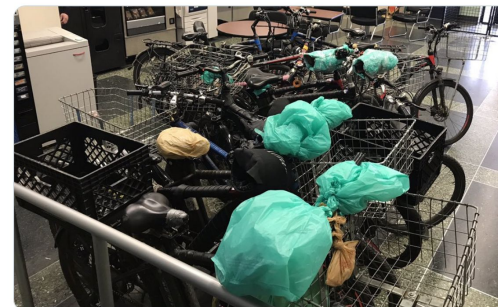
5:05 PM · Mar 22, 2017 · Twitter for iPhone



NYPD 24th Precinct

@NYPD24Pct

You called we listened! Ebike initiative is in effect.
[#VisionZero](#) [#UWS](#) [#EBikesareillegal](#)



NYPD Patrol Borough Manhattan North and 7 others

12:17 PM · Jan 17, 2019 · Twitter for iPhone

Drivers Keep Killing Pedestrians, So The NYPD Will Crack Down On Jaywalkers

**Cop Tackles Cyclist in Midtown — And It's All
Caught on Camera!**

The Fuzzy Logic of a Jaywalking Crackdown in New York

**NYPD Cracks Down On Cyclists,
Not Drivers, Where Truck Driver
Killed Bike Messenger**

**Cyclist Assaulted In East Village
Infuriated By NYPD Response:
'They Immediately Started
Gaslighting Me'**



We can't address traffic deaths if we don't address traffic.

- New York City's streets are more congested than ever.
- The number of annual FHV trips in NYC has nearly doubled since 2013.
- Subway and bus ridership has fallen, even as population has grown.



In London, after congestion pricing was implemented, total traffic deaths fell by 40% and cyclist deaths fell by 80%.



Vision Zero Street Design Standard & Transportation Master Plan

What we have today is a piecemeal approach to safe streets.
Together, these two bills would make safe street design more systemic.

Reckless Driver Accountability Act

Would boot or impound cars that accumulate five or more red-light and speed camera violations within one year, until their owners complete a Reckless Driver Accountability Program.

Sponsored by Council Member Brad Lander after a driver with a history of running red lights and speeding killed two children in his district.





Safe Streets Save Lives

October 10 - 11, 2019

New York City



Transportation Alternatives will bring together leading industry and policy experts, advocates, and elected officials for the fifth annual Vision Zero Cities conference, taking place at Columbia University.



**TRANSPORTATION
ALTERNATIVES**

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 @JoeCutrufo

 @TransAlt

VISION ZERO JC | SAFE STREETS FOR EVERYONE

[HOME](#) [WHAT IS VISION ZERO?](#) [ACTION PLAN](#) [GET INVOLVED](#)

**“The loss of each and every life as a result of a traffic crash is
AVOIDABLE.”**

Barkha R Patel

**Senior Transportation Planner, Jersey City
Co-Chair, Vision Zero JC Task Force**

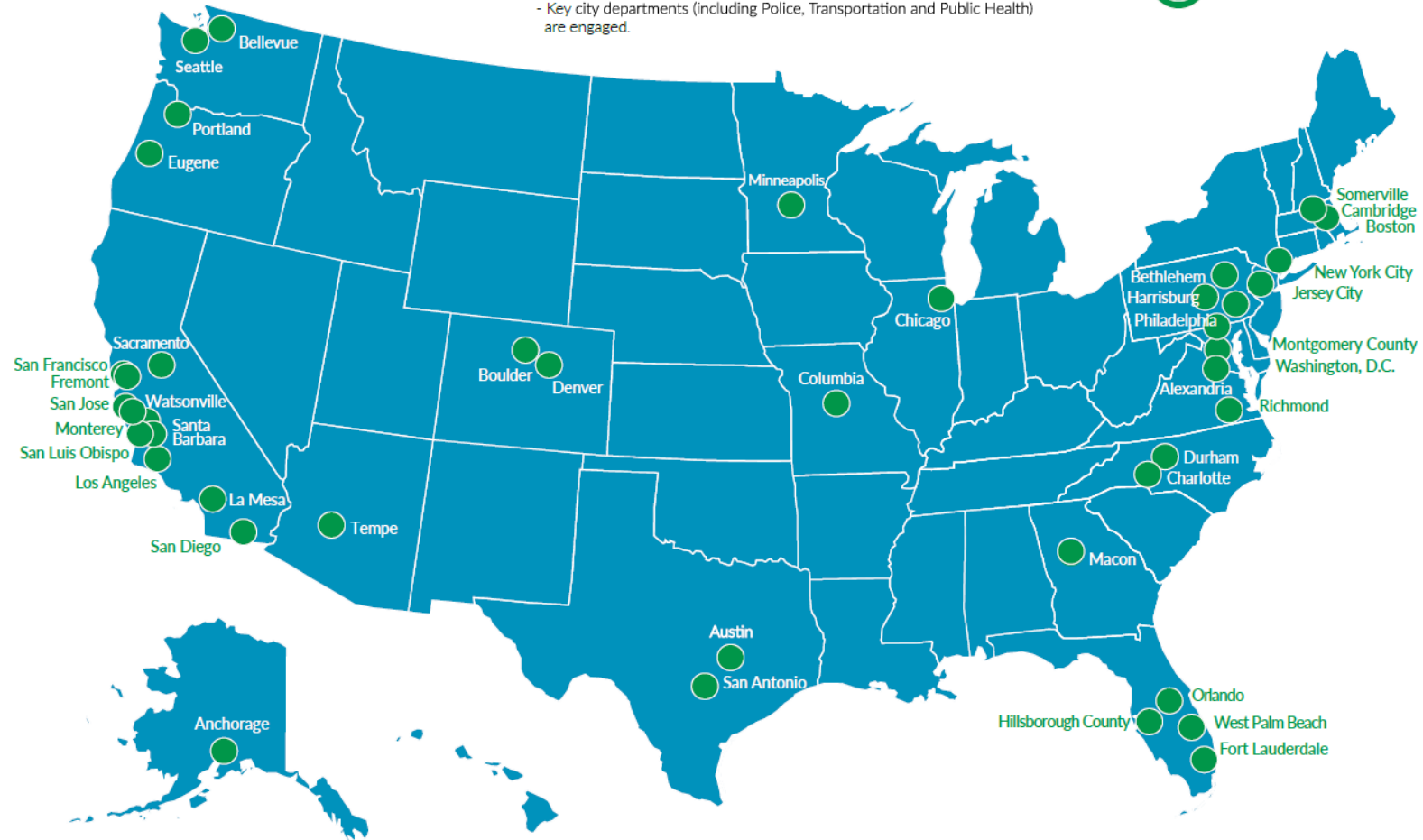
2019 New Jersey Complete Streets Summit



Vision Zero Cities

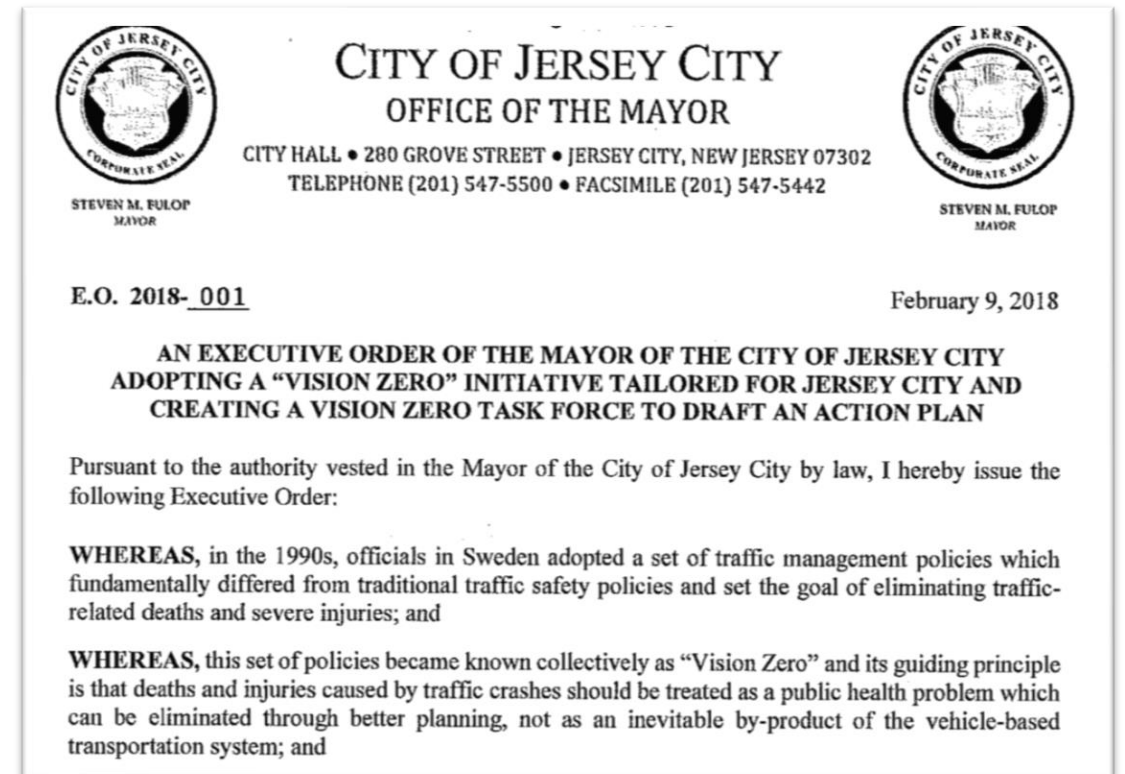
A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.



Mayor Fulop's Executive Order

- Adopted the Vision Zero Initiative tailored for Jersey City
- Established the Vision Zero goal
- Created the Vision Zero Task Force
- Charged the Task Force with creating an Action Plan

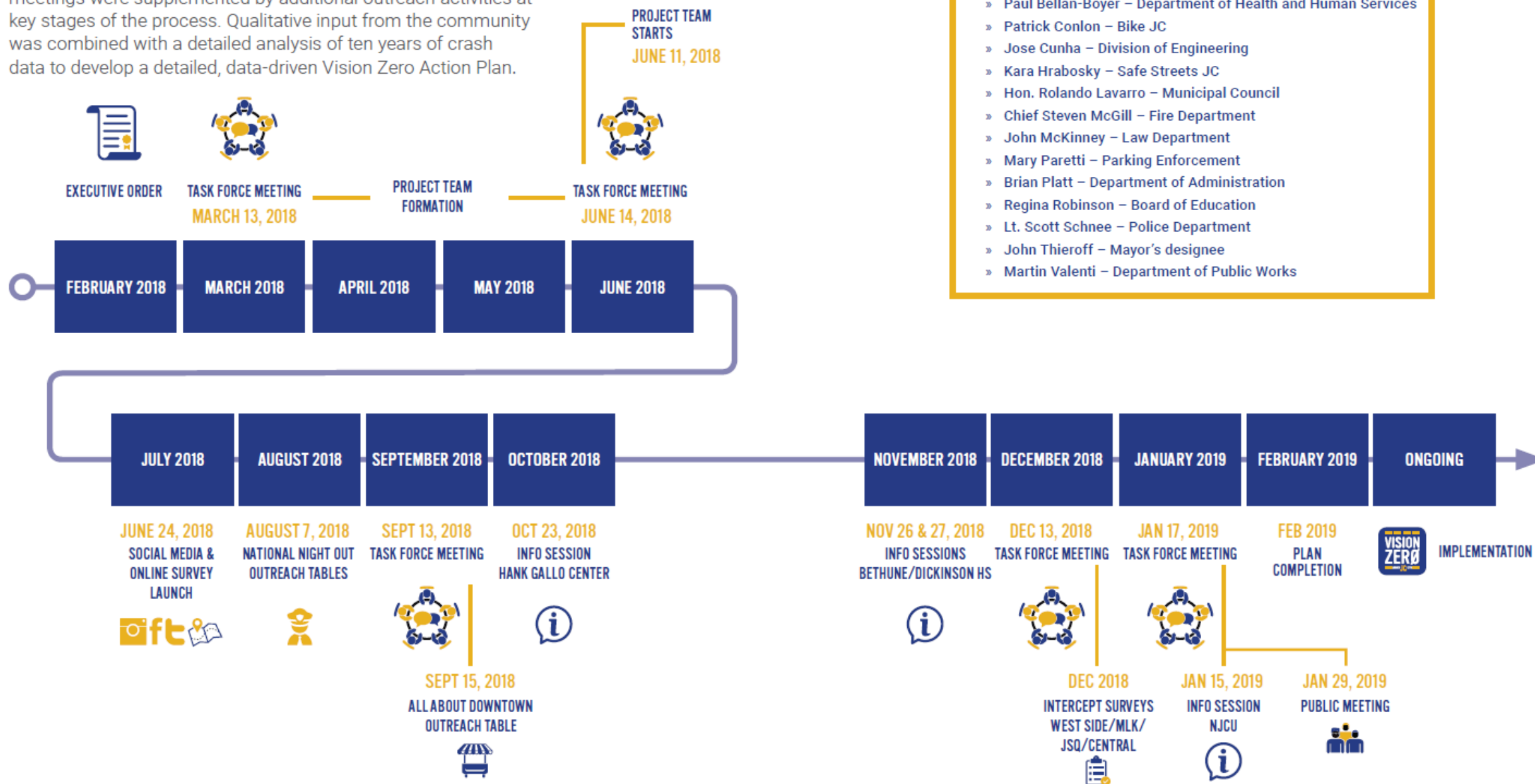


Our Vision Zero Goal

*Eliminate Traffic Fatalities and Severe Injuries on
Jersey City Roadways by the Year 2026*

Developing the Action Plan

The City established a Vision Zero Task Force to guide the development of the Action Plan through a 12-month process that included extensive public outreach. Three rounds of public meetings were supplemented by additional outreach activities at key stages of the process. Qualitative input from the community was combined with a detailed analysis of ten years of crash data to develop a detailed, data-driven Vision Zero Action Plan.

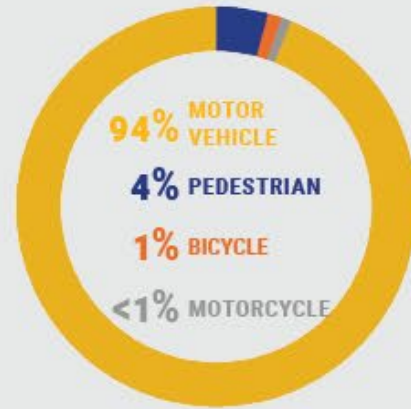


Where Are We Now?

JERSEY CITY TRAFFIC CRASHES BETWEEN 2008 AND 2017

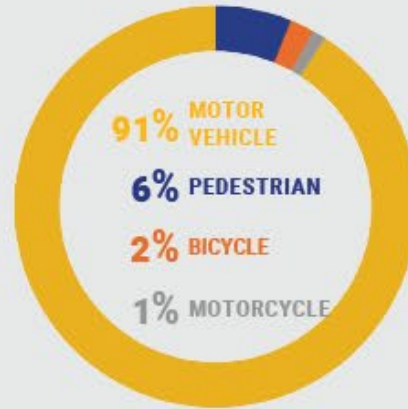
ALL ROADS

ALL CRASHES

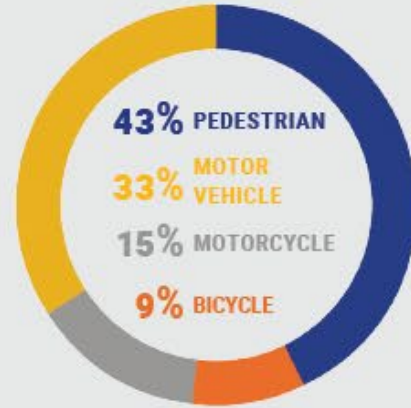


CITY ROADS

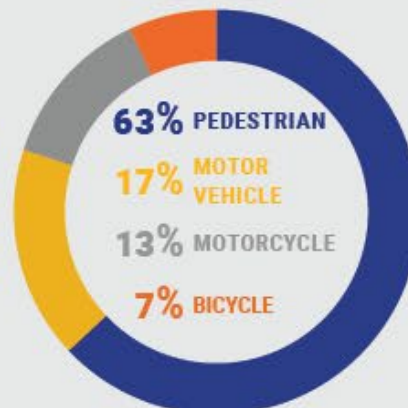
ALL CRASHES



FATAL CRASHES



FATAL CRASHES



JERSEY CITY TRAFFIC CRASHES IN AN AVERAGE YEAR

ALL ROADS

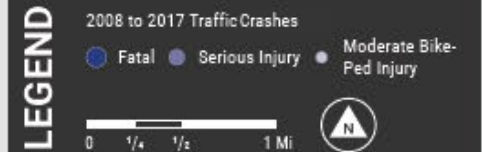
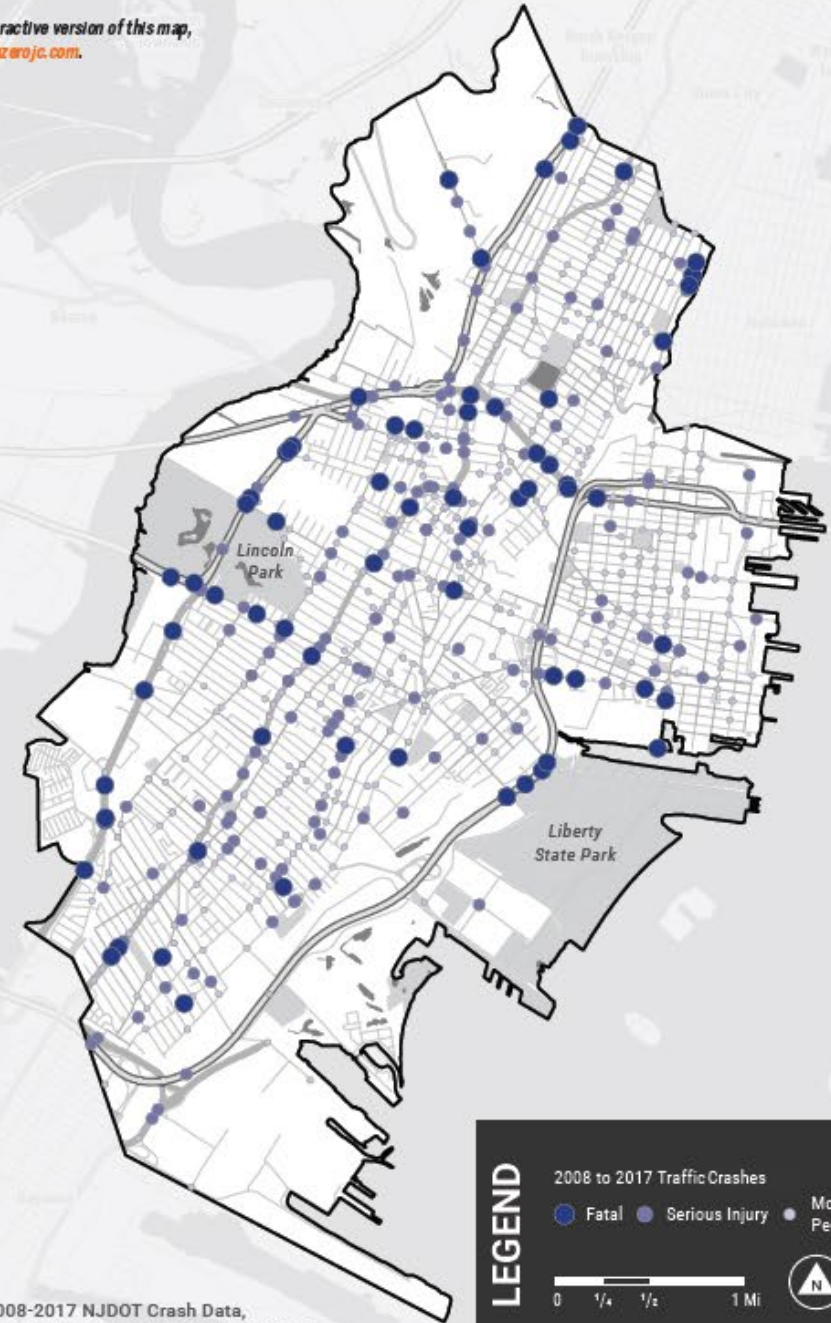


CITY ROADS



Figure 1: Traffic Crashes in Jersey City

For an interactive version of this map, visit visionzerojc.com.

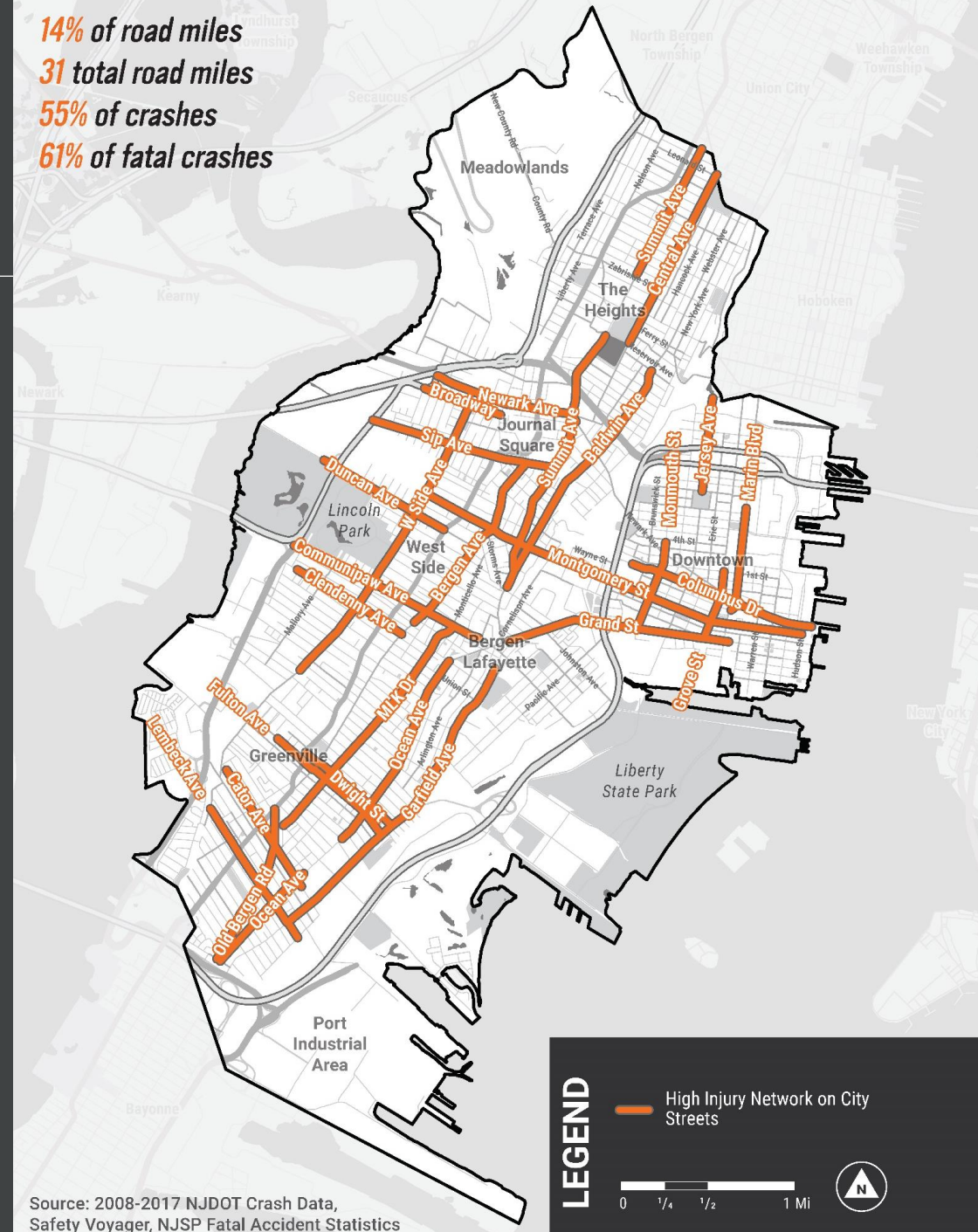


Source: 2008-2017 NJDOT Crash Data, Safety Voyager, NJSP Fatal Accident Statistics

High Injury Network

- Street segments with the most fatal and serious injury crashes
- Helps inform prioritization of VZ actions and strategies

14% of road miles
31 total road miles
55% of crashes
61% of fatal crashes



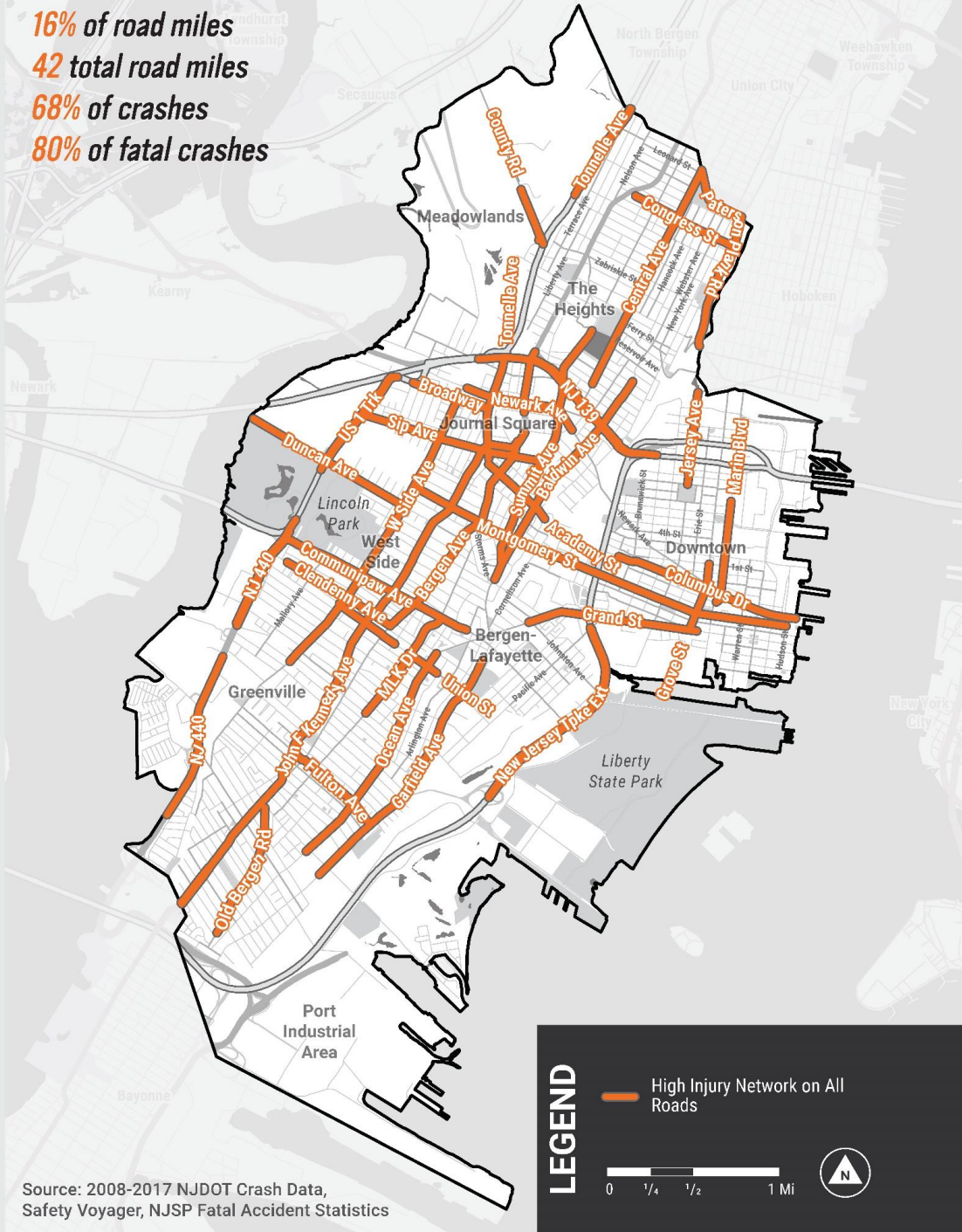
High Injury Network

State and County Roads

| State (NJDOT) | Hudson County |
|--------------------|--------------------|
| NJ 139 | JFK Blvd. |
| NJ 440 | Paterson Plank Rd. |
| US 1&9 | County Rd. |
| I-78 / NJ Turnpike | |

Engage the State and County as Vision Zero partners

16% of road miles
42 total road miles
68% of crashes
80% of fatal crashes



Actions to Design Safer Streets

| Action | Partners* | Timeframe | Performance Measures |
|---|------------------|-----------|--|
| 1.1 Incorporate the current speed hump program into a broader traffic calming policy that encompasses a wider menu of traffic calming options including raised intersections, traffic circles, diverters, forced-turn channelization, and other treatments permissible on residential streets. | T, E, M, O | 2 year | Update speed hump guidelines and application process |
| 1.2 Develop a neighborhood slow zone program to allow neighborhoods to request treatments to slow motor vehicles to 15 to 20 mph using traffic calming features, signs, and markings. Explore feasibility of setting a 20 mph speed limit on residential streets. | T, P | 2 year | Pilot one neighborhood slow zone near a school along the HIN |
| 1.3 Prioritize major safety engineering projects at locations along the High Injury Network. | E, P, DPW, T | Annual | Conduct safety evaluations along 5 miles along the HIN per year |
| 1.4 Advance high-priority projects established in Bike Master Plan. | E, P, T | Annual | Prepare concept development studies for 2 miles of protected bike lanes per year |
| 1.5 Increase the visibility of crossing pedestrians at intersections and mid-block crosswalks through design strategies such as painted curbs, flex posts, and bike corrals. | T, E, P, DPW | 2 year | Evaluate 30 of the most dangerous intersections along the HIN for potential improvements |
| 1.6 Update Standard Engineering Details to strengthen requirements to maintain pedestrian and bicycle access near construction zones. | E, DPW, T | 2 year | Update Traffic Barricade Manual and standard engineering details |
| 1.7 Explore the desirability and feasibility of introducing additional pedestrian malls throughout the City. | P, BA, E, M, T | 2 year | Evaluate one new pedestrian plaza location |
| 1.8 Launch a citywide initiative to treat streets as places by incorporating placemaking efforts, with public art, green infrastructure and neighborhood amenities, into traffic safety initiatives prioritizing Communities of Concern. | P, BA, E, DPW, T | 2 year | Pilot one placemaking initiative enhancing locations along the HIN |
| 1.9 Work with JC Public Schools to establish dedicated school drop-off/pick-up zones. | T, E, O, PE, P | 2 year | Pilot dedicated pick-up/drop-off zones at 6 schools along the HIN |
| 1.10 Undertake a review of loading zones and vehicle-for-hire staging areas to determine if relocation or consolidation of sites is appropriate, especially along the HIN corridors. | T, O, E, P | 2 year | Pilot new loading zone spacing and design on approximately 1/2 mile-long segment of one corridor |
| * ABC : Lead partner ABC: Supporting partner(s) | | | |

Actions to Design Safer Streets (continued)

| Action | Partners* | Timeframe | Performance Measures |
|---|-----------|-----------|--|
| 1.11 Update traffic signal timing policy to default to pedestrian recall, expand use of LPI and exclusive pedestrian phases, and target shorter cycle lengths. | T, E, P | 2 year | Place 75% of traffic signals on pedestrian recall and expand LPI to 30 intersections |
| 1.12 Identify bus stop locations near high crash clusters to determine potential improvements/relocation possibilities. | T, E, NJT | 2 year | Evaluate 10 bus stop locations |
| 1.13 Inventory regulatory signage along HIN to determine areas for improvement. | T, DPW | 2 year | Inventory 25% of the HIN |
| 1.14 Enhance street lighting to improve safety at key intersections on the HIN. | E, DPW | 5 year | Review intersection lighting levels at 20% of intersections within the HIN per year |
| 1.15 Review pavement marking condition along HIN. | E, T | Annual | Evaluate HIN annually |
| 1.16 Conduct review of the sidewalk network to identify gaps and prioritize improvements. | E, DPW | 5 year | Identify all gaps in sidewalk network along the HIN |
| 1.17 Improve the sidewalk and signage maintenance program to ensure sidewalks are clear of obstructions. | E, DPW | 5 year | Conduct sidewalk condition audit for half of the HIN and recommend improvements |
| * ABC : Lead partner ABC: Supporting partner(s) | | | |

Theme (1 of 5): Design Safer Streets

Highlights

- Implement a broad traffic calming program
- Prioritize major safety engineering projects on the High Injury Network
- Increase the visibility of pedestrian crossings



Theme: Promote a Culture of Safety

Highlights

- Establish Jersey City chapter of Families for Safe Streets
- Conduct a public education campaign to change norms around traffic safety
- Reduce motor-vehicle miles traveled and promote alternatives, especially for short trips



Theme: Embed Vision Zero in City Practices

Highlights

- Establish a multidisciplinary Rapid Response Team to review every fatal crash
- Develop a training program on Vision Zero for City staff and vehicle operators
- Ensure all City fleet vehicles have the latest crash reduction equipment



Source: NYC DCAS

Theme: Enforcement, Law, and Policy

Highlights

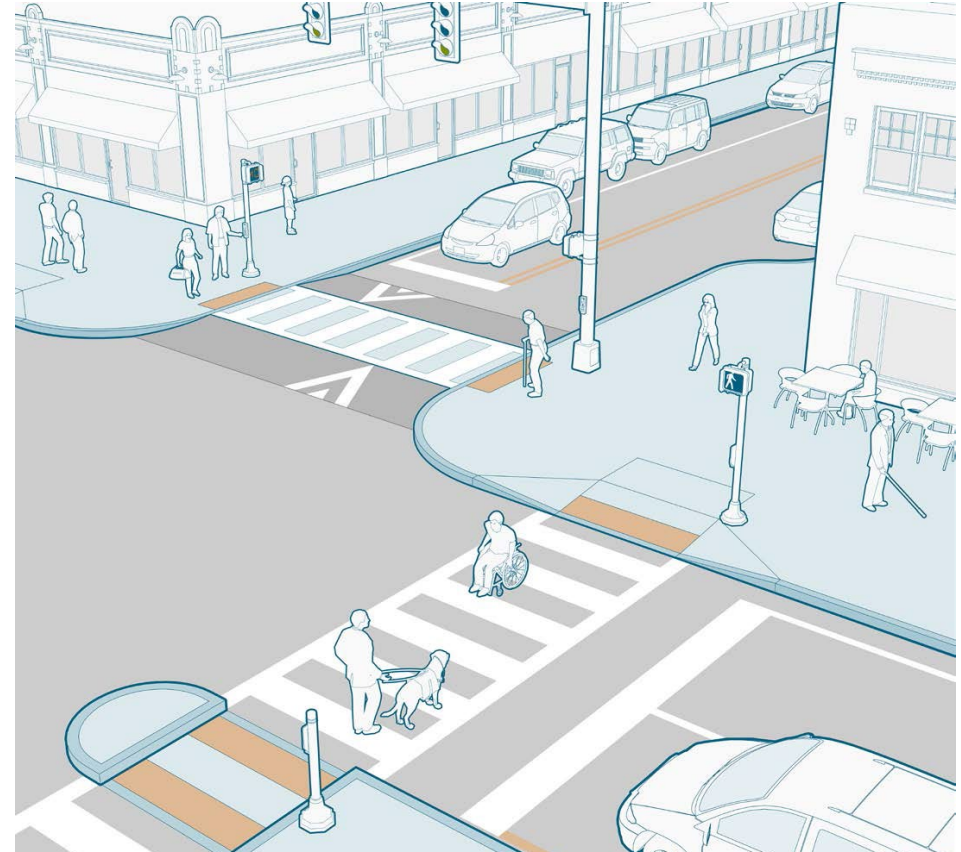
- Evaluate City laws and ordinances for changes necessary to improve traffic safety
- Develop a state legislative agenda to enable the City to promote roadway safety
- Develop a strategy for enforcement programs that is equitable and transparent



Theme: Planning and Leveraging Data

Highlights

- Develop a street design guide reflecting international best practices
- Update development regulations and design standards to reflect Vision Zero principles
- Improve data collection and analysis



Source: FHWA

LEADING PEDESTRIAN INTERVAL

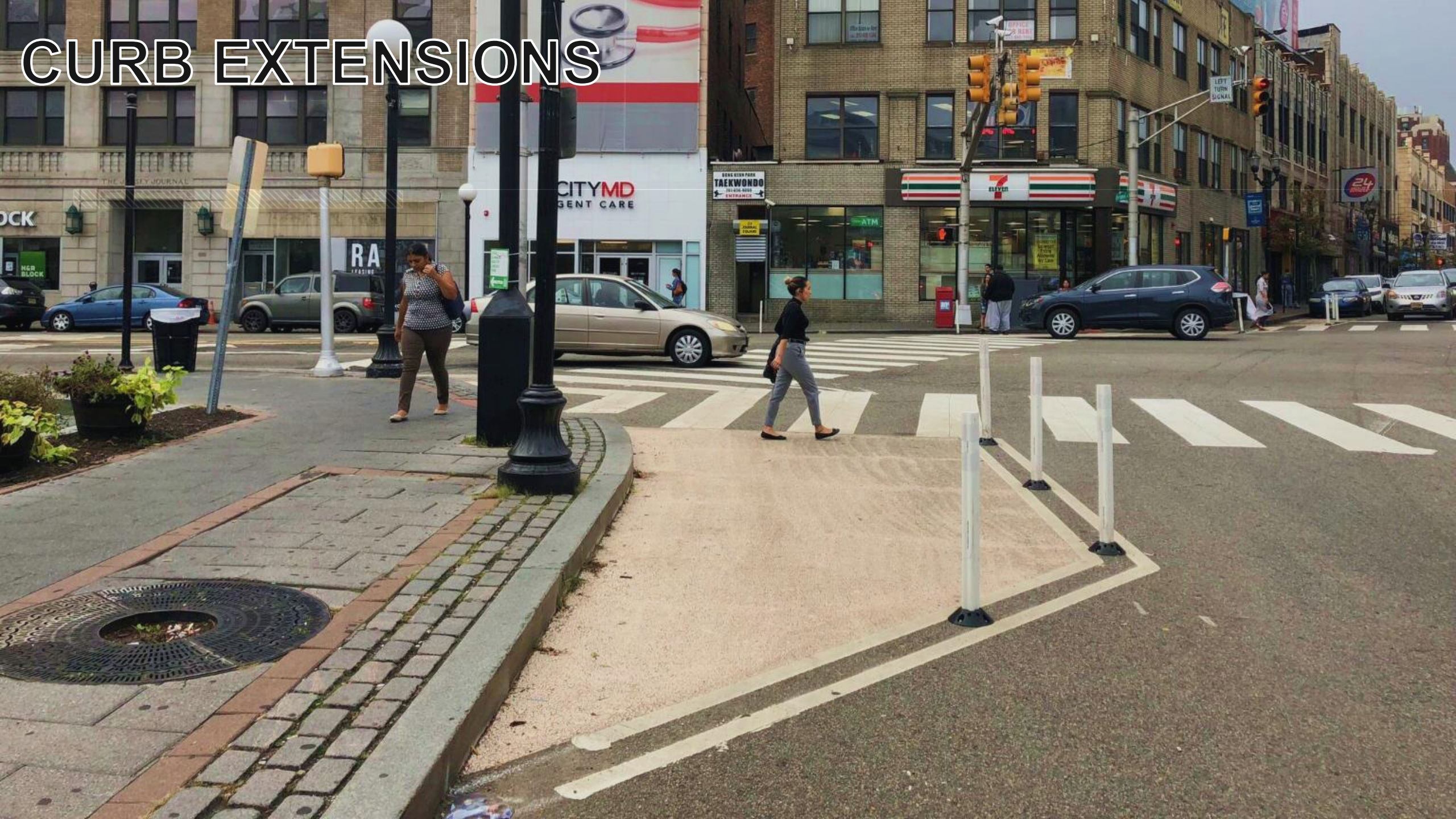


PEDESTRIAN REFUGE ISLAND



RECTANGULAR RAPID FLASHING BEACON CURB EXTENSION





CURB EXTENSIONS

PROTECTED BIKE LANES



Vision Zero JC: 2019

- Adopted Vision Zero JC Action Plan
- Renewed Task Force with new members
- Traffic Calming continues: speed humps, curb extensions, LPI, etc.
- Corridor safety studies along HIN continue
- First Bicycle Master Plan developed
- First protected bike lane installed (4.2 miles constructed)
- First Vision Zero Annual Report in progress

| Jersey City Fatalities from Traffic Crashes | | |
|--|----------------|-----------------|
| Years | City Roads | All Roads |
| 2008 – 2017 (on average) | 3 | 9 |
| 2018 | 5 (HIN – 3) | 10 (HIN – 5) |
| 2019 (to date) | 2 (HIN – 1) | 4 (HIN – 3) |

VISION ZERO JC | SAFE STREETS FOR EVERYONE

HOME WHAT IS VISION ZERO? ACTION PLAN GET INVOLVED

“The loss of each and every life as a result of a traffic crash is
AVOIDABLE.”

Barkha R Patel

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www.visionzerojc.com
www.jerseycitynj.gov/trafficsafety