THIS PRESENTATION

1. What's the Problem
2. Vision Zero - What is it?
3. Vision Zero Strategies
4. Getting Started on Vision Zero
What's the Problem

SETTING THE FRAMEWORK
ON AVERAGE, 100 PEOPLE EACH DAY ARE KILLED FROM MOTOR VEHICLE CRASHES IN THE U.S.
# NEW JERSEY NUMBERS

## TOTAL FATALITIES

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>602</td>
</tr>
<tr>
<td>2017</td>
<td>624</td>
</tr>
<tr>
<td>2018</td>
<td>565</td>
</tr>
</tbody>
</table>

## PEDESTRIAN & BICYCLE FATALITIES

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>183</td>
</tr>
<tr>
<td>2017</td>
<td>200</td>
</tr>
<tr>
<td>2018</td>
<td>193</td>
</tr>
</tbody>
</table>

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
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
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
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?

CHERYL KASTRENAKES
Greater Mercer TMA

PHONE
609.452.1491

EMAIL
ckastrenakes@gmtma.org
OUR CITY AND OUR FAMILIES DESERVE SAFER STREETS.

Zero traffic deaths by 2030.
TRADITIONAL APPROACH

Traffic deaths are INEVITABLE
PERFECT human behavior
Prevent COLLISIONS
INDIVIDUAL responsibility
Saving lives is EXPENSIVE

VISION ZERO

Traffic deaths are PREVENTABLE
Integrate HUMAN FAILING in approach
Prevent FATAL AND SEVERE CRASHES
SYSTEMS approach
Saving lives is NOT EXPENSIVE
Hit by a vehicle traveling at 20 MPH
9 out of 10 pedestrians survive.

Hit by a vehicle traveling at 30 MPH
5 out of 10 pedestrians survive.

Hit by a vehicle traveling at 40 MPH
only 1 out of 10 pedestrians survives.
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
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.
Vision Zero in New York City

Joe Cutrufo
Communications Director, Transportation Alternatives

New Jersey Complete Streets Summit
September 24, 2019
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.
How New York became America’s first Vision Zero city


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.
Automated enforcement

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

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.
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:
Had a successful Ebike operation today issuing multiple summonses & seizing the following bikes
@NYPDTransport #VisionZero #NYPD

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.
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.
Joe Cutrufo  
COMMUNICATIONS DIRECTOR

646-873-6027
joe@transalt.org
transalt.org
@JoeCutrufo
@TransAlt
“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.

Vision Zero Task Force Members

- Barkha R Patel (co-chair) – Division of City Planning
- Andrew Vischio (co-chair) – Division of Traffic & Transportation
- Paul Bellan Boyer – Department of Health and Human Services
- Patrick Conlon – Bike JC
- Jose Canha – Division of Engineering
- Kara Hrabosky – Safe Streets JC
- Hon. Rolando Lavarro – Municipal Council
- Chief Steven McGill – Fire Department
- John McKinney – Law Department
- Mary Paretti – Parking Enforcement
- Brian Platt – Department of Administration
- Regina Robinson – Board of Education
- Lt. Scott Schnee – Police Department
- John Thieroff – Mayor’s designee
- Martin Valenti – Department of Public Works
JERSEY CITY TRAFFIC CRASHES BETWEEN 2008 AND 2017

ALL ROADS

- 94% MOTOR VEHICLE
- 4% PEDESTRIAN
- 1% BICYCLE
- <1% MOTORCYCLE

CITY ROADS

- 91% MOTOR VEHICLE
- 6% PEDESTRIAN
- 2% BICYCLE
- 1% MOTORCYCLE

FATAL CRASHES

ALL ROADS

- 43% PEDESTRIAN
- 33% MOTOR VEHICLE
- 15% MOTORCYCLE
- 9% BICYCLE

CITY ROADS

- 63% PEDESTRIAN
- 17% MOTOR VEHICLE
- 13% MOTORCYCLE
- 7% BICYCLE

JERSEY CITY TRAFFIC CRASHES IN AN AVERAGE YEAR

ALL ROADS

- 20 INVOLVED SERIOUS INJURIES
- 9 RESULTED IN DEATHS

CITY ROADS

- 13 INVOLVED SERIOUS INJURIES
- 3 RESULTED IN DEATHS

Figure 1: Traffic Crashes in Jersey City

For an interactive version of this map, visit http://www.berkeley.edu.
High Injury Network

- Street segments with the most fatal and serious injury crashes
- Helps inform prioritization of VZ actions and strategies
High Injury Network
State and County Roads

<table>
<thead>
<tr>
<th>State (NJDOT)</th>
<th>Hudson County</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ 139</td>
<td>JFK Blvd.</td>
</tr>
<tr>
<td>NJ 440</td>
<td>Paterson Plank Rd.</td>
</tr>
<tr>
<td>US 1&amp;9</td>
<td>County Rd.</td>
</tr>
<tr>
<td>I-78 / NJ Turnpike</td>
<td></td>
</tr>
</tbody>
</table>

Engage the State and County as Vision Zero partners

Source: 2008-2017 NJDOT Crash Data, Safety Voyager, NJSP Fatal Accident Statistics
## Actions to Design Safer Streets

<table>
<thead>
<tr>
<th>Action</th>
<th>Partners*</th>
<th>Timeframe</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Incorporate the current speed hump program into a broader traffic calming policy that encompasses a wider menu of traffic calming options including reduced intersections, traffic circles, diverters, neighborhood greenways, and other treatments permissible on residential streets.</td>
<td>T, R, M, C</td>
<td>2 year</td>
<td>Update speed hump guidelines and application process</td>
</tr>
<tr>
<td>1.2 Develop a neighborhood slow zone program to allow neighborhoods to request treatments to slow motor vehicles to 15 or 20 mph using traffic calming features, signs, and markings: Explore feasibility of setting a 20 mph speed limit on residential streets.</td>
<td>T, P</td>
<td>2 year</td>
<td>Pilot one neighborhood slow zone near a school along the HIN</td>
</tr>
<tr>
<td>1.3 Prioritize major safetyengineering projects at locations along the High Injury Network.</td>
<td>E, P, DPW, T</td>
<td>Annual</td>
<td>Conduct safety evaluations along 5 miles along the HIN per year</td>
</tr>
<tr>
<td>1.4 Advance high-priority projects established in Bike Master Plan.</td>
<td>E, P, T</td>
<td>Annual</td>
<td>Prepare concept development studies for 2 miles of protected bike lanes per year</td>
</tr>
<tr>
<td>1.5 Increase the visibility of crossing pedestrians at intersections and midblock crossings through design strategies such as painted curbs, flex posts, and bike corrals.</td>
<td>T, E, P, DPW</td>
<td>2 year</td>
<td>Evaluate 30 of the most dangerous intersections along the HIN for potential improvements</td>
</tr>
<tr>
<td>1.6 Update Standard Engineering Details to strengthen requirements to maintain pedestrian and bicycle access near construction zones.</td>
<td>E, DPW, T</td>
<td>2 year</td>
<td>Update Traffic, Bicycles Manual and standard engineering details</td>
</tr>
<tr>
<td>1.7 Explore the desirability and feasibility of introducing additional pedestrian malls throughout the City.</td>
<td>P, BA, E, M, T</td>
<td>2 year</td>
<td>Evaluate one new pedestrian mall location</td>
</tr>
<tr>
<td>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.</td>
<td>P, BA, E, DPW</td>
<td>2 year</td>
<td>Pilot one placemaking initiative enhancing locations along the HIN</td>
</tr>
<tr>
<td>1.9 Work with JC Public Schools to establish dedicated school drop-off/pick-up zones.</td>
<td>T, E, D, PE, P</td>
<td>2 year</td>
<td>Pilot dedicated pick-up/drop-off zones at 6 schools along the HIN</td>
</tr>
<tr>
<td>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.</td>
<td>T, G, E, P</td>
<td>2 year</td>
<td>Pilot new loading zone spacing and design on approximately 1/2 mile-long segment of one corridor</td>
</tr>
</tbody>
</table>

### Actions to Design Safer Streets (continued)

<table>
<thead>
<tr>
<th>Action</th>
<th>Partners*</th>
<th>Timeframe</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.11 Update traffic signal timing policy to default to pedestrian recall, expand use of UPHI and exclusive pedestrian phases, and target shorter cycle lengths.</td>
<td>T, E, P</td>
<td>2 year</td>
<td>Place 75% of traffic signals on pedestrian recall and expand UPHI to 30 intersections</td>
</tr>
<tr>
<td>1.12 Identify bus stop locations near high crash clusters to determine potential improvements/reallocation possibilities.</td>
<td>T, E, N, T</td>
<td>2 year</td>
<td>Evaluate 10 bus stop locations</td>
</tr>
<tr>
<td>1.13 Inventory regulatory signage along HIN to determine areas for improvement.</td>
<td>T, DPW</td>
<td>2 year</td>
<td>Inventory 25% of the HIN</td>
</tr>
<tr>
<td>1.14 Enhance street lighting to improve safety at key intersections on the HIN.</td>
<td>E, DPW</td>
<td>5 year</td>
<td>Review intersection lighting levels at 25% of intersections within the HIN per year</td>
</tr>
<tr>
<td>1.15 Review pavement marking condition along HIN.</td>
<td>E, T</td>
<td>Annual</td>
<td>Evaluate HIN annually</td>
</tr>
<tr>
<td>1.16 Review the sidewalk network to identify gaps and prioritize improvements.</td>
<td>E, DPW</td>
<td>5 year</td>
<td>Identify all gaps in sidewalk network along the HIN</td>
</tr>
<tr>
<td>1.17 Improve the sidewalk and signage maintenance program to ensure sidewalks are clear of obstructions.</td>
<td>E, DPW</td>
<td>5 year</td>
<td>Conduct sidewalk condition audits for half of the HIN and recommend improvements</td>
</tr>
</tbody>
</table>

* ABC: Lead partner  ABO: 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
CURB EXTENSIONS
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

<table>
<thead>
<tr>
<th>Years</th>
<th>City Roads</th>
<th>All Roads</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008 – 2017 (on average)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>2018</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>(HIN – 3)</td>
<td>(HIN – 5)</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>(to date)</td>
<td>(HIN – 1)</td>
<td>(HIN – 3)</td>
</tr>
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“The loss of each and every life as a result of a traffic crash is AVOIDABLE.”

Barkha R Patel
Senior Transportation Planner
Division of Engineering,
Traffic & Transportation
City of Jersey City, NJ
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www.visionzerojc.com
www.jerseycitynj.gov/trafficsafety