

Green Wave


A Plan for Cycling
in New York City



July 2019



Cycling is one of the truly great ways to travel around New York City — biking is efficient, affordable, equitable, healthy and environmentally friendly.

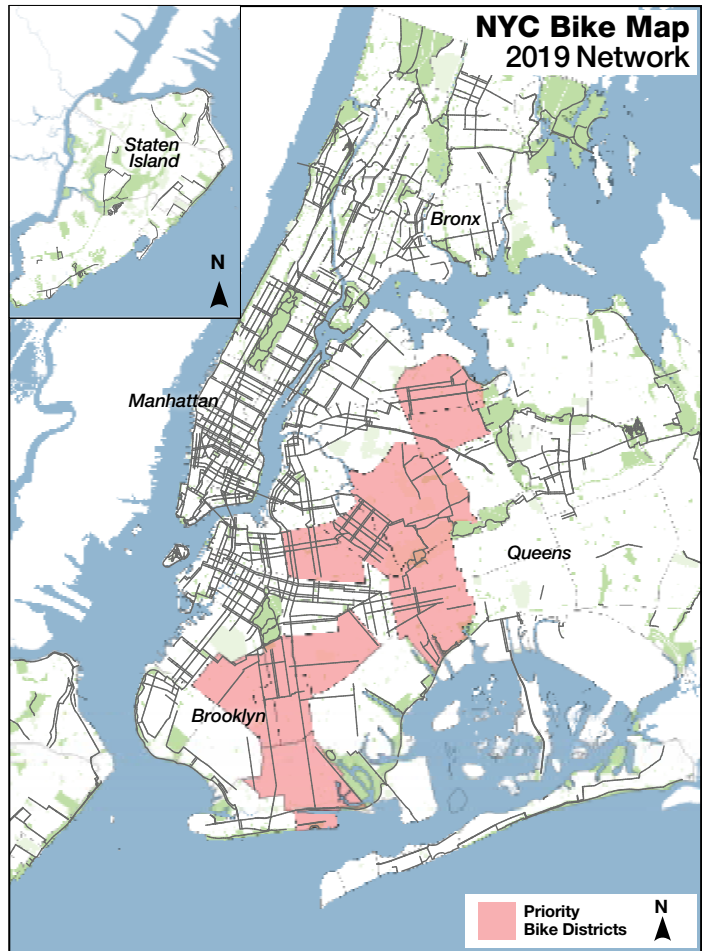


Increasing the number of people cycling makes our city a better place to live, and will help keep us at the forefront of sustainability. But too often cyclist trips have ended in tragedy, especially with 2019's sharp increase in cyclist fatalities in NYC, which have run contrary to the long-term trend of improving cyclist and overall roadway safety citywide. This situation is not acceptable – we have an obligation as part of Mayor Bill de Blasio's Vision Zero initiative to keep all of our residents safe, especially the most vulnerable on our streets.

Green Wave: A Plan for Cycling in New York City is the City's plan to meet this moment. This plan presents a long-term citywide vision for improving cycling safety and the riding experience for cyclists, but marries that with a slate of more immediate improvements. DOT, along with NYPD and other partners citywide, will commit resources to ensure that this plan is not only adopted but accomplished. Making cycling safer is a relentless goal and one that is not achieved all at once or by any single entity. It will require continual improvement of cycling infrastructure, targeted enforcement, including holding dangerous drivers accountable, effective public education, and ongoing work to pass and strengthen State and Local laws that make our streets safer. And it will require collaboration of City agencies, elected officials, local businesses and institutions, neighborhood residents, advocates and other stakeholders.

Although cycling fatalities are up this year, overall as cycling around the city has grown, the risk to cyclists has declined. DOT's aggressive expansion of our bicycle lane network, the growth and the expansion of Citi Bike, improved enforcement, and other changes have made the City vastly better for cycling. Increasing the number of cyclists both improves safety for everyone on the road and creates momentum for more improvements to the City's bike infrastructure to protect those growing numbers. This plan comprehensively addresses the ways safety can be improved, while also working to provide what is needed to get more cyclists on the road, from bike parking to new helmets. And it builds on all the other ways we are working to keep our transportation safe and efficient, from our record speed camera program expansion, to our Better Buses initiative, to our work with the MTA on the Central Business District Tolling Program.

Implementing this plan will not always be easy – the City is committing substantial new resources, and will need to take on new operational and political challenges in all parts of the City. The plan will need to continue to evolve over time, to reflect public input and how the City is growing and changing. But under Mayor de Blasio's leadership, we have created a plan that is realistic, has the necessary resources and personnel, and meets the urgency of this moment.



State of Cycling in NYC

- Since the adoption of Vision Zero in 2014, New York City has increased the miles of bicycle lanes by a quarter from 911 to 1,243, including 83 miles of protected lanes.
- DOT has added an average of 62 miles of bicycle lanes a year for the last three years, the largest increase in the country. This includes an average of 20 additional miles of protected bicycle lanes each year, creating a network of 480 protected lane miles.
- According to DOT's Cycling in the City report 24% of adult New Yorkers, nearly 1.6 million people, ride a bike; on a typical day there are nearly half a million cycling trips made in NYC (+55% between 2012 and 2017).
- The mobility landscape is changing;
 - Citi Bike, the largest bike share system in the USA, grew by 8% last year. DOT and Lyft plan to double its current footprint and triple its fleet by 2023.
 - > There have been 82 million Citi Bike trips since its launch.
 - > The system has a record of 85,000 trips per day, with an average of more than 70,000 trips on fair-weather business days.
 - DOT is bringing dockless bike share to all of Staten Island in 2019.
 - A 2018 DOT Traffic Rule clarified the legality of low-speed pedal-assist e-bikes, which makes cycling easier and more attractive. The Governor is expected to sign State legislation to legalize and authorize localities to establish a regulatory framework for throttle e-bikes and e-scooters. DOT is examining how these newer forms of micro-mobility can safely fit onto our streets.

Bicycle Safety

While progress has not always been linear, including a number of tragic fatalities in 2019, cycling has become considerably safer in the City over the past 20 years. As the bicycle network and ridership have grown, the risk for cyclists being killed or severely injured (KSI) has decreased by 75% since 2000. Even so, 103 cyclists have died on our streets since the launch of Vision Zero in 2014, including 17 fatalities in the first six months of this year (as of July 23, 2019.) These tragic deaths are a stark reminder that we must strengthen our work to support cyclist safety.

DOT performed a detailed analysis of fatalities since 2014, and found the following key factors at play:

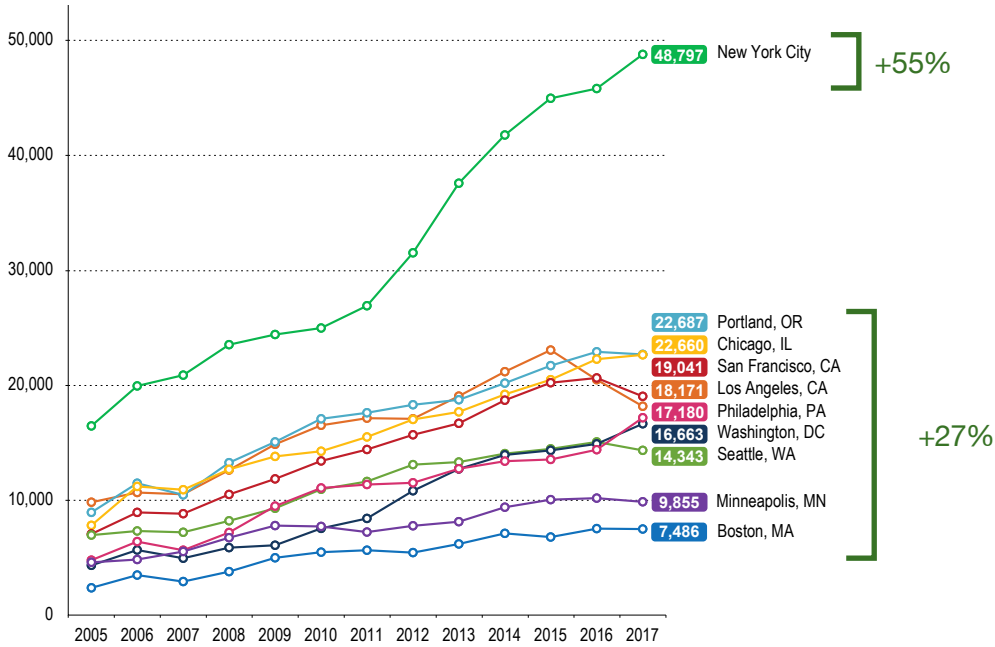
- 60% of fatalities happened at intersections
 - 23% involved a vehicle turn (left turns and right turns were evenly split)
 - 16% involved a driver’s failure to yield the right of way
- Nearly 90% of fatalities happened on streets without bike lanes
- More than 40% of bicycle fatalities have been in Brooklyn, 24% in Manhattan, and 22% in Queens.
 - In 2019 71% of the fatalities have been in Brooklyn
- 30% of fatalities involved a truck; there has been an uptick in truck related fatalities in recent years. (53% in 2019)
 - 45% in Brooklyn, 29% Manhattan, 13% Queens, 10% Bronx, 3% Staten Island
 - 58% occurred on designated truck routes
- 23% involved bicyclists disobeying red light signal
- 23% were hit and run crashes
- 7% were collisions with an open car door, or “dooring”

No fatality is acceptable, and the recent deaths highlight that more needs to be done. The City will increase cyclist safety citywide by building a connected bicycle network, providing education for all road users including vehicle and truck drivers, increasing enforcement to maintain clear bike lanes and safe driver behavior, and developing partnerships between City agencies to provide for the long term health of our infrastructure and improved design standards.

BOROUGH	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD
Bronx	5	0	3	1	3	1	1	2	3	1	2	0
Brooklyn	8	8	7	12	5	6	6	4	9	10	2	12
Manhattan	4	0	4	6	4	3	6	2	2	9	3	3
Queens	5	4	4	3	5	2	7	5	3	4	3	1
Staten Island	0	0	1	0	1	0	0	1	1	0	0	1
CITYWIDE	22	12	19	22	18	12	20	14	18	24	10	17

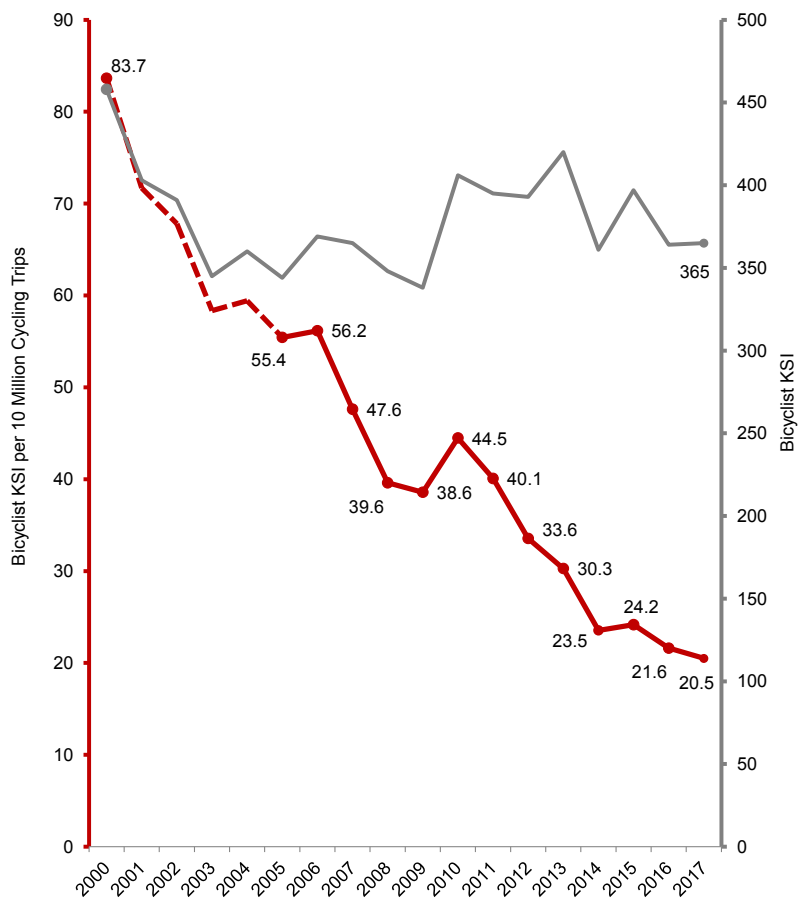
COMMUTE TO WORK ROLLING 3-YEAR AVERAGE 2012-17

Cycling to work in NYC has grown nearly 2x faster than in other major cities.



NEW YORK CITY CYCLING RISK:

Bicyclist Severe Injuries and Fatalities (KSI per 10 million cycling trips)



Implementation Resources

This plan represents a commitment to a dramatic increase in the cycling infrastructure DOT will be implementing citywide. And that commitment is being supported by a real increase in resources. This includes the hiring of 80 new employees, representing a nearly 75% increase in DOT staff who support bike lane infrastructure, as part of a commitment of \$58.4 million over the next five years, along with additional equipment and other resources.

Implementing this plan will involve growing many parts of DOT. The agency will increase its in-house street line marking capacity by 50%, so new implementation and maintenance will not be hindered by reliance on a finite pool of outside contractors. It includes staff dedicated to the installation – and maintenance – of bike lane protection, as well as signs and traffic control devices. It includes new crews who can build more concrete infrastructure. It includes personnel who design traffic signal timing and infrastructure, which are critical to so many bike lanes. It includes planners and engineers who will collect data, work with communities, and design bike lanes that reflect the needs of individual communities. And it includes community engagement and outreach specialists who can build and strengthen partnerships in local neighborhoods.



Plan Summary

1. CITYWIDE PROTECTED BICYCLE LANE (PBL) NETWORK

- Build 30 miles of protected bicycle lane annually, guided by a PBL vision document.
- Encourage increase in cycling mode share for safety and emissions reduction, with a target that 1 out of every 10 trips in NYC be taken by bicycle by 2050.
- Build 75 miles of bicycle infrastructure in 10 Bicycle Priority Districts (7 in Brooklyn, 3 in Queens) by 2022.

2. BETTER DESIGN

- Implement new design standards based on national & international best practices to enhance safety at intersections.
- Continue piloting new designs with rigorous safety analysis.

3. NYPD ENFORCEMENT

- Target enforcement on highest risk activities: speeding, failing to yield, blocking bike lanes, oversized trucks/trucks off route.
- Roll out Operation Safe Passage on a monthly basis focusing on dangerous driving behaviors including bike lane blocking.
- Explore new and emerging technology for automated enforcement.

4. TARGETED TRUCK INITIATIVES

- Convene a Truck Safety Task Force to leverage partnerships between public and private sector stakeholders.
- Increase enforcement efforts to reduce conflicts between trucks and cyclists.
- Expand Off-Hour Deliveries Program as well as Residential Loading Zones to reduce conflicts between trucks and cyclists.

5. LEGISLATION AND POLICY

- Support policy and legislation targeted at driver and cyclist behavior.
- Maintain PBLs at all times, including during construction and following resurfacing.
- Develop sound policies to address new mobility modes such as e-bikes and e-scooters

6. EDUCATION AND OUTREACH

- Launch next phase of Vision Zero public awareness campaign, educating drivers with a focus on cyclist safety — and expand the “Get There” bicycle encouragement/rules of the road campaign.
- Educate all street users about safe truck operation on city streets.
- Increase helmet giveaways and helmet use encouragement.

Immediate Actions

- Continue to build out an interconnected, protected network. In 2019 DOT will install 20+ miles of protected bike lanes in all five boroughs.
- Enhance safety in Priority Bicycle Districts—neighborhoods that have high ridership but lack adequate bicycle infrastructure. In 2019 DOT will install 20 lane miles in these districts (toward the goal of 75 miles total by 2022 in priority districts).
- Expand our protected bike lane network in farther reaches of the City to improve access to parks, transit, and other destinations, including on Southern Blvd in the Bronx, Fountain Avenue in Brooklyn, Beach 94th Street in Queens, and around the Goethals Bridge in Staten Island.
- Double the current Citi Bike service area by 35 miles and triple the number of bikes to 40,000 by 2023, launch borough-wide dockless bike share on Staten Island in 2019, while simultaneously evaluating opportunities to expand dockless bike share across the city.
- Increase the physical protection of bicycle lanes to fortify cyclists against drivers entering the lane. This may include more safety bollards, and pilots tests of new elements.
- Increase our annual target of protected bike lanes (PBLs) from 10 PBL lane miles to 30 PBL lane miles to quickly fill in gaps and make new connections in the PBL network. This increased target will be a mix of new miles, upgraded miles of existing unprotected lanes, and capital construction.
- Create and refine the vision for PBL network expansion through additional data analysis and stakeholder input.
- Review existing PBLs and implement upgrades where appropriate.

2019 PROJECTS

4 Av, 1 St – 60th St, Brooklyn

2nd Ave, 68 to 59 St, Manhattan

Central Park West, Manhattan

Grand St, Waterbury to Metropolitan, Brooklyn

Shore Parkway, Bay Pkwy to 53rd St, Brooklyn

Midtown Crosstown, 52nd & 55th St, Manhattan

Fountain Ave, Pitkin to Fountain Park, Brooklyn

Amsterdam, 51 to 72 St, Manhattan

Southern Boulevard, Fordham to Mosholu Pkwy, Bronx

Willis Ave, 135 to 148 St, Bronx

Flatbush Ave, GAP to Ocean Ave, Brooklyn

Big Jump / CB 3 and 4 Network, Queens

Flushing Network, Queens

Bay Ridge Bike Network, Brooklyn

Broad Street and Vanderbilt, Staten Island

2020 and Beyond

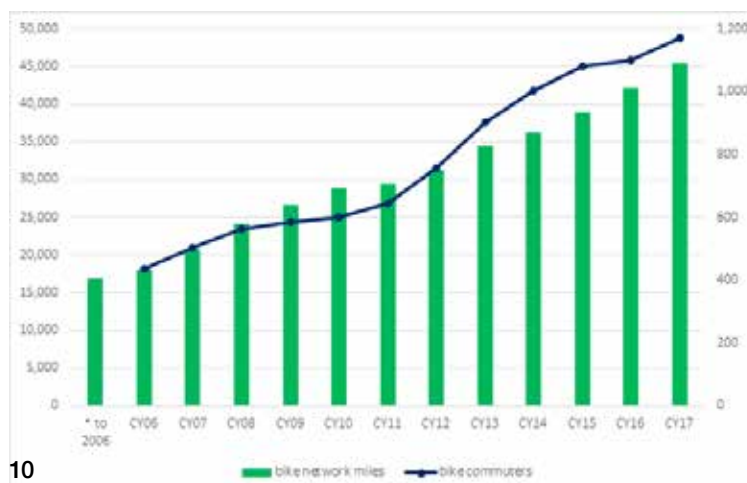
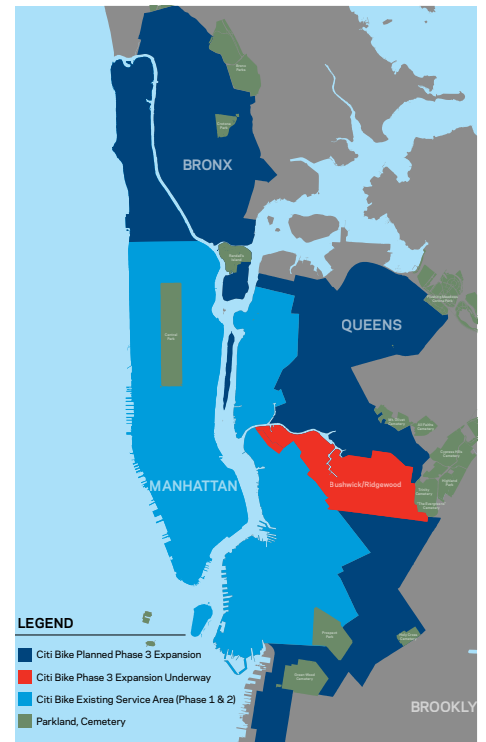
1. Citywide Protected Bike Lane Network

DOT illustrated a citywide vision for a fully connected Protected Bicycle Lanes (PBL) network, complemented by neighborhood routes consisting of conventional and protected infrastructure. This comprehensive plan, which represents years of work by DOT, is based on ridership trends, safety needs, stakeholder outreach, mobility and cycling studies, as well as Citi Bike and land use data. The plan seeks to cover the City with safe and comfortable bicycle infrastructure by 2030, transforming the cycling landscape to grow ridership and further advance Vision Zero.

The neighborhood connections address the existing need for dedicated cycling space by primarily providing conventional bike lanes, which can be more rapidly installed in areas with limited public and political support. Special attention will be paid to Bicycle Priority Districts, 10 neighborhoods designated as such by DOT in 2017 with only 14% of bicycle lane network but 23% of fatalities / serious injuries. These local lanes will lay the foundation for future bike lane enhancements as they build support through proven demand.

Comprehensive Plan Highlights

- Install over 80 miles of protected bike lanes by the end of 2021
- Continue to build neighborhood networks by installing 75 miles of both conventional and protected infrastructure in Bicycle Priority Districts
- Fully realized network by 2030



(above) Citi Bike expansion map;
(left) bike commuters and bike network miles

Vision Plan

The Vision Plan provides an early indication for what a city connected with safe, protected bicycle routes will look like. Using the existing network as a base, key desire routes have been identified by looking at neighborhoods, employment and commercial centers, recreation, and transit. The plan seeks to fill gaps and reach underserved neighborhoods, while strengthening the core and taking advantage of other citywide initiatives. Additionally, DOT examined ridership trends, community requests, and prior agency research including Cycling in the City and Safer Cycling to ensure a robust plan.

While the near-term projects in this plan are programmed for completion, there is a still flexibility to the proposed routes and nodes. In the coming months, DOT will refine these maps using additional data sets (e.g. origin-destination data and inter-neighborhood travel patterns; commercial, grocery, employment, community, parks, and entertainment centers; transit hubs). DOT will also look at truck route overlaps, the Better Buses Action Plan, curbside uses, and accessibility, and will work with stakeholder groups to set and prioritize the future routes. The refined map will guide DOT's design work over the next 10 years.






THE BIG JUMP

In 2017, NYC was one of ten cities awarded a technical assistance grant worth \$250,000 by People for Bikes to launch “The Big Jump” project in Queens, a 3-year program aimed at increasing safety, encouraging more people to bike, and improving connections within the neighborhoods of Elmhurst, Jackson Heights, East Elmhurst, and Corona. DOT has engaged thousands of residents and collected public input during each stage of the project. DOT’s Big Jump team has met with local elected officials and community groups, hosted public workshops, tabled at events, connected local organizations to \$25,000 in funding, and conducted on-street cycling safety education and giveaways. The culmination of this effort will be a robust neighborhood bicycle network.

New York City Protected Bike Lane Network

MAP 1 Protected Bike Lanes and Neighborhood Networks

Proposed Bike Network

-  Potential Protected Bike Corridor
-  Greenway Network
-  Neighborhood Network

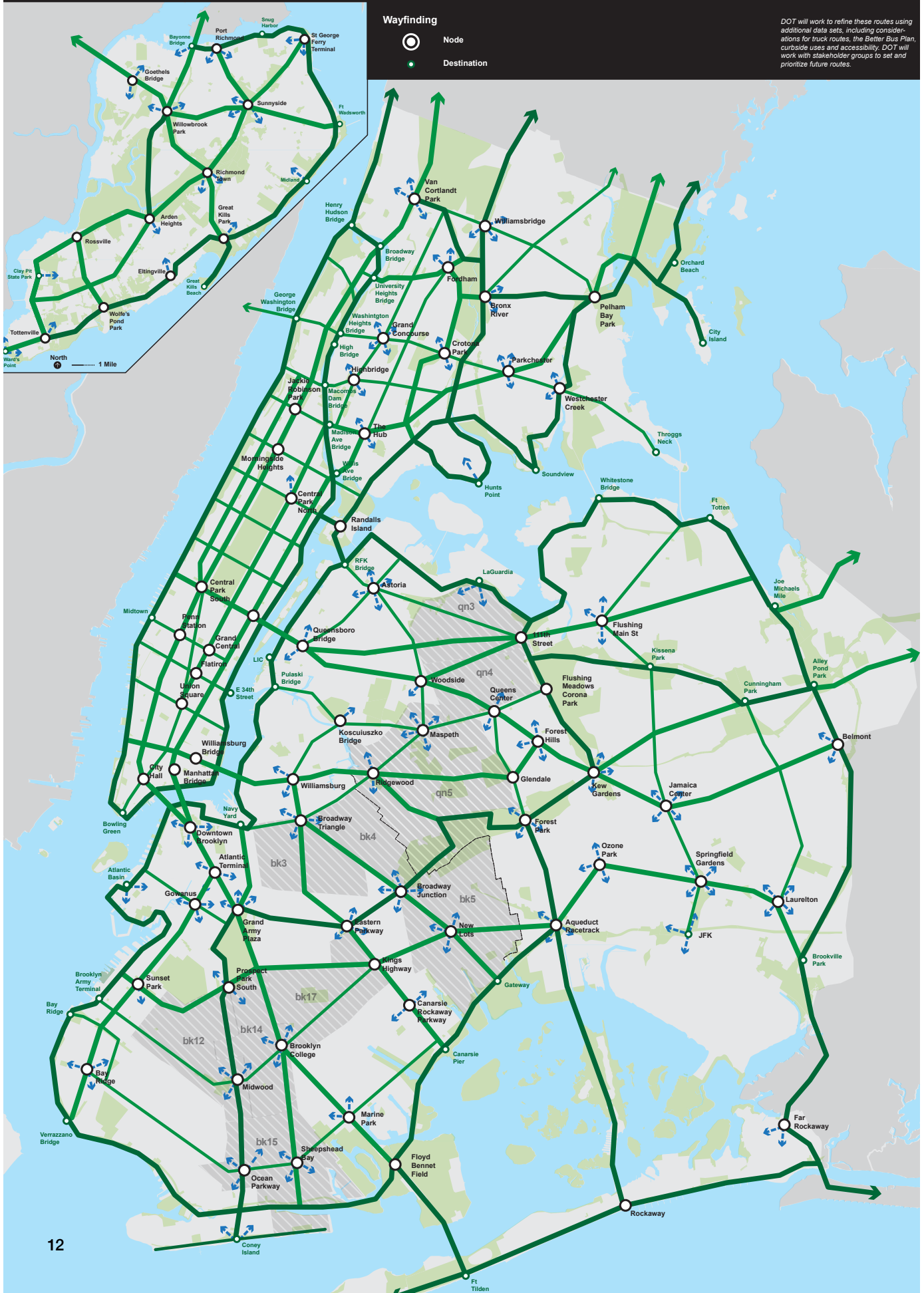
Priority Bicycle District

-  Community District with High Cyclist KSI and Low Bicycle Network Coverage

Wayfinding

-  Node
-  Destination

DOT will work to refine these routes using additional data sets, including considerations for truck routes, the Better Bus Plan, curbside uses and accessibility. DOT will work with stakeholder groups to set and prioritize future routes.



The Implementation Plan presents an overview of corridors that are planned to be installed by the end of 2021, priority community districts, and a potential next wave of focus corridors.

The projects labeled as 2019-2021 are in various stages of planning and design. Some have been presented to the public or are currently being installed. DOT will start outreach to elected officials and Community Boards on the others soon.

Project Prioritization

There are several focus areas guiding our work program over the next three years.

Central Business District (CBD) Tolling – DOT will establish a network of PBLs to encourage sustainable modes in and to the Manhattan core prior to the start of the CBD Tolling Program. Changes to traffic patterns as a result of CBD tolling will allow DOT to build new cycling infrastructure, providing safety benefits for both cyclists and pedestrians.

Bridges – DOT will create and improve on-street connections to/from existing bridge paths and upgrade existing infrastructure on bridges where feasible, including potentially on the Brooklyn, Queensboro, Goethals, and Harlem River Bridges.

Bike Share Expansion – DOT will focus on areas with expected ridership growth including in the Citi Bike expansion areas and dockless project areas, encouraging mode shift and providing safety in numbers.

Capital Projects/Greenways – DOT will work closely with the Department of Design and Construction (DDC), the Department of Parks and Recreation, and the NYC Economic Development Corporation (EDC) to build out greenway connections using capital funds, and begin a planning process to further develop the Queens Central Greenway network.

Bike Priority Districts/Neighborhood Planning – DOT will install over 20 miles of bike lanes in Bicycle Priority Districts and other neighborhoods where infrastructure is lacking.

Potential Protected Bike Lane Projects illustrate projects that are still in development and corridors that are to be defined. DOT will begin implementation of these lanes in 2022 and beyond. DOT will determine exact routes and specifications for each of these connections, which will be determined through local feedback and engineering analysis. The continued growth will follow a similar prioritization strategy with connectedness to existing lanes and bike priority areas as key considerations. DOT will also identify and overlay citywide priorities such as the **Better Buses Action Plan** and freight routes.

Neighborhood Network & Priority Districts highlight areas of the city where we will focus network development using a mix of PBL and non-PBL resources. Not all streets can fit PBLs nor are they always warranted by vehicular speeds, traffic volumes and crash data. The **Facility Study**, described in the policy actions, will define how non-PBL networks are appropriate in some locations. Designs may include conventional lanes, traffic diverters and calming, and shared markings for wayfinding and predictability.

New York City Protected Bike Lane Network

MAP 2 Protected Bike Lanes and Neighborhood Networks

Protected Bike Corridors

- Existing 2018
- Proposed Network Corridors

Bike Lanes in Development

- Current Work Program
- Protected Bike Lane Project
Includes in-house and on-going capital work
- Neighborhood Network & Priority District

Wayfinding

- Node
- Destination

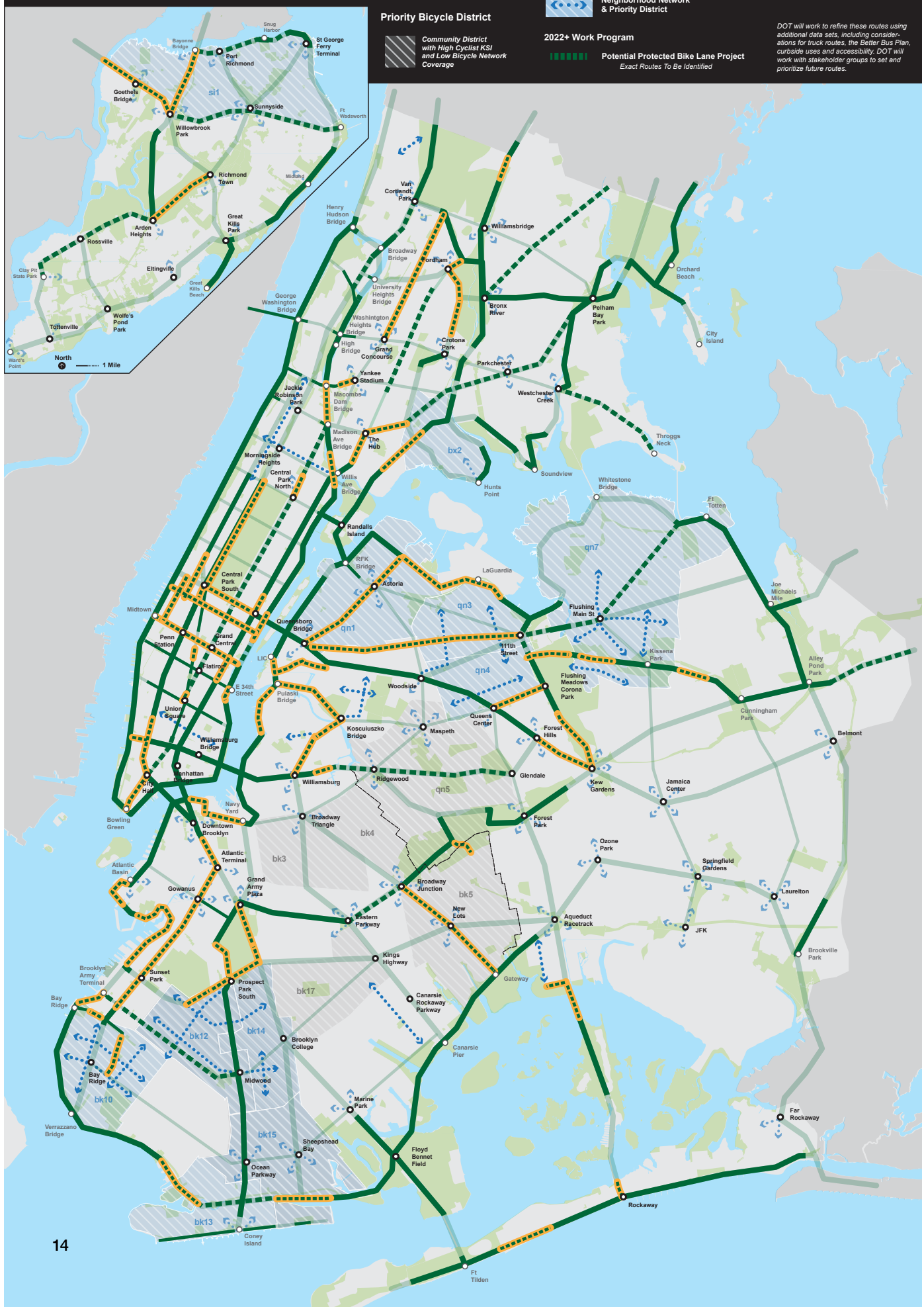
Priority Bicycle District

- Community District with High Cyclist KSI and Low Bicycle Network Coverage

2022+ Work Program

- Potential Protected Bike Lane Project
Exact Routes To Be Identified

DOT will work to refine these routes using additional data sets, including considerations for truck routes, the Better Bus Plan, curbside uses and accessibility. DOT will work with stakeholder groups to set and prioritize future routes.





(top row, left to right) Offset Crossing Intersection Treatment; Maintenance and Protection of Bicycle Lane During Construction

(middle row, left to right) Offset Crossing with Green Skip Bars, Mid-Implementation; Traffic Diverter Limiting Vehicular Through Lanes (Portland, OR)

(bottom row, left to right) Bicycle Signal at West 19th St. in Manhattan, Parking-Protected Bicycle Lane with School Bus Boarding

2. Better Design

DOT will continue to innovate and improve on our designs to create safe, intuitive, and contextual treatments, including a heightened focus on intersections where the majority of bike fatalities occur.

DOT will:

- Implement traffic calming treatments at 50 intersections with a high number of bike injuries in 2019.
- Regularly install protected intersection designs in new projects and after resurfacing, where appropriate and resources allow.
- Implement and review “Bicycle Progression” at one location in 2019 and identify other corridors for implementation in 2020. This signal timing strategy, often referred to a “bicycle green wave,” turns traffic signals along a street to green at cyclists speeds to discourage vehicular speeding, reduce cyclist travel time and stopping, and encourage steady bicycle speeds.
- Expand the use of green paint where bike lanes needs to be reinforced, including: green skip bars across key intersections, green backed sharrows at conflict points, and green bike boxes where cyclists have a safe place to wait.
- Integrate and install new street design treatments into our projects, including:
 - Bike boulevards to prioritize cyclists and limit vehicles on appropriate streets
 - Shared streets that incorporate bike safety best practices
 - Raised crossings where cars are slowed at protected bike lanes.
- Increase protection and fortify lanes, including: more safety bollards at key places along protected lanes, physical protection at new places, and projects that use new barrier types.

**Protected Bicycle Connection with
Painted Sidewalk Extension at 138th
St in the Bronx**



3. NYPD Enforcement

DOT and NYPD commit to working closely together to improve cycling safety throughout the five boroughs. Together, the agencies will identify key locations and behaviors to focus enforcement and education efforts. NYPD has developed a seven-point plan to eliminate cyclists killed and seriously injured by targeting the most dangerous behavior.

- Maintain continuous citywide implementation of “Operation Bicycle Safe Passage” initiative — extending elevated enforcement of blocked bike lanes and hazardous driving violations
- Focus enforcement on dangerous driving that puts cyclists at risk at the 100 most hazardous locations across the city as identified by DOT and NYPD
- Expand enforcement of oversized and off-route trucks by specialized units and precinct officers
- Discontinue general practice of ticketing cyclists immediately following where a fatal crash has occurred
- Improve investigations of cyclist and pedestrian injuries by having a supervisor respond to collisions to see whether right of way law (AC 19-190) should be applied
- Continue partnering with DOT on education and outreach

4. Targeted Truck Initiatives

DOT will deploy a targeted truck program to address the 30% of bike fatalities that involve trucks. To do this, DOT will work closely with partners in the trucking industry to reduce the number of conflicts between bicyclists and trucks.

DOT will develop an instructional video and materials for City large fleet, private sanitation, and freight industry partners, convene a Vision Zero Truck Safety Task Force which will have improved cycling safety as a goal, and expand the “Trucks Eye View” educational program on corridors with heavy truck travel.

DOT will implement and evaluate loading zones in residential areas, evaluate the curb management needs in commercial areas, and expand the Off-Hour Deliveries program to reduce conflicts between trucks and cyclists. These initiatives are complementary to DOT’s larger freight strategy. To address growing freight and goods movement, DOT’s forthcoming Smart Truck Management Plan seeks to improve the safety of truck travel within New York City, foster the sustainable and responsible movement of goods, expand partnerships within the public and private sectors, and improve the efficiency of truck movement to, from, and within the City. DOT will also support an expedited timeline for the installation of side guards for all BIC-licensed and registered trade waste vehicles, and will support EDC’s FreightNYC Plan and DSNY’s Commercial Waste Zone Management plan, which is projected to reduce truck miles by more than 50%, eliminating 18 million truck miles per year.



(Above) DOT's Truck's Eye View program enables New Yorkers to experience what it is like behind the wheel of a large vehicle, and understand their blind spots. (Below) Vision Zero palmcard



Cyclists riding on standard bicycle lane in Brooklyn



Cargo bike

5. Legislation and Policy

Legislation

DOT will increase safety for cyclists and all road users through new traffic rules, working closely with elected officials at the local and state levels to pass legislation, and changes in our policies and procedures.

At the local level, DOT thanks the Council for enacting legislation to allow cyclists to proceed on the pedestrian signal (Intro. 1457 by Council Member Carlos Menchaca). Intersections are the most frequent place in the city for serious bicycle crashes to occur due to conflicts with turning drivers. Council Member Menchaca recognized that people on bicycles were already using leading pedestrian intervals, or LPis, to proceed safely through intersections, and DOT observational studies and a limited pilot to authorize this practice at 50 intersections made it clear that these head starts safely offer effective protection to cyclists, too. Providing street designs, traffic signals, and laws that are more intuitive and responsive for people who bike should make our streets more orderly and provide additional incentives that encourage bicycling.

DOT supports legislation, with minor amendments on enforcement, to require chute closure devices on all concrete mixing trucks while traveling in New York City (Intro. 1354 by Council Member Holden), and will work with the Council to pass it. The agency has identified concrete spillage on roadways as posing a particular hazard to cyclists, which can be prevented by this simple, inexpensive piece of equipment.

DOT will work with the Council to introduce and pass a law requiring a vehicle overtaking a cyclist to allow at least three feet where a bike lane is not present – providing specificity to the “safe” distance required by state law.

DOT will work with the Council to introduce and pass legislation to streamline Community Board notice and presentation requirements and eliminate the waiting period after a public hearing takes place, to implement life-saving interventions in a more reasonable time frame. Two sections of the New York City Administrative Code, 191-101.2 and 19-187, require DOT to undergo an extensive process of Community Board notification, presentation, and waiting periods before implementation, whenever it plans major transportation projects that involve the realignment of the roadway or repurposing of lanes— or the addition of any type of bike lane of any length. These requirements add months-long delays to even relatively small-scale bike safety projects.

In addition, DOT will draft rules regarding cargo bicycle use to encourage their use and defining abandoned bicycles to aid in enforcement to keep our bike parking attractive and usable. And DOT is continuing to review its proposed double-parking rule for possible adoption. Double parking often forces cyclists to dart into traffic.

The Administration is in ongoing discussions with Council Member Lander on the Driver Accountability Act, which we support in concept.

DOT also supports enhanced side guard requirements and BIC- and DSNY – led reforms, including changes to the law, as detailed in the section of this plan on trucks.



Tool-cat maintenance vehicle purchased by DOT



DSNY collector truck with Vision Zero-branded side guard



Application of green MMA to bicycle lane

At the State level, DOT will support legislation to:

- Increase fines on repeat offenders of the City's speed and red light camera programs;
- Allow NYC to establish 20MPH speed limits solely through posted signage; and
- Raise caps on penalties for dangerous driving such as failure to yield the right of way.

DOT supports A4751/S5225 by Assemblymember Carroll and State Senator Gounardes, currently awaiting the Governor's signature. This bill would require a medical professional to confirm that anybody who declares a history of losing consciousness has the condition under control before the individual can obtain or renew a New York State driver's license. DOT will continue to pursue legislation that would require medical professionals to proactively report the diagnosis of such conditions to DMV, rather than relying on the license applicant to declare a history of suddenly losing consciousness.

DOT will also explore and evaluate the capabilities of existing and emerging technology for automated enforcement technologies to keep bike lanes clear, as well as enforce truck route and oversize or overweight truck restrictions, and determine the feasibility of obtaining State legislative approval for use of these technologies.

DOT Policy and Process

After many months of outreach and work to the construction industry, starting in May 2019, DOT began adding updated stipulations to all street construction permits on streets with existing bike facilities that require a temporary bikeway to be maintained whenever feasible and share guidance on how to comply. The requirement to include such stipulations on all such permits was then codified in Local Law 124 of 2019. DOT will also explore adding inspectors on bicycles to monitor work zone conditions.

Further, DOT is developing a standard checklist of safety-enhancing street design elements for consideration on all major transportation projects, per the requirements of Local Law 121 of 2019.

DOT will continue to advance policies that enhance cycling safety. This includes a new internal protocol to maintain a PBL after a road has been resurfaced, as well as a bicycle facility study to evaluate the safety and ridership numbers of each facility type.

DOT is continuing to take steps to curb placard abuse and create more loading zones, with intent to enable more truck parking to be accommodated at the curb, where they poses less hazard to cyclists.

Recognizing that bike lane maintenance is a key component for ensuring the long term health of NYC's bicycle network, DOT will prioritize markings refurbishment through increased inspections of existing bicycle infrastructure and adding new in-house markings capacity.



Bicycle corral

Bike Parking

Improving cycling in NYC is not only about providing infrastructure to get where you want to go, but about ensuring you have a place to park when you get there. To date, DOT has installed close to 30,000 bike racks, and plans to install 1,500 racks annually. DOT is revamping the bike parking program to be community-based, featuring an interactive bike parking suggestion portal and updated maps of existing bike parking. DOT will plan for future bicycle parking through comprehensive neighborhood or corridor lens, in conjunction with the planning and installation of other street furniture such as CityBenches, StreetSeats and LeaningBars. The program will have a goal of reaching 25 neighborhoods and installing 2,000 bike parking spaces, including bike corrals, annually.

DOT will also embark upon an effort to better maintain existing bicycle parking infrastructure. The agency will ensure parking availability by clearing racks of derelict and abandoned bikes, and a state of good repair through regular audits of existing bicycle parking capacity and close coordination with partners at NYPD and DSNY.

In 2019, DOT plans to pilot secure, high capacity bike parking at Myrtle-Wyckoff in Brooklyn and near Manhattan's Union Square using a shipping container design. On a parallel track, DOT intends to seek innovative private sector bike parking operators to provide more widely dispersed high quality, secure bike parking facilities, potentially using a public/private model similar to Citi Bike. DOT will also work to foster inclusion of high-capacity bicycle parking and bike sharing in major transit station projects across the City, including the Port Authority Bus Terminal.

Other Agencies

DOT will work with partner agencies to improve and advance new measures toward increasing cyclist safety.

Continuing to expand and truly weave an interconnected protected bicycle lane network into the fabric of our city streets involves more than just DOT. The operations of other agencies have a direct impact on the further development of bicycle infrastructure. DOT will continue to work with FDNY on emergency vehicle access considerations, with DSNY on street cleaning and snow plowing requirements, with DDC on street design and capital project management, and with NYPD on enforcement.

As DOT expands the bicycle network, overcoming operational constraints will be key in the maintenance, enforcement and design of bicycle infrastructure.

Other local and state agencies will play a role in ensuring safe bicycle and driver behavior on city streets. These include agencies that oversee fleet management, driver education, funding, and capital construction projects such as the Department of Citywide Administrative Services (DCAS), the Business Integrity Commission (BIC), the Department of Parks and Recreation, New York City Economic Development Corporation (EDC), the Taxi and Limousine Commission (TLC), New York State Department of Motor Vehicles (NYS DMV) and the New York State Department of Transportation (NYSDOT).

When BIC and DCAS release their study of serious crashes involving trade waste vehicles in late 2019, DOT will collaborate with the agencies to help implement best practice vehicle design and safety technology implementation. BIC and DOT are currently working together to develop a set of training videos specifically made for trade waste vehicle drivers.

TLC has begun working with for-hire vehicle app companies to improve communications to drivers and passengers to ensure both are aware of how to share the road safety with bicyclists. TLC is working on updated training materials, outreach to dispatching companies, and partnerships on street safety advocacy between cyclists and drivers, spurred by a community bike ride in June 2019 that brought together cycling advocates and TLC-licensed drivers to share each other's perspectives and challenges.





BED STUY DEEP DIVE

In 2018, DOT started a long term outreach effort in Brooklyn Community Board 3, home to the Bedford Stuyvesant and Ocean Hill-Brownsville neighborhoods. Through early outreach to local elected officials and the community board, DOT established relationships with key stakeholders who in turn were able to help guide future outreach and planning. This “deep dive” approach created an informed and comprehensive process, allowing for a sustained period of ground engagement by DOT’s Street Ambassador unit with the neighborhood, local elected officials, and community board to develop safety projects that both benefit and represent the neighborhoods. The process culminated with two street improvement projects being approved by the community board and slated for implementation in 2019.



6. Education and Outreach

Education is critical to ensuring everyone who uses our roads knows how to safely navigate the streets. DOT has a robust cycling education program, and will expand the depth and breadth of this program with a focus on rules of the road, cycling encouragement, and vehicle-cyclist interaction.

DOT will promote safe driving behaviors through the Vision Zero media campaign with a focus on cyclist safety, and will increase “Get There” bike encouragement and safety campaign messaging through weekly public outreach events. DOT will also engage city fleets and contractors with updated safety manuals, including DCAS and TLC training materials, and address the deficiencies in current defensive driving and driving training programs by providing additional services and materials to driving schools, high schools and new licensees.

Increased community engagement will include the formation of the “Bicycle Working Group,” which will meet to review ridership and data-driven trends, discuss design issues, create evidence-based outreach strategies, and provide input on new projects, including those in the PBL network plan. This group will foster cross-collaboration and promotion of co-branded bike encouragement and safety events, and to share information and best practices. Through these efforts, DOT will build and strengthen the community partnerships needed to support and develop a bicycle network that is responsive to diverse local needs.

In the classroom, DOT will continue to fund and expand a companion education portion to the defensive driving and training programs at local driving schools to raise awareness about driving in bicycle rich areas. Train the trainer programs will be offered and driving instructors will be helped to include this important awareness. DOT will also expand the citywide 7th Grade Bike Safety Program in collaboration with DOE and Bike New York going to 25 schools in the 19-20 academic year.

DOT currently operates Council-funded helmet fitting and giveaway program as well as providing helmets for students and youth. Since the launch of the program, DOT has given away over 225,000 helmets to New Yorkers, averaging 25,000 annually. DOT will continue and expand this free helmet program with 10 or more large events a year giving away at least 1,000 helmets per event with an emphasis on fitting children and youth. Some of these events will be targeted in locations that have Citi Bike expansion. In addition, comprehensive fitting instructions and guidelines will be distributed to ensure that our youngest New Yorkers have their helmets working to protect their developing brains. DOT will also work with Citi Bike to provide free helmets to NYCHA residents who are Citi Bike members.

Conclusion

Since the implementation of Vision Zero in 2014, New York City has bucked the national trend and seen a decline in the number of people killed and seriously injured year over year. However, DOT knows that progress is not linear, and this year NYC has experienced a tragic increase in cyclist fatalities. These deaths highlight the critical nature of our work and push us to recommit to bold and innovative initiatives to make our streets safer, greener, smarter and more equitable. This plan will require strong partnership and collaboration between City agencies, elected officials, local businesses, neighborhood residents, advocates, and other stakeholders.

Resources

For more information on our plans and sharing the road safely go to DOT's bicycle website: nyc.gov/bikes.

"Get There" palm cards

GET THERE SAFELY

- If you can't see the driver they can't see you**
Use extra caution when passing trucks, buses, or approaching an intersection alongside a large vehicle.
- Stop at all red lights and stop signs**
Running a red light or stop sign puts you at risk for a serious crash, and startles pedestrians who don't see you.
- Be sure to be seen when stopped**
At red lights, stop to avoid the driver's blind spot – slightly ahead of a waiting vehicle.
- Be aware of your surroundings**
Do not wear more than one earphone while riding. Check behind you, especially changing lanes.

Do not pass large turning vehicles. They cannot see you!

The diagram on the right shows a truck's blind spot area, labeled "BLIND SPOT", which extends behind and to the side of the truck. It also shows "CAB TRACK" and "TRAILER TRACK" for a turning truck.