NYC Vision Zero: On Bikes

Identifying Potential Bike Crash Locations

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NYC Vision Zero … Success?

Implemented:

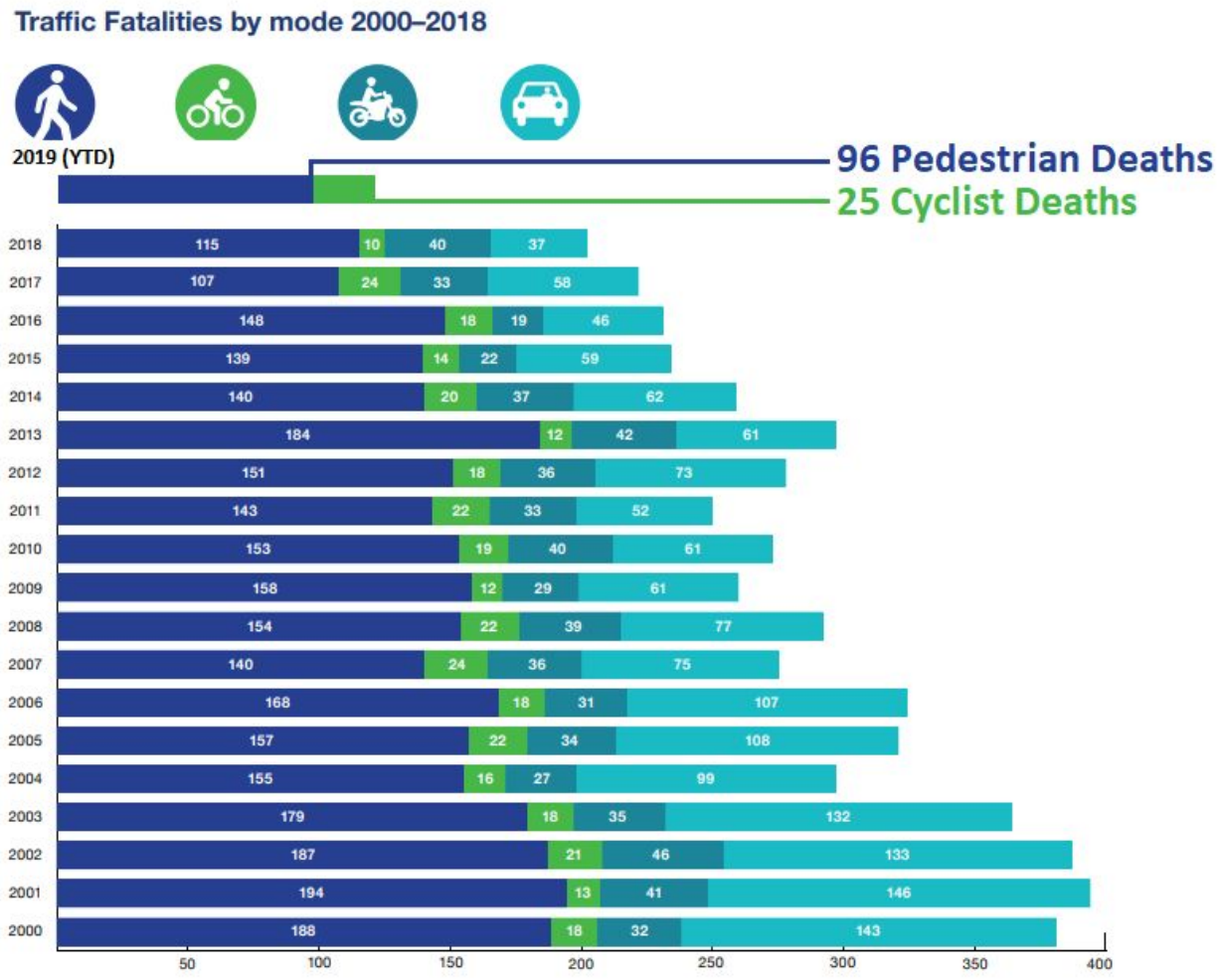
2014

By:

Mayor Bill de Blasio

Goal:

Eliminate all traffic deaths and serious injuries by **2024**

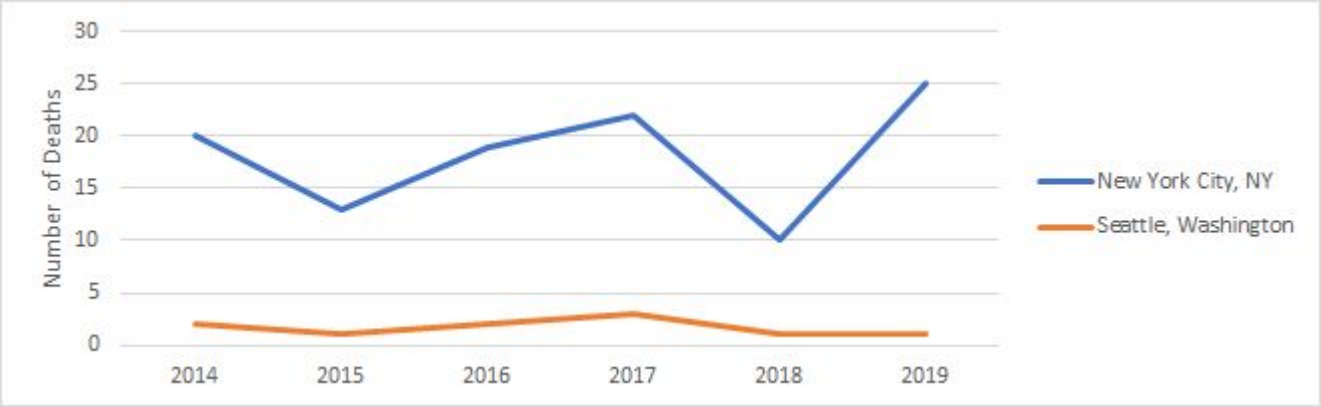


Source: NYC DOT & NYPD

[Vision Zero Year 5 Report]

Target Cities

City	Year Vision Zero Adopted	Number of Fatalities						
		2014	2015	2016	2017	2018	2019	Data as Of
New York City, NY	2014	20	13	19	22	10	25	11/18/19
Seattle, Washington	2015	2	1	2	3	1	1	11/22/19



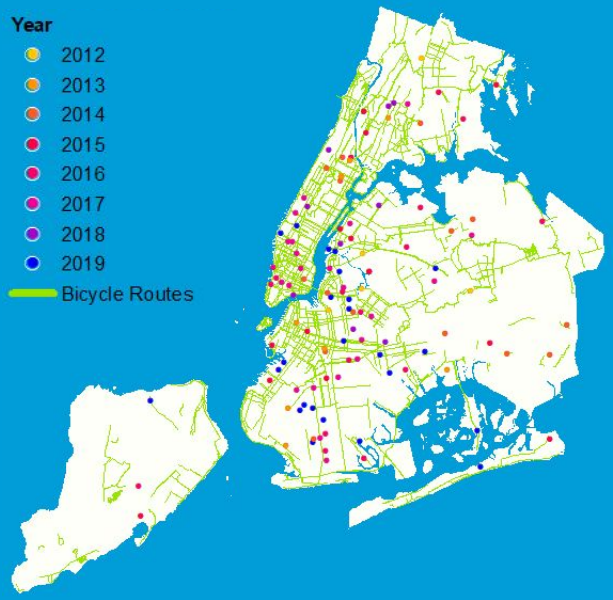
National Center for Statistics and Analysis Motor Vehicle Traffic Crash Data

Why, in 2019, has the cyclist death toll in NYC reached its all time high?

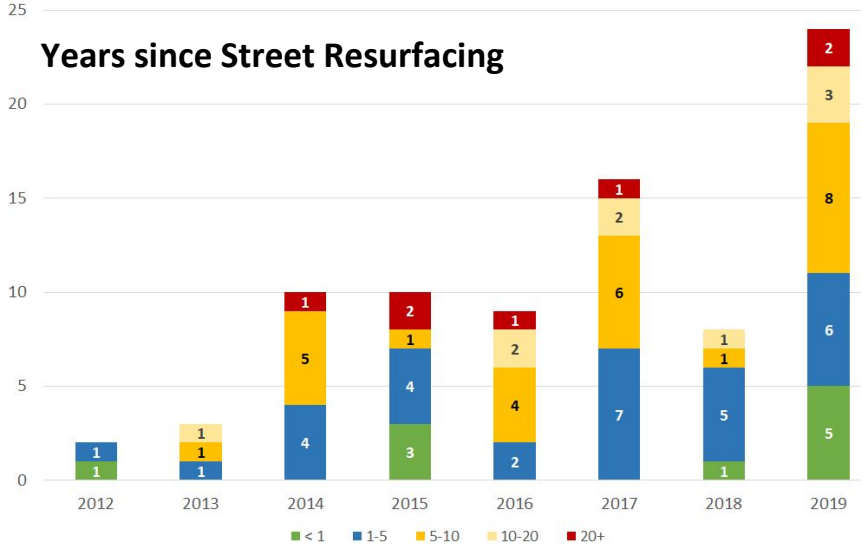
Topics to Explore:

- Fatal bike collision locations
- Street activity/traffic volume
- Street resurfacing projects
- Vision Zero projects
  - Bike Priority Areas
  - Bike Lanes and Protected Bike Lanes
- Seattle’s Vision Zero Approach to Bike Safety

Bicycle Fatality Locations



Data Source: NYC Open Data, NYC DOTMAP Portal



Vision Zero City: Seattle

Bicycle and Pedestrian Safety Analysis

Published: September, 2016

SDOT conducted exploratory analysis to identify:

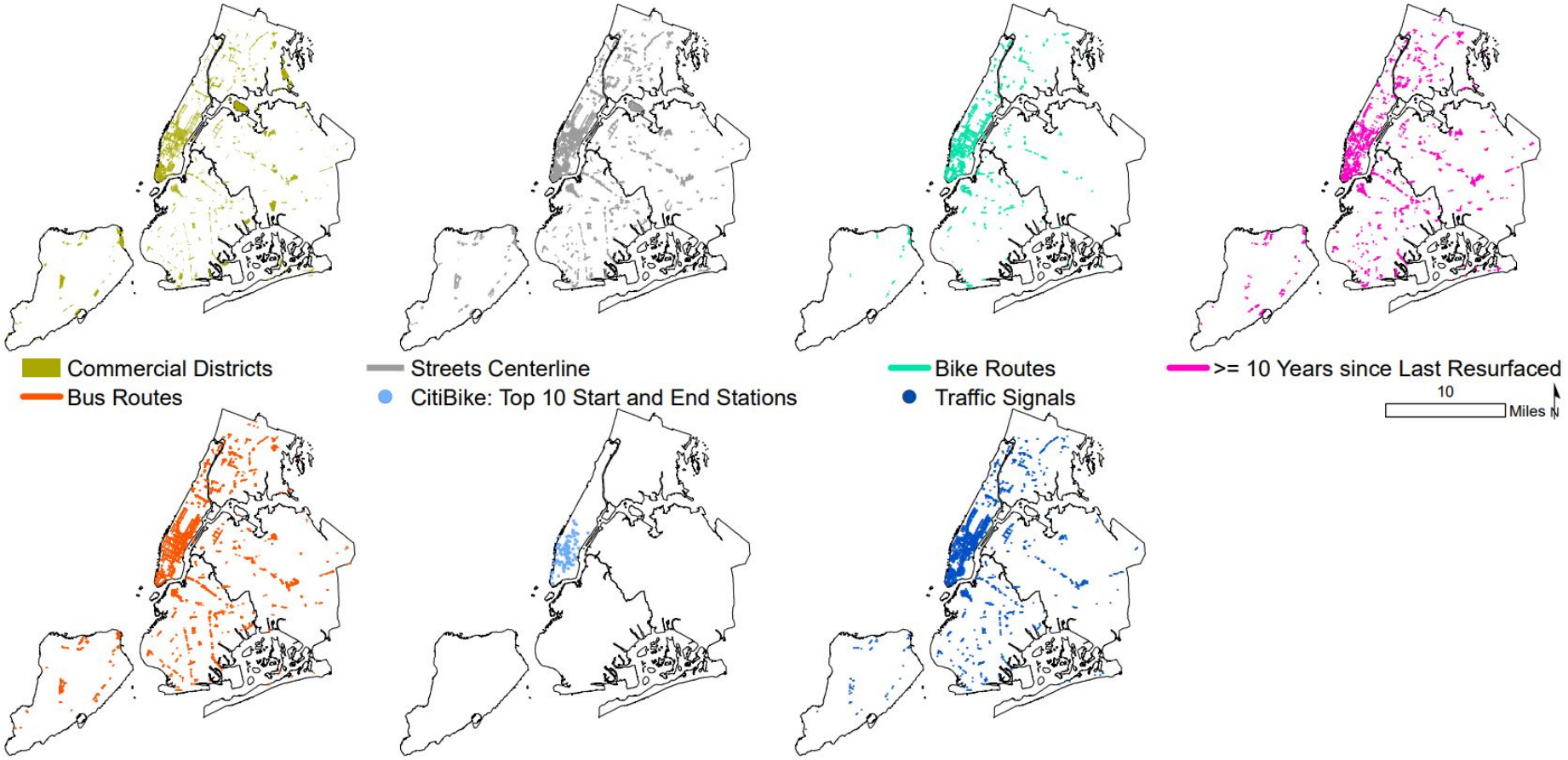
- Common bike and pedestrian crash types
- Significant risk factors
- Where field investigations should be conducted
- How to effectively install safety measurements

Data Source: City of Seattle Bicycle and Pedestrian Safety Analysis (SDOT)

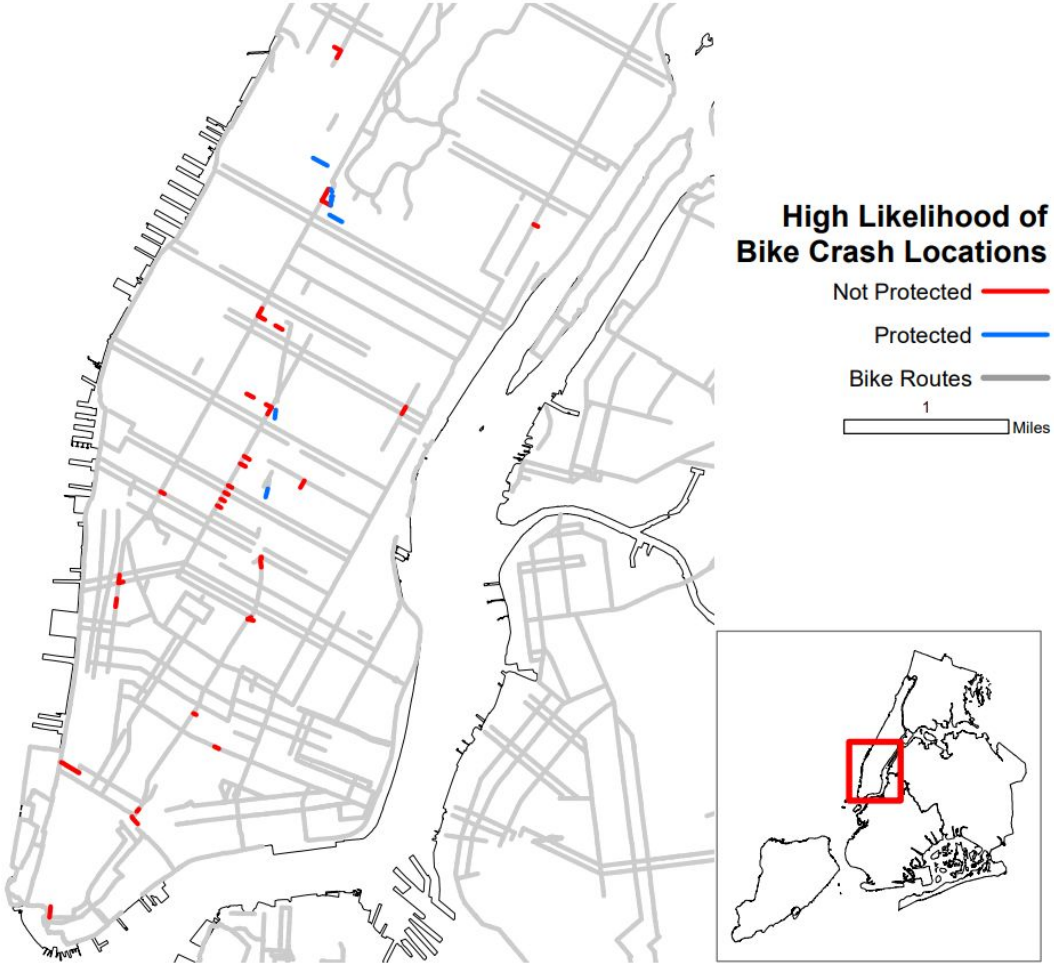
Applying Seattle's Bicycle Pedestrian Safety Analysis Findings

Identified Significant Bike Crash Variables	NYC Data
A. Crashes vs. bicycle volume estimates	**A. ✓ Citibike Start/End Data**
B. Arterial streets and large/complex intersections	**B. ✓ NYC Streets Centerline → Roadway Type = 'Streets'**
C. Traffic signals are positively related to bike intersection crashes	**C. ✓ NYC Traffic Lights**
D. Commercial areas have more activity	**D. ✓ NYC GIS Zoning Data → Commercial Districts**
E. Intersections with bike lanes or shared lane markings	**E. ✓ NYC Bike and Bus lanes**
F. Intersections with center turn lanes	F. Intersections with center turn lanes
G. Downhill approaches	G. Downhill approaches

Data Source: City of Seattle Bicycle and Pedestrian Safety Analysis (SDOT)



Data Sources: NYC Open Data, NYC DOTMAP Portal, Baruch Geoportal



All Locations:

- Have not been resurfaced in the past 10 years
- Are classified as a “narrow” street (< 75 ft wide)
- Are or are within 1 block of a:
  - Bike lane(s)
  - Bus lane(s)
  - Traffic light(s)
  - High volume CitiBike area(s)
  - Commercial District(s)

NYC's Green Wave Plan
July 2019

- Identified key factors and locations in bike fatalities (not mentioned before):
  - Trucks (30%)
  - Hit and runs (23%)
- Plan Summary
  - Citywide protected bike lane network (PBL)
  - Better design (intuitive, safety enhancing)
  - NYPD enforcement
  - Create a truck Safety Task Force (expand awareness and reduce conflicts)
  - Legislation and policy
  - Education and outreach

Data Source: NYC Green Wave

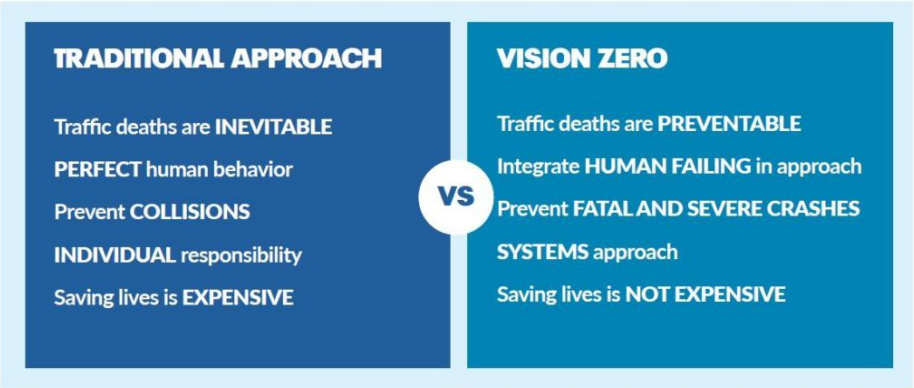
Mayor. de Blasio's goal for NYC's Vision Zero Plan
is to eliminate traffic deaths by **2024**.

2014:	20 bicycle deaths	448 total traffic fatalities
2019 YTD:	25 bicycle deaths	212 total traffic fatalities

In four years, can this be accomplished?

What makes Vision Zero different from other approaches to traffic safety?

It is a ***paradigm shift***



Vision Zero Network