

135 miles

miles of protected bike

lanes installed

55,921

safety systems installed on city vehicles (OEM and Retrofit)

VISION ZERO BEGINS IN NYC

5

355,712 failure to yield summonses

1,683

TLC drivers on safety honor roll

YIELD

11,834,294

automatic speeding notices of liability

11,327 telematics systems installed (City Fleet-Non Emergency Vehicles)



intersections receiving turn calming treatments

VIZION ZERO YEAR 2014-2020











 $\mathbf{+}$

130,103

City drivers trained in defensive driving

3

BY THE NUMBERS

"Our city has reimagined our streets as we've fought back the COVID-19 crisis...and, as we continue our fight to build a fairer and better city, we won't stop here."

Mayor Bill de Blasio

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Vision Zero Year Eight and Beyond







in Brooklyn

Executive Summary

One of the few constants in New York City life is change. The city of 2021 looks very different from just 20 years ago, when 9/11 presented an existential challenge to our way of life that left New Yorkers fearing they could never return to "normal." When Vision Zero began in New York City in 2014, centered on the tenet that deaths and serious injuries in traffic are avoidable, nobody could have anticipated that six years later the world would be gripped by a pandemic uprooting urban life as we know it. At least 24,000 New Yorkers have died of COVID-19, including many hardworking and dedicated personnel of Vision Zero agencies, and the 2020 program implementation season was severely limited by staff illness and the limitations of what kinds of work could be completed in a socially-distant scenario. The disruptions of 2020 led to new resource constraints for the City, with agencies facing the reality of having to do more with less. But New York has returned from challenges before, and will do so again. "Normal" can be, has been, and will be redefined, with our city finding the opportunity in crisis to come back stronger and smarter.

Artist Zara Fina Stasi completes a mural along the barriers that protect the Shore Parkway bike lane

After all, it used to be "normal" for Queens Boulevard to see double-digit fatality numbers every year. Vision Zero changed that, showing a large arterial road could be transformed from the "Boulevard of Death" to a model for complete reconstruction. Speed cameras were untested technology in New York City at the start of 2014; now they protect vulnerable road users in 750 school zones and enforce a 25 mile per hour speed limit that normalizes prioritizing safety over speed. It used to be "normal" to not see cyclists on the streets of New York, or to dismiss them as daredevils with a death wish. After seven years of Vision Zero, they are as woven into the urban fabric as hot dog carts and yellow taxis, with 135 new miles of protected bike lanes built since 2014 to show they belong on our streets as much as drivers and pedestrians do. Speaking of yellow taxis, while the ecosystem of for-hire vehicles now also includes thousands of app-based drivers along with traditional cabs and car services, these professionals now normalize safety in every part of their job, serving as a model for professional driving. So do the thousands of NYC Fleet operators who undertake defensive driving training tailored to our unique urban environment in vehicles specially procured to eliminate design features that endanger pedestrians and cyclists - all in a day's work.



Queens Boulevard, a Vision Zero Great Street, now features a protected bike lane



drivers became food deliverers, ferrying 65 million meals to New Yorkers in need. Road lanes formerly for traffic became seating areas for over 6,500 restaurants. Bicycling boomed as over 19,200 essential workers received free annual Citi Bike memberships. Despite unprecedented challenges, 2020 saw a record 30.9 miles of new protected bike lanes, over 350,000 NYPD summonses for the "Vision Zero offenses" most likely to injure or kill, and 411 outstanding safe drivers honored by the TLC in a virtual ceremony. Unfortunately, new challenges arose as well: An increase in speeding on newly-empty streets led to sharp spikes in motorcyclist and motor vehicle occupant fatalities, pushing up the overall 2020 death toll despite a record-low number of pedestrians killed on our streets.

What do all these changes have in common? They have needed to go beyond numbers on a spreadsheet and deep into the culture of our city. Such changes are only possible with a fundamental shift in how we think about our streets and their uses, and Vision Zero has ushered in this change by showing another way is possible, beneficial, equitable, and enjoyable. The year 2020 showed progress is not always linear, but also that Vision Zero has the capability to react and adapt to extraordinarily challenging circumstances.

COVID-19 created a new normal, and with this crisis came the opportunity to innovate and experiment with how our streets can be used for maximum public benefit. Taxi and Limousine Commission



YEAR 1 - TODAY

Statistics and Metrics

Data is at the heart of Vision Zero. In order to measure progress, devise policies, and direct resources, City agencies need detailed and reliable data. The following metrics illustrate the fundamental focus areas of Vision Zero and guide the ongoing work of the Task Force.

Bicycle Trips



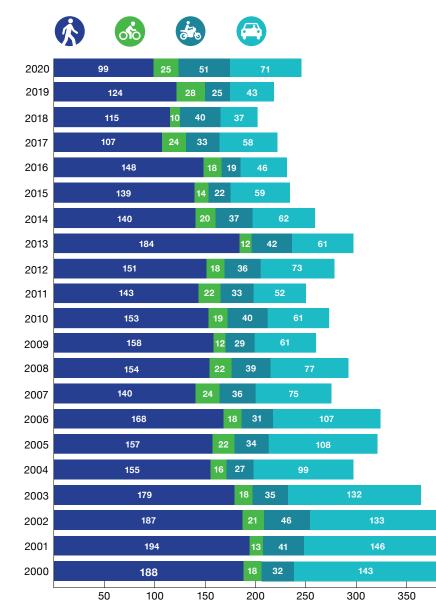
Cyclists use a temporary bike lane on Smith Street in Brooklyn, rapidly implemented as part of DOT's pandemic response

Cycling has continued to grow in popularity as a mode of transportation throughout the Vision Zero years. In 2019, the most recent year for which data is available, New York City had approximately 530,000 daily cycling trips, a 26 percent increase from 2014. The number of people biking to work in New York City grew nearly two times faster than in other major American cities between 2013 and 2018. About a quarter of New York City adults, or 1.6 million people, ride a bike at least occasionally.

Total Daily Cycling Trips

Traffic Fatalities by Mode

In 2013, the year before Vision Zero began, 299 people lost their lives on New York City streets, including 184 pedestrians. Seven years later, those numbers have fallen to 246 and 99 respectively. 2020 marked the first year on record with fewer than 100 pedestrian deaths. Looking at the five-year averages from before Vision Zero became City policy, total fatalities are now 10 percent lower, and pedestrian fatalities 37 percent lower. The Vision Zero years have been seven of the eight safest in New York City since record-keeping began in 1910.



Source: NYC DOT & NYPD

Please note that, in 2019 NYPD reclassified the deaths of throttle-powered electric bicycle riders from motorcyclists to cyclists. While this definition applies to 2019 and future statistics, it is not being retroactively applied to 2018 and earlier, so motorcyclist and cyclist fatality numbers may not be directly comparable. In 2019, five of these "e-bike" riders were killed in New York City. Under the classification mode used in previous years, this would add five to the motorcyclist total and subtract five from the cyclist total for 2019.

400

Trade Waste Vehicle Fatalities

In 2020, there was a significant decrease in collisions involving vehicles regulated by the Business Integrity Commission compared to the prior year. Most notably in the private trade waste industry, the number of fatal collisions decreased by 78 percent and the number of injury collisions decreased by 31 percent. Overall, the number of private trade waste collection vehicle collisions dropped by 59 percent. BIC increased its efforts in outreach and joint enforcement in 2020 by presenting safety lectures and partnering with NYPD, Sheriff's Office, and DSNY.

Dusk + Darkness

A prime example of the data-driven collaboration between Vision Zero partner agencies to solve longstanding problems is the Dusk and Darkness initiative. In 2016, a review of collision data revealed that pedestrian injuries spiked between November and March, particularly during evening hours. This coincided with the end of daylight savings time, when earlier sunsets cause lower visibility during the evening rush. The Vision Zero Task Force acted collaboratively on outreach and enforcement: NYPD deployed enforcement resources to locations with high volumes of pedestrian traffic during the hours of 4pm to 8pm, concentrating on drivers who speed or fail to yield to pedestrians and cyclists. DCAS and TLC circulated communications among their drivers warning them to be cautious with the earlier onset of darkness, and DOT ran radio messages during rush hours. Together, NYPD and DOT Street Teams distributed over one million postcards each year to caution drivers about the dangers of lower visibility, encourage them to follow the 25 MPH citywide speed limit, turn slowly, and yield to pedestrians.

In subsequent years, Dusk and Darkness has included specialized programming that reflects the wider scope of Vision Zero. For example, in 2018, after several fatal crashes involving trade waste vehicles that operate overnight, NYPD and the Business Integrity Commission (BIC) conducted enforcement operations and inspections of these trucks.

Following on this success, "Warm Weather Weekends" was added in 2017, with a press conference before the first warm Saturday in the spring. Data showed that on weekends in spring and summer, when winter weather finally lifts, crashes involving motorcyclists increase. New Yorkers were urged to show caution during this weekend, especially motorcyclists. DOT engaged with ABATE, which represents motorcyclists from all five boroughs and began the first "Look Twice for Motorcycles" campaign.

Vision Zero Task Force

As the number of initiatives and the breadth of Vision Zero have grown since 2014, so has the membership of the Vision Zero Task Force, a multiagency coalition of representatives dedicated to collaborating on traffic safety. Led by the Mayor's Office of Operations, the Vision Zero Task Force brings together skilled agency representatives to share information while jointly striving to eliminate traffic deaths and serious injuries. The membership of the Vision Zero Task Force includes Business Integrity Commission (BIC), Department of Citywide Administrative Services (DCAS), Department of Health and Mental Hygiene (DOHMH), Department of Transportation (DOT), Law Department, Mayor's Office of Operations, Mayor's Office Community Affairs Unit, Metropolitan Transportation Authority (MTA), New York Police Department (NYPD), Mayor's Office of Management and Budget (OMB), Sheriff's Office, and Taxi and Limousine Commission (TLC).

In addition to biweekly general meetings, the Vision Zero Task Force has working groups focused on data, marketing, fleets, and micromobility, which allow for deeper dives into topics of concern for multiple agencies. These groups have expanded membership that includes the Department of Education (DOE), Department of Sanitation (DSNY), Fire Department Emergency Medical Services (FDNY EMS), and the Mayor's Office of Data Analytics.



Members of the Vision Zero Task Force meet to discuss priority issues







Equity in Vision Zero

been meant as an initiative for all New guiding metric for Vision Zero work. road user, and nobody is immune from the effects of traffic crashes. However, the burdens of crashes do not fall equally upon all communities. In addition to equitably distributing the a dangerous driving behavior and not

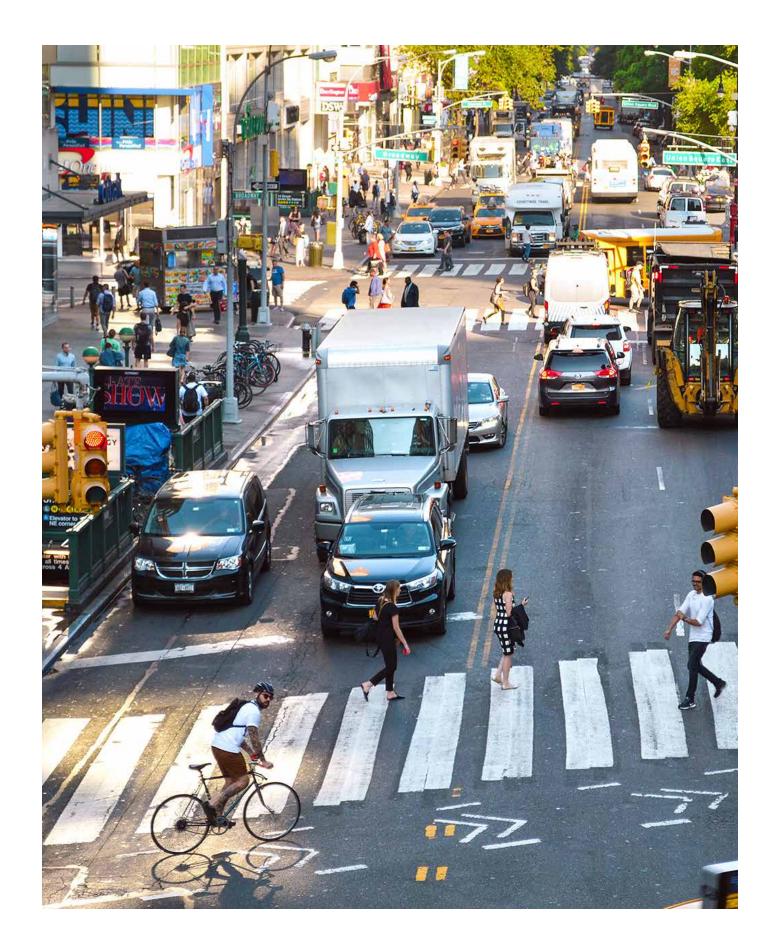
outdated street designs that prioritize traffic enforcement does not target the fast movement of automotive any demographic group. NYPD has From its inception, Vision Zero has traffic at the expense of pedestrians focused its efforts on the driving and cyclists. The agencies of the offenses most likely to injure or kill, Yorkers. The rate of pedestrians killed Vision Zero Task Force are therefore and at locations where pedestrian or seriously injured, or KSI, is the committed to ensuring their work is safety demands intervention, for equitable, using data to prioritize precisely this reason. In addition, Everybody in this city is a vulnerable interventions where they are most they have supported the City's needed and can provide the greatest extensive automated enforcement benefit.

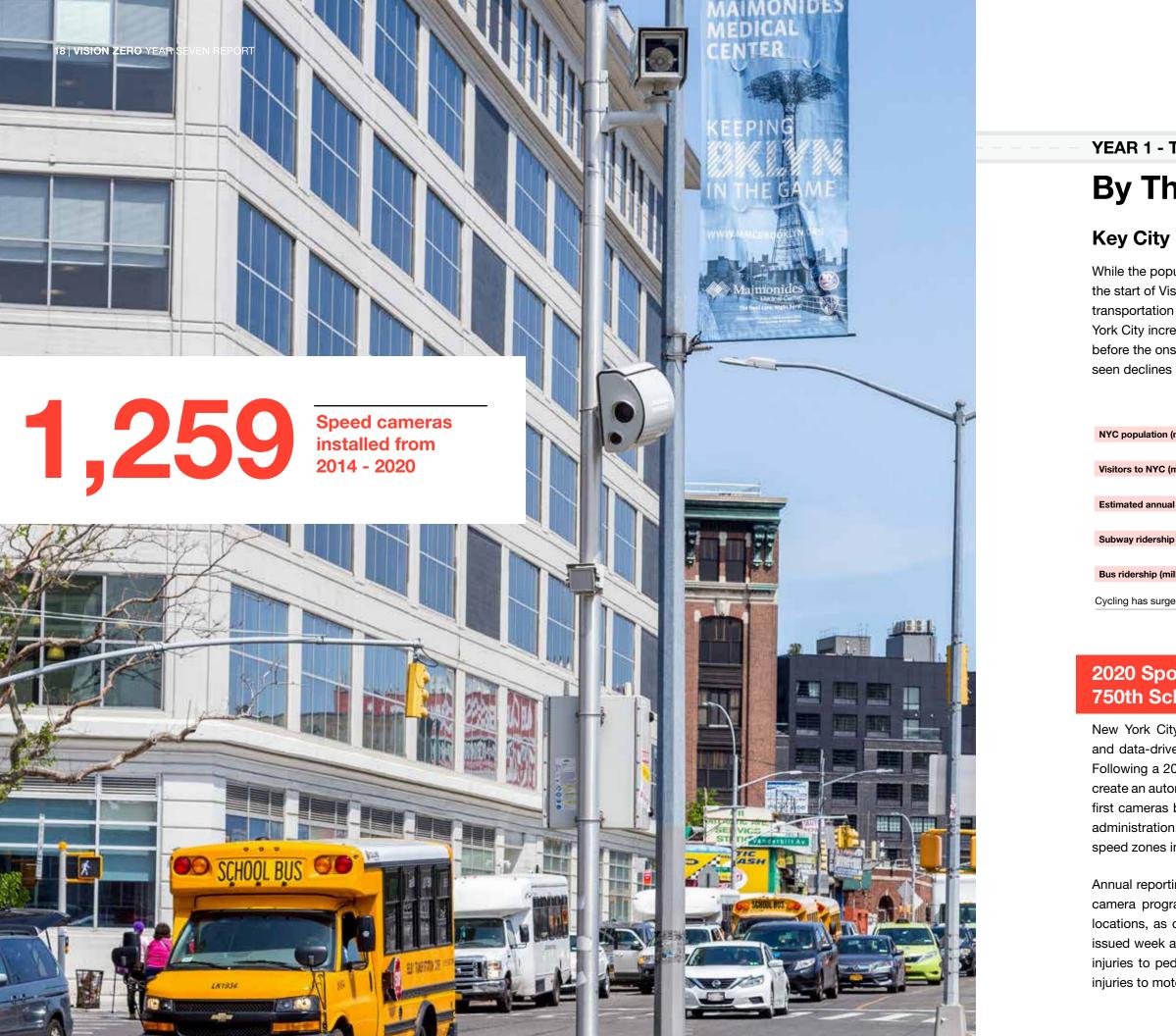
Historic disinvestment in low-income benefits of street improvements and any characteristic of the driver. communities of color has led to outreach, the Vision Zero agencies

certain neighborhoods suffering from are also committed to ensuring that program, which ensures that the only criteria for issuing a violation is



Public workshops, like this one held at Hostos Community College in the Bronx, give local residents a chance to speak with City officials about their street safety concerns.





YEAR 1 - TODAY

By The Numbers

Key City Metrics

While the population of New York City has remained relatively stable since the start of Vision Zero, the same cannot be said for metrics relating to transportation demand and mode share. The number of tourists visiting New York City increased from 56.5 million in 2014 to about 66.6 million in 2019, before the onset of the COVID-19 pandemic. Subway and bus ridership have seen declines since 2014, while cycling has increased.

	2014	2015	2016	2017	2018	2019			
millions)	8.434	8.463	8.469	8.437	8.390	8.337			
millions)	56.5	58.3	60.5	62.8	65.0	66.6			
l cycling trips (millions)	153.3	164.3	168.4	178.9	186.2	193.5			
(millions of trips)	1,751	1,763	1,757	1,727	1,680	1,698			
llions of trips)	793	776	764	725	691	678			
nd in New York City ever the Vician Zero years									

Cycling has surged in New York City over the Vision Zero years

2020 Spotlight 750th School Speed Zone Reached in June

New York City's speed camera program is a story of incremental change and data-driven policy leading to clear benefits, many years in the making. Following a 2013 change in State law that permitted the City of New York to create an automated speed enforcement pilot program in 20 school zones, the first cameras began operating in January 2014, at the start of the De Blasio administration. In June 2014, the pilot was expanded to a total of 140 school speed zones in order to support the City's Vision Zero goals.

Annual reporting required by State law allowed DOT to demonstrate that the camera program was leading to meaningful drops in speeding at camera locations, as demonstrated by sharp decreases in the number of violations issued week after week. Likewise, data analysis indicated that not only were injuries to pedestrians and cyclists falling at camera locations, but so were injuries to motor vehicle occupants.



New York City now operates speed cameras in 750 school speed zones

In addition to the evidence of safety benefits, by 2019, public opinion had largely coalesced around seeing the speed cameras as fair and necessary after all, a violation from these cameras resulted in a \$50 fine and no points on one's license, and cameras only issued violations to vehicles traveling more than 10 miles above the speed limit near schools. The State Legislature then granted New York City the authorization to deploy speed cameras in a maximum of 750 school zones beginning in July 2019, with expanded hours of operation and greater discretion as to where the cameras could be placed relative to the school building. DOT committed to an installation rate of 60 speed cameras per month.

While much of the DOT's work was curtailed following the COVID-19 outbreak in March 2020 due to illnesses and the need for social distancing, speed camera installation continued uninterrupted. Furthermore, because camera violations are reviewed remotely and do not require in-person interaction, the pandemic caused no interruptions to any of DOT's automated enforcement programs. In June 2020, DOT achieved the milestone of 750 school speed zones containing at least one camera. Going forward, additional cameras will be installed within the existing zones as needed. By the end of 2020, the de Blasio administration had registered its intention to expand the speed camera program even further with State permission, seeking 24/7 operation to help curtail the deadly speeding that arose on City streets after COVID-19 changed traffic volumes and commute patterns.

City Vehicles and School Buses with Real Time Telematics

DCAS has implemented the largest public vehicle live-tracking program in North America with nearly 23,000 vehicles being tracked so far, including 12,000 City fleet units and nearly 11,000 school buses.



DCAS operates telematics systems on nearly 23,000 vehicles

Through the telematics program, City agencies and the school bus program receive live alerts of speeding, failure to use seatbelts, and possible crashes by their drivers. Agencies also receive monthly Safety Index scoring by vehicle that includes speed, seatbelts and crashes, and incorporates potential indicators of unsafe driving such as hard braking and accelerating. Speeding violations and enforcement are discussed in interagency fleet federation meetings and, through the Vision Zero Safe Driver Training program and citywide fleet newsletters, DCAS reminds drivers about the dangers of speeding. DCAS has also worked with the Department of Education and school bus vendors to design safety alerts, reporting, and safety scorecards that can be used to promote safer driving for school transport. The goal is to improve driving behaviors before they result in crashes.

Protected Bike Lane Installation

Under Vision Zero, DOT undertook a program of protected bike lane installations of a scale never before seen in New York City. Since January 2014, DOT has built out about 135 protected miles, including such notable corridors as First and Second Avenues, Amsterdam and Columbus Avenues, and several crosstown streets in Manhattan; Willis Avenue, Bruckner Boulevard, and Broadway in the Bronx; Queens Boulevard, 43rd Avenue, Skillman Avenue, Shore Boulevard, and the Shore Front Parkway in Queens; and Fourth Avenue, Ninth Street, Fountain Avenue, and Grand Street in Brooklyn. Despite the challenges of the COVID-19 pandemic, DOT installed a record-setting 30.9 protected miles in 2020. Taking all protected and conventional bike lanes into account, as well as signed and shared routes, the bicycle network in New York City has grown from 946 miles at the start of Vision Zero to 1,375 miles by the end of 2020.



DOT has built out 135 miles (and counting) of protected bike lanes

The more people choose to ride bicycles, the safer cycling becomes. Citi Bike, New York City's bike share program, has been a major force in encouraging cycling since its introduction in 2013. Citi Bike now has over 1,150 stations and 18,000 bikes in four boroughs, with expansion into northern Manhattan and the Bronx having begun in 2020. At the end of 2020, the Bronx saw its first 174 stations activated.

In response to the pandemic, Citi Bike introduced the Critical Worker Program in March 2020, enabling over 19,200 essential workers in sectors like health care to travel safely and affordably. Users have taken over 110 million rides on Citi Bikes throughout its history.

Training-Related Statistics

Between March and October 2020, TLC Driver Education required for licensure was suspended due to pandemic-related safety restrictions. After significant coordination with TLC-authorized education providers to ensure training facilities were safe for TLC Driver License applicants to return, courses resumed in late October. Throughout the months that courses were available to applicants in 2020, 3,774 drivers received Vision Zero training. Since 2014, 130,103 TLC-licensed drivers have received this regularly updated training in rules of the road, defensive driving techniques, and safety guidance specific to providing for-hire transportation to the public.

MTA was forced to temporarily suspend its Transitional Operator Training (TOP) classes at the beginning of the COVID-19 pandemic, but was able to resume this crucial program before the end of the year. The TOP class targets new operators, providing a refresher in safe operating procedures. Topics discussed include approaching bus stops and intersections, executing left and right turns, challenges operating in the vicinity of pedestrians, cyclists, and other motorists, and importance of proper rest to reduce fatigue. In 2020, close to 400 bus operators attended TOP Training. Since the beginning of 2014, over 5,200 bus operators have attended TOP training.

Citi Bike Expansion

2020 Spotlight Overcoming COVID-19 Challenges by Creating Virtual Learning Classes

DCAS, through NYC Fleet, has other vehicle technology systems. committed to setting an example for professional fleet drivers, starting vision Zero principles and the "Drive Like Your Family Lives Here" video, as well as the "I See You" training video. The rest of the full day consists of New York State's DMV-authorized class, accounting for over 85 percent of City fleet drivers. Among City agencies, DOT, DCAS, Parks, TLC, and DOHMH are close to having a 100 percent completion rate.

The class includes a one-hour module specific to safety for City fleet cars and trucks, rules for City fleet drivers, and information about Fleet Vision Zero initiatives including telematics, side guards, connected vehicles, and

other vehicle technology systems.pandemic hit, NYC Fleet had toThe curriculum also covers generaltemporarily suspend the training. InVision Zero principles and the "DriveAugust, NYC Fleet launched an onlineLike Your Family Lives Here" video,as well as the "I See You" trainingvideo. The rest of the full day consistsa revised Vision Zero presentation,of New York State's DMV-authorizeddefensive driving training manual,class, with additional materials onupdated videos, and interactivepromptsto receive materials

DCAS has also certified additional staff at certain City agencies to teach classes at agency locations, following the "train the trainer" model. For instance, DCAS worked with DOE to certify members of their staff to be able to train school bus operators in defensive driving. DCAS worked with DOE to produce a Vision

Zero-specific training module that is focused on school bus operations and bus design.

Prior to COVID-19, these trainings were held in person and in large rooms. When the conference pandemic hit, NYC Fleet had to temporarily suspend the training. In version of the class which included a revised Vision Zero presentation, audio and visual presentations of the defensive driving training manual, updated videos, and interactive prompts to receive materials typically handed out in class. Online training has come with a big bonus: Participants can now do the course in segments, on their own schedule. This removes the need to take a City employee from their work for a full day. In the first three months of the program, over 2,500 drivers took the training, the equivalent of over 60 inperson classes.



DCAS has trained over 67,000 drivers since Vision Zero began



TLC Safety Honor Roll Members

TLC has held seven Honor Roll ceremonies since 2014 celebrating the safest drivers and businesses licensed by the agency as models for the forhire transportation industry at large. Across all seven classes of honorees, TLC has recognized 1,683 unique drivers and 144 unique businesses for safety. In 2020, the Safety Honor Roll included 161 repeat honorees whose consistent driving records placed them on multiple annual TLC Honor Rolls.



TLC held its annual Honor Roll ceremony virtually in 2020

Failure to Yield Summonses

Intersection collisions involving a turning vehicle consistently account for almost one-third of pedestrian and bicycle fatalities. Since the start of Vision Zero, NYPD officers have issued 352,361 summonses for failure to yield to these vulnerable road users, including 35,253 in 2020. In addition, education by NYPD and DOT Street Teams continues to be a key element in reminding drivers of their obligation to turn safely and always yield the right of way to pedestrians and cyclists.

Safe Driving Education for MTA Bus Operators

In 2020, the MTA Safety & Training Division continued to educate its operators in Vision Zero initiatives. The MTA recently combined their Vision Zero class with their de-escalation class because many of the aspects taught in both curriculums are related. The MTA is continuing their "Seasonal Challenges" campaigns, taking into account the adjustments needed due to the changes in traffic conditions that have been influenced by the COVID-19 pandemic, such as an increase in cyclists, E-bikes, and motorcycles on the road, and the increase in dangerous speeding.

2020 Highlight Side Guard Program

Large truck crashes are more likely to result in a pedestrian or bicyclist fatality than crashes involving passenger vehicles and are more likely to be side-impact crashes. Side guards are vehicle-based safety devices that prevent pedestrians and cyclists, and in some instances motorcyclists, from falling into the exposed space between the axles of trucks with high ground clearance and subsequently being run over by their wheels. These devices are successful and save lives. The fatality rate for bicyclists and pedestrians colliding with the side of a truck decreased by 61 percent and by 20 percent, respectively, following a

United Kingdom in the 1980s. Truck side guards are standard in many countries but still rare in the United States.

The NYC Truck Side Guard Program has offered eligible BIC licensees and was launched in 2015 by DCAS and is now governed by Local Law 56 of 2015 which requires all City-owned and commercial waste trucks to have side guards no later than Jan. 1, 2024. At the beginning of the side guard program there was just one supplier of side guards in the United States and no vendors in the New York City area who knew how to install them. Part of the New York City effort was with a pedestrian or cyclist to its side.

and encourage suppliers to be able to provide the parts. With these efforts there has been an expansion national side guard requirement in the of suppliers and installation vendors who can provide the necessary material and labor, not only in the New York City area, but nationally as well. In addition, since 2016 the Vision Zero Side Guard Incentive Program registrants an opportunity to receive funding toward the purchase and installation of Vision Zero side guards in advance of the 2024 installation requirement. The funding is offered to fleets who will work with the City to promote early adoption of these life-saving devices, as many fatalities involving trade waste collection vehicles have featured a turning truck

to educate vendors on how to install



Vehicle Side Guards Installed



Over 3,600 City Fleet vehicles now have side guards installed, of which 53 percent have been based on new vehicle purchase and 47 percent done as vehicle retrofits. The New York City program is the largest side guard safety program of its type in the United States and a model for truck operations, private and public.

While the COVID-19 impacted many City initiatives, DCAS maintained its priority on side guards. In fact, 2020 had the largest number of installations since 2015. FDNY, DEP, and DOT joined NYPD, DPR, DOHMH, DOC, and the DCAS client fleets in completing this initiative. As of the end of 2020 over 80% of all trucks eligible for side guards have been completed. DSNY, the largest truck program, has close to 2,000 trucks or 75% completed. NYC Fleet also worked with partners at NYCHA to fund and complete truck side guards installations on all their trucks in 2020.

NYC Fleet has collaborated with other cities on side guard initiatives or laws, including Boston, Cambridge, Chicago, Seattle, Portland, and Madison, and in April 2020 DCAS participated in the National Side Guard Task Force Virtual Forum. Attendees included victim advocates, government officials, the trucking industry, and side guard manufacturers. The forum discussed current side guard initiatives in the United States and the status of national legislation on side guards.

As of December 1, 2020, 185 trade waste collection vehicles had participated in the Vision Zero Side Guard Incentive Program, and over 1,500 trade waste collection vehicles had side guards.



YEAR 1 - TODAY

Data-Driven Solutions



of New Yorkers aware of Vision Zero as of 2020

The hallmark of Vision Zero, from its inception, has been an emphasis on data guiding every aspect of this initiative. Evidence-based practices lead to responsible and equitable uses of City resources, providing the greatest benefit. Combined with a focus on eliminating agency silos and pooling knowledge resources from government, academia, and the private sector, Vision Zero has allowed for innovative research collaborations that illuminate previously-overlooked aspects of street safety in New York City.

Data Working Group and Research on the Road

To advance Vision Zero goals and efforts, robust research and evaluation is needed. DOHMH, Department of Design and Construction's Town+Gown, and the Vision Zero Data Working Group hosted three installments of the Vision Zero Research on the Road (RoTR) conference with over 200 total participants representing various academic institutions, private traffic engineering firms, city agencies, and other stakeholders, such as advocates, to update researchers on traffic safety findings and identify projects relevant to Vision Zero. After the inaugural RoTR in October 2016, Vision Zero City agencies, with input from RoTR attendees, published a research agenda that outlined current projects and future research and evaluation questions. While trends and basic circumstances of traffic crashes in New York City are known through record-



Sal Arrona of BIC addresses attendees at Research on the Road

keeping on traffic crashes and contributing factors, RoTR events provided the opportunity for traffic safety researchers to more intensively explore factors, network, and potentially research innovative ways to prevent crashes and reduce injury as well as deepen understanding of the most effective strategies. Planning for the fourth installment of RoTR in 2020 was underway when the COVID-19 pandemic redirected many city agencies' resources. However, planning has resumed with the fourth installment expected in Summer 2021. Achieving the City's Vision Zero goals would not be possible without collaboration. In recognition of this, New York City agencies regularly work with each other and engage academic partners to study research questions through Vision Zero's Data Working Group. The Data Working Group has fostered projects with various traffic safety partners including NYU, Columbia University, and University of Chicago, which are highlighted later in this report.

DOHMH Enhanced Surveillance Projects

DOHMH, working with the Vision Zero Data Working Group and partner agencies, has continually looked for ways to improve traffic safety through enhanced surveillance of public health data sources. In 2018, DOHMH partnered with the Mayor's Office of Data Analytics (MODA) to link hospitalization injury data and severity scores with NYPD crash reports. MODA analyzed this linked data to predict which types of crashes would be most likely to result in severe injuries for pedestrians. This analysis found that pedestrians older than 70 years of age are most susceptible to the most serious injuries and are twice as likely to sustain serious injury compared with other New Yorkers.



DOHMH published research describing drivers who self-report speeding

DOHMH published two Epi Data Briefs reviewing medical examiner data among pedestrian and motorist fatalities, looking at demographics, neighborhood poverty, and alcohol involvement. Using data from the Community Health Survey (CHS), DOHMH published a third Epi Data Brief on driving behaviors. The Community Health Survey provides robust data on the health of New Yorkers, including neighborhood, borough, and citywide estimates on a broad range of chronic diseases. Since 2015, traffic safety questions have periodically appeared on the CHS in addition to cycling frequency and physical activity.



DOHMH Data Portals

The NYC Environment & Health Data Portal provides integrated environmental and public health data to the public in a user-friendly format and links various health indicators to show how the environment affects health. This portal includes hospitalization and emergency department visit data for pedestrian and bicyclist injuries, and users can see the relationship between neighborhood poverty and pedestrian and bicyclist injuries. Data indicate that residents who live in neighborhoods with higher rates of poverty also have higher trafficrelated injury hospitalization and emergency department visit rates compared to residents who live in neighborhoods with lower rates of poverty. The Environment & Health Data Portal provides deep dives and further insight into environmental health factors that shape the health of New Yorkers.

gaith Data Portal		
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DOHMH includes traffic-related injury data in its public-facing portals

2020 Spotlight **Cycling Data Story**

In November 2020, DOHMH published a cycling data story on the Environment & Health Data Portal, which highlights cycling as a healthy and safe way to get around the city. The data story includes a comparison of pedestrian and cyclist injuries in hospitalization and emergency department visit rates (Brooklyn) with the borough that had the lowest (Manhattan). It also includes maps physical activity.

with the rate of cyclist injuries, traffic density, cycling rates (percent adults reporting riding a bike at least once a month), and environmental factors such as the percentage of streets with bike lanes. When all of this data is examined together, a "safety in the borough with the highest injury numbers" story emerges: The more extensive the infrastructure and the more people riding bicycles, the safer streets are as an environment for



2020 Spotlight Self-Reported Speeding Manuscript

DOHMH published a peer-reviewed of worse social cohesion, defined as often than those reporting better manuscript with New York University's School of Medicine determining the prevalence of self-reported speeding in New York City based on responses to DOHMH's Community Health Survey, 2015 and 2016. The manuscript found self-reported speeding is common: 63% of New York City adult drivers reported that they ever sped and 13% reported often speeding. Driving behavior is influenced by many factors, including social norms, road design, and rules of the road. Often speeding was commonly reported among more younger drivers, males, and drivers living in wealthier households. A central finding - not examined before in literature of speeding - was that New Yorkers who reported feelings

weaker social relationships, fewer shared values, and lower trust among neighbors, were more likely to speed

social cohesion. The full journal article was published in the Journal of Community Health, September 2020.



DOHMH published research describing drivers who self-report speeding

Collaborations with Academics

From the start of Vision Zero in NYC, the City has worked with research partners from the private, non-profit, and academic spheres, developing innovative tools and fresh insights into improving street safety.

In 2015, DOT teamed up with DataKind, a data science nonprofit, to develop a comprehensive injury/fatality analytical model. This effort led to the 2019 launch of a new Motor Vehicle Volume Annual Average Daily Traffic (AADT) Estimator, enabling planners to access estimated AADT counts on all New York City streets. This data model allows for quick project vetting, systematic site selection for safety treatments, and citywide crash research.

In January 2019, DOT engaged the University of Chicago Energy and Environment Lab to study the links between injury crashes and driver behaviors such as speed camera violations, red light camera violations, and parking violations. DOT has used this work to characterize which type of drivers are more likely to be involved in traffic crashes and be repeat offenders, as captured by speed and red light cameras. The preliminary findings of the study have already informed City Council legislation that seeks to curb repeat dangerous driving behavior.

Speed cushions calm traffic on Bay Street, Staten Island



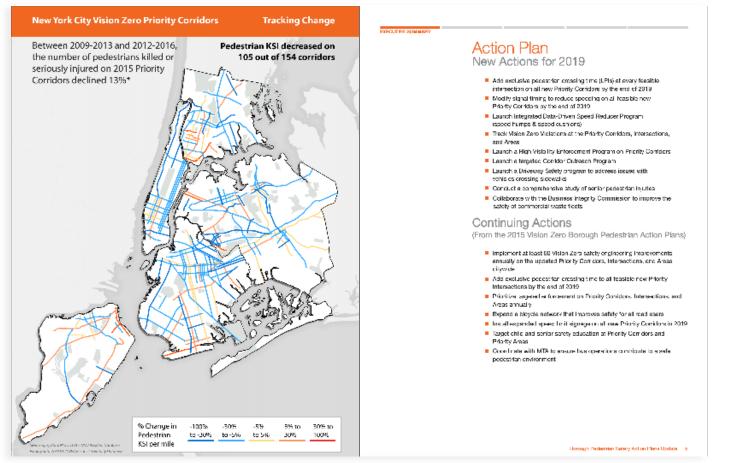
Over several years, DOT worked with the Smart Cities Center at Columbia University on the Driver Behavior Index (DBI) project that studied the links between driver behavior data drawn from DCAS CANceiver fleet data and DOT crash data. That work now powers a tool for DOT planners to access speed data in order to quickly assess existing and potential projects. DOT has used the tool to help locate sites appropriate for speed cushions and automated enforcement. Columbia's work has also investigated predictive links between traffic injuries on New York City streets and aggregate speed, hard braking, and hard acceleration data.



DOT Reports: Understanding Road Safety

DOT reports have provided deep dives into aspects of road safety relevant to street design, policy-making, and legislation for Vision Zero. All originate in the recognition that, if serious injuries and deaths on our streets are preventable, then a comprehensive analysis of factors influencing crashes needs to be conducted in order to guide the City's action. This also ensures all policies are evidence-based, rather than merely guided by hunches as to what might work.

The guiding documents for DOT's Vision Zero work have been the Pedestrian Safety Action Plans, first published by borough in 2015 and then updated citywide in 2019. These plans designate the priority intersections, corridors, and areas where pedestrian deaths and serious injuries have been disproportionately concentrated. They also describe in detail the engineering interventions DOT makes for pedestrian safety, set out the agenda for street redesigns, and, in the 2019 update, show progress made on Vision Zero initiatives.



Don't Cut Corners: Left Turn Pedestrian and Bicyclist Crash Study arose from the problem of left turns accounting for over three times as many serious injuries and fatalities as right turns. For this 2016 study, DOT examined five years of citywide crash data, manually reviewing 1,105 crash reports drawn from the most problematic locations citywide, and analyzing 478 intersections that had received safety treatments. The report found that leading pedestrian intervals, protected bike lanes, left turn restrictions, and left turn-specific signals substantially reduced vulnerable road user casualties. Following this report, DOT piloted new turn calming designs at 100 intersections citywide, later expanded to 468 and counting.

Safer Cycling: Bicycle Ridership and Safety in New York City, published in collaboration with NYPD and DOHMH in 2017, analyzed the growth of cycling alongside the expansion of New York City's bicycle network. The report notes that as the number of regular bicyclists has increased, cycling has grown dramatically safer - an example of "safety in numbers." In describing the progress New York City has made in improving cyclist safety, this report presented a detailed analysis of the factors that contribute to serious crashes involving cyclists and laid out a comprehensive action plan to further improve cycling safety. This report was followed in 2019 by Green Wave: A Plan for Cycling in New York City, which accelerated the construction of the citywide bicycle network and outlined new strategies for design, enforcement, legislation, policy, and education.

Distraction Shouldn't Be Deadly examined data to reveal that, contrary to popular opinion that has influenced policy in other American states, pedestrian use of mobile devices is not a significant contributor to crashes. This 2019 report reiterated that the most significant gains in reducing pedestrian fatalities and severe injuries can be made by continuing to target the most dangerous behaviors - such as driver speeding and failure-to-yield - and by implementing street improvement projects that reduce the severity of crashes.

In addition, DOT is required by State law to publish regular reports on the efficacy and impact of its automated speed and red-light enforcement programs. These reports have consistently shown that speed and red light cameras are improving safety for vulnerable road users throughout New York City and changing driver behavior, and have provided the data basis for supporting the expansion of the speed camera program to become the largest in the United States.

The Vision Zero Action Plan Update quantified improvements on DOT Priority Corridors



YEAR 1 - TODAY

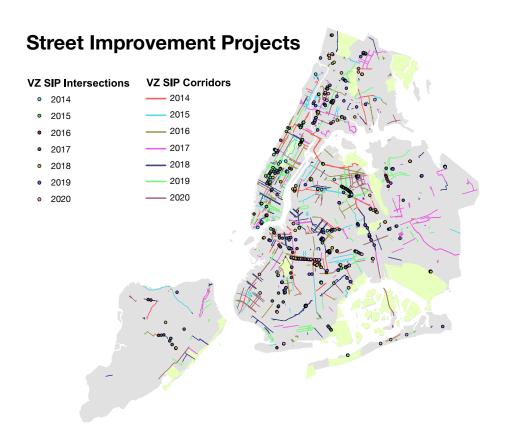
Engineering

All road users are human, and humans make mistakes. In a truly safe system, these errors do not need to lead to consequences like serious injury and death. Street engineering improvements help create this system by making sure the built environment encourages safer behaviors, whether it is slower driving, greater visibility, or separation of modes. Since Vision Zero became City policy in 2014, the Department of Transportation has been funded to increase the number of safety projects, governed by data set out in the 2015 Pedestrian Safety Action Plans and their 2019 update. First and foremost, planning these projects relies on information about preventing deaths and serious injuries to pedestrians, the most vulnerable road users. By prioritizing the locations in greatest need of engineering improvements, DOT ensures equitability in its work and emphasizes how Vision Zero remains a data-driven initiative. The results have literally become part of the fabric of New York: Bike lanes, pedestrian spaces, and the Vision Zero Great Streets all show what a city can become when it designs for safety.



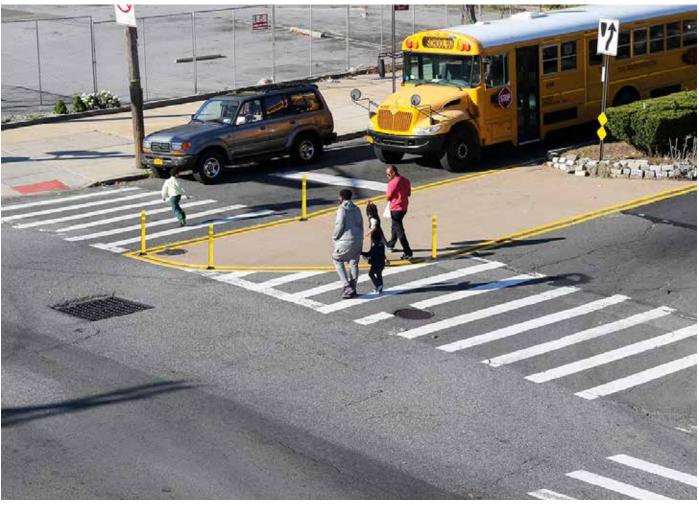
Avenue in Brooklyn

DOT's record 30.9 miles of protected bike lanes installed in 2020 included Flatbush



The COVID-19 pandemic curtailed DOT's capacity to complete a full season of Street Improvement Projects (SIPs) as planned, but the agency still finished work at 75 locations by the end of the year. These projects included the installations of bike lanes, bus lanes, traffic signals, curb extensions, and enhanced crossings. Expansion of pedestrian space took on special significance in the context of the pandemic, as this permitted greater social distancing and facilitated access to transit for essential workers. Some of the projects completed in 2020 include:

- Median tip extensions, pedestrian islands, curb extensions, bus stop improvements, and a new stop sign and crosswalk on Rockaway Beach Boulevard
- Protected bike lane installation on Central Park West
- A two-way parking protected bike lane, pedestrian islands, and signaling improvements on Fifth Avenue between Central Park and Marcus Garvey Park
- Upgrades to the Brooklyn Waterfront Greenway in Greenpoint
- Rubber pedestrian island installations on Rockaway Parkway in Canarsie



Temporary materials create a pedestrian refuge on Merrick Blvd, Queens

• New crosswalks, curb extensions, and left turn traffic calming on Myrtle Avenue in Ridgewood

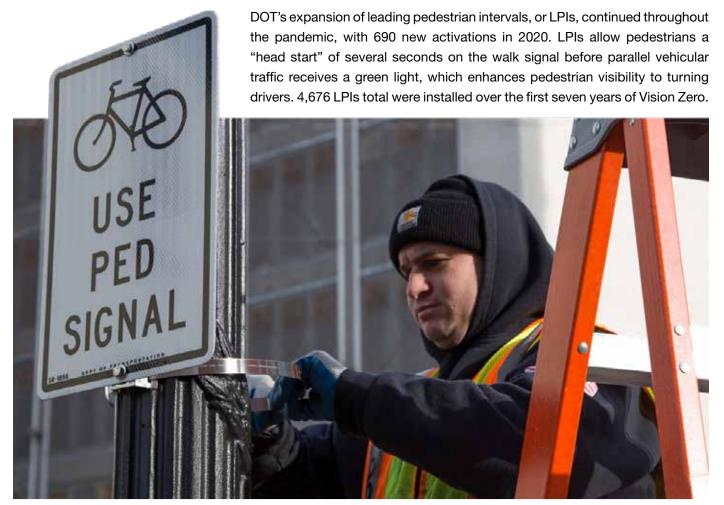
• Bicycle lanes connecting the Kosciuszko Bridge and Queens Boulevard

• Bicycle lane connections to the Goethals Bridge via Western, Forest, and Gulf Avenues on Staten Island

• Bus boarding islands, pedestrian islands, and a protected bike lane on E.L. Grant Highway in the Bronx

• New crosswalks, expanded pedestrian space, and a new signal on Morris Avenue near Claremont Park in the Bronx

Prior to the pandemic, DOT set records annually for the number of SIPs completed under Vision Zero, with 728 total through the end of 2020.



Local law now allows cyclists to safely advance using the leading pedestrian interval, following a DOT study

Enhancing Intersection Safety

Over half of fatal pedestrian crashes in New York City occur at intersections. These locations have been a particular focus of DOT engineering work since Vision Zero began.

In addition to LPIs to improve safety for pedestrians crossing streets, DOT has undertaken a project of turn calming installations at over 460 intersections since 2016. The installations have involved the use of hardened centerlines (sections of rubber curb and bollards, or rubber speed bumps, that extend into the intersection to prevent vehicles crossing the double yellow line) and slow-turn wedges (pavement markings paired with flexible posts or rubber speed bumps at corners to force wider turns). Bike island channelization, suitable for certain one-way intersections with protected bike lanes, uses the same materials to slow turns where cyclists are likely to be present. Pedestrian

injuries have decreased by 20 percent where turn calming treatments have been implemented, declining faster than at nearby comparable locations. The average left turn speed at these locations has slowed by 53 percent, while the average right turn speed has slowed 34 percent.

DOT has piloted raised crossings at numerous locations throughout New York City. These are marked pedestrian crosswalks constructed at a higher elevation than the adjacent roadway, forming a "speed table" 10 to 15 feet wide. They compel drivers to slow down, much like a speed hump or speed cushion would, while also enhancing visibility of the pedestrian crossing.

Curb extensions typically use paint and bollards, or sometimes concrete, to create more space for pedestrians at intersections. They calm traffic by physically and visually narrowing the roadway for drivers, force slower turns, and reduce the physical distance pedestrians need to travel when crossing the street. DOT has installed curb extensions at hundreds of intersections since Vision Zero began.

Traffic Management Center Communications Improvements

The replacement of the City-owned wireless network, NYCWiN, starting in the fall of 2019, was the largest municipal computerization project in the nation. NYCWiN provided a citywide communication backbone to all of DOT's Intelligent Transportation System (ITS) devices, including traffic cameras, Variable Message Signs (VMS), vehicle detection devices, and 14,000 traffic signals via the Traffic Management Center. The large-scale deployment of DOT's new Traffic Safety Network (TSN) was completed in June 2020 and it is based on the First Net AT&T Wireless Network. The TSN now provides DOT with more reliable traffic signal operation with 99% communication reliability, and a solution to maintain the integrity of DOT systems. The TSN modems at every signalized intersection also have WiFi readers from which DOT is currently collecting data to be used in the future for travel time computation analysis.

Leading Pedestrian Intervals

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Project Highlights Designing Safety

Vision Zero engineering projects take many forms, adapting to the unique circumstances of a corridor or intersection to address specific safety concerns. What they all have in common is an emphasis on creating designs that are forgiving of human error and which focus on the needs of vulnerable road users such as pedestrians and cyclists.

The "showcases" for how Vision Zero can transform roadways are the Vision Zero Great Streets, four major corridors that have been re-imagined since 2014. One of them, Queens Boulevard, bore the unfortunate moniker "Boulevard of Death" for many New Yorkers familiar with the high number of pedestrian and cyclist casualties along its seven-and-a-half mile route through the western half of the borough. Vision Zero provided the impetus to fully redesign Queens Boulevard with a protected bike stop-controlled slip lanes, lane, reconstructed medians with extended tips, and new crossings between the central malls that divide the local lanes from the central thru lanes. The

result was that a road that had seen 18 pedestrian fatalities in 1997 had zero in 2015, 2016, and 2017. Like the other Vision Zero Great Streets -Grand Concourse in the Bronx, and Atlantic Avenue and Fourth Avenue in Brooklyn - Queens Boulevard's transformation has progressed in phases first as operational projects, using less expensive and quickto-install materials, and later as intensive capital projects, making them permanent.

A focus on the needs of pedestrians not only for safe places but also inviting, pleasant ones that encourage walking led to the expansion of plaza construction under Vision Zero. One of the most successful examples of repurposing road space for pedestrians and enhancing safety can be seen at Myrtle-Wyckoff Plaza along the Brooklyn-Queens border, where previously a six-way intersection under elevated train tracks and a subway station allowed for 25 possible vehicular movements. Numerous bus routes terminated near the intersection of Myrtle Avenue, Wyckoff Avenue, and Palmetto Street, where three pedestrians died between 2009 and 2014. DOT made one block



of Wyckoff Avenue pedestrian-only, added curb extensions at all other corners to reduce crossing distances, banned several turns, and improved markings and signage. Extensive community outreach and partnership with local businesses ensured the success of this and other plazas as sustainable spaces.

space. added while enhancing mobility.



Recognizing from the start that it is not enough to improve discrete segments of roadway without considering their role in wider networks and complete journeys, DOT has made improvements at key locations that serve as connections across the City. A major re-engineering of the Manhattan Bridge approach at Canal Street between Baxter and Chrystie Streets expanded pedestrian extended sidewalks, and signals and crosswalks. Combined with the elimination of the daily peak hour reversals of the Manhattan Bridge's middle lower roadway to keep it Manhattan bound full-time, this project simplified complex roadway configurations Successful projects link not only boroughs, but also different modes of transportation. DOT has taken opportunities to combine transit development projects with pedestrian safety, recognizing that users of public transportation are also pedestrians at different points in their journey. The launch of Select Bus Service on Woodhaven and Cross Bay Boulevards in Queens provided such an opportunity to transform 11 miles of extremely wide arterial roadway by reducing crossing distances, calming turns, and reducing traffic speeds by design while also creating amenities like bus lanes and bus islands to serve over 30,000 daily riders. Likewise, Street Improvements Projects have facilitated better connections to transit nodes to ensure that an entire multimodal journey is safe, such as at **Bay Street and Victory Boulevard** in Staten Island, where the addition of new sidewalks, curb extensions. and a bicycle lane combined with the removal of one vehicular traffic lane helped to simplify turns and calm traffic near the Staten Island Ferry's St. George Terminal.

2020 Highlight **New Speed Limit Reductions**

City have been subject to a 25 mile November 2014; however, there are a few exceptions where higher speeds are permitted. In 2020, DOT lowered speed limits by five miles per hour on over 25 miles of these streets, mostly arterial roadways heavily

Most streets throughout New York used by pedestrians and cyclists. In addition to installing new signage, per hour citywide speed limit since DOT adjusted speed camera trigger thresholds and modified signal timing in accordance with the new speed limits.

> Corridors that had their speed limits lowered in 2020:

CORRIDOR	FROM	то	MPH
Third Avenue	Prospect Avenue	62nd Street	25
Hamilton Avenue	Luquer Street	• 18th Street	25
Flatbush Avenue	Grand Army Plaza	Empire Boulevard	25
Shore Parkway Service Road	Bay 8th Street	Plumb 3rd Street	25
Dahlgren Place	86th Street	92nd St	25
Riverside Drive	165th Street	• 181st St	25
Bruckner Boulevard	E 135th Street	Pelham Bay Park	25
Webster Avenue	E 233rd Street	• E Gun Hill Road	25
Rockaway Boulevard	150th Avenue	Nassau County border	25
Northern Boulevard	114th Street	Glenwood Street	25
Targee Street	W Fingerboard Road	Broad Street	





With the growing popularity of cycling as a mode of transportation throughout the pandemic, particularly commute to their workplaces, DOT installed 63.8 miles of bike lanes, including 30.9 protected miles in 2020.

Central Park West and Sixth Avenue in Manhattan, Flatbush Avenue in Brooklyn, and E.L. Grant Highway in for essential workers continuing to the Bronx. To improve connections to the Jamaica Bay Greenway, both standard and protected lanes were installed on 84th Street and 165th This included protected lanes on Avenue in Queens. Likewise, new

lanes on 47th and 48th Street help link the Kosciuszko Bridge with Queens Boulevard through the Maspeth Industrial Business Zone. On Staten Island, DOT built connections to the Goethals Bridge, while in Brooklyn the Bay Ridge neighborhood network saw expansions.

Rapid Bike Lane Deployment

Starting in March, when an increasing number of New Yorkers took to cycling but DOT crew capacity was limited due to the pandemic, DOT implemented rapid bike lanes with temporary materials like barrels and spray paint at the following locations:

- Smith Street in Downtown Brooklyn
- Second Avenue and 38th and 39th Street in Midtown Manhattan
- Flatbush Avenue along Prospect Park in Brooklyn
- East 61st and 62nd Streets, Crescent Avenue, and Northern Boulevard on both sides of the Queensboro Bridge

Project locations were chosen based on ability to implement quickly (including plans and materials availability), potential to increase ridership, and likelihood of vehicular conflicts. Most temporary lanes were converted into full street improvement projects as crews returned to work and outreach protocols for the pandemic were established.



Lower Broadway in the Financial District

Temporary materials helped to quickly implement bike lanes during the pandemic



Open Streets has transformed road space across the city at a time when New Yorkers need it most

2020 Highlight: **Open Streets - Response to COVID-19**

The upheaval caused COVID-19 pandemic affected all New Yorkers. In a city where space many people seeking places to safely walk or get fresh air. Meanwhile, the City service vehicles, utility vehicles, hospitality sector bore the brunt of the associated economic downturn, Mayor's Office, NYC Council, NYPD, with restaurant kitchens initially only found themselves with few options and with the resumption of in-person K-12 education in the fall, schools Yorkers sought outdoor activity. looked for ways in which to maximize the space available for students to learn while social distancing.

by the The City established the Open Streets program to allow for pedestrians and cyclists to use the roadbed, barring is at a premium, the early entreaties vehicular through traffic. Vehicle to stay indoors in Spring 2020 left traffic is limited to local deliveries, pick-ups and drop-offs, necessary emergency services. The and Parks, DOT, Business Improvement open for take-out and delivery. As the Districts (BIDs), and local community summer arrived, some neighborhoods organizations worked collaboratively to establish and maintain Open available for residents to cool off, Streets locations, which became popular as summer began and New

> The Open Restaurants program repurposed curbside road space for

outdoor dining, allowing restaurants to set up tables and chairs in what had previously been parking lanes. To implement this initiative quickly and minimize waiting times for businesses that were already struggling, DOT introduced a selfcertification process that allowed for restaurants to start serving customers outside right away. DOT also created a real-time data system to monitor compliance, designed a variety of media to show restaurant owners how to appropriately set up their space, and established a customer service team to handle questions. Education, inspection, and enforcement were handled by multi-agency teams working together much in the same way that the Vision Zero Task Force broke down agency silos when it was first established. In September, Mayor de Blasio announced that the Open Restaurants program would become year-round and permanent.

In addition, the Open Streets: Restaurants program took the repurposing of road space even further in alliance with civic organizations, BIDs, and groups of three or more businesses. Here, short segments of corridors were entirely shut to traffic in order to expand outdoor dining space. In total, 91 streets and 10 pedestrian plazas joined in Open Streets: Restaurants in 2020.

On hot summer days, the City activated Cool Streets and Open Streets: Play, which utilized the road bed for safe recreation. The Department of Environmental Protection and FDNY installed spray caps on fire hydrants located on streets with ample tree canopy, creating a cooling water feature for the public to enjoy without worrying about traffic.

In total, the City implemented 83 miles of Open Streets, nearly 50 percent of which are in zip codes with the highest rates of COVID-19, which are mostly communities of color. Nearly 60 percent are located in census tracts that are considered low- to moderate-income. Over 10,800 restaurants participated in Open Restaurants in 2020, supporting an estimated over 100,000 jobs in New York's hospitality sector.



Over 10,800 restaurants have taken advantage of the new program

In late summer, the City invited interested schools to apply for the Outdoor Learning program, which allowed classes to take place in schoolyards, adjacent streets, and parks. The program prioritized schools already lacking outdoor space in the neighborhoods hardest hit by COVID-19. In total, 17 miles of streets were repurposed for schools to participate in this program.



965,530

NYPD speeding summonses from 2014-2020



126773

Enforcement

Vision Zero has changed culture in New York City by bringing a new urgency to the matter of stopping death and serious injury on our roads, including amplifying the consequences for those who operate vehicles recklessly or criminally to the detriment of others. By emphasizing enforcing the laws related to those behaviors most likely to injure or kill, the City is focusing its resources where they can have the most public benefit. Since the start of Vision Zero, New York City has embraced automated enforcement as an efficient, effective, and equitable solution to some of the most pervasive traffic offenses, like speeding and red light running. As technology continues to evolve, the City will seek out more of these solutions, freeing highly-skilled enforcement personnel to tackle the behaviors that demand their specialization and professionalism.

Speed Camera Expansion

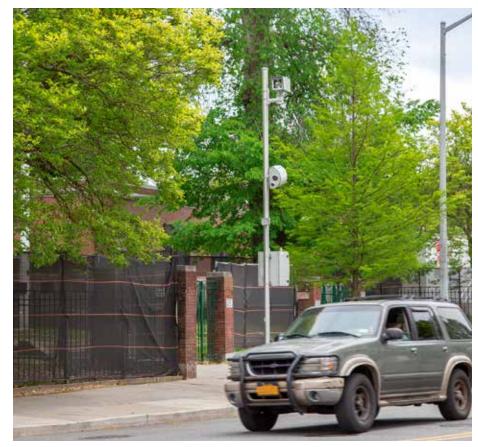
Since its inception in 2014, the speed camera program has continued to demonstrate effective, equitable, data-based enforcement against one of the most deadly driving behaviors. By assigning cameras to school speed zones in the order of where speeding and pedestrian KSIs were most severe, DOT was able to direct resources to where they were needed most. Cameras capture only the license plate of a speeding vehicle and send the violation to the registered owner responsible for it, with no identifying information about the driver. The latest data show speeding has fallen 71.5 percent at locations with active cameras, and injuries have decreased 17 percent. The fifty-dollar fine levied by speed cameras, with no points on the driver's license, has proven an effective deterrent: In 2019, two-thirds of vehicles that received one speed camera violation did not receive a second, even as the number of school speed zones and the likelihood of a speeder being caught increased throughout the year.

Following State legislative authorization to expand New York City's speed camera program from 140 to 750 school zones beginning in 2019, DOT installed 60 cameras per month throughout 2020, reaching the 750th zone in June. Additional cameras will be placed within these zones throughout 2021. Cameras are now active weekdays year-round from six a.m. to ten p.m.

Moving Violations

The NYPD continues to take a data-driven approach to eliminating traffic deaths and serious injuries from New York City streets. With assistance from its Vision Zero partners, the NYPD identified violations that are particularly relevant to accomplishing this goal because they are most likely to be implicated in serious crashes. The NYPD therefore focuses its moving violation issuances on these "Vision Zero" violations.

YEAR	SPEEDING	FAIL TO YIELD TO PED/BIKE	DISOBEY RED LIGHT	IMPROPER TURN	CELL PHONE	TEXTING	DISOBEY SIGN
2014	117,768	33,577	53,445	73,237	106,503	32,601	152,623
2015	134,438	39,853	55,199	76,049	84,630	41,209	165,389
2016	137,256	59,187	59,202	82,630	75,898	46,629	194,380
2017	149,955	51,765	70,021	37,280	29,610	23,188	79,104
2018	152,344	54,463	72,340	89,876	49,876	74,838	211,278
2019	139,596	78,256	65,029	79,788	35,115	65,972	179,515
2020	125,008	35,253	33,678	31,654	15,392	32,269	79,507



Automated enforcement provides a consistent, fair, and effective tool for behavior change

TLC Enforcement

In response to the pandemic, TLC Enforcement redeployed its officers to support the City's emergency work starting in Spring 2020. TLC Enforcement has focused on personal protective equipment (PPE) distribution to drivers, coordination of food delivery services with the Office of Emergency Management, and collaboration with the New York City Sheriff, including distribution of COVID-19 educational materials to the public and business inspections to ensure new public health guidelines are strictly followed. This important work supports the safety of the city in new ways given the unique circumstances of 2020. When pandemic-related efforts are no longer required, TLC will resume its regular Vision Zero safety-related patrols across the city.

driving for-hire.

Yea	ar	Total Vision Zero Summonses	Speeding	Failing to yield right of way	Traffic signal violation	Stop sign violation	Unsafe lane change	Electronic comm. device	lliegal U-turn
201 (PRE-		2,607	10	7	57	13	19	2,467	-
201	4	6,563	166	16	188	82	53	6,017	-
201	5	8,316	723	83	375	175	64	6,819	-
201	6	7,800	889	64	553	260	73	5,870	429
201	7	11,390	1,183	160	705	2,193	2,396	6,953	4,432
201	8	10,823	1,108	174	606	2,396	112	6,376	4,432
201	9	15,777	1,876	372	934	6,411	128	5,929	3,850
202	20	5,712	529	96	268	2,982	52	980	772

TLC Enforcement Officers focus on the traffic safety violations most likely to lead to serious crashes, such as speeding, failure to yield to pedestrians with the right of way, and disobeying traffic signals and signs. Apart from 2020 due to pandemic-related redeployment, TLC increased its traffic safety violations to TLC licensees each year since 2014. From 2014 to 2020, TLC Enforcement officers issued over 6,500 violations for speeding, almost 15,000 stop sign violations, and almost 40,000 electronic communication device violations, which includes using cell phones, headphones, and Bluetooth devices while

Vision Zero Summonses by Calendar Year

The Right of Way Law (19-190)

Far too many drivers make erratic turns or fail to pay attention to pedestrians in crosswalks. Administrative Code Section 19-190(a), also known as the Right of Way Law, states that a motorist who fails to yield to a pedestrian or cyclist who has the right of way shall be guilty of a traffic infraction. The offense rises to the level of a misdemeanor if the motor vehicle makes contact with the pedestrian or cyclist and causes physical injury, then classified as AC § 19-190(b). Since the law's inception in 2014, there have been approximately 15,000 summonses and 185 people across all five boroughs arrested for AC § 19-190 and held accountable for their dangerous driving behavior. AC § 19-190 is an important tool for District Attorneys and the NYPD because it allows for appropriate penalties to prevent drivers from repeating their behavior.



New York City law ensures penalties for failure to yield the right of way to pedestrians

Finest Online Records Management System (FORMS)

Since the launch of Vision Zero, the NYPD has adopted the Finest Online Records Management System (FORMS) to improve record management in a centralized system with a mobile platform. FORMS provides a single interface for users to capture numerous types of incidents including collisions and various types of summonses. It standardizes the process for documenting, storing, and delivering information. This in turn provides capabilities for field-based reporting and electronic summonsing via mobile devices. The NYPD is now able to review and analyze data more quickly, and therefore deploy enforcement officers more effectively, as a part of precision policing.

Ensuring Cyclist Safety

An essential component of increasing cyclist safety is ensuring that designated bicycle lanes are not obstructed by parked motor vehicles. NYPD Transportation Bureau Traffic Enforcement Agents pay particular attention to vehicles illegally parked in bike lanes, while the police officers of the Traffic Operations District issue moving violations summonses to motorists observed driving in bike lanes.

In support of the Green Wave Bicycle Plan, since 2019 the NYPD has conducted a week-long citywide safe cycling initiative each month. These initiatives are intended to protect the most vulnerable road users by focusing on drivers who fail to yield to pedestrians and cyclists. Speed is also a violation that is given high priority on these operations because it is a key determinant in collision injury severity.

Truck Enforcement and Assisting



NYPD partners with other City agencies to enforce against truck violations

Trucks play a valuable role in New York City by delivering supplies, transporting goods, and building the future. Trucks currently represent approximately 10 percent of the vehicles on New York City roadways, but have been disproportionately involved in traffic fatalities - in as high as 15 percent of traffic deaths in 2020. Pedestrians and cyclists, lacking the protection of motorists, face particular danger. In order to ensure the safety of New York's most vulnerable road users while simultaneously assisting the trucking industry in the valuable services that they perform, the NYPD will continue to conduct education, outreach, and enforcement in order to keep all road users safe.

The Sheriff's Office and Vision Zero

The Sheriff serves as an officer of the court and conservator of the peace in the City of New York. The Sheriff is responsible for ensuring all laws to protect life and property are obeyed, and any decisions rendered by a court or tribunal are enforced. For Vision Zero efforts, this means ensuring parking and traffic laws are obeyed, court orders for fines for these offenses are enforced, and vehicles with large outstanding judgments are seized in order to deter negative behavior and get dangerous drivers and vehicles off the road.

The Sheriff's Office has participated in Vision Zero since 2016. Since then, the office has conducted many large-scale operations to seize over 500 vehicles for a multitude of traffic offenses, camera violations, and tax fraud, and has recouped over \$100,000,000 in unpaid fines.

Chronic Offender Seizures

Beginning in 2017, the Sheriff's Office launched specialized operations involving the seizure of vehicles with a history of egregious Vision Zero offenses. Violations included chronic offenders who registered vehicles out of state to bypass New York's vehicle inspection requirements, illegal taxi operations, drivers with suspended licenses, vehicles involved in prohibited tobacco and cigarette trafficking networks, significant unpaid traffic violation summonses, and one case, extortion of taxi medallion owners.



The Sheriff holds the authority to seize vehicles connected to traffic offenses and violations that put the public at risk



The Sheriff's Office has uncovered fraud, extortion, and trafficking alongside dangerous driving and parking

In 2018, the Sheriff's Office also created the New York City Commercial Motor Vehicle Enforcement Program. This program focuses on commercial motor vehicles that are subject to tax and other safety violations. Recent investigations led to a discovery of various types of fraud schemes including registration, parking, and tax fraud. Not only do these crimes cheat the City out of tax revenue, they also bypass safeguards meant to keep all New Yorkers protected from unqualified or dangerous drivers.

Notably, in 2019, the Sheriff's Office conducted a large operation, known as Operation Meltdown, which investigated registration fraud. From 2017 through 2019, the Sheriff's Office conducted extensive investigations on the ice cream truck industry which culminated in the seizure of 46 ice cream trucks over a two-day operation.

The investigation uncovered the defendants operating their trucks in the most densely congested part of New York City — midtown Manhattan — and creating an outsized risk to public safety. Between 2009 and 2017, the City wrote over 22,495 parking tickets to these ice cream trucks, with over 98.5 percent of the tickets issued to trucks illegally parked between 34th and 59th Streets and between Third and Eighth Avenues in Manhattan.

Violations found included stopping or standing or parking in crosswalks (846 violations) or too close to fire hydrants (1,192 violations), going through red lights (93 violations), and blocking access to pedestrian ramps (63 violations). The resulting debt was approximately \$4.4 million, excluding interest. Through this operation, it was possible to get these reckless, unaccountable operators and vehicles off NYC roads.

Sheriff's Office Partnerships

In the beginning of 2020, the New York City Sheriff's Office hosted a large-scale multiagency enforcement operation in Brooklyn, targeting vehicles with thousands of dollars in Vision Zero-related infractions. City agencies such as the Business Integrity Commission, Taxi and Limousine Commission, Department of Transportation, and the New York City Police Department joined the Sheriff's Office during a 12-hour focused crackdown on dangerous vehicles that operated on the streets of southern Brooklyn.

Since the beginning of the coronavirus pandemic in March 2020, the Sheriff's Office has been responsible for executing mandates issued by the Governor, Mayor, and the City and State Health Commissioners. Orders included enforcing mandates around quarantining, social distancing, criminal alcohol sales, and regulatory safety practices.



Dangerous vehicles with outstanding fines for Vision Zero-related offenses are subject to seizure

DWI Enforcement

Since September 1st, 2015, the NYPD has conducted oral swab testing for drugs at the scene for all drivers involved in death or critical injury crashes where the driver consents to the test. Prior to the availability of an oral swab test, officers had no way of knowing quickly whether drugs played a role in the crash. Oral swab testing has proved critical for directing an investigation, such as prompting additional steps of blood testing if the oral swab is positive. If negative, it can also be useful in redirecting the investigation to other possible causes such as mechanical failure, operator error, or road design.



Vehicle seizures are an important tool for enforcing against commercial motor vehicle safety violations

Field Enforcement Collaboration

Throughout the past seven years, TLC has worked in coordination with its partners at NYPD to target traffic safety deployment geographically around the city, including joint deployment with the NYC Sheriff focused on unlicensed and unsafe van and car service operators in Brooklyn and Queens. TLC and NYPD have also collaborated by improving and expanding training for TLC officers, such as providing training on LIDAR speed enforcement tools.

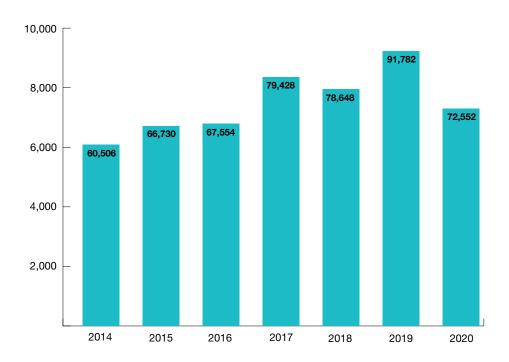
Collision Investigations

The District Attorney's Office works closely with the Collision Investigation Squad (CIS) unit of the NYPD. The DA's Offices are notified of crashes at the same time as CIS so that prosecutors can be involved in the direction of the investigation and ensure that all appropriate rules are followed. DAs can facilitate obtaining any necessary search warrants including for Event Data Recorders (black boxes) and blood samples and can issue subpoenas for the production of video surveillance and other evidence. This is particularly important in hit-and-run cases where the investigation may take days or weeks to find a driver. The DA's Offices also consult with CIS in determining appropriate charges when a driver is arrested. Over the years, DAs have attended crash reconstruction training with the NYPD and covered a variety of subjects ranging from pedestrian crashes to interpreting the data from Event Data Recorders. They have also provided numerous trainings to NYPD Highway and CIS officers on legal issues often encountered in the field.

Partnering with the Public to Clear Bike Lanes

Bike lanes are intended to provide a designated space for people on bicycles to help them travel safely in the city. Motorists who park or even stop temporarily in a bike lane place bicyclists in danger by forcing them into traffic.

NYPD conducts monthly Safe Passage operations that focus on combatting dangerous driving behaviors that place cyclists in danger.



Number of Bike Lane Violations Issued

Summonses issued to a driver who parked in a bike lane

TLC receives and processes complaints regarding traffic safety by licensees from members of the public via 311. These complaints are a valuable enforcement tool that complement TLC's and NYPD's enforcement. The information provided by the public, especially in the form of photographs and videos showing the TLC-licensed vehicle, the location, and the date and time, all serve as critical evidence for TLC to use in pursuing summonses against licensees violating TLC rules. One of the top traffic safety complaints received is of TLC-licensed vehicles parked or standing in bike lanes, in crosswalks, and beyond stop lines, behavior that prevents bicyclists and pedestrians from navigating streets safely. From 2014 to 2020, TLC issued 14,711 of these violations to drivers.

	2014	2015	2016	2017	2018	2019	2020	TOTAL
Bike Lane Violations Issued by TLC from 311 Complaints	83	606	1,380	1,407	3,686	5,776	1,744	14,771

Totals include summonses and settlements

2020 Highlight: Joint Enforcement



In 2020, BIC enhanced its regular enforcement by partnering with the NYPD Motor Carrier Safety Unit, Sheriff's Office, and DSNY to conduct numerous joint enforcement operations along major corridors and other high priority areas. The operations were conducted between 11 p.m. and 7 a.m., when less congested roadways can encourage speeding, and darkness reduces visibility. This enforcement action on private sanitation vehicles resulted in a wide range of safety-related violations including unlicensed vehicles, undisclosed drivers, and heavy equipment mechanical problems and failures. Several inspections resulted in unsafe vehicles being put out of service. BIC is continuing its partnership with other City agencies to complement its regular enforcement and uphold its work towards safer streets.



NYPD clears parked vehicles from bike lanes to ensure safe passage



Grand Jury Reports Recommendations

In October 2019, the Manhattan District Attorney and two state senators announced the introduction of a new article in the State's Penal Law entitled "Vehicular Violence," intended to better enable prosecutors to hold dangerous drivers responsible for their actions. The article establishes four new offenses including the class A misdemeanor "Death by Vehicle," and class B misdemeanor "Serious Physical Injury by Vehicle," which would apply when a driver fails to exercise due care, commits a specified traffic infraction, and causes harm to another person. This proposed article grew out of a set of recommendations released by a Grand Jury empaneled by the DA's Office in April 2019. The bill has not been voted on by the New York State Legislature as of the writing of this report, but the Manhattan DA's Office and Vision Zero Task Force are hopeful that the Legislature will pass the bill in the near future in order to protect New Yorkers against dangerous drivers.

If passed, the new Vehicular Violence Accountability Act (S7298/A9605) would apply statewide, address gaps in existing laws, and account for aggravating factors by escalating offenses to a class E felony for death or class A misdemeanor for serious injury when a driver has a license suspended or revoked for DWI, a recent history of DWI, speeds more than 20 or more miles per hour above the legal speed limit, injures or kills multiple people, or violates more than one traffic law.

Following the recommendation of the Grand Jury to strengthen the voice of vehicular violence victims, the DA's Office created a new Liaison position in its Witness Aid Services Unit. The Liaison works with vehicular violence survivors and their families to connect them with services and counseling, and help them understand the criminal court process over the lifetime of their case.

Other Recommendations

The Grand Jury also offered the following recommendations to policymakers in New York State:

Toughen and expand

reckless drivers.

Improve the

evidence.

development and

the admissibility of

Strengthen the voice

of vehicular violence

Remove dangerous drivers from New

York State and City

roadways.

victims.

sanctions imposed on

• Amend the predicate felony statute to expand qualifying prior crimes to all felonies defined in the Vehicle & Traffic Law

Provide for alternatives to incarceration for Vehicle & Traffic Law offenses

· Increase sanctions on a driver's license

 Broaden the application of Vehicle & Traffic Law §§ 1192.4 and 1192.4-a, relating to driving while ability impaired by drugs

• Mandate oral fluid testing at the crash scene

• Repeal the "two-hour rule" (regarding the administration of a chemical test within two hours of a driver's arrest)

Broaden mandatory fingerprinting

• Exempt vehicular homicides from statutory speedy trial limitations

 Permit remote testimony for offenses under Vehicle & Traffic Law §511 (aggravated unlicensed operation)

• Amend DMV regulations to permit the estate of a deceased victim to submit additional evidence at hearings, and to permit the victim's family and friends to submit written impact statements

Create a liaison position within the District Attorney's Office's Witness Aid Services Unit to assist vehicular violence victims

• Reduce the per se blood alcohol content for intoxication

Broaden the Business Integrity Commission's regulatory authority

Expand automated camera enforcement

Improve oversight of medically impaired drivers

Encourage the collection and analysis of more data

Incentivize a safe driving culture through education



130, 103 TLC drivers educated in Vision Zero from 2014-2020

6

YEAR 1 - TODAY

Fleet

The City of New York utilizes a fleet of approximately 30,000 vehicles, and regulatory bodies like TLC and BIC regulate tens of thousands more. These vehicle operations can be directly influenced by the policies set by Vision Zero agencies. Since the start of Vision Zero, the City has striven to lead by example by expanding training, improving vehicles, harnessing new technology, and sharing knowledge with peer cities.

2020 Highlight **Vision Zero Fleet Events**



Representatives of Vision Zero agencies share knowledge through events nationwide pivoting to doing so virtually in 2020

In a typical year, DCAS hosts two fleet events that focus on Vision Zero and fleet safety, including the Fleet Show and the Vision Zero Fleet Safety Forum. Both events are held to showcase potential vendor solutions to collisions, discuss best practices in fleet safety and training, explore collaborations between public and private fleets, and announce changes to fleet policy such as the Safe Fleet Transition Plan. These events had to be postponed in 2020 due to COVID-19; however, NYC Fleet did participate in both local and international events in January 2020 and hosted virtual Vision Zero Fleet events.

Before the world felt the impact of COVID-19, NYC Fleet attended the Future Fleet Forum in London where the audience from countries spanning North America and Europe learned about New York City's efforts to implement the Safe Fleet Transition Plan. NYC Fleet presented on efforts to transform heavy vehicle design to high vision truck cabs, expand the use of telematics for live vehicle tracking, use safety scorecards, implement live collision alerts, change the public perception regarding the use of hands-free cell phones, and advocate for truck side guards in America. The forum also provided the opportunity to discuss the goal of making safety items standard in vehicles, not part of luxury packages.



DCAS Deputy Commissioner Keith Kerman presents on the City fleet's safe driving training

In coordination with all the Vision Zero Task Force members, DCAS held a two-part virtual Fleet Safety Training Workshop in Summer 2020. The sessions included close to 100 companies including waste management, for-hire vehicles, school bus operators, non-profits, and public fleets. The workshop discussed best practices in safety such as telematics, automatic braking, truck side guards, and cameras. Through this experience, members focused on how to create impactful, memorable, and behavior-altering trainings in the current environment.

Trainers discussed how to make dramatic openings, the role of data and emotions in training, and the effective use of video. Fleets were shown a series of these safety videos including: "Drive Like Your Family Lives Here," "Safety First," and "I See You." A goal of the event was to help private and other public fleets improve their own training efforts and to share training content.

Road safety partner Together for Safer Roads (TSR) also presented along with member companies on corporate best practices in safety.



September 2017

Vision Zero Safety Honor Roll Ceremony

Since 2014, TLC has recognized exemplary licensees in an annual Honor Roll ceremony for their commitment to safety. Over the past seven years, TLC has in total honored 1,683 individual drivers and 144 businesses in this public celebration. The ceremony and honor serve as positive reinforcement for the honorees and a model for all TLC licensees to aspire to in their work.

2020 Highlight **COVID-19 Innovation – Virtual Honor Roll**

TLC hosted its seventh annual Honor Roll Ceremony on December 1st, 2020, recognizing the excellent records in safety, accessibility, and community service of drivers and businesses from across all industry sectors. This was the first time TLC held this ceremony in a virtual format including congratulatory messages from TLC's Vision Zero partners from around the City. The virtual celebration video can be viewed on TLC's YouTube Channel.

recognized for safety Drivers achievements in this year's Honor Roll did not have any safety violations over the past four years and were not involved in any serious collisions. Combined, these honorees completed almost six million trips between 2017 and 2020, illustrating both their commitment to Vision Zero and to serving the riding public in New York City.

- The 2020 Safety Honor Roll is comprised of 411 TLC-licensed drivers. Among the honorees, 202 drive yellow taxis, 230 drive for-hire vehicles, 16 drive green taxis, and 42 drive commuter vans.
- This year, TLC has 161 repeat honorees for at least two years. In addition, 63 drivers are three-time TLC also honored its safest business honorees, 39 drivers are four-time honorees, 13 drivers are five-time honorees, two drivers are six-time



Karttik Joadder was among 411 TLC-licensed drivers were honored at the 2020 virtual Honor Roll ceremony, December 2020

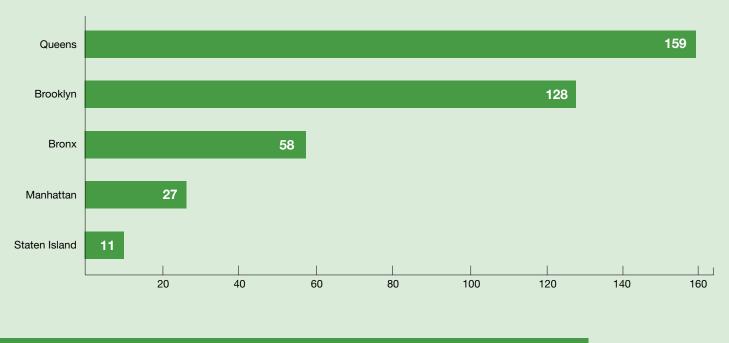
honorees, and one driver, Howard Kugelman, has been honored at every TLC Honor Roll Ceremony since 2014.

- William Abebrese completed the most trips out of all the honorees in the past four years, a total of 27,986 trips. He has also been a repeat honoree for the past three years.
- Safety Honor Roll drivers hail from all five boroughs. Of the honorees, 159 are from Queens, 128 are from Brooklyn, 58 are from the Bronx, 27 are from Manhattan, and 11 are from Staten Island.

licensees for their commitment to safety. Safety Honor Roll businesses have the lowest shares of vehicles involved in serious collisions in their industry sectors in the prior year.

- The honorees include five yellow taxi fleets and 20 car service bases.
- All honorees had zero crashes involving their affiliated vehicles in the past year.
- TLC's safest business honorees serve every corner of the city. Six car service bases are located in Manhattan, thirteen are located in Queens, three are located in Brooklyn, one is located in the Bronx, and the remaining two are located outside the city.

2020 Safety Honor Roll Drivers By Borough



2020 Highlight MTA Innovations – Overcoming COVID-19 Challenges

MTA has adapted to the challenges of COVID-19 in ways that support the COVID-19. During the fourth quarter operate their buses with proper continuation of its training programs of 2020, MTA's Occupational Health training and less fear in difficult and the safe operation of its buses. For example, MTA has expanded its training facility locations to include three satellite sites to ensure proper social distancing while maintaining safety training compliance. MTA has installed polycarbonate sliding partitions on buses to protect their employees and customers from COVID-19 exposure when boarding and alighting, while still providing the operator an unobstructed view during normal operation. In addition, MTA fast-tracked the implementation of the OMNY touchless smart payment system to reduce the amount of contact customers encounter when boarding the bus, thus protecting

COVID-19 testing, on a voluntary basis, to all active employees which

2 MIX



MTA has ensured its COVID-related adaptations go hand in hand with safety

drivers and reducing the spread of continues in 2021. Drivers who can Services (OHS) began providing free times are best situated to continue providing safe essential services to the public.



TLC Outreach to Licensees

TLC built an expansive outreach program to regularly engage its licensees and the riding public on issues of street safety. Starting in 2014, TLC staff began visiting car service bases, taxi fleet garages, and driver groups to meet directly with licensees and share Vision Zero messages at over 660 meetings. In 2018, TLC introduced the TLC in Your Borough program, designed to reach broader populations of licensees and engage directly on safety and other licensee concerns in a town hall setting. TLC held 10 of these events from 2018-2019 in all outer boroughs of the city to reach most licensees in their communities. Throughout the past seven years, TLC has diversified its outreach strategies with a variety of ways to communicate with licensees. Highlights have included events like TLC's 2019 bike ride and dialogue event with drivers and cycling advocates, focus groups with Honor Roll members to learn their best practices, and remediation meetings with bases to share fleet management best practices. TLC has used both paper and digital methods of sharing campaign materials and messages, including flyers, palm cards, vehicle stickers, and social media and app-based outreach from TLC and from industry organizations and business licensees. To better reach drivers, TLC staff have also provided outreach in the field, including the citywide Dusk and Darkness campaign, around the city where TLC-licensed drivers congregate, such as at taxi stands and transportation hubs such as the Barclays Center.



TLC meets directly with licensees to ensure policies and safety practices are observed

Training Taxi and For-Hire Vehicle Drivers

While TLC historically required pre-licensure training for all taxi drivers, the rapid growth in for-hire vehicle drivers in recent years presented an opportunity to expand and improve training to a large and growing population of drivers. In 2016, TLC began requiring all applicants to take a 24-hour course and pass a test to receive their TLC Driver License. From 2014 to 2020, over 130,000 TLClicensed drivers received Vision Zero content via the pre-licensure training course. This course includes a regularly updated Vision Zero curriculum which highlights rules of the road, dangerous driving behaviors that can lead to serious crashes, and information on how to navigate new streetscapes across the City.

Since 2017, TLC has expanded the number of TLC-authorized education providers, offering the course and test in multiple languages to improve accessibility, and audited curriculum and teaching practices of each provider to ensure applicants receive the best training possible.

- pedestrian

TLC has continuously updated training materials and standards for driver education providers. The initial licensure course includes two TLC-developed training videos, "Drive Like Your Family Lives Here," which debuted in 2015 and presents fatal crash victims' families' stories, and "Safety First," which debuted in 2018 and highlights five urban and for-hire driving situations and advises the safest actions for TLC-licensed drivers. Vision Zero curriculum updates over the years have included new TLC rules and new citywide Vision Zero messaging, including information on the risks of fatigued driving, dangers at dusk and overnight, and how to best share the road with cyclists.

Failure to Yield to Pedestrians

Pedestrians in the crosswalk always have the right of way

Over 25% of pedestrian deaths and serious injuries are caused by a turning driver striking a

Left turns are **3 times** more likely to kill or seriously injure a pedestrian than right turns



2020 Spotlight **Updated Distracted Driving Course**

driving for all an electronic device while driving

In 2020, TLC relaunched an standards include an overview of the to offer the course through an updated and improved distracted dangers of distracted driving, how application, interview, and teaching retraining course required to prevent this unsafe behavior, and demonstration process established drivers convicted of using a review of safety enforcement and by TLC to ensure curriculum and point-based penalty programs. Five teaching quality. The new course for-hire. The course's new curriculum education providers were approved launched November 15, 2020.

Distracted Driving

- Driver inattention, including using cell phones and other devices, contributes to **22%** of pedestrian deaths and serious injuries in NYC
- TLC-licensed drivers are not allowed to use phones, even hands-free, while operating a taxi or for-hire vehicle



Setting High Standards for Regulated Fleets

TLC sets licensing standards and rules for drivers that ensure all of its licensed professional drivers meet and maintain safe driving records while transporting the public. Since 2014, TLC has made various Vision Zero-related changes that have improved the safety standards for licensees, including passing new rules in 2016 to prevent fatigued driving by limiting the number of hours drivers could perform for-hire trips to 10 hours per day and 60 hours per week. These rules also apply to businesses, limiting their ability to dispatch trips to potentially fatigued drivers.

TLC's Critical Driver Program also ensures its licensees are the safest on the road. If a TLC licensee receives at least six DMV or TLC conviction points on their license within 15 months, they may be subject to TLC Driver License suspension. If that total increases to 10 or more points, then they may be subject to TLC Driver License revocation. The violations that accrue these points directly align with the unsafe behaviors most likely to lead to serious crashes, including speeding, distracted driving, and disobeying traffic signals. The Critical Driver Program allows TLC to ensure that only the safest drivers provide for-hire transportation service to the public.

Since 2014, TLC has passed rules expanding the amount of detailed data the agency receives on each trip its licensees provide. One way that TLC uses this data is to build on existing safety programs, such as citywide automated enforcement cameras. TLC can uniquely determine if licensees ran red lights while providing for-hire trips by matching camera images to trips. This process allows TLC to determine not just the vehicle in violation, as with private vehicle owners subject to these tickets, but also the driver responsible. By identifying the driver in these situations, TLC can more effectively track the full safety records of its licensees.

Installing Connected Vehicle Technology

As part of the federally funded DOT Connected Vehicle Pilot, NYC Fleet is working closely with City agencies in order to install thousands of connected vehicle devices in City-owned vehicles. This technology has the potential to alert drivers, through direct short-range communication, to take specific actions to avoid a collision or reduce collision severity if one occurs. Some applications of this technology that are being evaluated include traffic signal change warnings, blind spot and pedestrian alerts, road hazard alerts, pedestrian-oriented phone app interfacing, and the ability to notify drivers about road restrictions such as weight and height maximums.

Currently, installations are underway at 18 participating city agencies. TLC has installed connected vehicle technology in its entire fleet of enforcement vehicles. Eight MTA buses, from four depots in Manhattan, are currently equipped with the system.

While installations were paused during the earlier part of 2020 due to COVID-19, City fleet agencies worked over the last few months of the year to get back on track. Over 810 city vehicles were outfitted with connected vehicle technology in 2020, an increase of 58 percent from 2019. DOT leads the way in installations with 1,200 total vehicles in the current program. MTA's goal is to equip up to seven hundred buses with the system in a six-month period during 2021.

DOT has also installed 450 roadside units to provide data collection and transmission. These units have the capability to detect adverse driving conditions, enable preemption for first responders, and can grant signal priority to buses and service vehicles. DOT is currently in the process of testing the 13 safety applications these units can provide. Connected vehicle data is regularly and automatically transmitted to USDOT for the start of the evaluation phase in January 2021.



Surround cameras can compensate for obstructions to direct vision

Expansion of BIC Safety Powers

On November 20, 2019, Mayor Bill de Blasio signed two bills into law that would reform the commercial waste industry: Local Law 199 of 2019 (LL 199), which established the Commercial Waste Zones program, and Local Law 198 of 2019 (LL 198), also known as the BIC Safety Bill. LL 198 expanded BIC's jurisdiction to include traffic safety in the trade waste industry. It specifically enables BIC to deny a license or registration for safety issues that rise to a level that warrants such action, a new power for the agency that reflects its interest in licensee and registrant safety in the age of Vision Zero. BIC intends to promulgate the first set of safety-related rules for the trade waste industry under authority granted by Local Law 198, including requirements for worker training, vehicle equipment, traffic safety practices, inspections and operational practices, and recordkeeping.

Improving MTA Bus Safety

MTA has continued to invest in safety technologies for buses. All new MTA buses will be equipped with an extensive video camera system, both inside and out. New exterior rear-facing cameras and new interior exit door cameras provide additional viewpoints for the operator when backing up, boarding, and alighting. Side-mounted exterior cameras provide crucial viewpoints along each side of the bus, in forward and rear directions. These additional cameras, along with multiple passenger compartment and operator compartment-facing cameras, help to prevent crashes, provide greater insight in collision investigations, and influence new approaches in safety training. By the end of 2020, approximately 4000 buses – 75 percent of the fleet – were fully equipped. MTA expects to have over 95 percent of its fleet fully equipped by the end of 2021.

All new MTA buses will also be equipped with the Pedestrian Turn Warning System (PTW), currently on one-third of buses, as standard equipment. The PTW system lets pedestrians in the vicinity of the bus know that the bus is making a turn via audio messages.





2020 Spotlight **BIC Bulletins**

In 2020, BIC, in collaboration with the Vision Zero Task Force, distributed a series of Vision Zero Safety Bulletins to the trade waste community to ensure drivers and helpers continue to prioritize safety. The Back to School 2020 bulletin reminded trade waste truck operators to slow down,

especially near schools, parks, and intersections. Throughout the pandemic, BIC has issued bulletins regarding the Open Streets and Open Restaurants programs to highlight that new dining options may result in narrower streets with more pedestrian and for-hire vehicle traffic. To ensure pedestrian and cyclist safety, BIC reminded truck operators to turn slowly and to keep the speed limit in mind. The End of Daylight Saving

Time bulletin, as part of the Dusk & Darkness initiative, warned drivers that starting in fall and throughout winter, visibility drops significantly. In low light, drivers can fail to see pedestrians and cyclists until they are dangerously close. The final bulletin of the year, COVID-19 Related Safety Concerns, highlighted new or heightened safety concerns on City streets as a result of the pandemic.



Appropriate outreach to trade waste companies ensures the safety of these essential vehicles

Fleet Working Group

Every month, the Vision Zero Task Force agencies that are responsible for, or have oversight of, large fleets meet to discuss safety concerns, relevant initiatives, and opportunities for collaboration. The Fleet Working Group includes the following agencies:

- BIC
- DCAS
- DOE
- DOT
- DSNY
- FDNY EMS
- MTA
- TLC

to safeguard New Yorkers.

Mayor's Office of Operations

Inter-Agency Collision Review Panel

BIC has hosted seven Collision Review Panels (CRP) to assess serious injury or fatal collisions involving a BIC-regulated vehicle. Several city agencies (NYPD, DOT, DSNY, TLC, and DCAS) convene to review, discuss, and produce solutions to prevent future collisions like the cases presented. The CRP is a multi-agency effort to improve the safety of road users and has been successful in making constructive changes. During robust discussions during the CRP meetings, the panel identified certain safety-related trends: obstructions of the driver's field of vision through various means and the need for more regular driving training. These findings informed BIC's rulemaking. In April 2021, BIC HELD a CAPA hearing (jointly with DSNY on other rules) regarding certain safety rules, including but not limited to requiring convex mirrors (also known as crossover mirrors) for long-nosed trucks to reduce blind spots and prohibiting obstructions of windshields and windows. Additionally, the rules will require annual safety training for all drivers, laborers, and helpers, and defensive driving courses for drivers every three years. Another development that arose as a result of the CRP discussions was that BIC and DOT identified a problematic intersection for vulnerable road users, which resulted in DOT developing an improved design for that location that is being evaluated for implementation. BIC also identified high-priority corridors for enforcement operations and is working jointly with NYPD to carry out such enforcement. Throughout 2020, BIC continued to host the CRP virtually, working together

2020 Highlight **Procurement and Launch of Truck Camera Program**

Many of the most serious and tragic Fleet has also announced an effort to As an additional step to address address these sight gaps. As part of side guards. our Safe Fleet Transition Plan, NYC

crashes involve large trucks and transition to high vision trucks, where line of sight issues, DCAS has line of sight obstruction. Due to the the engine is not in front of the driver. launched a program to retrofit 1,250 design of conventional trucks, many High vision trucks hold the promise trucks with surround cameras and operators can't see the ground for of greatly improving sightlines, but back-up sensors. The cameras were over 25 feet. This increases risk unlike in United Kingdom and the purchased in 2020 and installs will be when trucks make turns, back up, or European Union, these trucks are completed in 2021. These cameras driving in crowded areas. Additional not yet widely available in the United will offer a full vehicle view at all convex mirrors have been long States. DCAS is working to move times to drivers, helpful them monitor installed on City fleet trucks to help the marketplace, as it did for truck conditions around the vehicle and

avoid people and obstructions.



Typical truck cab designs can obstruct a driver's view of pedestrians







Camera technology can help compensate for obstructed vision

DCAS's ambitious retrofit program will help City fleet drivers operate safely at all times



YEAR 1 - TODAY

Engagement

Vision Zero is not just a slogan or a marketing brand, nor does it live only in government agency documents. It is a program meant for all New Yorkers, from all backgrounds, in every neighborhood, so the City has developed engagement strategies meant to educate the public about safety where they live, with an emphasis on how their choices matter. As the past seven years have shown, by focusing engagement at the street level to change New Yorkers' views on traffic safety, Vision Zero can create real culture change in communities.



4 7 1 Outreach events at schools from 2014-2020

Targeted community outreach

Focusing communications on the contributing factors in serious crashes and using data and research to create meaningful messages that resonate with New Yorkers has led to a change in the public's attitudes and behaviors. The education, communication, and outreach efforts that engage New Yorkers in their neighborhoods, at their schools and community centers, and on their streets, have helped to spread the message about the impact of high-risk driving choices. DOT Safety Educators, fleet managers and driving instructors, NYPD officers, and community outreach specialists engage with local stakeholders to collaborate on safety solutions, share resources and strategies, and create incremental improvements where people live and work.

Clear, direct materials explain to drivers how they can contribute to safer streets



Vision Zero outreach meets New Yorkers in their own communities with information that matters to them

Two City agency subunits focus specifically on Vision Zero public education: The DOT Safety Education and Outreach Unit, and the NYPD Transportation Bureau Outreach Unit. Members work collaboratively, and prior to the COVID-19 pandemic, hundreds of events took place across the city, distributing information and equipment to hospitals, community centers, after-school programs and senior centers. This was in addition to over 600 visits to schools each year by DOT and NYPD, plus targeted outreach to older adults, bicyclists, and motorcyclists, who remain among the most vulnerable road users. For these six years, DOT and NYPD worked collaboratively as a Vision Zero Street Team, going into neighborhoods at crash-prone locations from April to November to educate drivers and other street users about the importance of safety right where they live - and make drivers aware that anywhere they might travel is a place where New Yorkers live and expect safe streets.

In addition, the DOT Safety Education and Outreach team held dozens of free helmet fitting events annually, where over 230,000 helmets were distributed to New Yorkers in every borough. Delivery cyclists received free safety training and equipment at DOT Delivery Cyclist Forums. Free car seats were distributed to families in all five boroughs and over 250 free one-on-one car seat fittings were given every year to ensure that New York City children are seated properly in vehicles.

NYPD Transportation Bureau Outreach Unit also collaborated with NYPD Neighborhood Coordination Officers to address traffic issues highlighted during local Build the Block meetings, while continuing to respond to critical vehicle collisions when appropriate. At venues such as schools, senior centers, bicycle and motorcycle shops, businesses on priority corridors, and civic association meetings, NYPD's Vision Zero safety outreach events have served as forums to:

- regulations.

- and reflexes.

 Discuss the seriousness with which NYPD takes the mission of reducing collisions and saving lives within the City of New York, by providing an overview of the Traffic Safety forum process. The Traffic Safety forum serves as a holistic and multifaceted platform, partnership, and collaboration by all parties involved to save lives. It stresses the importance of Neighborhood Policing, community partnership, and equitable enforcement.

• Discuss collision prone locations (including local collision patterns, clusters, and trends), safe bicycling and pedestrian crossing information, and pertinent provisions of the New York State Vehicle and Traffic Law and New York City Traffic Rules.

 Share information regarding on-going traffic safety initiatives such as Bicycle Safe Passage, Pedestrian Safe Passage, and Vision Zero High Visibility Corridors so that the public understands why these take place.

Inform community members of changes in Vision Zero-related laws or

Address frequently asked questions about traffic rules or laws.

• Distribute bicycle and motorcycle safety literature.

 Partner with businesses to encourage their customers to stop parking illegally and dangerously.

· Coordinate the "Know Your Limit" campaign, which illustrates the detrimental effects that alcohol consumption has on a driver's motor skills

Working with Communities During COVID-19

New	Yorkers	changed	their	travel

routines during New York on PAUSE. of necessity for essential workers in March, DOT worked with hospitals and other locations on the front lines safe cycling skills. A collaboration program. with the state's 511 travel program The Vision Zero Street Teams were

and Bike New York led to over but Vision Zero principles remained 20 online workshops, which also crucial to street safety. Beginning included helmet distributions. New with a bike boom, which came out forms of mobility have emerged on the streets and and DOT has created standards for safety and skills-based training for newer programs such to distribute helmets and promote as the Revel shared electric moped

unable to deploy in 2020 due to social distancing guidelines, so new outreach strategies were adopted. All Vision Zero Task Force agency members have leveraged their social media platforms to remind the public of the importance of safe driving, and in the spring, the "Get There" bicycle outreach program featured essential workers in citywide messaging. Education and



Expanded bicycle outreach accompanied the pandemic cycling boom

Outreach with Private Carters

In 2020, BIC Commissioner Noah Genel began a series of safety lectures held at trade waste companies to engage directly with drivers, helpers, and managers in this industry. This forum allowed for robust conversations about safety-related concerns between BIC and front-line workers. Commissioner Genel spoke to three different groups at Action Environmental Services with a total of 120 employees and one group of approximately 80 employees at Waste Connections. Additional safety talks were postponed due to COVID-19, but BIC plans to recommence these sessions once it is safe to resume these important events.

Youth Engagement

Schools have been a central focus of outreach and education efforts of Vision Zero. Children and youth in New York City are likely to walk and take transit to school each day, leaving them vulnerable to crashes. Because of this, school administrators and educators understand the importance of traffic safety education and safety engineering around their schools. Vision Zero curriculum ranges from workshops for parents of Pre-K students to high school programs focused on safe driving. With an emphasis on pedestrian safety, these ageappropriate lessons also include messaging around dangerous driving behaviors to help educate parents who drive and feature explanations of new engineering techniques deployed by DOT to change driving behaviors, particularly regarding speed and slow turns. DOT uses innovative programs such as the "Word on the Street" curriculum which features in-class polling to engage students in their knowledge of street safety, and "Stop, Think, Act," which explains traffic safety principals by story-telling through the use of smart phones.

The Department of Education has served as a partner in Vision Zero, and in September of 2016, the Schools Chancellor announced that the Department of Education was adopting the "Cross This Way" curriculum as the official pedestrian safety curriculum for all New York City elementary and middle schools. "Cross This Way" is a dynamic tool for educating students about safe choices in New York City's traffic environment. Through video, hip-hop music, choreography, and easy to follow accompanying materials, the curriculum illustrates situations where crash data indicates students are most commonly injured and provides safety strategies. This curriculum focuses on dangers specific to elementary and middle school students, typically ages 9 through 11, who may be navigating city streets without supervision for the first time. The universal teaching of this curriculum to students in this key age range is designed to create continuity of message and practice for children.

2020 Highlight Focus on Schools – Remote Education and Re-Opening

As students moved to a remote of teachers. This remote learning learning model in March of 2020 when school buildings closed, DOT adapted lessons to an online slide-based learning program as the foundation for interactive lessons. These learning units are available in both pre-recorded video content that can be shared through classroom teachers with students in their homes and live webinars provided by the Safety Education and Outreach team

model has freed the team to reach out to all public, charter, and independent schools at the same time, no longer platform, using existing video and a hampered by travel time and the limitations of scheduling. This led to more wide-spread dissemination of the Vision Zero lessons at the elementary and middle school level. Lessons for high school students were developed in the fall of 2020 and were deployed in January 2021. In addition, the two assembly-based

programs that teach traffic safety have also moved online, most notably executed by Family Life Theatre which has developed an improvisation-style story using actors portraying people who have been involved in a crash. Students attend this Zoom meeting while the actors discuss the incident and are encouraged to discuss their opinions and share their experiences as pedestrians, cyclists, and car passengers.

2020 Highlight Working with Older New Yorkers at Home

Working closely with the Department for the Aging, DOT changed their workshops to a remote platform in 2020, holding both teleconferences and online webinar meetings with the members of various older adult centers. More recently, DOT has partnered with Family Life Theater to bring a situational improvisation theater program to the Zoom platform, engaging older New Yorkers to discuss their situations as they navigate the streets while protecting themselves from the COVID-19 virus.



The Vision Zero Task Force and Department for the Aging are ensuring outreach continues to older New Yorkers

KSU My Safety Tool Box

y Safety Toolbox My Safety Toolbox teaches 1st-3rd

grade students about the tools available to keep them safer on NYC streets.

This respondation

- Recurses how signals, signs and street marker talk to keep everyone talks on the city streets
- ans that everyone has tools that help them

- uses swammers of possible traffic raiss and Autons in the school zone.
- introduces functioneritats of safe billing ni bood car piesenger sole

pail to Google Classroom or off In platform. A short follow-up gui

Transies

- Pedestrian, bicuche and pe
- Parsonal and environmental astery tools School zone dangers and safety solution
- Bike riding safety
- Carphiergersulety
- Learning to use our own personal to be safe when we walk outside and a



Cross This Way

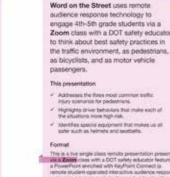
Cross This Way encourages 4th-5th grade students to think about street safety and make safer decisions in the traffic environment.

- Depicts children and teams crossing New York City streams in realistic altustions that may be risky.
- Engages students in analyzing the scenarios and minimizing critically about safe decision-making.
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Parent Workshop

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Vision Zero educational materials are appropriately pitched to each grade level of students

In New York City, people over the age of 65 comprise 14 percent of the population, but over the past six years of Vision Zero have represented between 35 and 50 percent of annual pedestrian fatalities on city streets. DOT and NYPD have focused their efforts on older adult centers to educate older New Yorkers about

pedestrian safety. These events gave seniors the opportunity to discuss their concerns about dangerous driving behaviors in their neighborhoods and set the stage for NYPD and DOT to make improvements. The Vision Zero Task Force has also worked closely with the Department for the Aging to ensure robust engagement with these vulnerable communities.

Vision Zero Public Education Campaigns – Retrospective

The goals of Vision Zero public education campaigns are to provide information and change behavior in clear, understandable, and measurable ways, using media to reach and educate the general public so that they will make safer choices. In addition to influencing behavior, campaigns provide context for other elements of Vision Zero: Why is NYPD issuing speeding tickets? Why is DOT redesigning an intersection? Why is a law changing? Since 2014, New York City has used billboards, radio, and television to answer these questions and remind drivers that their "choices behind the wheel matter."

The 2014 Vision Zero Action Plan outlined the City's first 63 initiatives, including the development of a high-quality ad campaign aimed at reducing speeding, failure to yield, and other forms of reckless driving. In line with the data-driven emphasis of Vision Zero, all campaigns are the result of a comprehensive market research program. DOT works with an advertising agency and researchers to conduct focus groups and online quantitative surveys. These efforts gauge reactions to campaign concepts under consideration, including clarity, credibility, relevance, and motivation. Once a campaign is active, an annual tracking study measures awareness and effectiveness, also signaling when it's time to adapt a campaign. Over the past seven years, New York City's Vision Zero initiative launched four distinct campaigns to address reckless driving - Reckless Driving Kills, Your Choices Matter, Signs, and Was It Worth It?

Reckless Driving Kills, 2014

The first Vision Zero public education campaign in the United States, Reckless Driving Kills, featured family members who lost loved ones to crashes caused by dangerous drivers. The campaign was produced in the first month of New York City's Vision Zero initiative and was featured throughout the city on billboards and bus shelters. Video messages were shown online, on Taxi TV, and in movie theaters.



Your Choices Matter, 2014-2017

Your Choices Matter utilized graphic imagery to draw attention to the issue of pedestrian deaths and serious injuries on city streets. The headline emphasized personal accountability needed by drivers, whose actions behind the wheel were factors in 70 percent of New York City's pedestrian crashes. By incorporating key facts into the campaign materials, DOT was able to elevate the seriousness of traffic crashes and identify the key behaviors that contribute to pedestrian fatalities. In fall 2014, these ads ran across a variety of outdoor placements including on billboards and bus shelters and over gas pumps.



In the spring of 2015, Your Choices Matter expanded to include facts specific to boroughs, neighborhoods, and corridors defined in the Vision Zero Borough Pedestrian Safety Action Plans. This hyper-local campaign approach was part of a larger strategy to engage with communities experiencing the highest pedestrian crash rates. In 2015, DOT also expanded its citywide communication with a series of radio ads and Vision Zero's first television ad. Your Choices Matter won five Telly awards for excellence in video and television in 2016.

Slow down Your choices matter. VISION ZERO



Signs, 2017-2019, Updated for 2021

In October 2017, DOT launched a new Vision Zero campaign, building upon the existing theme of driver accountability and using facts to further capture New Yorkers' attention for the program. Signs features real New Yorkers holding street signs to encourage compliance with the City's 25 MPH speed limit and pedestrian Right of Way Law. The tagline, "Driving isn't easy, but saving a life is," is straightforward, acknowledging the complexities of driving in a busy urban environment, while recognizing that simple behaviors can ultimately save lives.



The Signs campaign was a comprehensive multimedia effort that included significant outdoor ad placements on billboards, digital highway billboards, bus tails, bus shelters, LinkNYC kiosks, ferry posters and prominent NYC venues. DOT also utilized online, radio, and television ads. In 2019, Signs received PR News honorable mention recognition for Community Engagement Campaign and Data Insight Campaign and was awarded the PR Platinum Award for Public Service Announcement of the Year.

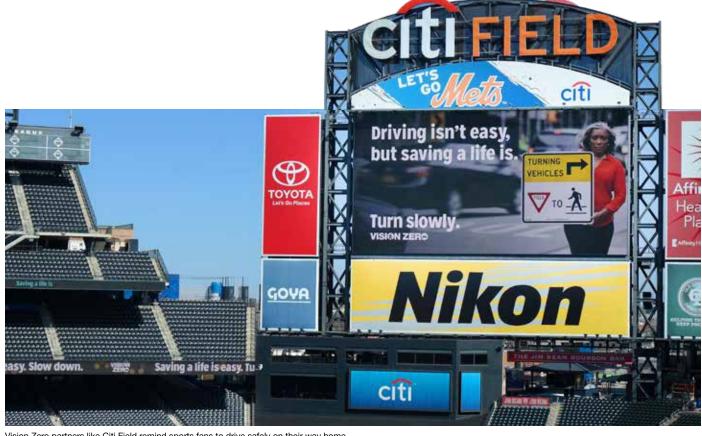
Was It Worth It?, 2019 - 2020

In mid-2019, with traffic fatalities tracking on par or higher than the previous three-year average, DOT began developing new campaign concepts. New York City's current Vision Zero public education campaign, Was It Worth It?, launched in October 2019. This effort marked a return to hard-hitting imagery



paired with a new approach of turning the attention on the experience and emotion of the driver. The campaign asks drivers to consider if driving over the speed limit, making a turn too quickly, or sending a text message while driving is worth someone's life. Concise calls to action, like slow down, turn slowly, and pay attention, quickly remind the audience of the simple actions needed to prevent crashes. The campaign included a variety of outdoor ad placements and a prominent radio plan featuring emotional readings from drivers' perspectives.

Targeted Ad Placement



Vision Zero partners like Citi Field remind sports fans to drive safely on their way home

Focusing on data ensures the delivery of the right message, to the right audience, at the right time. DOT selects outdoor advertising locations that provide broad exposure in locations defined as priorities in the Pedestrian Safety Action Plan, based on their rates of serious pedestrian crashes. Campaign radio and television ads align with the seasonality and timing of pedestrian crashes as well - for example, using "drive time" radio during the annual Dusk and Darkness campaign in autumn, when drivers need to pay special attention when clocks go back and it becomes dark earlier in the evening. The use of digital ads also allows for significant geographic, demographic, and behavioral targeting.

Successful Strategies

In addition to data-driven media placements, there are strategies that have allowed City agencies to reach target demographics and connect with New Yorkers, successfully advancing the Vision Zero brand.

In-Stadium Promotions

DOT developed strong partnerships with local stadiums to promote Vision Zero awareness. Data indicate that the drivers involved in crashes in New York City are overwhelmingly young to middle aged males, closely aligning with the demographics of stadium audiences. Stadiums, with points of sale and consumption of alcohol, are also ideal for DWI prevention messaging. Fans of the New York Mets, Brooklyn Nets, New York Islanders, Brooklyn Cyclones, Staten Island Yankees, Fordham Rams, and St. John's Red Storm see Vision Zero ads and interact with Vision Zero Street Team members during select games. Additionally, partnerships with WFAN Yankees Radio and WCBS Mets Radio deliver messaging throughout the season.



Street Team outreach at sports events emphasizes the importance of safe driving

and walk.





Street Teams

New York City's innovative Street Teams program brings rigorous education and coordinated multi-precinct enforcement to high crash corridors across the City. The materials distributed by DOT and NYPD at these events coordinate with Vision Zero campaign materials for consistent messaging. Street Teams events are unique opportunities for New Yorkers to interact with public education materials in the places where they drive, bike,



Vision Zero Street Teams bring education directly to the public



NYPD officers bring authority and expertise to communication with drivers

Challenges of 2020

COVID-19 and other events of 2020 impacted public education campaigns by reducing funding for Vision Zero media. Additionally, it was a challenge to secure high-impact media placements in a market consumed by critical COVID-19 information, growing social justice discourse, and national political ads. Due to health and safety restrictions, production was also paused in spring of 2020 and DOT was unable to produce a television ad to expand the Was It Worth It? campaign.

Despite these challenges, campaign efforts to date delivered over 486 million media impressions. The Vision Zero Marketing Working Group was able to implement a successful Dusk and Darkness month of messaging on agencies' digital platforms and with the support of external partners.

Annual Performance Tracking

Each year, DOT and its research partners conduct an online survey among 1,000 New Yorkers to track the impact of Vision Zero public education campaigns. This study allows the City to measure campaign awareness and comprehension, as well as motivation, perceptions, and behaviors. The data collected provides unique insights by age, gender, borough, and driving frequency, among other demographics.

2020 Key Findings:

- Comprehension of the pedestrian Right of Way Law measured at 84% among all residents.
- Awareness and support of Vision Zero reached all-time highs among drivers, at 79% and 83% respectively.
- Awareness of Vision Zero, at 87%, is the highest it has ever been among male drivers, age 25-54.
- Across nearly every behavior or attitude measured, the proportion of drivers saying they were influenced by Vision Zero messaging is the highest it has been since 2015, indicating that the ads are salient and effective.
- The positive effect of the campaign is the highest ever reported this year among male drivers, age 25-54.

CAMPAIGN INFLUENCE, DRIVERS	2015	2016	2017	2018	2019	2020	∆ 2015- 2020
Encouraged me to be a more responsible driver	80%	79%	80%	81%	82%	86%	+6
Made me more supportive of new street designs to increase safety for motorists and pedestrians	78%	75%	76%	78%	78%	79%	+1
Give more thought to the speed at which I approach crosswalks and intersections	82%	78%	81%	80%	82%	83%	+1
Pay more attention to pedestrians and cyclists while driving	84%	80%	82%	84%	84%	85%	+1
Avoid texting/making phone calls while driving	83%	82%	75%	70%	78%	84%	+1
Made me a more careful pedestrian	79%	76%	78%	78%	75%	82%	+3
Expect more enforcement of traffic laws	78%	73%	74%	77%	78%	77%	-1

CAMPAIGN INFLUENCE, MALE DRIVERS AGE 25-54	2015	2016	2017	2018	2019	2020	∆ 2015- 2020
Encouraged me to be a more responsible driver	83%	79%	77%	85%	83%	89%	+6
Made me more supportive of new street designs to increase safety for motorists and pedestrians	80%	78%	78%	82%	81%	82%	+2
Give more thought to the speed at which I approach crosswalks and intersections	85%	80%	78%	81%	82%	87%	+2
Pay more attention to pedestrians and cyclists while driving	86%	81%	83%	84%	84%	87%	+1
Avoid texting/making phone calls while driving	85%	82%	76%	86%	78%	86%	+1
Made me a more careful pedestrian	81%	76%	77%	81%	75%	81%	0
Expect more enforcement of traffic laws	82%	75%	77%	80%	81%	78%	-4

Health and Bike Share Partnerships

Since 2017, the Department of Health and Mental Hygiene's Bureau of Brooklyn Neighborhood Health has collaborated with the NYC Better Bike Share Partnership on programs such as Prescribe-a-Bike, through which healthcare providers at clinical partner sites offer free Citi Bike memberships as well as helmets and Street Skills classes to patients to encourage physical activity. The Prescribe-a-Bike program has enrolled at least 60 participants in its lifetime.

Party on Park

From 2017 to 2019, working with community partners and organizers, DOHMH's Bureau of Harlem Neighborhood Health co-sponsors the annual block party on Park Avenue, which focuses on promoting cyclist and pedestrian safety as well as the reimagining of Park Avenue as a space for health and community and not just vehicular traffic and train tracks. During Party on Park, each block under the viaduct from 116th to 125th Street featured organizations providing health screening, nutrition education, fitness opportunities, art activities, and child-focused projects.



Children attending Party on Park enjoy street space for hands-on fun

Block by Block Walking for a Healthier East Harlem

In Fall 2018, DOHMH released "Block by Block: Walking for a Healthier East Harlem" by the Bureau of Harlem Neighborhood Health, which works to reduce the causes of health inequities for residents in neighborhoods experiencing institutional and structural racism and long-term disinvestment by organizations and institutions. The report is based on surveys with over 200 East Harlem residents and assessments of more than 20 blocks aiming to promote health and physical activity by making walking safer, easier, and more enjoyable in their neighborhoods.

El Barrio Bikes + the East Harlem Community Walking Trail



Since 2016 the Bureau of Harlem Neighborhood Health has facilitated collaborations that built capacity and engage residents and organizations directly in planning and promotion around biking and walking. These groups aim to make biking and walking more accessible, safe, and enjoyable for all Harlem residents. In 2020 El Barrio Bikes coalition members submitted a manuscript detailing their experiences building a multi-sector cycling collaborative. The East Harlem Community Walking Trail partnered with The Mayor's Office for Criminal Justice to fund nine local walking groups to lead walking tours throughout the neighborhood.



The East Harlem Community Walking Trail celebrates local street art

2020 Spotlight **Senior Health Outreach**

In 2020, in collaboration with DOT, DOHMH supported dissemination of preliminary findings regarding DOT's analyses of older adult pedestrian injuries, which will be published in 2021. Specific outreach targeted

public health partners to share findings, inform health providers about older adult pedestrian risks, and support them as messengers of safety practices. Early in the year, a DOT representative joined

the DOHMH Healthy Aging Working group - an intra-agency group of staff working to promote the health of older adults - to share findings about senior pedestrian safety. In August, DOT shared findings with the NYC Falls Prevention Coalition; the Coalition is co-chaired by Department for the Aging (DFTA) and DOHMH and focuses on collaboration to prevent falls among older New Yorkers.



Pedestrian safety is crucial for NYC older adults

DCAS Outreach

As part of the city's outreach efforts to public and private fleets at the beginning of 2020, DCAS designed and began to distribute a brochure that describes the City's efforts to make our streets safer. These efforts include buying only high vision trucks where available, installing truck side guards, real time monitoring and alerting through telematics, training, and connected vehicle technology. The flyer can be found here.

In February 2020 Mayor de Blasio signed Executive Order 53, calling for a transition to a clean and safe City fleet and an all-electric fleet by 2040. As part of this order, DCAS will establish a Fleets of The Future Network including all commercial, non-profit, and public fleets operating in the City and use the network to promote and expand safe and sustainable fleet approaches.

every day.



Lenin Fierro of DCAS (center), a leader in driver training, is greatly missed by all who knew him

DCAS would also like to recognize Lenin Fierro, the agency's Vision Zero Fleets Director, who was a tremendous leader in fleet safety. Lenin developed the DCAS safety brochure and led DCAS' partnership with the Department of Education to provide paid internships, driver training, and jobs to Automotive High School students. Lenin coordinated the DCAS defensive driving efforts, training thousands himself. He also worked to build the DOE driver safety program, helped in the design and improvements of the citywide collision management system called CRASH, and created a driver customer survey so that DCAS could hear directly from their fleet operators. He often recorded the Spanish segments for news pieces on Vision Zero and Fleet. Lenin was a Navy veteran and an immigrant. Most importantly, Lenin was a loving husband to his wife Brenda and a father to two daughters, Faith and Destiny. We lost Lenin due to the COVID-19 epidemic in late March 2020 and miss him



2020 Spotlight Informing the Public and TLC License of New State Seat Belt Law

In November 2020, new State laws went into effect requiring all passengers in private vehicles and TLC-licensed vehicles, no matter where they sit, to buckle up. Under the new law, adult passengers in violation may receive a fine for not complying. TLC and DOT coordinated a public awareness campaign titled "Everybody. Every Seat." to educate the public on their new responsibility and how seat belts save lives in crashes. This campaign included press, social media, and LinkNYC kiosks around the city throughout the fall and winter. TLC targeted communication to its licensees to remind them to encourage passengers to wear a seat belt at all times. To ensure passengers have a visual reminder to buckle up while riding in taxis and for-hire vehicles, TLC began issuing decals with messaging in multiple languages at no cost to all vehicle owner licensees to post in their back seats.

Everybody. Every seat.





Buckling up is required in personal cars and when riding in a taxi or for-hire vehicle, including on app-based trips.



Deploying Coordination Officers and Auxiliaries

The Police Department and its Transportation Bureau have the obligation to be responsive to the public's transportation concerns. In working towards the goals of the Neighborhood Policing philosophy, being responsive to communities' traffic-related needs greatly enhances community relations and builds trust and can lead to communities demonstrating a willingness to collaborate on larger issues. With all patrol precincts staffed with Neighborhood Coordination Officers (NCOs), residents can bring their concerns directly to the officers best equipped to correct the condition. Traffic safety and parking concerns are a leading topic of community meetings throughout the City. NCOs have a direct contact within the NYPD Transportation Bureau should they require traffic safety resources, such as tow trucks and Traffic Enforcement Agents, to appropriately address the various traffic conditions within their respective communities.

The Auxiliary Police force was founded on public service, and the men and woman that volunteer to wear that uniform have always been on the forefront of safety performing a wide array of tasks. Beginning in 2018, and continuing currently, the Police Department has deployed these officers to intersections in all patrol precincts to assist road users, particularly seniors and children, with crossing the street safely. This is especially valuable when the auxiliary officers, equipped with flashing traffic wands, conduct these operations after sunset when turning motorists are most likely to fail to yield to pedestrians.



DRIVERS

DANGEROUS

Lawmaking at both the City and State levels has helped to ingrain the goals of Vision Zero into everyday life. New laws have created penalties for dangerous driving, granted City agencies authority to utilize best practices, and expanded the jurisdiction of City agencies to take greater responsibility for traffic safety. At the City level, laws relating to the work of the Vision Zero Task Force passed since 2014 include:

Right of Way Law (Local Law 29 of 2014): This law created Section 19-190 of the Administrative Code of the City of New York, making it a traffic infraction for a driver to fail to yield the right of way to a pedestrian or cyclist, and a misdemeanor when such action results in injury or death. Previously, there were few, if any, consequences for drivers striking pedestrians who were crossing the street in the crosswalk and with the walk signal -a common cause of pedestrian death and serious injury. Since the enactment of the Right of Way Law, it has become one of the most-enforced traffic laws in New York

City.



Vision Zero: Legislation

Taxi and Limousine Commission Crash Review (Local Law 28 of 2014): Following any serious crash involving a driver licensed by the New York City Taxi and Limousine Commission, this law requires the Commission to review the results of the Police Department's investigation, review the fitness of the driver to operate a vehicle, and take any enforcement action that it deems appropriate. It also requires the Commission to publicly report quarterly on the number of reviews and their outcomes.



A decrease in the citywide speed limit kicked off Vision Zero's focus on safer speeds

Accessible Pedestrian Signals (Local Law 60 of 2014): An accessible pedestrian signal, or APS, is a device that communicates information about pedestrian timing in nonvisual format such as audible tones, verbal messages, and vibrating surfaces. An APS generally provides information to pedestrians about the existence and location of the push-button, the beginning of the walk signal interval, the direction of the crosswalk, and location of the destination curb. This law increased the annual minimum number of intersections at which DOT must install an APS from 25 to 75.

Side Guards (Local Law 56 of 2015): Side Guards (LL 56 of 2015): Side guards are devices fit to the side of a truck that help prevent pedestrians and cyclists from falling into the exposed space between a vehicle's axles. Under this law, all large vehicles in the City fleet and City-licensed trade waste hauling vehicles weighing over 10,000 pounds are required to have side guards installed by January 1st, 2024. Owners or operators of trade waste hauling vehicles that fail to install side guards will be subject to penalties of \$10,000 per vehicle and license revocation or denial.

Clarified Pedestrian Right of Way (LL 115 of 2016): The law established the right of way for pedestrians while crossing the roadway during various pedestrian control signal phases. Other traffic is required to yield the right of way to pedestrians when a steady walking person, flashing upraised hand, or flashing upraised hand with a countdown clock is displayed on a pedestrian control signal.



Advocates like Families for Safe Streets tirelessly work to pass City and State laws advancing Vision Zero goals

Commercial Cyclist Safety (LL 91 of 2017): This law extends the safety and record-keeping requirements of businesses utilizing the services of commercial bicyclists to cover independent contractors as well as employees.

At the State level, the following laws granted New York City the power to take the necessary measures to improve road safety:

25 mph Default Speed Limit (S7892/A10144 of 2014): This law amended the New York State Vehicle and Traffic Law, authorizing the City of New York to lower the default speed limit on City streets from 30 MPH to 25 MPH. This small difference in speed doubles the chance a pedestrian will survive a collision with a motor vehicle, and reduces the likelihood a serious crash will happen in the first place. This legislation formed the cornerstone of the first year of Vision Zero.

2020 Highlight New Legislation in 2020

In crashes, especially those that happen at high speeds, rear passengers who are not wearing seat belts can essentially become projectiles, harming not only themselves but also other vehicle occupants. In November 2020, a mandatory rear passenger seat belt law went into effect in New York State. The previous law only required front-seat passengers and children under 16 in rear seats to wear a seat belt; under the new law, adults sitting in rear seats are no longer exempt. The agencies of the Vision Zero Task Force publicized this new law through social media channels, reminding New Yorkers that every person in every seat must buckle up. TLC engaged with its drivers and business licensees to ensure their awareness of the new law, which applies to for-hire vehicle passengers as well as those riding in private cars.

Speed Camera Expansion (S4331/A6449 of 2019): New York City's school zone speed camera program, established in 2013 and implemented in 2014, allowed the City to place automated enforcement cameras in 140 school zones. These cameras issued \$50 tickets to the owners of vehicles observed driving more than 10 mph above the speed limit at particular times. Despite the geographical and temporal restrictions on their operation, these cameras helped reduce speeding significantly in locations where they were active. However, the initial program expired in 2018 and temporarily lapsed due to lack of legislative renewal. In 2019, not only did the State Legislature renew the program, but they also expanded it to 750 school zones and removed certain operating restrictions, recognizing that this effective solution to a widespread type of dangerous driving should be brought to all neighborhoods.

VISION ZERO YEAR EIGHT AND BEYOND Policy Initiatives

Department of Transportation	 Create five Bike Boulevards to prioritize and protect cyclists Install 10,000 additional bike parking racks by the end of 2022 Convert roadway space on the Brooklyn and Queensboro Bridges for bicycle and pedestrian usage 	 Lower speed limits on 10 additional corridors where it is currently higher than 25 mph Create new and improved pedestrian spaces, including a focus on safety treatments, in the neighborhoods hardest-hit by the COVID-19 pandemic 	Department of Health and Mental Hygiene	 Engage with health partners to integrate traffic safety messages in physical activity promotion Continue enhanced surveillance of traffic safety with public health da sources
Department of Citywide Administrative Services	 Expand Driver Training Options Through VR/Online/Video Expand Safety Collaboration with NYC DOE and School Bus Companies Expand the Fleets of the Future Network 	 Publish second Update of the NYC Safe Fleet Transition Plan Install Truck Surround Cameras and Back Up Sensors Advocate for the use of innovative safety technology in vehicles to Government and Car Manufacturers 	Business Integrity Commission	 Launch Digitizing Vision Zero Pilot Program Partner with DOT to offer virtual "Train the Trainer" safety program to private trade waste haulers Promote improved trade waste truck design
	 Evaluate options for Intelligent Speed Assist (ISA) 		New York City Sheriff's Office	 Enforcement of the Dangerous Vehicle Abatement Act
New York Police Department	 Expand outreach and education efforts to reach all road users Ensure compliance with the new Rear Seat Seatbelt law 	 Focus on speed enforcement during hours of darkness Focus on truck safety to respond to shifts in delivery methods 		 Continue post-pandemic enhanced enforcement of excessive red light and speed camera offenders
Taxi and Limousine Commission	 Communicate Street Safety Messages to TLC Licensees Update Driver Education Curricula for TLC Licensees Analyze Consumer Complaints to Support Traffic Safety Enforcement 	 Focus TLC Enforcement Deployment on Priority Dangerous Driving Behaviors Evaluate Trends in Crashes Involving TLC Licensees 		

health partners to Support engagement with external fic safety messages research partners to promote and ctivity promotion advance collaboration around Vision Zero goals nanced surveillance of with public health data Continue to conduct outreach to izing Vision Zero trade waste drivers and helpers in order to bring street safety awareness DOT to offer virtual ainer" safety program Continue targeted traffic enforcement de waste haulers operations roved trade waste Increase investigations concerning of the Dangerous ement Act registration fraud and parking fraud st-pandemic Expand on fraudulent license plate nforcement of investigations and seizures

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Appendix

YEAR ONE Initiatives Scorecard

ID#	Agency	Initiative Name	Status
1.1	NYPD	Establish a permanent Vision Zero task force in the Mayor's Office of Operations	Complete
1.1	NYPD	Increase the Highway District to 263 personnel	Complete and Ongoing
1.11	NYPD	Expand Collision Investigation Squad cases to encompass all crashes with critical injuries.	Complete
1.12	NYPD	Modify precinct-level traffic plans to increase focus on pedestrian safety	Complete
1.13	NYPD	Update technology for capturing crash data	Complete
1.14	NYPD	Enhance training for officers to better record and preserve crash details and site evidence	Complete
1.15	NYPD/DOT	Broaden recruiting efforts for School Crossing Guards	Complete
1.16	NYPD/DOT	Conduct intensive street-level outreach and enforcement on safety problems and traffic laws, focused in areas with known crash histories	Complete and Ongoing
1.17	NYPD/DOT	Convene monthly meetings of the DOT Traffic Division and the NYPD Transportation Bureau to review traffic safety performance and set strategy for improvement	Complete and Ongoing
1.18	NYPD/DOT/CAU	Develop data-driven citywide enforcement strategy	Complete
1.19	City Hall/Ops	Develop borough-wide safety plans in close coordination with community boards, community organizations, and the Mayor's Community Affairs Unit	Complete
1.2	NYPD/DOT	Launch a Vision Zero website to gather input from New Yorkers and coordinate information about the City's Vision Zero plans and upcoming events and provide data	Complete
1.2	DOT	Conduct targeted outreach in 500 schools each year, educating students about protecting themselves as safe pedestrians and working with their families for safer school zones	Complete and Ongoing
1.21	DOT	Complete 50 street improvement projects that enhanced safety by reengineering intersections and corridors	Complete
1.22	DOT	Create 25 new arterial slow zones	Complete
1.23	DOT	Implement eight new neighborhood slow zones	Complete
1.24	DOT	Install speed cameras at 20 new authorized locations	Complete
1.25	DOT	Install 250 speed humps, including in neighborhood slow zones	Complete
1.26	DOT	Enhance street lighting at 1,000 intersections	Complete
1.27	DOT	Enhance maintenance of street markings	In Progress
1.28	DOT	Install traffic signals where needed	Complete and Ongoing
1.29	City Hall/CAU/DOT	Implement additional street reconstruction safety projects	In Progress
1.3	DOT	Conduct Vision Zero presentations across the City	Complete and Ongoing

YEAR ONE Initiatives Scorecard Continued

ID#	Agency	Initiative Name	Status
1.3	DOT	Survey national and international best practices to expand potential strategies	Complete and Ongoing
1.31	DOT	Hold workshops for major street design projects	Complete and Ongoing
1.32	DOT	Undertake a high-quality ad campaign aimed at reducing speeding, failure-to-yield and other forms of reckless driving	Complete and Ongoing
1.33	DOT	Broaden the message and expand the reach of the "Choices" anti-DWI campaign	Complete and Ongoing
1.34	DOT	Double the number of programmable speed boards for the intensive education/enforcement initiative	Complete
1.35	DOT	Make effective, age-appropriate safety curriculum available to schools throughout the city	Complete and Ongoing
1.36	DOT	Partner with senior centers to increase communication and get specific feedback from aging New Yorkers about street safety im- provements	Complete and Ongoing
1.37	DOT	Increase the number and visibility of hands-on safety demonstrations	Complete and Ongoing
1.38	DOT/TLC	Add safety flyers and messaging in DOT mailings such as Alternate Side Parking regulations and construction permits	Complete and Ongoing
1.39	DOT/TLC	Issue summonses to TLC drivers identified by red light cameras	Complete and Ongoing
1.4	City Hall/Ops	Update taxi school to account for new streetscape features and alert drivers to higher-crash street types	Complete
1.4	TLC	Publish crash and safety data on a regular basis in user-friendly format(s)	Complete and Ongoing
1.41	TLC	Create TLC safety enforcement squad equipped with speed radar equipment to enforce speed and safety regulations	Complete
1.42	TLC	Pilot program to place black box data recorders in TLC-licensed vehicles	Complete
1.43	TLC	Implement more comprehensive traffic safety curriculum for initial licensees	Complete and Ongoing
1.44	TLC	Create behind-the-wheel driving course for drivers who would benefit from additional instruction	Complete and Ongoing
1.45	TLC	Pilot technology that alerts passengers and drivers when they are traveling over the speed limit	Complete
1.46	TLC	Explore in-car technology that limits vehicle speed, warns drivers of impending collisions, or reduces the fare when the driver speeds	Complete and Ongoing
1.47	TLC	Introduce street safety public service announcements on Taxi TV	Complete and Ongoing
1.48	TLC	Use driver information monitors to send safety reminders to taxi drivers	Complete and Ongoing
1.49	City Hall/Ops	Add safety flyers and messaging in TLC mailings to drivers	Complete and Ongoing

ID#	Agency	Initiative Name	Status
1.5	TLC	Partner with industry groups and vehicle manufacturers to educate fleet drivers and explore design changes to their automotive fleets	Complete
1.5	TLC	Include left turn reminder stickers in TLC licensed vehicles	Complete
1.51	TLC	Create publicly accessible "Honor Roll" of safe TLC drivers	Complete
1.52	TLC	Enhance enforcement against drivers offering for-hire service without a TLC license	Complete
1.53	TLC	Explore vehicle design requirements to improve safety	Complete
1.54	DCAS	Pursue City law changes and new TLC rules to increase sanctions on TLC drivers who engage in dangerous behavior	Complete
1.55	DCAS	Ensure all City fleet vehicles are equipped with technology that record speeding and other dangerous driving behaviors by the end of June 2016	Complete and Ongoing
1.56	DCAS	Upgrade the collision tracking system for the citywide fleet through the new NYC Fleet Focus system	Complete
1.57	DCAS	Oversee a Citywide expansion of Defensive Driver training courses for all employees driving City vehicles	Complete
1.58	DOHMH	Recommend safety related devices and designs, such as high visibility vehicles, back-up cameras, and rear wheel side guards, for City vehicles and other vehicles under City regulation	Complete
1.59	City Hall/Intergov	Conduct public health surveillance on traffic-related hospitalizations and fatalities	Complete and Ongoing
1.6	DOHMH/VZ Task Force	Lead a state legislative campaign to give the City power over the placement of speed and red-light cameras, power to reduce the citywide speed limit to 25 MPH, and ability to increase the penalties associated with dangerous driver behavior	Complete and Ongoing
1.6	DOHMH	Provide Vision Zero Task Force with public health data to help target traffic safety interventions	Complete and Ongoing
1.61	DOHMH/VZ Task Force	Include traffic fatalities and injuries and prevention messages in public health reports	Complete and Ongoing
1.62	DOHMH/DOT/ NYPD	Engage community public health partners in promoting Vision Zero goals	Complete and Ongoing
1.63	NYPD	Promote research on walking, driving, motorcycling, and bicycling behaviors and patterns in the city	Complete and Ongoing
1.7	NYPD	Increase enforcement against dangerous moving violations, including speeding, failing to yield to pedestrians, signal violations, improper turns/disobeying signage, and phoning/texting while driving	Complete and Ongoing
1.8	NYPD	Increase speeding enforcement at the precinct level	Complete and Ongoing
1.9		Purchase advanced speed detection equipment (LIDAR guns), upgrade speed detection technology available to precincts and train additional personnel	Complete and Ongoing

YEAR TWO Initiatives Scorecard

2.1 NYPD/DOT/ TLC/ DCAS/Ops Promote a new outreach and enforcement campaign of the new 25 MPH speed limit – Operation Drive 25 Complete 2.11 DOT Drive community input and engagement at priority corridors, intersections, and areas Complete 2.12 DOT Expand a bicycle network that improves safety for all road users (including at least 10 miles per year of protected bike paths) Complete 2.13 DOT Release motorcyclist crash study and list of proposed action items to aid in preventing future crashes Complete 2.14 DOT Conduct study on severe injury and fatal bicyclist crashes and list of proposed action items to aid in preventing future crashes Complete 2.16 DOT Install 75 Accessible Pedestrian Signals (APS) per year and develop additional accessibility measures Complete 2.16 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.17 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.18 DOT/NYPD/MTA Partner with NYPD and MTA to develop and complete a study on large vehicles and use truck and large vehicle crash data to identify truck enforcement priority areas In Prog 2.19 DOT <t< th=""><th>ID#</th><th>Agency</th><th>Initiative Name</th><th>Status</th></t<>	ID#	Agency	Initiative Name	Status
2.1 DCAS/Ops speed limit - Operation Drive 25 Completed 2.11 DOT Drive community input and engagement at priority corridors, intersections, and areas Completed 2.12 DOT Expand a bicycle network that improves safety for all road users (including at least 10 miles per year of protected bike paths) Completed 2.13 DOT Release motorcyclist crash study and list of proposed action items to aid in preventing future crashes Completed 2.14 DOT Conduct study on severe injury and fatal bicyclist crashes and list of proposed action items to aid in preventing future crashes Completed 2.14 DOT Install 75 Accessible Pedestrian Signals (APS) per year and develop additional accessibility measures Complete 2.16 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.17 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.18 DOT/NYPD/MTA Partner with NYPD and MTA to develop and complete a study on large vehicles areas In Prog 2.19 DOT Proactively design for pedestrian safety in high-growth areas, including locations in the Housing New York plan Completed eploy dedicated enforcement on priority forindors, intersections, and areas	2.1	DOT	Install expanded speed limit signage on all priority corridors in 2015	Complete
2.11 DOT and areas Complete 2.12 DOT Expand a bicycle network that improves safety for all road users (including at least 10 miles per year of protected bike paths) Complete 2.13 DOT Release motorcyclist crash study and list of proposed action items to aid in preventing future crashes Complete 2.14 DOT Conduct study on severe injury and fatal bicyclist crashes and list of proposed action items to aid in preventing future crashes Complete 2.15 DOT Install 75 Accessible Pedestrian Signals (APS) per year and develop additional accessibility measures Complete 2.16 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.17 DOT Continue to reform off-hours programs for commercial deliveries to and use truck and large vehicle crash data to identify truck enforcement priority areas Complete 2.18 DOT/NYPD/MTA Partner with NYPD and MTA to develop and complete a study on large vehicles and use truck and large vehicle crash data to identify truck enforcement priority areas Complete 2.19 DOT Proactively design for pedestrian safety in high-growth areas, including locations in the Housing New York plan Complete 2.2 DOT/NYPD/TLC/ Develop and execute a comprehensive Vision Zero media campaign Comp				Complete and Ongoing
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2.14 DOT proposed action items to aid in preventing future crashes Complete 2.15 DOT Install 75 Accessible Pedestrian Signals (APS) per year and develop additional accessibility measures Complete 2.16 DOT Complete deployment of speed cameras and implement the majority of speed camera locations at priority corridors, intersections, and areas Complete 2.17 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.18 DOT/NYPD/MTA Partner with NYPD and MTA to develop and complete a study on large vehicles and use truck and large vehicle crash data to identify truck enforcement priority areas In Prog 2.19 DOT Proactively design for pedestrian safety in high-growth areas, including locations in the Housing New York plan Complete 2.20 DOT/NYPD/ TLC/ Develop and execute a comprehensive Vision Zero media campaign Complete 2.21 DOT/NYPD Target street team outreach at priority corridors, intersections, and areas Complete 2.21 DOT/NYPD Increase training, awareness, and outreach to address Administrative Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of way Complete	2.13	DOT		Complete
2.15 DOT additional accessibility measures Complete 2.16 DOT Complete deployment of speed cameras and implement the majority of speed camera locations at priority corridors, intersections, and areas Complete 2.17 DOT Continue to reform off-hours programs for commercial deliveries to reduce conflicts with pedestrians In Prog 2.18 DOT/NYPD/MTA Partner with NYPD and MTA to develop and complete a study on large vehicles and use truck and large vehicle crash data to identify truck enforcement priority areas In Prog 2.19 DOT Proactively design for pedestrian safety in high-growth areas, including locations in the Housing New York plan Complete campaign 2.19 DOT Proactively design for pedestrian safety in high-growth areas, including locations in the Housing New York plan Complete campaign 2.19 DOT Proactively design for pedestrian safety in high-growth areas, including locations in the Housing New York plan Complete campaign 2.2 DOHMH/DCAS/ City Hall/Ops Develop and execute a comprehensive Vision Zero media campaign Complete cample decicated enforcement on priority intersections, and areas Complete deploy dedicated enforcement on priority intersections and corridors and deploy dedicated resources to NYPD precincts that overlap substantially with priority areas as outlined in borough plans Complete deploy decicated resources to NYPD precincts that overlap substantially wi	2.14	DOT		Complete
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2.19 DOT locations in the Housing New York plan Completer Co	2.18	DOT/NYPD/MTA	and use truck and large vehicle crash data to identify truck enforcement priority	In Progress
2.2DOHMH/ DCAS/ City Hall/OpsDevelop and execute a comprehensive Vision Zero media campaignComplete2.2DOT/NYPDTarget street team outreach at priority corridors, intersections, and areasComplete2.2DOT/NYPDTarget street team outreach at priority corridors, intersections and corridors and deploy dedicated enforcement on priority intersections and corridors and deploy dedicated resources to NYPD precincts that overlap sub- stantially with priority areas as outlined in borough plansComplete2.22NYPDIncrease training, awareness, and outreach to address Administrative Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of wayComplete	2.19	DOT		Complete and Ongoing
2.21 DOT/NYPD Deploy dedicated enforcement on priority intersections and corridors and deploy dedicated resources to NYPD precincts that overlap sub-stantially with priority areas as outlined in borough plans Complete Complete Complete Complete Complete Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of way Complete Complete Complete Complete Complete Complete Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of Way	2.2	DOHMH/ DCAS/	Develop and execute a comprehensive Vision Zero media campaign	Complete and Ongoing
2.21 DOT/NYPD and deploy dedicated resources to NYPD precincts that overlap sub- stantially with priority areas as outlined in borough plans Complete 2.22 NYPD Increase training, awareness, and outreach to address Administrative Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of way Complete	2.2	DOT/NYPD	Target street team outreach at priority corridors, intersections, and areas	Complete and Ongoing
2.22 NYPD Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of way	2.21	DOT/NYPD	and deploy dedicated resources to NYPD precincts that overlap sub-	Complete and Ongoing
Implement and test a new model of enforcement that increases	2.22	NYPD	Code 19-190, a law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of	Complete and Ongoing
	2.23	NYPD		In Progress
2.24 NYPD Pilot a program to allow Traffic Enforcement Agents to respond to motor vehicle collisions involving only property damage Complete	2.24	NYPD		Complete and Ongoing
2.25 NYPD Pilot a program to allow civilian members of the NYPD to work in the Intoxicated Driver Testing Unit In Prog	2.25	NYPD		In Progress
2.26 NYPD Increase outreach, education, and enforcement on motorcycle registra- tion and the prohibition of dangerous and stunt behavior of motorcyclists Completion	2.26	NYPD		Complete and Ongoing

ID#	Agency	Initiative Name	Status
2.27	DOT/NYPD	Increase large vehicle and truck education and enforcement amongst precinct police and focus on truck safety education for drivers, pedestrians, and cyclists	In Progress
2.28	TLC	Develop a system to communicate safety information to TLC-licensed drivers	Complete
2.29	TLC	Advocate for a change in the New York State seatbelt law to remove the exemptions for taxis and liveries	Complete
2.3	TLC	Expand required TLC driver education to car service drivers	Complete
2.3	DOT/NYPD/TLC/ DOHMH/DCAS/	Expand collaboration with new partners, including the District Attorney's offices, the Metropolitan Transportation Authority (MTA), and the New York State Department of Motor Vehicles	Complete and Ongoing
2.31	TLC	Introduce license renewal course for taxi and car service drivers, providing additional continuing education about safe driving	In Progress
2.32	TLC	Engage taxi fleets and car service bases in promoting safe driving among TLC-licensed drivers	Complete and Ongoing
2.33	TLC	Create public service announcements (PSAs) to engage passengers in promoting safe driving by TLC licensees and educate partner agencies	Complete and Ongoing
2.34	DCAS	Recognize safe operators among City fleet drivers through "Good Operator" awards	Complete
2.35	DCAS	Install the first wave of 240 truck side guards and test their effectiveness	Complete
2.36	DCAS	Survey City fleet drivers regarding their perceptions of safety and safe driving as part of ongoing defensive driving initiative	Complete and Ongoing
2.37	DOHMH	Issue guidance on traffic safety messaging for older adults based on formative research.	Complete
2.38	DOHMH	Create new partnerships with schools and priority neighborhoods that will promote Vision Zero and active living	Complete and Ongoing
2.39	DOHMH	Link traffic crash event and hospitalization data to describe patterns and risk factors for traffic-related injuries	Complete
2.4	DOT/NYPD	Identify priority corridors, intersections, and areas	Complete
2.4	DOHMH/VZ Task Force	Identify priority topics for research and evaluation of Vision Zero efforts	Complete
2.5	DOT/NYPD	Target safety education at priority corridors and priority areas	Complete and Ongoing
2.6	DOT	Implement 50 Vision Zero safety engineering improvements annually at priority corridors, intersections, and areas citywide, informed by outreach findings at project locations	Complete and Ongoing
2.7	DOT	Implement Vision Zero Great Streets	In Progress
2.8	DOT	Significantly expand exclusive pedestrian crossing time through the use of leading pedestrian intervals (LPIs) on all feasible priority corridors and priority intersections by end of 2017	Complete and Ongoing
2.9	DOT	Modify signal timing to reduce off-peak speeding on all feasible priority corridors by the end of 2017	Complete and Ongoing

YEAR THREE **Initiatives Scorecard**

ID #	Agency	Initiative Name	Status
3.1	DOT	Pilot a left-turn initiative focused on safer left-turn designs	Complete
3.1	NYPD	Explore the expansion of the criteria for Collision Investigation Squad (CIS) involvement	In Progress
3.11	TLC	Explore developing a system of incentives to increase safe driving behavior	Complete
3.12	TLC	Evaluate the effectiveness of current enforcement programs	Complete and Ongoing
3.13	TLC	Identify strategies to reduce fatigued driving and raise awareness among TLC-licensed drivers	Complete
3.14	TLC	Provide targeted outreach and education to TLC-licensed businesses to increase safe driving behavior	Complete and Ongoing
3.15	DOHMH	Analyze and disseminate data on traffic-related injuries and driving behaviors	Complete and Ongoing
3.16	MTA	Provide focused safety awareness training to 6000 bus operators	Complete
3.17	MTA	Expand use of Pedestrian Turn Warning and Collision Avoidance safety technology	Complete and Ongoing
3.18	City Hall	Pass legislation in Albany to expand speed camera hours and streets to target locations where crashes most often occur	In Progress
3.19	DA	Organize legislative support to increase penalties for drivers who flee crashes	In Progress
3.2	DOT	Prepare for deployment of Connected Vehicle Technology pilot	Complete
3.2	DA	Revise Public Health Law Section 3306 to include any impairing substances	In Progress
3.21	DA	Improve DWI search warrant processing	In Progress
3.22	DA	Support the purchase and operation of a Mobile Impaired Driver Testing site	In Progress
3.3	DOT, DOE	Incorporate VZ curriculum designed for students in grades 4-6	Complete
3.4	DCAS	Restrict the use of hands-free mobile devices for City drivers in City vehicles	Complete
3.5	DCAS	Standardize vehicle safety messaging and signage	Complete and Ongoing
3.6	DCAS	Install second wave of truck sideguards	Complete
3.7	DCAS	Research and report on driver alert systems for Safe Fleet Transition Plan	Complete
3.8	NYPD, DOT, DFTA	Launch senior outreach and enforcement campaign	Complete
3.9	NYPD	Increase impaired driving enforcement	Complete and Ongoing

YEAR FOUR Initiatives Scorecard

ID#	Agency	Initiative Name	Status
4.1	DOT	Make high-visibility crosswalks the standard crosswalk citywide	Complete and Ongoing
4.1	NYPD	Continue to conduct safe cycle initiatives in the effort to reduce bicyclist fatalities	Complete and Ongoing
4.101	NYPD	Analyze data to address unlicensed operators, unregistered vehicles and uninsured vehicles	Complete and Ongoing
4.11	NYPD	Ensure school crossing guards at every post with the addition of 100 new crossing guard supervisors and a mobile replacement squad	In progress
4.12	NYPD	Add 120 new speed guns to local precincts, increasing speed enforcement capability by 50%	Complete
4.13	DCAS	Continue vehicular safety optimizations through Safe Fleet Transition Plan	Complete and Ongoing
4.14	DCAS	Partner with DOE/DOT to incorporate Vision Zero safety training into high school curriculum	In progress
4.15	DCAS	Implement Phase-2 of truck side-guard installation	Complete and Ongoing
4.16	DCAS	Pilot real-time speed and safety tracking	Complete
4.17	DCAS	Enhance and expand defensive driving training	Complete and Ongoing
4.18	TLC	Implement new fatigued driving prevention rules and educate drivers on framework and fatigue risks	Complete
4.19	TLC	Expand public outreach, official vehicle markings, and enforcement to reduce the prevalence of illegal vans	Complete and Ongoing
4.2	TLC	Hold focus groups with TLC Safety Honor Roll members to determine effective safety messaging	Complete
4.2	DOT	Accelerate the replacement cycle for street markings	Complete and Ongoing
4.21	TLC	Promote discussion and research on the traffic safety issues related to automated vehicles	Complete and Ongoing
4.22	DOHMH	Disseminate findings from data set linking collision and hospitalization data	Complete and Ongoing
4.23	DOHMH	Convene external research partners to promote cross-disciplinary data sharing and collaboration	Complete and Ongoing
4.25	DA	Resolve legal challenges to Administrative Code 19-190	In progress
4.26	DA	Ensure precise and efficient ignition interlock monitoring in New York City	In progress
4.3	DOT	Install left-turn traffic calming upgrades to at least 100 additional intersec- tions	Complete and Ongoing
4.4	DOT	Make upgrades to at least 20 key cycling intersections within the bike network	Complete
4.5	DOT	Commence lighting upgrades at 1,000 intersections	Complete and Ongoing
4.6	DOT	Continue to pilot raised crosswalks	Complete and Ongoing
4.7	DOT	Install first neighborhood traffic circle pilots	Complete and Ongoing

YEAR FOUR Initiatives Scorecard Continued

ID#	Agency	Initiative Name	Status
4.1	DOT	Make high-visibility crosswalks the standard crosswalk citywide	Complete and Ongoing
4.2	DOT	Accelerate the replacement cycle for street markings	Complete and Ongoing
4.3	DOT	Install left-turn traffic calming upgrades to at least 100 additional intersections	Complete and Ongoing
4.6	DOT	Continue to pilot raised crosswalks	Complete and Ongoing
4.7	DOT	Install first neighborhood traffic circle pilots	Complete and Ongoing
4.9	NYPD	Apply precision policing principals to maximize efficiencies in deployment	Complete and Ongoing
4.1	NYPD	Continue to conduct safe cycle initiatives in the effort to reduce bicyclist fatalities	Complete and Ongoing
4.1	NYPD	Analyze data to address unlicensed operators, unregistered vehicles and uninsured vehicles	Complete and Ongoing
4.13	DCAS	Continue vehicular safety optimizations through Safe Fleet Transition Plan	Complete and Ongoing
4.15	DCAS	Implement Phase-2 of truck side-guard installation	Complete and Ongoing
4.17	DCAS	Enhance and expand defensive driving training	Complete and Ongoing
4.19	TLC	Expand public outreach, official vehicle markings, and enforcement to reduce the prevalence of illegal vans	Complete and Ongoing
4.21	TLC	Promote discussion and research on the traffic safety issues related to automated vehicles	Complete and Ongoing
4.22	DOHMH	Disseminate findings from data set linking collision and hospitalization data	Complete and Ongoing
4.23	DOHMH	Convene external research partners to promote cross-disciplinary data sharing and collaboration	Complete and Ongoing

YEAR FIVE Initiatives Scorecard

ID#	Agency	Initiative Name	Status
5.1	NYPD	Explore using NYPD auxiliary officers to manage pedestrians and effect positive change in driver's behavior at intersections with notable crash/ injury histories with the underlying goal of enhancing pedestrian and bicyclist safety	Complete and Ongoing
5.1	DOT	Intensify street safety improvements in areas with high concentrations of senior citizens and senior pedestrian injuries	Complete and Ongoing
5.11	NYPD	Roll out NYPD Transportation Bureau Community Outreach Unit	Complete and Ongoing
5.12	DCAS	Activate a Fleet Office of Real Time Tracking (FORT) to track the safety and utilization of City fleet units	Complete and Ongoing
5.13	DCAS	Implement the first formal investments in new safety equipment as part of the Safe Fleet Transition Plan	Complete
5.14	DCAS	Centralize administration of License Event Notification System through DCAS	In progress
5.15	DCAS	Start posting stickers on City vehicles that encourage the public to call 311 if they see unsafe or problematic driving	Complete and Ongoing
5.16	DCAS	Expand current in-person training initiative under Vision Zero to include online and interactive virtual training	In progress
5.17	TLC	Develop Vision Zero driver training video for TLC licensees and integrate into TLC driver education	Complete
5.18	TLC	Offer licensees safety retraining in lieu of standard fines for certain moving violations	In progress
5.19	TLC	Enhance TLC field enforcement training to support Vision Zero efforts	Complete
5.2	DOT	Implement Bicycle Priority Districts to increase lane-mileage of bike lanes in areas with disproportionate KSIs relative to their infrastructure	Complete and Ongoing
5.2	TLC	Collaborate with advocates and large app-based bases on passenger and licensee outreach campaigns	In progress
5.21	TLC	Coordinate quarterly safety outreach campaigns to professional drivers	In progress
5.22	DOHMH	Expand Prescribe-a-Bike pilot program to a second clinical partner	Complete and Ongoing
5.23	DOHMH	Expand data partnerships to enhance surveillance of traffic-related fatalities and injuries and to further identify populations at risk	Complete and Ongoin
5.24	DOHMH	Support equity-focused analyses of traffic-related data and dissemina- tion of findings	Complete and Ongoing
5.25	BIC	Educate school children about street safety around private garbage trucks	In progress
5.26	BIC	Establish interagency collision review panel to review crashes involving a trade waste truck that resulted in a death or serious injury	Complete and Ongoing
5.27	BIC	Conduct outreach to workers in the trade waste industry	Complete and Ongoing
5.3	DOT	Examine locations where pedestrians are killed on or near highways	Complete and Ongoing
5.4	DOT	Update Borough Pedestrian Safety Action Plan priority maps based on analysis of recent KSI data	Complete

YEAR FIVE Initiatives Scorecard Continued

ID#	Agency	Initiative Name	Status
5.5	DOT	Convene a working group to plan a Vision Zero-focused driver education program for under-25s	Complete
5.6	DOT	Use data analysis to proactively identify intersections at which new traffic signals are likely warranted	Complete and Ongoing
5.7	NYPD	Expand outreach and enforcement program for intercity buses, charter buses, and commercial trucks	Complete and Ongoing
5.8	NYPD	Explore ways to increase the role of the neighborhood policing program into traffic strategy	Complete and Ongoing
5.9	NYPD	Evaluate and improve utilization of AC 19-190	In progress

YEAR SIX Initiatives Scorecard

ID#	Agency	Initiative Name	Status
6.1	DOT	Launch an integrated speed reducer installation program	In progress
6.1	NYPD	Increase safety within the trade waste and private carting industry through outreach and enforcement	In progress
6.11	NYPD	Expand NYPD's clear bus routes enforcement action plan	In progress
6.12	DCAS	Codify fleet safety best practices	In progress
6.13	DCAS	Reduce use of left tuns	In progress
6.14	DCAS	Operationalize the updated Safe Fleet Transition Plan	In progress
6.15	DCAS	Advocate for driver safety training of regulated and contracted entities	In progress
6.16	DCAS	Pursue expansion of sideguard law to require sideguards on private fleets with City contracts	In progress
6.17	DCAS	Introduce predictive analytics relating to driving behaviors and crashes through CRASHStat and the Fleet Office of Real Time Tracking (FORT)	In progress
6.18	TLC	Ensure TLC-licensed vehicles with outstanding part recalls are fixed in a timely manner	In progress
6.19	TLC	Engage drivers on safely sharing the road with people on bicycles	In progress
6.2	DOT	Install speed cameras at additional school zone locations	Complete and Ongoing
6.2	TLC	Study emerging trends in TLC-involved crash data	In progress
6.21	TLC	Collaborate with NYPD to provide additional training on TLC-specific enforcement	In progress
6.22	DOHMH	Reconvene external research partners to promote crossdisciplinary data sharing and collaboration that advances Vision Zero	In progress
6.23	DOHMH	Continue traffic safety outreach efforts for older adults and support related efforts with other Vision Zero City agencies	In progress
6.24	DOHMH	Continue enhanced surveillance of traffic safety with public health data sources	In progress
6.25	BIC	Expand BIC's oversight in the trade-waste industry to include safety	In progress
6.26	BIC	Update Trade Waste Safety Manual	In progress
6.27	BIC	Develop Vision Zero driver training videos for BIC trade waste industry drivers	In progress
6.28	Sheriff	Expand public outreach and enforcement by the Sheriff's Road Patrol to ensure compliance with criminal traffic sanctions	In progress
6.3	DOT	Launch a new Driveway Safety Program to help developers and property owners adopt best practices for curb cuts and driveways	In progress
6.4	DOT	Investigate the connection between speed and red-light camera violations on traffic crashes and injuries, as well as generate insights into the impact of these violations on driving behavior over time	In progress
6.5	DOT	Conduct outreach and issue recommendations concerning interventions for medically-impaired drivers	In progress

YEAR SIX Initiatives Scorecard Continued

ID#	Agency	Initiative Name	Status
6.6	DOT	Conduct high-visibility education and enforcement campaigns alongside NYPD at key locations	Complete and Ongoing
6.7	DOT	Expand and enhance People Priority Streets to improve pedestrian safety and access	Complete and Ongoing
6.8	NYPD	Expand outreach and enforcement regarding the safe execution of left and right hand turns by all motorists	In progress
6.9	NYPD	Expand lifesaving efforts in the field of motorcycle safety	In progress

YEAR SEVEN Initiatives Scorecard

ID#	Agency	Initiative Name	Status
7.1	DOT	Open at least 40 miles of street space to pedestrians and cyclists to enhance social distancing	In progress
7.11	DCAS	Expand safety retrofitting for trucks	In progress
7.12	DCAS	Codify Fleets of Future, establishing network of private, public and non-profit fleets	In progress
7.13	DCAS	Evaluate the need for and draft, budget permitting, a Safe Fleet Transition Plan (SFTP) for school buses	In progress
7.14	DCAS	Draft a Safe Fleet Transition Plan for (SFTP) private waste haulers	In progress
7.15	DCAS	Advocate nationally for safety features as standard on vehicles	In progress
7.16	DCAS	Share safety best practices with small and mid-size private fleets using Together for Safer Roads' (TSR) Global Leadership Council	In progress
7.17	DCAS	Deploy existing Vision Zero training as a model for large fleet vehicle drivers in the private sector	In progress
7.18	NYPD	Conduct Green Wave Safe Passage Operations	In progress
7.19	NYPD	Conduct speed and failure to yield enforcement initiatives	In progress
7.2	DOT	Install 30 miles of protected bicycle lanes and additional Green Wave engineering initiatives	In progress
7.21	NYPD	Initiative Vision Zero Safe Corridor Initiative	In progress
7.22	TLC	Expand Vision Zero outreach materials for TLC-licensed drivers	In progress
7.23	TLC	Study emerging trends in TLC-involved crashes	In progress
7.24	TLC	Host Street Safety Digital Forums with Driver Groups	In progress
7.25	TLC	Create dooring PSA for TLC passengers	In progress
7.26	TLC	Develop TLC driver education course to combat distracted driving	In progress
7.27	DOHMH	Promote traffic safety initiatives, through community engagement and partnerships that feature the health benefits of physical activity	In progress
7.28	DOHMH	Continue engagement with external research partners to promote cross- disciplinary data sharing and collaboration that advances Vision Zero	In progress
7.29	DOHMH	Support DOT's outreach and education related to older adult pedestrian safety, with specific focus on engaging health care providers	In progress
7.3	DOT	Advocate for legislation that mandates the NYS DMV test includes pedestrian, bicycle, and new street design content	In progress
7.31	BIC	Improve trade waste truck design by pursuing local legislation that requires companies to adopt high visibility cab vehicles and phase out conventional cab vehicles	In progress
7.32	BIC	Local Law 56 of 2015 requires mandatory side guards for trucks over 10,000 pounds by January 1, 2024. As part of its legislative agenda, BIC is seeking to expedite the timeline for the installation of side guards for all BIC-licensed and registered trade waste vehicles	In progress

YEAR SEVEN Initiatives Scorecard Continued

ID#	Agency	Initiative Name	Status
7.33	BIC	In order to effectuate BIC's new safety law (Local Law 198 of 2019), BIC will promulgate various rules to regulate safety in the trade waste industry	In progress
7.34	BIC	Conduct outreach to trade waste drivers and helpers in order to bring street safety awareness	In progress
7.4	DOT	Evaluate and expand the Neighborhood Loading Zone program	In progress
7.5	DOT	Provide detailed input to NHTSA on improvements to vehicle design for pedestrian safety and collision avoidance technology for the revision of the New Car Assessment Program (NCAP)	In progress
7.6	DOT	Accelerate speed camera installations	In progress
7.7	DOT	Advocate for State legislation on measures to enhance safety for vulnerable road users and strengthen enforcement of dangerous driving behaviors	In progress
7.8	DOT	Implement a suite of Freight Mobility initiatives to reduce the number of truck-involved fatal crashes	In progress
7.9	DCAS	Study Intelligent Speed Assist (ISA) Technology/Launch second update of Safe Fleet Transition Plan	In progress
7.10	DCAS	Expand City driver training using e-learning and additional safety videos	In progress
7.20	NYPD	Expand NYPD's clear bus routes enforcement action plan	In progress
7.30	DOHMH	Sustain enhanced surveillance of traffic safety with public health data sources, featuring physical activity	In progress

Glossary

Administrative Code 19-190

A City Law creating a criminal misdemeanor penalty for New York City drivers who injure or kill pedestrians or cyclists with the right of way. In Fall 2016, the City Council passed an amendment that specified that motorists must yield to all pedestrians who enter the crosswalk during the walking person phase or the flashing red hand phase

Arterial

A wide high-volume roadway

Automatic Emergency Braking

A feature in some motor vehicles where brakes will automatically activate if sensors indicate a crash is imminent and the driver does not react.

Collision Investigation Squad

The Collision Investigation Squad investigates crashes which involve fatalities and the most serious of injuries. These expert investigators scrutinize a collision scene and seek to determine the cause of the collision and whether any criminality occurred.

Connected Vehicle Technology

A set of innovations that allow vehicles to "communicate" with each other and with smart infrastructure to identify roadway risks and prevent crashes. New York City has enacted the largest pilot program of this technology in the United States, and the first in a complex urban environment.

CRASH

The citywide tracking system for all nonNYPD collisions involving City vehicles. Prior to 2014, NYC collisions were all tracked at the agency level in diverse ways. CRASH created a cohesive standardized system for recording collision information and updating data.

90 Curb Extension

Also known as a neckdown. This is an expansion of the curb line into the lane of the roadway adjacent to the curb for a portion of a block either at a corner or mid-block, which creates more pedestrian space.

Daylighting

Removing parking adjacent to a crosswalk in order to make pedestrians crossing more visible to approaching motorists.

Fleet Office of Real-time Tracking (FORT)

DCAS Fleet manages an operations center for all citywide fleet tracking and monitoring. FORT tracks over 22,000 city vehicles and school buses via telematics and works with agencies on issues such as vehicle utilization, fuel efficiency, and driver behavior.

For-Hire Vehicle

Vehicles other than taxis and commuter vans that are licensed by TLC to transport the public. They include community car services (also known as liveries), black cars (which include app-based black cars, such as those dispatched by Uber), and certain luxury limousines.

FORMS (Finest Online Records Management System)

An electronic database that replaced the existing legacy collision system and was deployed by NYPD on March 14, 2016. In addition to replacing the existing department database, it allows officers to do direct entry crash reporting using mobile devices.

Intelligent Speed Assistance

Also referred to as Intelligent Speed Adaptation, this is a feature that uses GPS or sign recognition to advise drivers of the speed limit, and automatically limit the vehicle's ability to travel above it. While this technology is rarely seen in the United States, the European Commission has mandated it in all new light vehicles starting in 2022.

Killed or Seriously Injured Calculation

A method of analyzing the potential danger of a corridor or intersection by measuring the number of people killed or seriously injured at that location (calculated as a per mile rate for corridors).

Leading Pedestrian Interval

A signal timing strategy designed to reduce turning vehicle/pedestrian conflicts. With an LPI the walk signal is displayed before the parallel movement of traffic gets a green light. This allows pedestrians to start their crossing and establish a presence in the crosswalk before the traffic is released.

LIDAR Gun

A laser device used by the police for speed limit enforcement. LIDAR guns allow a police officer to measure the speed of an individual vehicle within a stream of traffic.

Neighborhood Coordination Officers

The NCOs serve as liaisons between the police and the community, but also as key crime-fighters and problem-solvers in the sector. They familiarize themselves with residents and their problems by attending community meetings with neighborhood leaders and clergy, visiting schools, following up on previous incidents, and using creative techniques and adaptive skills.

Open Streets

A segment of street in which vehicular access is extremely limited in order to provide space for pedestrian use. This program, started during the 2020 COVID-19 pandemic, often involves partnerships between City agencies and businesses or civic organizations.

Pedestrian Safety Island

A designated area located at crosswalks that serves as pedestrian refuge separating traffic lanes or directions, particularly on wide roadways.

Precision Policing (in Traffic Enforcement)

Focusing targeted, highly visible traffic enforcement on the locations with the greatest number of crashes with injury. Greater use of technology will allow NYPD to identify the specific crash causing violations and evaluate the impact of enforcement efforts in these locations in order to adjust as necessary to reduce crashes.

Priority Corridor

A selection of streets measuring at least one mile in length in each borough, which were ranked on a pedestrian KSI per-mile basis. Corridors were selected from the top of this list until the cumulative number of pedestrian KSI reached half of the borough's total.

Priority Intersection

A selection of intersections with the highest rate of pedestrian KSI that cumulatively account for 15% of the borough's total pedestrian KSI.

Protected Bike Lane

Designated on-street bicycle lanes that are protected from motorized traffic by parked vehicles, barriers, or bollards.

Raised Center Median

A raised area separating traffic lanes or directions of travel, particularly on wide roadways

Safe Fleet Transition Plan

A plan implemented by NYC Fleet to ensure that specifications for new and replacement fleet units incorporate standard items for safety across all agencies and that the City procures the safest vehicles that are operationally suitable, while recognizing limitations in costs, proven technology, suppliers, and applicability across different types of units. The plan was first issued in May 2017 and updated in November 2018 calling for mandated technology and vehicle design changes for NYC-owned fleet vehicles. This plan will be updated again in 2021.

SIPs: Street Improvement Projects

are pedestrian or cyclist safety engineering interventions undertaken by DOT using an extensive toolkit of options to address each location's individual needs. A SIP can involve an intersection. corridor, or neighborhood. Actions can include changes in signals, creation of pedestrian space through curb or sidewalk extensions or plazas, bike lane additions, enhancements to markings, reconfiguration of roadway operations, construction of pedestrian islands, marking of crosswalks, installation of new features like raised crosswalks or chicanes, and accessibility or transit improvements.

Speed cushion

A modified speed hump designed for use on wider, busier roads that may be used by buses or emergency vehicles. These raised sections of roadway have cut-outs for the wheels of large vehicles, but still require passenger vehicles to slow down.

TEAs

Unarmed uniformed civilian members of the Police Department responsible for issuing parking summonses, directing traffic, towing vehicles, enforcing truck laws, and inspecting construction sites.

Telematics

A system of monitoring in real-time the behavior of a driver and a vehicle using devices like GPS and accelerometers to detect speeding, hard braking, and other unsafe maneuvers. A telematics device transmits this data to fleet management software, allowing managers to better understand how they need to help their drivers improve their safety.

TLC Safety Honor Roll

A list created by TLC of taxi and for-hire vehicle drivers who have, over four years or more, not had a single crash involving injury, a single traffic violation, or a single violation of TLC safety-related rules; and TLC-licensed companies with the lowest shares of vehicles involved in serious collisions in their sector over the past year.

Together for Safer Roads

A coalition of global private sector companies with an interest in improving their fleet safety and reduce deaths and serious injuries. TSR has partnered with the NYC Vision Zero Task Force to improve data and knowledge sharing.

Trade Waste Industry

Private companies that use trucks to collect garbage and recyclables from commercial businesses, including construction and demolition sites. In New York City, these companies are licensed and regulated by BIC.

Volpe Center

The United States Department of Transportation's John A. Volpe National Transportation Systems Center, based in Massachusetts, is the national center of transportation expertise. The Center assists governments, academia, and the private sector with transportation and systems design and strategy, and partnered with DCAS on the Safe Fleet Transition Plan and its update.

Vision Zero Helpful Links

Vision Zero Website

http://www.nyc.gov/html/visionzero/

Vision Zero View Map

http://www.nycvzv.info/

DOHMH Environment and Health Data Portal

http://www.nyc.gov/health/tracking

DOT Automated Speed Enforcement Program Report, 2014-2017

www.nyc.gov/html/dot/downloads/pdf/speed-camera-report-june 2018.pdf

DOT Safer Cycling Report: Bicycle Ridership and Safety in New York

www.nyc.gov/html/dot/downloads/pdf/bike-safety-study-fullreport2017.pdf

TLC Safety Honor Roll

https://www1.nyc.gov/site/tlc/about/tlc-safety-honor-roll.page

Safety First: Vision Zero Training for Professional Drivers

https://www.youtube.com/watch?v=VDNq2P6-kIY

TLC Vision Zero Project and Materials https://www1.nyc.gov/site/tlc/about/vision-zero.page

MODA Project Library

https://github.com/MODA-NYC/Project_SevereCrashes

Safety First: Vision Zero Training for Professional Drivers

https://www.youtube.com/watch?v=VDNq2P6-kIY

The Department of Health and Mental Hygiene (DOHMH) Data Linkage Project

https://www.ncbi.nlm.nih.gov/pubmed/28226252

Block by Block: Walking for a Healthier East Harlem Publication

https://www1.nyc.gov/assets/doh/downloads/pdf/dpho/blockby-block-east-harlem.pdf

TrafficStat

https://trafficstat.nypdonline.org/

NYPD Traffic Summonses Report

http://www.nyc.gov/html/nypd/html/traffic_reports/traffic_ summons_reports.shtml

Vision Zero Borough Pedestrian Safety Action Plans

http://www.nyc.gov/html/dot/html/pedestrians/ped-safety-action-plan.shtml

Updated Safe Fleet Transition Plan

https://www1.nyc.gov/assets/dcas/downloads/pdf/fleet/Safe-Fleet-Transition-Plan-Update-2018.pdf

"I see you" video

https://www.youtube.com/watch?v=ZbdcCZrHNjk

NYC Fleet Vision Zero page

https://www1.nyc.gov/site/dcas/agencies/vision-zero-fleet-safety.page

Press release on global fleet leadership council

https://www1.nyc.gov/assets/dcas/downloads/pdf/fleet/ Together-for-Safer-Roads-and-NYC-Fleet-Form-Global-Fleet-Leadership-Council.pdf)

UN Event Release

https://www1.nyc.gov/assets/dcas/downloads/pdf/fleet/ Together-for-Safer-Roads-and-Anheuser-Busch-Join-NYC-Connected-Vehicle-Pilot.pdf)

UNITAR Report

https://www.un-roadsafety-learn.org/partnership-report

"Distraction Shouldn't be Deadly" Report

https://www1.nyc.gov/html/dot/downloads/pdf/distractionshouldnt-be-deadly.pdf

Open Data Portal

https://opendata.cityofnewyork.us/

New York City Department of Design and Construction Page

https://www1.nyc.gov/site/ddc/about/about-ddc.page

TLC Bike Ride Event Video

https://www.youtube.com/watch?v=ABBeHfMg4E0

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Vision Zero Task Force

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Second Row: Lawrence Fung, Anna Caffarelli, Benjamin Furnas, Julia Kite-Laidlaw, Salvador Arrona

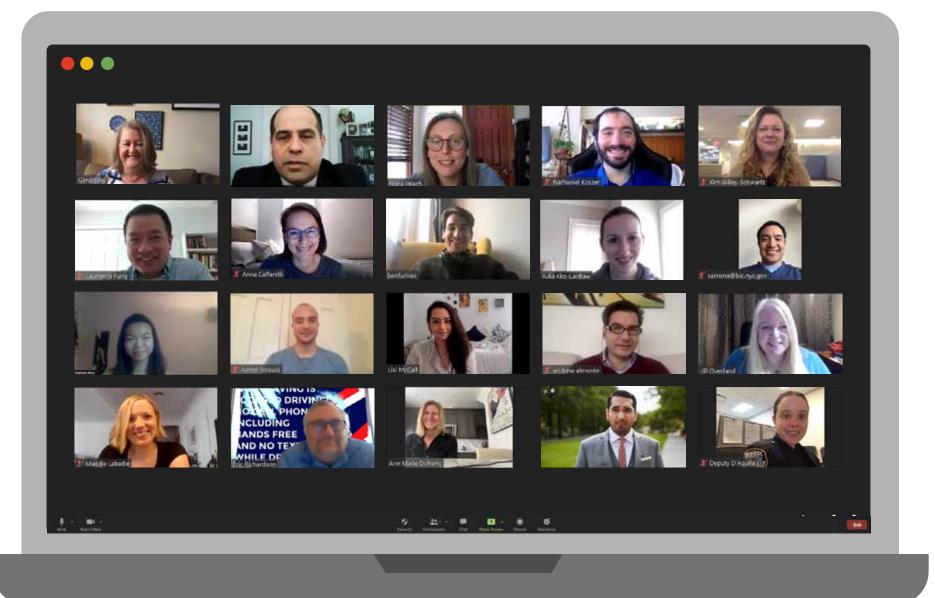
Andrew Almonte, Jill Hoexter

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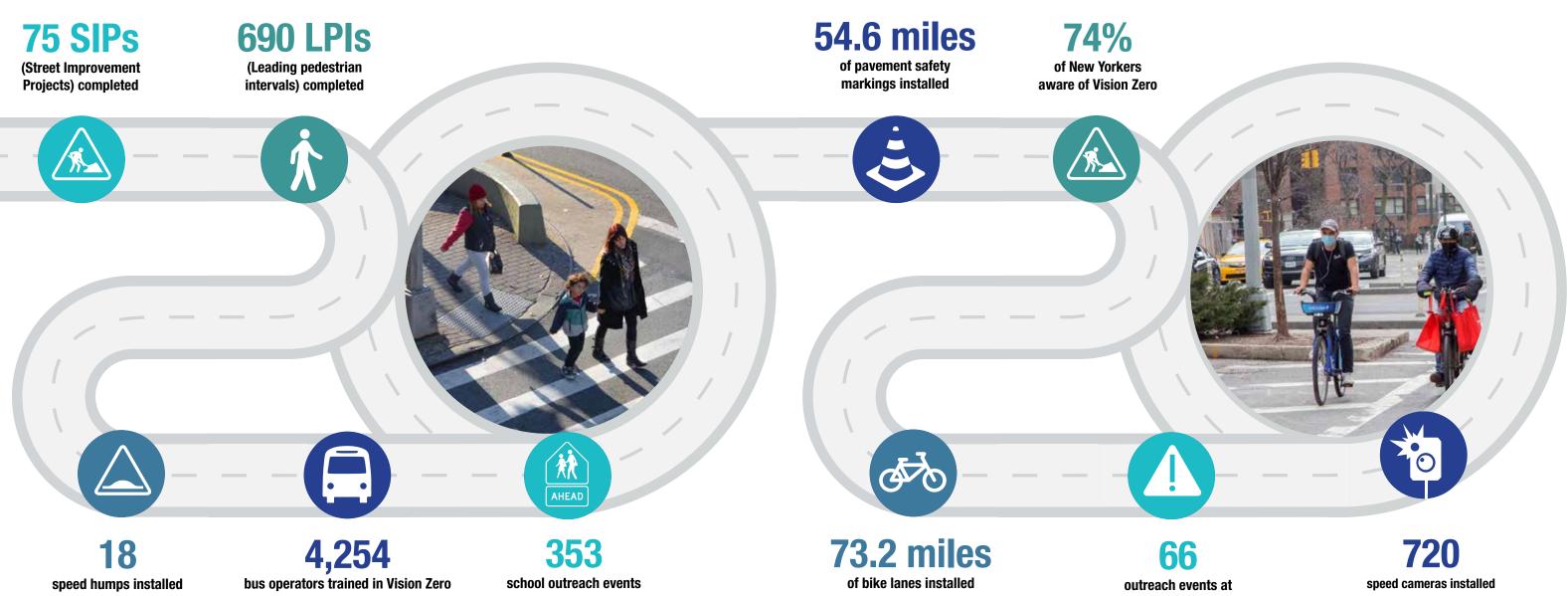












VIZION ZERO YEAR 7

BY THE NUMBERS 2020

senior centers





Crashes are preventable. Together, we can save lives.