



VISION ZERO NEW YORK CITY

Identifying Risk and Safe Systems Approach

US DOT Summit on Pedestrian Safety 2020
Ann Marie Doherty, NYC DOT



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Risk

What is risk-based safety planning?

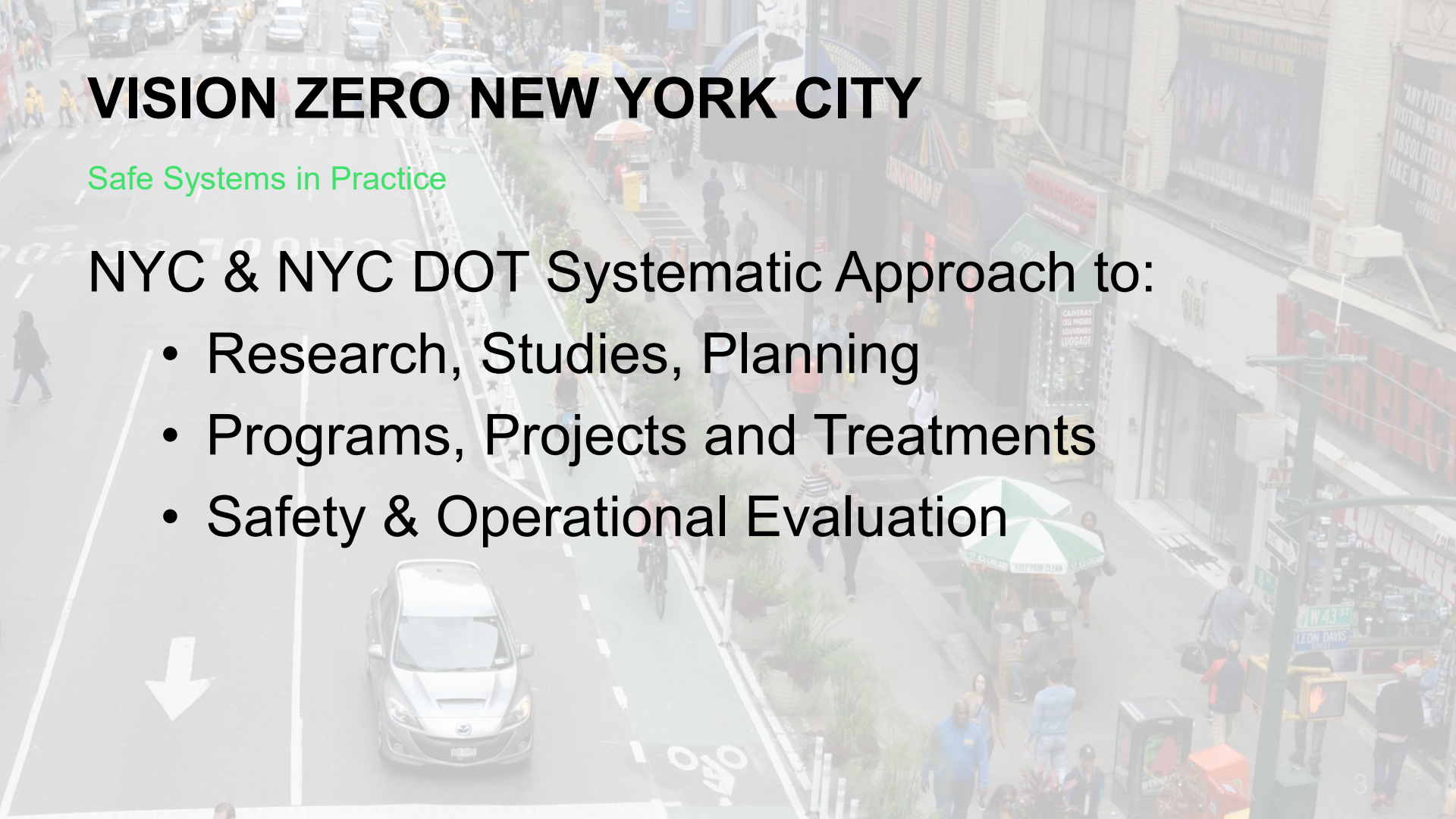
- Not just targeted to specific crash sites and geographies
- Analyzes crash typology and trends (i.e., mode, contributing factors, demographics, time of day, etc.) to identify high risk behaviors and most vulnerable populations
- Deploys treatments broadly and **systematically**

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Safe Systems in Practice

NYC & NYC DOT Systematic Approach to:

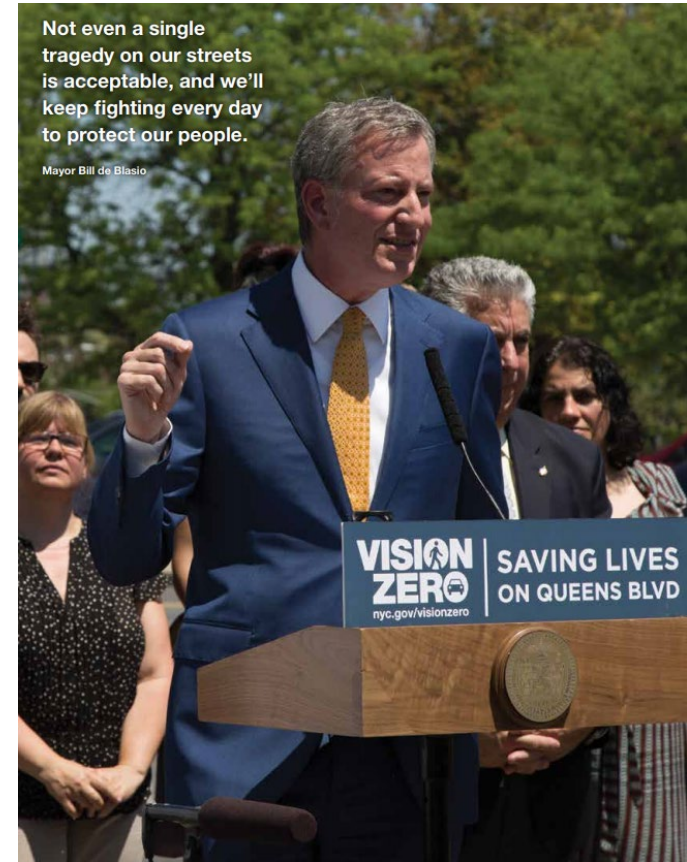
- Research, Studies, Planning
- Programs, Projects and Treatments
- Safety & Operational Evaluation



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What does it involve?

- Mayoral Commitment
- Resourced
- Data-driven and evidence-based
- Shared public metric of success – lowering fatalities and injuries
- An ongoing process of cultural change – both public and institutional
- Laser-focus on SPEED (25MPH in 2014)
- A multi-agency effort
- Comprises Legislation, Engineering, Enforcement & Education



A FOCUS ON PRIORITY LOCATIONS

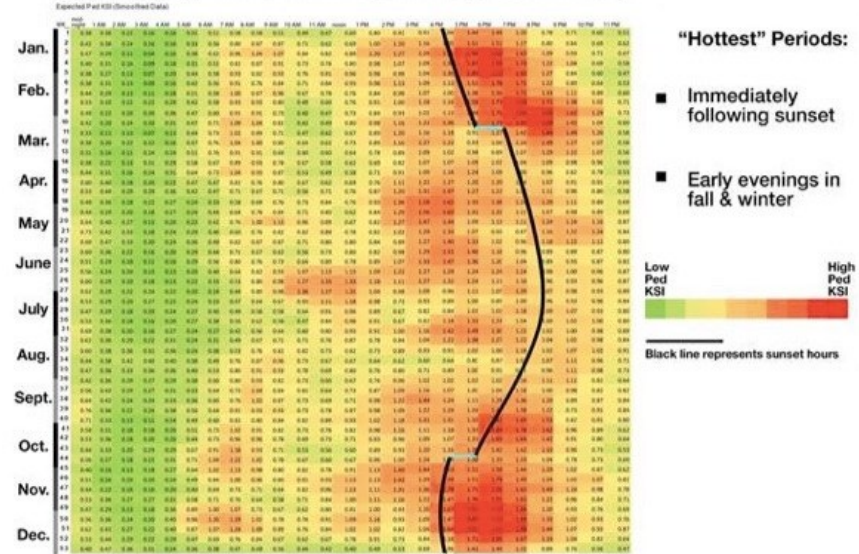
- Data 2012-2016, pedestrian deaths and serious injuries
- 7% of corridors were the site of 50% of ped KSI
- 1% of intersections see 15% of ped KSI



DUSK AND DARKNESS

- Data analysis showed spike in pedestrian casualties in early evening around the time clocks turned back
- Clock change resulted in evening rush hour being in darkness
- DOT, NYPD, TLC messaging to drivers: Small change in time leads to massive difference in visibility
- Increased enforcement of dangerous driving
- Sustained decreases since initiative began

**Pedestrians Killed or Severely Injured (KSI)
Mon-Fri by week and by hour (2010-2014)**



FATALITIES DASHBOARD

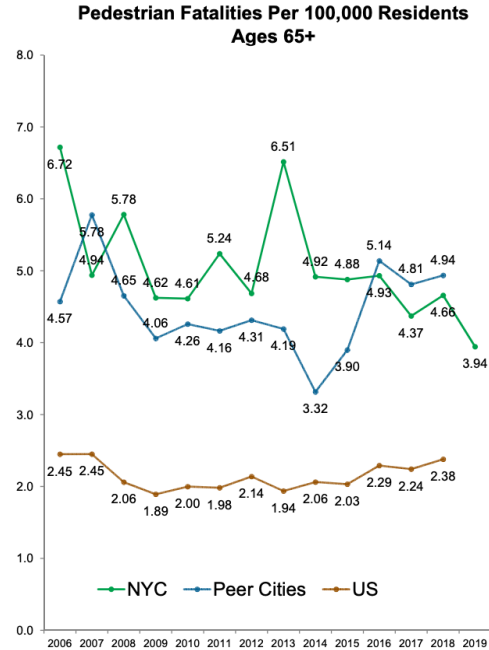
Monthly crash analysis

- Track and analyze traffic fatalities by:
 - Mode
 - Age
 - Time of Day
 - Borough
 - Contributing factor
 - Vehicle Type
 - Gender
 - Mid-block / intersection / highway

Senior Pedestrians age 65+

NYC Senior Pedestrian Fatalities by Year and % of Ped Fatalities		
2006	69	41%
2007	52	37%
2008	60	39%
2009	47	30%
2010	46	30%
2011	53	37%
2012	49	32%
2013*	69	38%
2014*	54	39%
2015	55	40%
2016	57	38%
2017	54	50%
2018	58	50%
2019*	52	42%
Last 12-Month Total	39	37%

Note: *includes bicyclist on senior pedestrian fatalities (non FARS); 1 in 2013, 2014, and 2019.



Year to Date 1/1/2020 - 6/30/2020 6 months		
Year	Number	Pct. of Ped Fatalities
2017	24	51%
2018	19	39%
2019	28	50%

3-Year Avg.	23.7	47%
2020	15	39%

% Change in 2020 From 3-Year Average
-37%

PROGRAMS, PROJECTS AND TREATMENTS

Systematic Deployment

Since the start of Vision Zero:

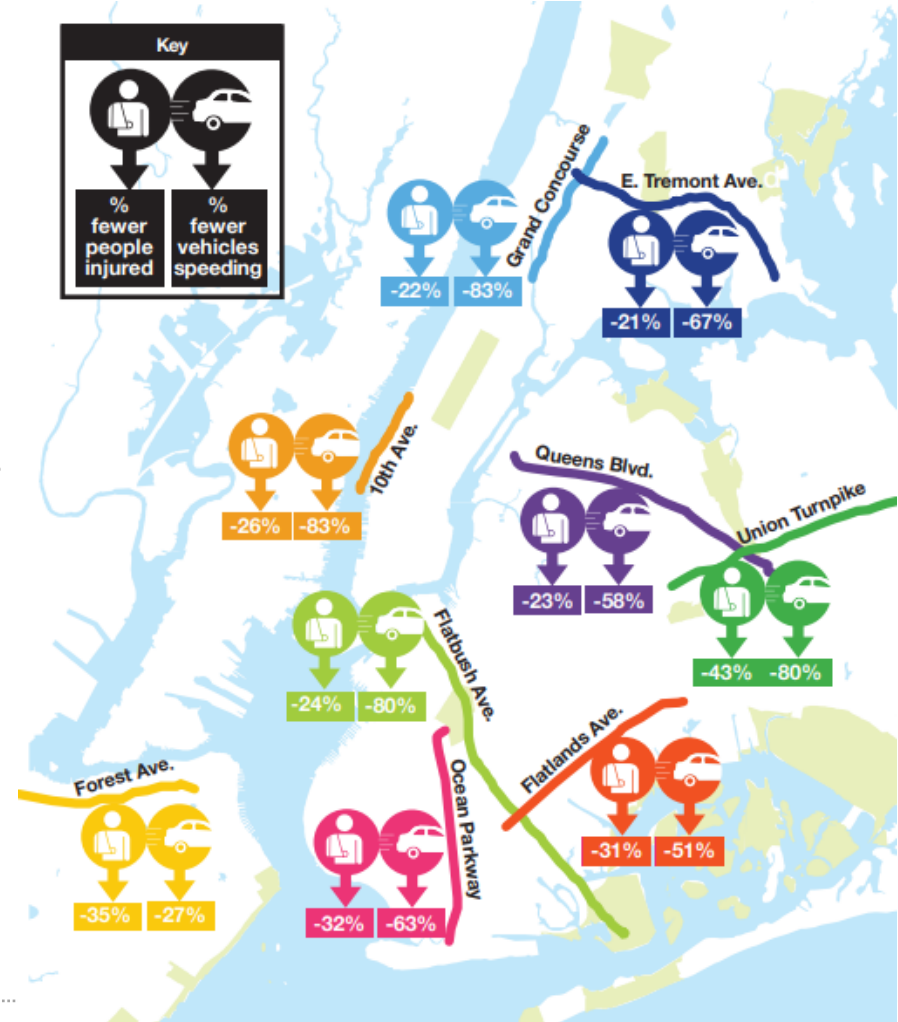
NYC DOT has made safety engineering improvements at more than 85% of Priority Intersections and more than 75% of the total length of Priority Corridors

- More than 450 safety engineering projects completed at Priority Locations
- Nearly 600 miles of corridors retimed for 25 MPH speed limit
- Over 400 intersections received Left Turn Traffic Calming
- Over 4,000 new Leading Pedestrian Intervals (LPis)
- More than 7 million speed camera violations issued
- More than 70 signals & all-way stops approved via Proactive Warrant Analysis program (began in 2017)

SPEED MANAGEMENT

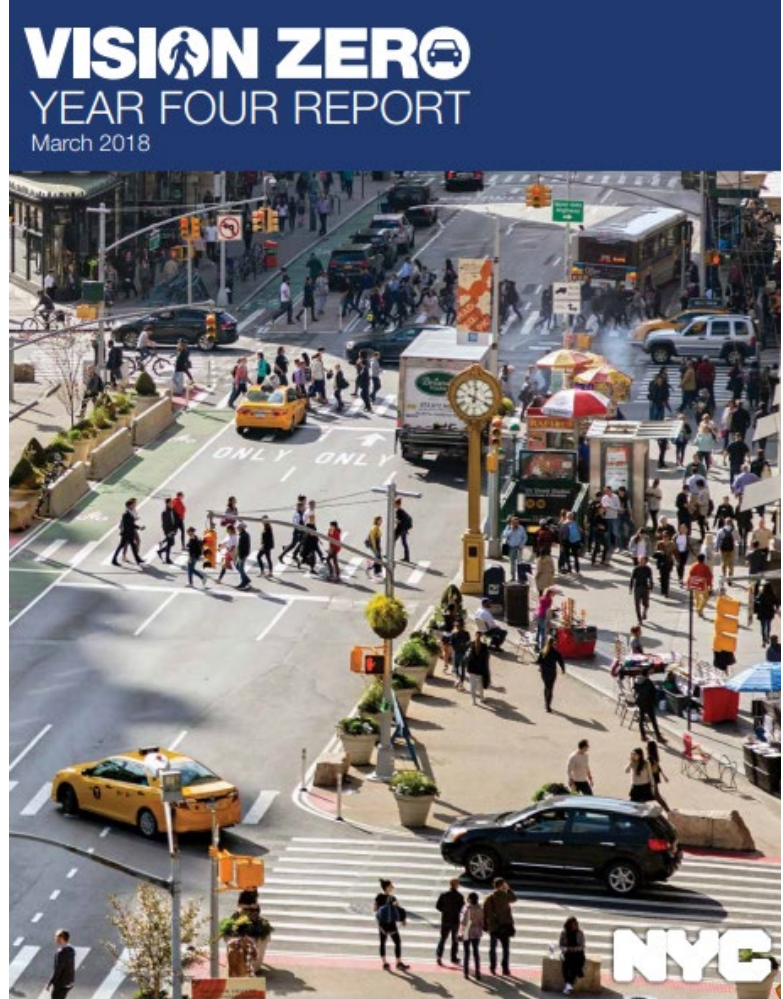
Possibly our most important tool

- **Speed camera program**
 - 750 locations by schools
 - Fixed and mobile
 - Speeding down 63% at locations with cameras
 - Hard-fought expansion
 - 2000 cameras planned



EVALUATION

- Holding ourselves accountable for initiatives
- Revisiting Priority Locations maps with new data
- Street Improvement Project Program evaluation – micro & macro
- Left turn speeds
- Before/after speeds from City telematics data
- **TRAFFIC FATALITIES...**

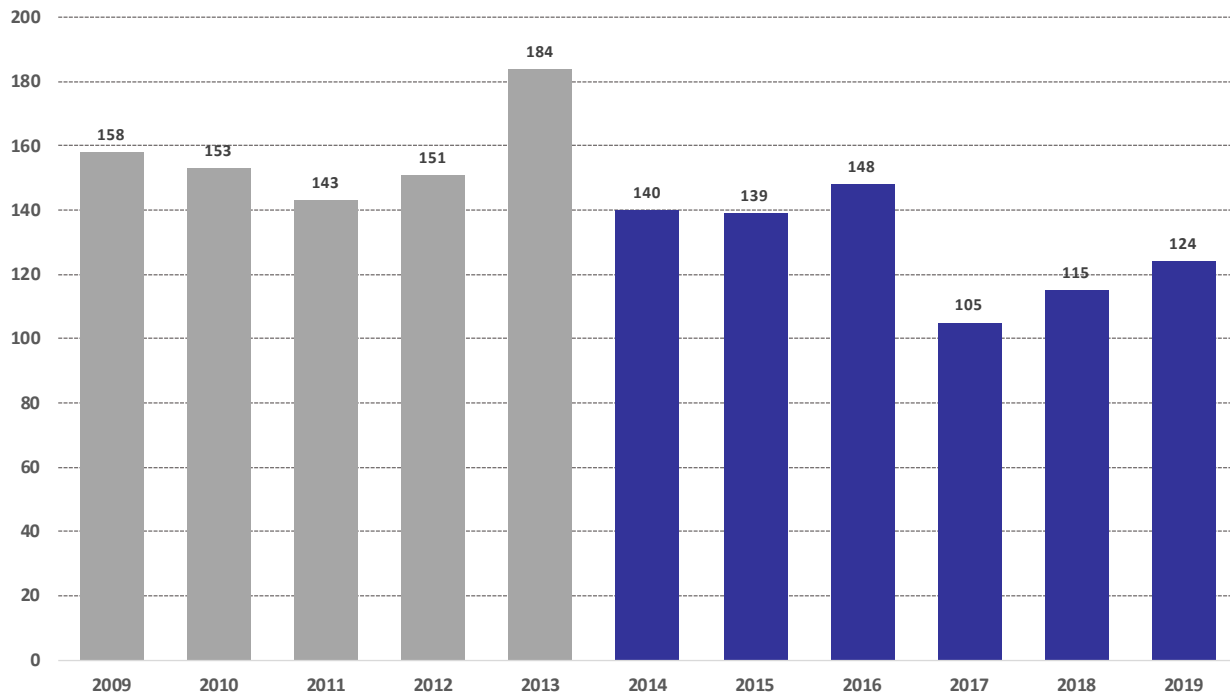


EVALUATION

- Between 2008 and 2017, pedestrian fatalities in urban areas nationwide **increased by 46%**
- During that same time period, pedestrian fatalities in New York City **dropped 31%**

PEDESTRIAN FATALITIES

Before / After Vision Zero



5 year average
pre-VZ: 158

2019 vs pre VZ
-22%

COVID-19 PANDEMIC

Fatality & Injury Trends

- Traffic & pedestrian volumes down
- Injuries down
- Pedestrian fatalities down
- Motor vehicle occupant & motorcyclist fatalities up
- Increase in speed related fatalities & injuries



COVID-19 PANDEMIC

Current and Future Challenges

- Dramatic budget cuts
- Increase in traffic volume as New Yorkers avoid the subway – more exposure for vulnerable road users
- Implementing fewer safety projects
- Shifting paradigm on enforcement



THANK YOU!

Questions?



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