

## **DRAFT DOCUMENT: MICROMOBILITY\* FOR PEDESTRIAN POPULATIONS IN NYC & OTHER MUNICIPALITIES**

As researched by Diane DiMartino, Teresa La Bosco and Iris Lipner: Members of Good Neighbors of Park Slope, Advocacy Committee

The Advocacy Committee of Good Neighbors of Park Slope (“ACGNPS”) asked us to review the experience with electric bicycles by other municipalities in light of safety concerns of vulnerable pedestrians and others<sup>1</sup>. This memo derives from publicly available sources (“Sources”).<sup>2</sup> It is intended as a briefing tool for ACGNPS activities on behalf of seniors<sup>3</sup>. Hopefully, this report adds to the substantial work of many dedicated people who have been involved in these issues and who make our neighborhood great. Our hope is that our various stakeholders reach consensus on how we can foster a seamless surface transportation system that is safe, fair, and efficient for everyone who uses our neighborhood sidewalks and streets.

As we go forward, we may heed the experience of the Mayor Briley of Nashville when he said “A city needs to be the municipal equivalent of the sober parent, the safety-conscious parent, and either ban the devices altogether or commit the resources to make them safer.” After a young man died, he said “when we have that sense of loss in our community as a result of something we put out there without necessarily thinking it all the way through, we have to go back and readdress the system.” Mayor Briley, Nashville, TN “Welcome to San Diego. Don’t Mind the Scooters”. (Eric Griffith 9/2/19)

States across the Nation recognize the seriousness and urgency of managing the use of e-bikes and other motorized devices. The range of nationwide alternatives, as described below, contains characteristics similar to of NYC’s Commercial Cycling approach as well as NYS’s proposed legislation. Moreover, the context of these rules and regulations are tailored to those municipalities’ unique needs, sizes, topography, and demographics; and would need to be tweaked to suit ours.

NYC’s Mayor established a policy that legalized e-bikes that have a 20 mph limit and that allows pay-as-you-go motorized bikes on the streets. The City, for the most part, treats e-bicycles as if they were bicycles. So, presumably NYC’s rules and regulations (some obsolescent) applicable to commercial cycling also apply to e-bikes. In the past, NYC enforced its ban on throttle activated bikes with fines and vehicle confiscation. This remedy has been abandoned. A fuller summary of NY’s approach may be found below.

### **Organization:**

- Section I: Definition of Micromobility/E-bikes for the Purposes of This Report
- Section II: NY and Electric-Bicycles
- Section III: Some Approaches Nationwide to Micromobility Issues
- Section IV: Recommendations

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\*Micromobility- <https://www.dictionary.com/e/tech-science/micromobility/>

<sup>1</sup> Hu, Winnie, 11/28/18, NYT, “In This Corner of New York City, It’s Gray-Haired Pedestrians vs. Bikes”

<sup>2</sup> Sources are solely responsible for the accuracy of the information derived from their materials. GNPS and its members and committees assume no liability for the content and it does not reflect the official views of GNPS, its members, and committees. Statistics can be moving targets. Sources often noted difficulty in determining whether a jurisdiction explicitly permits or prohibits e-bikes on paths and sidewalks where some have multiple definitions of e-bikes, and the e-bike industry, itself, is changing rapidly. Please consult Sources for comprehensive material they contain.

<sup>3</sup> The National Highway and Safety Administration report, “[Pedestrian Safety Workshop, a Focus on Older Adults](#)” recommends addressing the realities of aging, such as vision, hearing, cognition, physical mobility, falls. Situations that increase the likelihood of being struck by a bicycle or motorized devices (“Vehicles”) often involve intersections (turning Vehicles), stepping off the curb (curb ramp design) visual screens, crossing time at signals, backing up Vehicles (parking lots, behind parked vehicles, driveways) drivers not seeing pedestrians (distraction, low lighting), too much trust in systems. See also, “[Regulation of E-Bikes in North American Cities, A Policy Review](#),” Report NITC-RR-564, 8/20/14 prepared by the National Institute for Transportation and Communities and still relevant.

Section V: Some Thoughts

Attachment A: Types of Electric Bicycles and Motor Propelled Devices

Attachment B: Selected Laws around the Nation

Attachment C: NYS and NYC Rules and Regulations

Attachment D: Sources and Other Reference Materials

### **Discussion: What are the problems?**

The rapidly changing surface transportation landscape is growing around the use of e-bikes and other motorized two and three wheeled micromobility devices. National businesses without brick and mortar locations open to the public, dispatch delivery services. Other national businesses and ride share companies are installing 'pay-as-you-go electric bicycles'. NYC started a Commercial Cargo E-Bike delivery program. The ranges, types, and capabilities of e-bike devices and bicycles are growing rapidly and use the sidewalks and streets without effective oversight. All while the number of increasingly active aging pedestrians is growing, as is the number of vulnerable pedestrians and children.

There can be little doubt that a senior's use and enjoyment of our sidewalks is becoming more and more limited and a senior's attempt to cross the street can be a dangerous undertaking. It is difficult to assess the actual consequences of non-compliance with safety rules because, as it's been reported, NYC treats deaths from bike/pedestrian collisions as accidents and doesn't keep a tally of the number of collisions between cyclists and pedestrians.<sup>4</sup>The National Highway and Traffic Safety Administration's annual fact sheet, "Pedestrian and Bicyclist Data Analysis" shows that the greatest number of bicycle collision fatalities occur in the older age groups. See [www.nhtsa.gov](http://www.nhtsa.gov). While reckless use of electric powered devices is not the only danger, it is one that can be managed to everyone's benefit.

Neither the assertion the e-bikes can reduce the number of pedestrian deaths by reducing the number of cars on the road, nor the assertion that these vehicles are eco-friendly is supported by a study that considered the environmental effect of their manufacture, distribution, use and disposal of the vehicles and of their batteries. In fact, "this study clearly demonstrates that there is the potential for e-bikes to increase life-cycle emissions relative to the transportation modalities that they displace." For information about e-scooter injuries see the Consumer Reports investigation of 1,500 e-scooter injuries to users and to pedestrians across the nation, and the many hospitals that don't tract them, and the study by the American Medical Association, 1/25/2019, "Injuries Associated with Standing Electric Scooter Use."

The current NYS Bill and NYC regulations concerning commercial cycling may already be obsolescent. How, then, should the State and the City adapt to current conditions and anticipate the future challenges? Should we just enforce rules and regulations that already exist? Should these be changed? Should changes be blind or should they consider any effect on e-bike operators while, at the same time, benefitting national dispatchers<sup>5</sup>and e-bike suppliers.

### **Section I: What Is An E-Bike?**

Electric bicycles are similar to manually powered bicycles but have a small electric motor that provides pedal assistance ("e-bikes). These bicycles have working pedals that can propel the bicycle with or without the help of an electric motor. They can generally be divided into two categories: bicycle-style electric bikes and scooter-style electric bikes. Some have a throttle mode (or a combination of throttle and pedal assist), which, when engaged, propels the bike forward without pedaling at speeds over 20 mph. People may confuse the term "e-bike" for electric scooter type devices, which have different regulatory requirements than bicycles.

### **Section II: Where We Stand: New York And E-Bikes**

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<sup>4</sup> Goodman, David, 9/28/14, NYT, "Deaths Expose Chaos of Central Park's Loop"

## New York State:

The N.Y.S.DMV does not register electric bicycles or throttle electric bicycles. Their operation is prohibited in NYS. Some proposed changes to NYS law would exclude pedal assisted e-bikes up to speeds of 28 mph, from the definition of “motor vehicles” and allow them to use and to park on sidewalks, and to be shielded from impound and from fines. The most recent version of the proposed amendment was vetoed by the Governor, citing certain safety concerns and in the beginning of January 2020, the Bill was transferred back to the Assembly Transportation Committee. Senator Felder on January 23, 2020. Proposed legislation requires helmet use by every individual riding a bicycle, e-scooter, or e-bike in a city of 1 million or more. NYS already mandates helmets for bicycle riders up to the age of 14. The

(iii) NYC established rules and regulations for Commercial Cycling, some of which warrant update and all of which warrant

Governor’s version of the bill mandates helmets for riders of e-scooters and e-bikes aged 16 and 17. One site where progress on the Bill can be monitored is <http://open.nyssenate.gov>.

## **New York City**

Although e-bikes are banned in NYS, enforcement of this law varies at the local level.

(i) The Mayor modified policy so as to legalize e-bikes with a 20 mph speed limit and, among other criteria, lack throttle capacity or additional motorized equipment.

(ii) Businesses that use bicycles for commercial purposes, may not permit any employee to operate a motor scooter on behalf of its business. Previously, NYC enforced the ban on throttle propelled electric bikes with fines and confiscation. NYC has doubled the fines for using motor scooters on public thoroughfares.

(iv) Lyft has been awarded the exclusive right to install an initial fleet of several hundred pay-as-you go e-bikes. Lyft claims to have remedied the brake and battery issues that led it suspend its venture into NYC

(v) A Commercial Cargo Bike Program with automatic extension of 6 months each, rolled out in midtown and downtown. E-bikes with a maximum speed of 12 mph are intended to replace delivery trucks.

## **Commercial Bicycling in NYC**

Businesses that use bicycles (and now, e-bikes, above) for commercial purposes must comply with certain laws and rules. Failure to do may result in a fine. These businesses must:

(i) Submit a roster of commercial bicyclists who completed The Commercial Bicyclist Safety Course, as required;

(ii) Register their business with DOT, if their business doesn’t have a site in NYC open to the public;

(iii) Post the Commercial Bicyclist Safety Poster where commercial bicyclists can see it and in languages they understand;

(iv) Maintain a roster that includes each commercial bicyclist’s names, address, date of employment and discharge from employment, unique 3 digit ID number, and confirmation that the bicyclist has completed the DOT Commercial Bicyclist Safety Course;

(v) Provide delivery cyclists with (a) a unique 3 digit ID number, (b) retro-reflective upper body apparel with the business’ name and the cyclists 3 digit ID on the back; a helmet, a business ID card.

(vi) Equip commercial bicycles with a bell or other audible device, not a whistle or siren; reflectors on each wheel, back and front; brakes; a sign affixed as required.

(vii) Motor scooters are prohibited and businesses are liable for violations by their employees that operate motor scooters in connection with the business. Businesses can be liable for violations of NYC code committed by any employee while that employee is operating a motor scooter on behalf its business. Local Law 2013/41.

## **Enforcement in NYC**

NYCDOT's Commercial Bicycle Unit (under 10-157 and section 10-157.1 of the NYC Administrative Code) inspects businesses using bicycles for commercial purposes and responds to 311 complaints.

NYPD enforces traffic-related moving violations against bicycles and (section 10-157 and section 10-157.1) against businesses.

### **Section III Some Approaches Nationwide to Micromobility Issues**

Some jurisdictions, including Park City, Utah, Chicago, Nebraska, and New York are considering amendments to their vehicle codes or local ordinances. (See Attachment B)

#### **Definitions**

States and local municipalities also recognize the importance determining what is considered an e-bike, and where and how e-bikes can operate. Without definition of an electric-assisted bicycle, confusion about regulations among a moped, motorcycle, motorized bicycle, motor scooter, scooter and other motor assisted/propelled devices. The numbers below indicate the approximate number of States.

30 don't define e-bikes as vehicles apart from mopeds, et.al.

10 use the Federal definition of a low speed electric bicycle;

12 use "motorized bicycle"

11 use "moped";

7 use "electric assisted bicycle";

3 use electric bicycle";

variations of the above by others.

#### **Treatment**

e-bikes are treated as manual powered bicycles by 24;

e-bikes are considered motor vehicles by 10;

some combination of the above by 27.

#### **Driver's License**

27 require operator's license

#### **Registration**

38 do not require registration, some require a certificate or endorsement

#### **Minimum Age**

38 require 16 yr. old minimum age, others minimum required ages range from 14 years old up

#### **Speed Limit**

22 use 20 mph

6 use 25 mph

16 use 30 mph

#### **Special Equipment**

Most States do not require a helmet for riders over a specified age

States that treat e-bikes as mopeds or motor-driven cycles require helmets

One State allows posting of insurance of at least \$10,000 in lieu of helmet

A couple of States allow the use of a bicycle helmet in place of a motorcycle crash helmet

### Permissible Locations

Where considered vehicles e-bike are banned on sidewalks, where treated as bicycles a minority of States ban from sidewalks and a greater number of States allow on sidewalks, some with conditions.

Some treat as bicycles but restrict the use on sidewalks.

Approximately 18 are silent or unclear.

### Claims By Scooter Companies

CityLab.com of NYC reported that claims by scooter companies that scooters reduce the number of pedestrian deaths by reducing the number of cars on the road, that they are safer than traditional modes of transportation, and that they are eco-friendly, appear to be unsupported.

Portland, OR established a permit program and capped the number of scooters to about 2,000 roughly divided among 3 companies- Bird, Lime and Skip in exchange for data used to assess whether scooters live up to their promise to reduce pollution and congestion. Portland required 100 scooters from each company and were positioned in lower-income neighborhoods with poor access to Portland's transit system. The 15mph speed limit was exceeded and the agreed upon number of scooters were not deployed in the lower-income neighborhoods. When Portland's pilot program ended, all of the e-scooters were cleared off the streets. A second pilot program is being planned. (NYT 6/19/19).

### Pedestrian Safety

Advocates for the disabled said they would have trouble moving through the streets if the scooters were zooming around or left on sidewalks. Advocates for older people said rampaging scooters would also encourage them to seek the safety of their homes, becoming shut-ins" (NYT ). "There are no official numbers illustrating how frequently pedestrians are injured by scooters, but doctors in 5 cities reported that badly injured pedestrians are showing up in trauma centers multiple times a week. Injuries include shattered knees, teeth knocked out, broken hips, bone fractures, broken ribs, joint injuries, soft tissue injuries, lacerations, deep abrasions, fatalities, traumatic brain injuries." ( Medical Director, Nethercutt Emergency Center in Southern California. ) The AMA reported that among scooter injuries 6.0% were admitted to the hospital and .8% admitted to the ICU.

Moreover, "The dangers to pedestrians pale in comparison with the dangers to riders. 'Right now, a stunning number of e-scooter users are getting seriously hurt" (William Wallace, Consumer Reports Austin TX) reported that nearly half of injured riders had head injuries and less than 1% were wearing a helmet when they were injured. (Epidemiology, Electric Scooter Study 5/2/19)

### Regulation By Permits

Many States instituted a permit system and rules and regulations for the use of scooters in their jurisdictions. When San Francisco experienced the arrival of thousands of share electric scooters in a year, it instituted a permit system limited to Skip and Scoop, locking out Lime and Bird. Some States, e.g. Colorado, Virginia, Washington report that permits, and laws, such as speed limits, conditions for sidewalk use, are widely ignored and rarely enforced.

Skepticism about scooter services is rising. Companies like Bird and Lime are raking in hundreds of millions of dollars in investment capital and ride-sharing companies have entered a skyrocketing market. Scooter companies sometimes engage in a strategy to just show up in cities without permission and ask for forgiveness later. When Washington established a permit program to limit the impact of "scooter invasions" and limit companies to deploy up to 600 scooters, Bird, A \$2 billion company, argued that the limitation would make it "impossible" to provide full service. Portland city commissioner, Chloe Eudaly, commented the "a lot of these companies roll into town, flout local regulations, see what they can get away with and how far they can push cities to accommodate them".

As a result, cities have been shocked to discover that thousands of electric scooters have been dropped onto their sidewalks seemingly overnight, causing a commotion on sidewalks and scenes of scooters

strewn across wheelchair ramps and doorways. Officials in San Francisco and Santa Monica have been sending cease and desist notices, and some even filed charges against scooter companies. Others have been confiscating scooters. Santa Monica filed a 9 count misdemeanor criminal complaint against Bird for operating without a license and for failing to comply with citations. Bird pleaded no contest and paid a settlement of \$300,000. (1/15/18) Other cities impounded the scooters. (NYT 6/19/19).

More than 4,000 electric scooters appeared in the streets of Nashville in a year. People abandoned them in the middle of sidewalks, in doorways, at street corners where pedestrians try to cross. In a city dense with tourists, the introduction of more than 4,000 tripping hazards is not a civic boon. Margaret Renkl, Scooter Madness, Nashville NYT, 6/17/19

In cities like Santa Monica, Beverly Hills, according to the Los Angeles Times, fed up residents are “waging guerilla war against the devices” – setting them on fire, throwing them from balconies, and burying them at sea. A newly formed company in San Diego has hauled away 12,500 scooters parked on private property or blocking entrances to local businesses. They charge Bird, Lime, and others a retrieval fee of \$50 a scooter plus \$2 for each day of storage.

#### **Section IV: Recommendations**

Make safety a clear priority;  
 Adopt a generic definition of vehicles propelled by motors/micromobility users;  
 Establish regulations for pay-as-you-go suppliers  
 Establish caps on the number of vehicles in any one area.  
 Better enforcement.

#### **Suggested Requirements:**

Require NYC ID (universally available in NYC);  
 Increase predictability by following the same traffic laws as operators of motor vehicles;  
 Operators must generally ride as close as is practical to the right-hand side of the road;  
 Must yield to pedestrians;  
 Must use bicycle lanes, where available  
 Must wear helmets

#### **Commercial Use**

Must comply with NYC guidelines for commercial bicycles  
 Courier companies must require annual inspections of e-bikes on their rosters  
 Courier companies must provide liability insurance, covering the driver and third parties.  
 Courier companies must be authorized annually by NYC government to operate.  
 Courier companies must monitor the number and locations of accidents and submit a monthly report of same to NYC authority.

**Prohibits** – See Attachment C.

#### **Section V: Some Thoughts**

Sidewalks and crosswalks need to be safe for micromobility in our neighborhood and city. An informed community of riders and walkers would help us achieve our goal. Enforcement of laws would contribute to predictability on the streets. We now have to figure out how to blend all motor propelled vehicles into a safer surface transportation system.

February 27, 2020

## **Attachment A: Types of Electric Bicycles and Motor Propelled Devices**

[https://ppms.trec.pdx.edu/media/project\\_files/NITC-RR-564A\\_Regulations\\_of\\_E-Bikes\\_in\\_North\\_America\\_r4Durz3.pdf](https://ppms.trec.pdx.edu/media/project_files/NITC-RR-564A_Regulations_of_E-Bikes_in_North_America_r4Durz3.pdf) See photos and descriptions beginning on page 2.

### TABLE OF CONTENTS

What are e-bikes?.....	2
Bicycle-style electric bikes (BSEB).....	3
Scooter-style electric bikes (SSEB).....	7

**WHAT ARE E-BIKES?** Electric bicycles (e-bikes) are similar in geometry to human-powered bicycles but have a small electric motor that provides pedal assistance and allows riders to accelerate, climb hills, and overcome wind resistance more easily than manually powered bikes. They are part of a broader classification of motorized bicycles, which includes a range of bicycles with motors, from gasoline- and diesel-powered internal combustion engines, to even steampowered engines. The modern electric variety of motorized bicycles emerged in the early 1980s in Japan as a way to make cycling easier for the elderly. By 2001, Japan had sold over 900,000 units (Rose & Cock, 2003). E-bikes can be generally divided into two categories: bicycle-style electric bikes (BSEB) and scooter-style electric bikes (SSEB). The authors have chosen to use these two categories in order to group different e-bike styles and to facilitate the discussion in the report around federal, state, and local 2 definitions. Because the e-bike market is quickly changing and evolving, there is more of a spectrum of low-speed electric bicycles that range from more traditional bicycles to scooters than there are distinct classifications, all of which could be officially classified as an e-bike by the federal CPSC definition. As discussed in this report, the variety of e-bikes on the market have caused confusion for policymakers, the general public, retailers, law enforcement, media and other groups in understanding what an electric bicycle is and how it may differ from other devices, such as scooters, mopeds, motorcycles, bicycles, and Segways. We are hoping that by using BSEB and SSEB, it will help the reader understand the different broader categories of e-bikes on the market. In general, we use characteristics such as geometry, functional pedals, speed, additional safety components (e.g., headlights, mirrors, and turn signals) and motor type to describe BSEBs and SSEBs.

**Bicycle-style electric bikes (BSEB)** In North America, many terms are associated with the general classification of bicycle-style electric bicycles (BSEB), sometimes called low-powered electric bicycles or low-speed electric bicycles. In general, BSEBs have an electric motor powered up to 750 watts that goes slower than 20 miles per hour. These bikes have working pedals that are meant to propel the bicycle with or without the help of the electric motor. BSEBs can be further divided into two broad categories: powered bicycles (PB) and powerassisted bicycles (PAB), or pedelecs (Table 1). The term pedelec is mostly used in Europe<sup>3</sup> and sometimes used in the U.S., but it is more of an insider's term and does not appear in the legal definitions. S-pedelecs, another common classification in Europe, <sup>4</sup> are bikes with motor power greater than 250 watts and can attain speeds up to 27.9 mph (European Parliament & European Council, 2003). In the U.S. this term is rarely used, and there are not many S-pedelec electric bikes on the market. In most cases, these types of bikes would potentially be classified as a moped or motorized bicycle in local jurisdictions.

### **Attachment B: Selected Laws around the Nation**

Regulations of E-Bikes in North America, A Policy Review," August. 2013, MacArthur, John and Kobel, Nicholas for National Institute for Transportation Communities

Regulations of E-Bikes in North America ([https://ppms.trec.pdx.edu/media/project\\_files/NITC-RR-564A\\_Regulations\\_of\\_E-Bikes\\_North\\_America\\_rDurz3.pdf](https://ppms.trec.pdx.edu/media/project_files/NITC-RR-564A_Regulations_of_E-Bikes_North_America_rDurz3.pdf)). Last edited 2/5/2020

Wikipedia contributors ""Electric Bicycle Laws. Wikipedia The Free Encyclopedia last edited 2/5/2020 "[https://en.wikipedia.org/w/index.php?title=Electric\\_bicycle\\_laws&oldid=939355584](https://en.wikipedia.org/w/index.php?title=Electric_bicycle_laws&oldid=939355584)"

[https://ppms.trec.pdx.edu/media/project\\_files/NITC-RR-564A\\_Regulations\\_of\\_E-Bikes\\_in\\_North\\_America\\_r4Durz3.pdf](https://ppms.trec.pdx.edu/media/project_files/NITC-RR-564A_Regulations_of_E-Bikes_in_North_America_r4Durz3.pdf)-- See Appendix A for Electric Bicycles Laws by State

"State Electric Bicycle Laws/A Legislative Primer" National Conference of State Legislatures, [State Electric Bike Laws-A Legislative Primer NCSL](#)

[www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812502\\_pedestrian-and-bicycle-data-analysis-tsfr-research-note.pdf](http://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/812502_pedestrian-and-bicycle-data-analysis-tsfr-research-note.pdf)

"State Electric Bicycle Laws/A Legislative Primer," National Conference of State Legislatures, [ncsl.org](http://ncsl.org)

"E-Scooter Ride-Share Industry Leaves Injuries and Angered Cities in its Path," Consumer Reports, [consumerreports.org](http://consumerreports.org)

North Carolina community based program--[Http://www.walk-wise.org](http://www.walk-wise.org)  
[Www.pedbikeindo.org/data/library/details.cfm?id435](http://www.pedbikeindo.org/data/library/details.cfm?id435)

"Pedestrian and Bike Safety Laws Enacted in 2019" came from the Bill Tracking section on the website of the National Conference of State Legislatures, 444 North Capitol Street NW, Suite 515, Washington DC 20001, tel 202 624 5400, fax 202 737 1069. NCLS.org [Https://ncsl.org](https://ncsl.org)

Other Countries:

Canadian- [Www.ncc-cc'd.gc.ca](http://www.ncc-cc'd.gc.ca)

China - Oster, Shaun (0/16/2010) "electric Bicycles Deadly! Co on China's Streets" [Https://www.wsj.com/articles](https://www.wsj.com/articles), retrieved 9/16/16

Israel-Erider Motors, "Israel Law on Electric Bicycle" 4/13. [Http://eridermotore.com](http://eridermotore.com)



**Attachment C: NYC and NYS Rules and Regulations**

**Vision Zero** The Federal Vision Zero Network is an ample resource for information, policies and procedures relevant to that initiative. <http://www.visionzeronetwork.org>. Some additional Federal programs include the following. “ Safe Routes to School Program” “Roadway Safety Improvements for Older Drivers and Pedestrians” “Roadway Safety, Bicycle and Pedestrian Safety “ “Non-Motorized Transportation Pilot Program” [www1.nyc.gov/site/visionzero](http://www1.nyc.gov/site/visionzero)

<https://www1.nyc.gov/html/dot/html/bicyclists/bike-ridership-safety.shtml>

Summary of Bicycle Law, Rules and Regulations: <https://www1.nyc.gov/html/dot/downloads/pdf/bicyclerules-english.pdf>

NYS Bill : Consumer Product Safety Act, Pub.L. 107-319, 15 USC 2085(b) <https://www.cpsc.gov>  
The federal highway administration bicycle and pedestrian program coordinator for newyork is Emmett [McDevitt@dot.gov](mailto:McDevitt@dot.gov) NY Division Office O'Brien Federal Building Room 719 Albany NY 12207

NYC Commercial Bikes: <https://www1.nyc.gov/html/dot/html/bicyclists/commercial-cyclists.shtml>

## **Attachment D - Sources and Other Reference Materials**

The sources appearing here have been linked to their full text online web source. They are chiefly listed in alphabetical order by Last Name, when apparent, of author. An attempt has been made to link all references cited to the full text of online source; however some may be missing.

-----  
 Aratani Laura "The Guardian," 15 Feb 2019

['It's persecution': New York City delivery workers fight electric bike ban-Murkey legal areas](#)

[Austin, Texas Epidemiology report](#) on Dockless Electronic Scooter Related Injuries

Barone, Vincent "AM New York", January 24, 2019

[City food delivery workers on e-bikes could see legal relief soon](#)

Felton, Ryan Consumer Reports, February 06, 2019

[Scooter ride share industry leaves injuries and angered cities](#)

Fitzsimmons, Emma G. NYT June 19, 2019

[Electric Scooters Are Coming to New York, but You Can't Rent One in Manhattan](#)

Goodman, David. New York Times, 9/28/2014

Article about chaos of Central park loop: [www.nytimes.com/2014/09/29/nyregion/deaths-expose-chaos-of-central-parks-loop.html?smid=nytcore/ios-share](http://www.nytimes.com/2014/09/29/nyregion/deaths-expose-chaos-of-central-parks-loop.html?smid=nytcore/ios-share) Hollingsworth, Joseph 2019, Environ. Red. Let. 1408403

["Are e-scooters polluters](#)

Hu, Winnie NYT, November 27, 2018

[In This Corner of NYC, it's Gray-Haired Pedestrians vs. Bikes,](#)

Leonhardt, David. New York Times, December 2, 2019

[Scooters vs. People"](#)

McDonough, Annie. City and State NY April 24, 2019

[Legalizing e-bikes and e-scooters failed to make it through the state budget, but proponents haven't given up.](#)

MacArthur and Kobel," [Regulation of E-Bikes in North America, NITC](#) 2014 Many resources

[Mayor DeBlasio announces Commercial Cargo Bike Delivery Program](#) Dec 4, 2019 (not referenced – added by DD)

McGeehan, Patrick. NYT Nov. 6, 2019

[Dangers of the Electric Scooter Craze - Hoboken](#)

[National Highway Traffic Safety Administration.](#)

[Pedestrian Safety Workshop: A Focus on Older Adults NHTSA](#)

[NHTSA BICYCLIST AND PEDESTRIAN SAFETY PAGES](#)

[https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/14046-pedestrian\\_bicyclist\\_safety\\_resources\\_030519\\_v2\\_tag.pdf](https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/14046-pedestrian_bicyclist_safety_resources_030519_v2_tag.pdf)

Nir, Sarah Maslin and Jeffrey E. Singer, "The New York Times," January 4, 2020

[Electric Bike Thefts Threaten Livelihoods, and the Lives, of Food Deliverers](#)

[Other cities in Vision Zero](#)

NYC Department of Transportation, Division of Traffic Operations

[DOT Safe Cycling in NYC](#) (bicycle rules)

[NOTICE OF ADOPTION relating to pedal-assist bicycles \(DOT NYC\)](#)

[NYPD bicycle crash data report](#)

Renkl, Margaret NYT June 17, 2019

[Scooter Madness](#)

Robbins, Christopher "Gothamist," January 3, 2019

[NYPD Tells Officers Stop Fining E-Bike Delivery Cyclists](#)

Shanahan, Ed. New York Times, December 26, 2019

[Cuomo Vetoes E Bikes and Scooters](#)

Consumer Product Safety Act, Pub.L. 107-319, 15 USC 2085(b) <https://www.cpsc.gov>

[Consumer Product Safety Act](#)

For further information on e-bike laws, research, news and industry updates:

[People for Bikes.](#)

[Transportation Alternatives](#)

Ebike pay as you go articles

[Http://www.wired.com/story/injuries-force-lyft-hit-brakes-e-bikes-ambitions](http://www.wired.com/story/injuries-force-lyft-hit-brakes-e-bikes-ambitions)

For the discussion of how collision statistics are kept:

[Discussion of how collision statistics are kept](#)

Walking/pedestrians references-<https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/walkingchecklist.pdf>

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