

Safer Cycling

BICYCLE RIDERSHIP AND SAFETY IN NEW YORK CITY



2017

Executive Summary

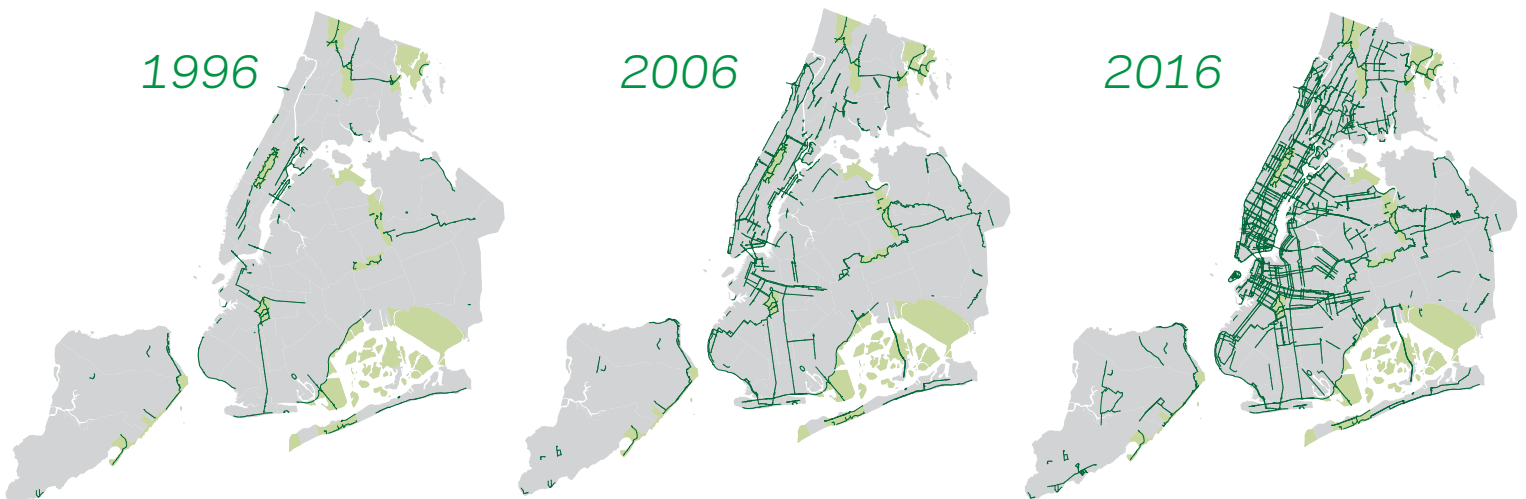
More New Yorkers than ever before are embracing cycling as a convenient and affordable way to get around—in the last decade alone, annual bicycle trips rose 150%. Moving forward, the City of New York is committed to supporting further growth in bicycling and doubling the number of regular cyclists by 2020 (based on 2013 levels). Increasing cycling helps to expand mobility, reduce air pollution, improve public health, and fight global climate change. Getting more New Yorkers on two wheels, however, requires a continued effort to make cycling safer than it is today.

As part of Vision Zero, Mayor de Blasio’s multi-agency effort to eliminate severe traffic injuries and fatalities, the New York City Department of Transportation (NYC DOT), the New York City Department of Health and Mental Hygiene (NYC DOHMH), and the New York City Police Department (NYPD) have undertaken the first comprehensive analysis of cyclist safety since 2006. This study seeks to understand the main causes of severe injuries and fatalities involving cyclists and the factors that helped significantly improve cycling safety over the past 20 years. The agencies then used these insights to develop a package of actions to further reduce the risks cyclists face on our streets.

BICYCLE RIDERSHIP

Over the past ten years, the City dramatically increased its efforts to make cycling safer and more convenient. Under the previous and current administrations the City has implemented a coordinated set of actions to expand cycling. Since 2006, the City increased the size and quality of the bicycle network, adding 308 lane miles of conventional bicycle lanes and 74 lane miles of protected facilities. During the same period, NYC DOT distributed over 180,000 free bicycle helmets and thousands of free bicycle bells and lights, installed 24,000 bicycle racks across the five boroughs, and conducted safety trainings at hundreds of New York City public schools. In 2013, the City launched Citi Bike, now the largest bike share system in North America.

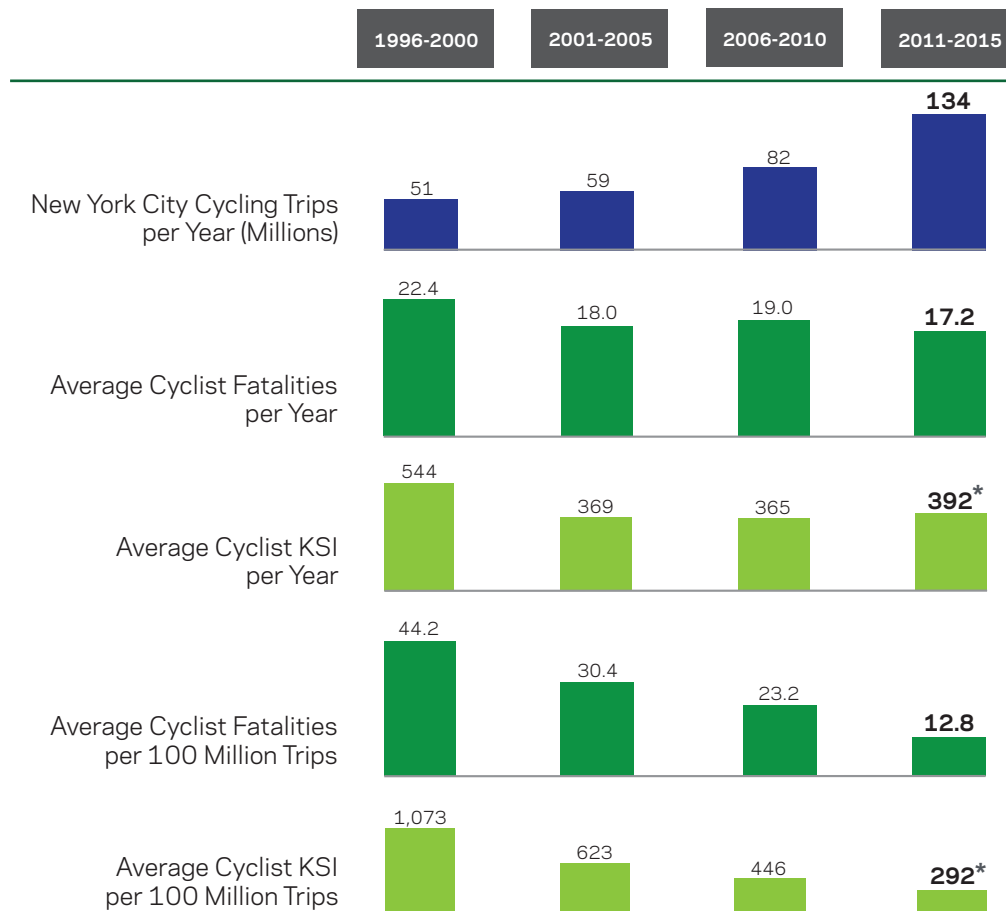
New York City Bicycle Network



More City residents are cycling than ever before. As detailed in NYC DOT's companion report [Cycling in the City](#), cycling increased far faster than population or employment growth. There were an estimated 164 million bicycle trips in 2015, up from nearly 66 million trips in 2006, an increase of 150%.

CYCLIST SAFETY

Cyclist safety has improved significantly since 1996. Between 2011 and 2015, there were an average of 12.8 cyclist fatalities per 100 million bicycle trips compared to 44.2 cyclist fatalities per 100 million bicycle trips between 1996 and 2000, a decline of 71%. Combined fatalities and severe injuries (referred to as cyclist KSI) followed a similar pattern. Despite the dramatic increase in bicycle ridership, the total number of cyclist fatalities remained relatively flat over the same period.



Despite this progress, much work remains to be done. Between 2006 and 2016, there were 199 cyclist fatalities and between 2006 and 2014 there were 3,395 cyclist KSI. In 2016, 18 cyclists tragically lost their lives on the streets of New York. This report is part of the City's ongoing efforts to achieve Vision Zero and end the preventable deaths of cyclists.

*Cyclist fatalities and cyclist KSI on this page are presented in five years increments from 1996 to 2015. Cyclist KSI for 2011 to 2015 uses data from 2011 to 2014, the last year of available data.

Executive Summary (continued)

KEY FINDINGS

The growing number of cyclists on our streets is a likely contributor to the positive changes in cycling safety. Researchers in the field of traffic safety posit that the more cyclists there are on the road, the safer riding becomes for all cyclists. The correlation between the rise in cycling trips and the drop in cyclist fatalities and cyclist KSI per bicycle trip suggests that this “safety in numbers” dynamic may be occurring in New York City.

The launch of Citi Bike coincided with a drop in cyclist KSI within the bike share area. Cyclist KSI declined by 17% within the bike share zone after one year of operation, despite a recorded 8.2 million bike share trips in the first year of operation.

The vast majority of cyclist fatalities occur on streets without bicycle facilities. Between 2006 and 2016, only 11% of cyclist fatalities occurred on streets with a bicycle facility.

A number of New York City neighborhoods underserved by the bicycle network experience significant cyclist KSI. NYC DOT identified 10 **Priority Bicycle Districts**, neighborhoods with comparatively high numbers of cyclist KSI—suggesting significant bicycle ridership—and few dedicated bicycle facilities. These districts, seven in Brooklyn and three in Queens, represent 14% of the City’s bicycle lane network and 23% of cyclist KSI. Moving forward, the agency will prioritize these areas for bicycle network expansion.

The overwhelming majority of cyclist fatalities and cyclist KSI occurred at intersections. The majority of cyclist fatalities (65%) and an even greater percentage of cyclist KSI (89%) occurred at intersections. NYC DOT is undertaking a study, to be released in early 2018, to examine the safety impacts of different intersection designs and make recommendations for new design treatments.

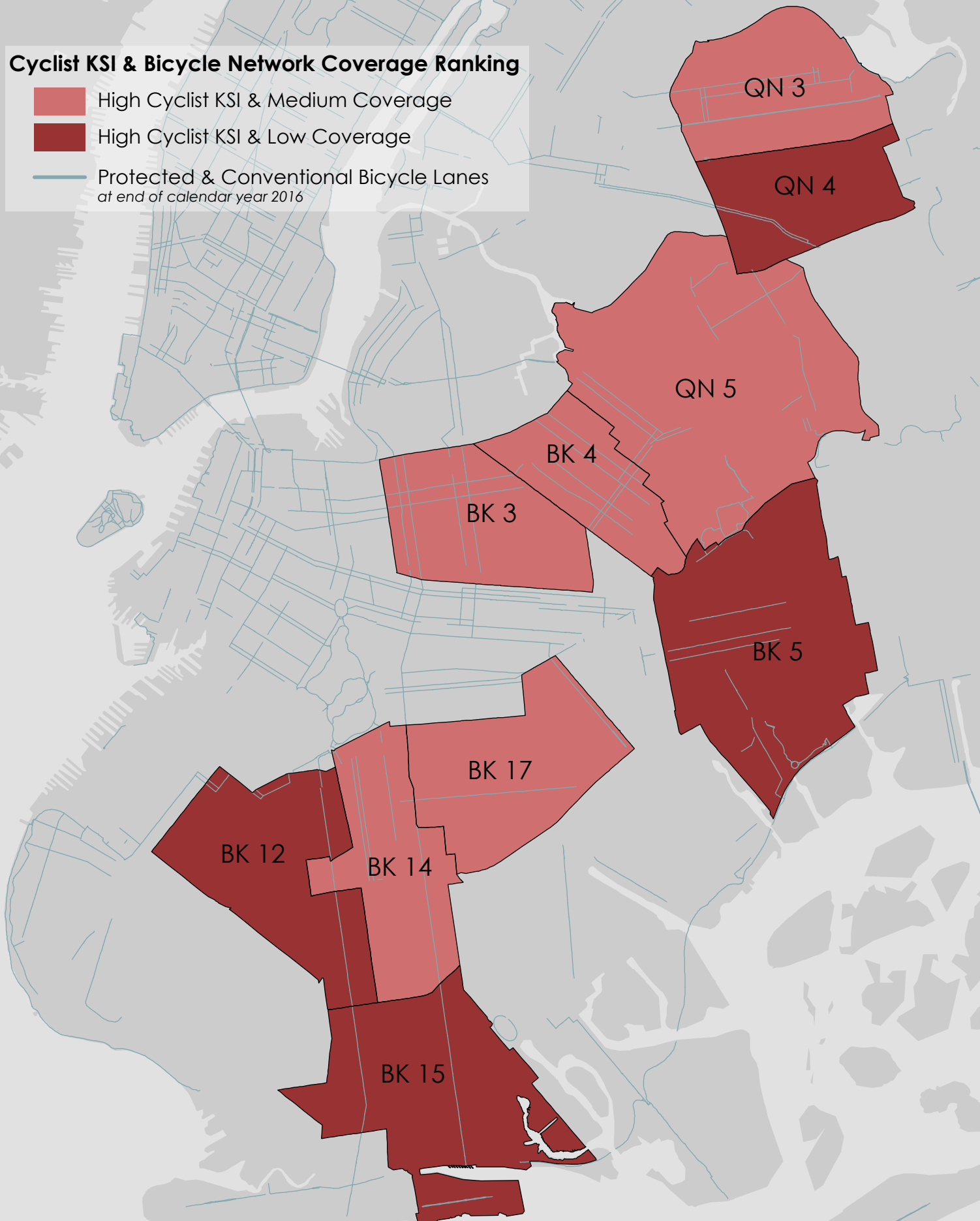
Most crashes leading to cyclist fatalities fall into three main categories. The top three crash types resulting in a cyclist fatality were: traveling adjacent to a motor vehicle (29%), traveling at a right angle to a motor vehicle (27%), and motor vehicle turn crashes (21%). A high percentage of cyclist fatalities (27%) involved trucks, when compared to cyclist KSI (5%).

Based on these findings, the *Safer Cycling* report recommends a comprehensive set of engineering and planning, enforcement, education, policy and legislation, and research and data strategies to improve cyclist safety across New York City.

Priority Bicycle Districts

Cyclist KSI & Bicycle Network Coverage Ranking

-  High Cyclist KSI & Medium Coverage
-  High Cyclist KSI & Low Coverage
-  Protected & Conventional Bicycle Lanes
at end of calendar year 2016



Action Plan

Engineering & Planning

- Continue to implement 50 lane miles of bicycle facilities a year, including at least **ten lane miles of protected bicycle lanes**
- Create or enhance **75 lane miles** of bicycle facilities in **Priority Bicycle Districts** by 2022
- Increase the percentage of **New Yorkers living near a bicycle facility** from approximately 80% to 90% by 2022
- Complete a study of best practices in **intersection design** for bicycle facilities in early 2018 and implement and evaluate new treatments
- Evaluate and improve midblock **curb regulations** along current and future bicycle facilities to reduce conflicts with parking and loading vehicles
- Explore the expansion of New York City's **bike share** system to Priority Bicycle Districts

Enforcement

- Focus and deploy enforcement resources to **intersections with high rates of cyclist KSI**
- **Tailor enforcement** to address the most dangerous driver and cyclist behaviors

Educational Programs

- Develop **targeted outreach strategies** to promote safe driving and cycling behaviors
- Promote safe and accessible bicycling for **young New Yorkers**
- Implement education and regulation of independent contractor **commercial cyclists**

Legislation & Policy

- Explore legislation requiring vehicles to **provide three feet** between the vehicle and bicycle when passing a bicycle
- Advocate for legislation requiring all companies that do business with the City to install **truck side guards**

Research & Data

- Conduct a comprehensive **evaluation of all bicycle facility types**
- Continue to collect **citywide bicycle ridership** data in the Department of Health and Mental Hygiene Community Health Survey, resources permitting
- Expand **bicycle count data** collection to better understand where and when New Yorkers are cycling



Central Park W & W 96 St
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