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E-BIKES, MOPEDS AND SCOOTERS

# 21 Ways to protect pedestrians, delivery workers, and cyclists

Report of the  
Symposium on Reimagining Micromobility Safety  
Midtown Community Justice Center



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State Senator  
**Brad Hoylman-Sigal**

COUNCIL  
MEMBER  
**GALE  
BREWER**



# Background

New York City's streets have changed dramatically over the past decade. Electric bikes have not only proliferated – they have become the essential tool of a booming food-delivery economy. This shift is tangible for every street user, from pedestrians and drivers to the most dedicated cyclist. For many, the new street ecosystem can feel disorderly, chaotic, and complicated. The conflict has been especially acute on Manhattan's West Side, which contains some of the densest residential neighborhoods in the world.

As one of the first “problem-solving courts,” Midtown Community Justice Center (MCJC) has long sought to deploy restorative approaches to address safety and quality-of-life issues in Manhattan. An increase in moped and e-bike-related misdemeanors, as well as conversations with Midtown community partners, demonstrated the need for durable, nonjudicial solutions to address the proliferation of new street uses.

That's why Midtown Community Justice Center, along with State Senator Brad Hoylman-Sigal and Councilmember Gale A. Brewer, convened a symposium titled: “Reimagining Micro-Mobility Safety in NYC.” Participants included elected officials, transportation advocates and experts, lawyers, and City agencies. The symposium had three primary goals:

- 1) Identify the obstacles to building a safe micromobility network in New York City;
- 2) Analyze the causes of these obstacles;
- 3) Isolate policies to promote a safe micromobility economy that serves both workers and consumers.

This report lays out a summary of the Symposium's findings and a survey of promising policies. While some of our analysis and conclusions have already been discussed by others, this report seeks to provide a comprehensive and unifying presentation. It also identifies areas of concern that have received less policy attention.

# Introduction

In April of 2020, the New York State legislature legalized the use of “bicycles with electric assist” on New York City streets up to 25 miles per hour. The change was driven by two factors: 1) the increased availability of powered micromobility devices to average consumers and 2) the enormous use of third party food delivery apps. By April of 2022, meal delivery service had grown 162% year-over-year.<sup>1</sup> As of 2021, three companies accounted for almost every app-based food delivery in New York City: DoorDash, Uber Eats, and Grubhub.<sup>2</sup>

Four years later, e-bikes occupy more and more of the streetscape. This in part reflects the expansion of cycling infrastructure, with over 1,500 miles of bike lanes and more than 650 miles of protected bike lanes installed, and growth of Citi Bike, New York City’s bike share network.<sup>3</sup> E-bike ownership more than tripled from 3% of active cyclists in 2019 to 10% in 2022, and Citi Bike reported that e-bikes accounted for 39% of trips in 2022 while only composing 20% of the bike share fleet.<sup>4</sup>

E-bikes (and, increasingly, gas-powered mopeds) have become essential for commercial use among the city’s 65,000 third party food delivery workers, known colloquially as deliveristas. According to data released by the New York City Department of Consumer and Worker Protection (DCWP), deliveristas made an average of 2.6 million trips per week in Q1 of 2024.<sup>5</sup>

However, the rapid increase in e-bike ridership for personal and commercial uses has outpaced New York City regulations and infrastructure. The New York City Department of Transportation (DOT) has missed every benchmark to install 250 new miles of protected bike lanes by 2026 (just 5.2 miles were installed in 2023 out of the required 50). Cycling deaths in New York City are at a 24-year high, with 30 fatalities in 2023 – 23 of which were on e-bikes. Two pedestrians died in 2023 as a result of collisions with e-bikes.<sup>6</sup> Legislation by the New York City Council increased hourly wages for deliveristas to \$19.56, but unsafe and illegal practices by third party delivery apps exposes them to wage theft and other exploitative practices. And in 2023, lithium-ion battery fires resulted in 250 fires and 18 deaths.<sup>7</sup>

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<sup>1</sup> [Bloomberg](#) Second Measure, “Which Company is Winning the Restaurant Food Delivery War?” 2024.

<sup>2</sup> [McKinsey & Company](#), “Ordering In: The Rapid Evolution of Food Delivery,” 2021

<sup>3</sup> [DOT](#), “Cycling in the City,” 2022

<sup>4</sup> [Lyft](#), “Multimodal Report,” 2023.

<sup>5</sup> [DCWP](#), “Restaurant Delivery App Data: January-March 2024.”

<sup>6</sup> [NYT](#), “Why Bicycle Deaths in New York City Are at a 24-Year High,” March, 2024.

<sup>7</sup> [NYT](#), “E-bike Battery Fire Caused Fire That Killed Young Journalist, Officials Say,” 2024








The omnipresence of the e-bike in New York City – and, increasingly, the moped – has been met with fear and anger in some communities. These concerns materialize as frequent phone calls to elected officials, increased media attention, presence at community meetings, and the formation of new civic groups. The growth of e-bike use also led to the introduction of at least 34 bills in the New York State Senate and 49 in the New York City Council related to e-bikes, lithium-ion batteries, and mopeds since 2023.

Facing this surge of new and existing forms of micromobility, New York State has constructed a complicated web of overlapping rules (Figure 1). The Vehicle and Traffic Law (VTL) only recognizes e-bikes, mopeds (officially referred to as “limited use motorcycles”), and e-scooters. E-bikes and mopeds in turn contain subclasses defined by characteristics such as speed and design. Class 1 e-bikes have motors that engage when the rider pedals (known as “pedal assist”). Class 2 and Class 3 e-bikes have a hand throttle, which allows them to accelerate more quickly and without using pedals. Micromobility vehicles outside this spectrum, such as onewheels and electric skateboards, cannot legally be used on City streets. E-bikes cannot operate in excess of 25 miles-per-hour and e-scooters cannot exceed 15 miles-per-hour. Unlike mopeds, E-bikes and e-scooters can be operated without a license, registration, or insurance, and can be ridden in bike lanes. However, all two-wheeled vehicles must follow the traffic laws as cars. They must yield to pedestrians, stop at red lights, and cannot ride on sidewalks, with very limited exceptions.<sup>8</sup>

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<sup>8</sup> Local Law 154 of 2019 permits cyclists to follow “leading pedestrian intervals.” § 19-176 of the New York City Administrative Code permits cyclists under the age of 14 to ride on sidewalks.

**Figure 1**

<b>E-BIKES &amp; MORE</b> ▼ Know the difference <small>Not everything is an e-bike. Know the differences - and always ride legally and safely.</small>	<b>E-BIKE CLASS 1</b>	<b>E-BIKE CLASS 2</b>	<b>E-BIKE CLASS 3</b>	<b>MOPED CLASS C</b>	<b>MOPED CLASS B</b>	<b>MOPED CLASS A</b>	<b>E-SCOOTER</b>
							
	Pedal assist	Throttle with pedals	Throttle with pedals	Limited use motorcycle	Limited use motorcycle	Limited use motorcycle	Under 100 lbs
<b>How fast can I go?</b>	20 MPH	20 MPH	25 MPH	20 MPH	30 MPH	40 MPH	15 MPH
<b>Do I need a Driver's License?</b>	NO <small>(Must be 16)</small>	NO <small>(Must be 16)</small>	NO <small>(Must be 16)</small>	YES	YES	YES <small>(Plus M endorsement)</small>	NO
<b>Does my bike need a license plate?</b>	NO	NO	NO	YES	YES	YES	NO
<b>Does my bike need a Vehicle Identification Number (VIN)?</b>	NO	NO	NO	YES	YES	YES	NO
<b>Do I need to register my bike with the DMV?</b>	NO	NO	NO	YES	YES	YES	NO
<b>Can I ride in bike lanes?</b>	YES	YES	YES	NO	NO	NO	YES
<b>Can I ride in vehicle lanes?</b>	YES*	YES*	YES*	YES**	YES**	YES**	YES*
<b>Can I ride on bridges?</b>	YES <small>(Only in bike lanes)</small>	YES <small>(Only in bike lanes)</small>	YES <small>(Only in bike lanes)</small>	YES <sup>+</sup> <small>(Only in vehicle lanes)</small>	YES <sup>+</sup> <small>(Only in vehicle lanes)</small>	YES <sup>+</sup> <small>(Only in vehicle lanes)</small>	YES <small>(Only in bike lanes)</small>
<b>Can I ride in park drives and greenways?</b>	YES	YES	YES	NO	NO	NO	YES
<b>Do I need to wear a helmet?</b>	RECOMMENDED <small>(YES, if working)</small>	RECOMMENDED <small>(YES, if working)</small>	YES	RECOMMENDED	YES	YES	RECOMMENDED

\* Vehicle lanes with speed limits no greater than 30 MPH \*\* Right lane and/or shoulder, except when making a left turn  
<sup>+</sup> Except the Brooklyn, Manhattan, Queensboro and Williamsburg Bridges

Source: NYCDOT

# Recommendations

Through conversations with delivery workers, New York residents, advocates, transportation planners, and city agencies, four central problems emerged:

- Street infrastructure is inadequate for pedestrians, cyclists, and delivery workers.
- Algorithms by food-delivery companies incentivize workers to behave dangerously.
- Delivery workers don't have access to safe battery-charging infrastructure or quality bikes and batteries.
- Delivery workers are subject to exploitative and illegal labor practices.

In light of these four central issue areas, this report makes the following recommendations:

- Build more double-wide bike lanes to comfortably and safely accommodate more users.
- Implement universal “daylighting” in New York City to maximize visibility at intersections.
- Increase the number of two-way bike lanes to disincentivize delivery workers and cyclists from riding on the sidewalk.
- Install an expansive network of protected bike-parking to ensure workers park their bikes at intersections, rather than ride on the sidewalk.
- Explore new kinds of infrastructure to reduce pedestrian-cyclist conflicts at major intersections.
- Ensure mopeds are licensed and registered by requiring the registration to occur at the point-of-sale.
- Establish regulations to safeguard delivery workers from dangerous incentives and unjustified, sudden deactivation.
- Protect workers and pedestrians by requiring food-delivery companies to provide liability insurance for workers.
- Mandate the registration of e-bikes used for commercial purposes to enhance enforcement.
- Make food-delivery companies pay their fair share for worker protection policies and street safety upgrades via a surcharge on food deliveries.
- Implement a rebate for e-bikes to improve access to safe delivery vehicles.
- Improve regulation of online sellers of e-bikes that don’t comply with NYC battery standards.
- Ensure battery-charging stations targeted at delivery workers are placed in optimized, strategic locations.
- Permit *qui tam* actions to recover unpaid wages on behalf of workers subject to mandatory arbitration.
- Increase civil penalties for unpaid back wages.

- Obligate food-delivery companies to share the contact information of their workers with DCWP to ensure the City can properly inform workers of their rights.
- Mandate food-delivery companies implement fair and transparent tipping policies.

# Problem #1:

## Street Sidewalk Safety

### Inadequate Cycling Infrastructure

New York City's system of bike lanes has not kept pace with surging demand. When the City launched its first parking-protected bike lane in 2007, the food-delivery apps didn't exist, the introduction of Citi Bike was five years away, and daily cycling trips were one third of their current total.<sup>9</sup> In other words, the existing cycling infrastructure is struggling to accommodate the diversity and quantity of riders, vehicles, and speeds. While the average pedal-powered cyclist will average between 10-15 miles per hour on city streets, electric bikes can easily exceed 20 miles per hour. In a typical, 6-foot wide parking protected bike lane, bikers on e-bikes can't comfortably pass slower cyclists, creating dangerous riding conditions for all.

Furthermore, when bicycle lanes are absent, cyclists and delivery workers are subject to a deadly streetscape. In 2023, New York recorded its deadliest year for cyclists since 1999.<sup>10</sup> Delivery workers are uniquely at risk. With a fatality rate of 36 per 100,000 workers, food delivery is one of the most dangerous professions in New York City – far more dangerous than even construction, which historically held that “distinction.”<sup>11</sup>

### Bikes Breaking Traffic Laws

Bike riders in New York City frequently run red lights. It's also not uncommon to see bikers riding against traffic or on the sidewalk. All of these actions are already illegal. Unfortunately, there is not enough data to quantify the full picture. This is because, first, a share of crashes go unreported – especially less serious crashes. Second, the diversity of micromobility vehicles (mopeds, e-bikes, e-scooters), makes accurate data tracking difficult, given the police don't always collect such granular collision data. E-bikes and

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<sup>9</sup> [DOT](#), “Cycling in the City,” 2022.

<sup>10</sup> [NYT](#), “Why Bicycle Deaths in NYC are at a 24-year high,” 2024

<sup>11</sup> [DCWP](#), “A Minimum Pay Rate for App-Based Restaurant Delivery Workers in NYC,” 2022, p. 24

mopeds only began to be recorded as a separate category in NYPD collision data in 2021. In the past, mopeds and e-bikes could have been recorded as motor vehicles or bicycles, based on the recording officer.

## Proposals to Protect Pedestrians, Cyclists, and Delivery Workers

### Build More Double-Wide Bike Lanes

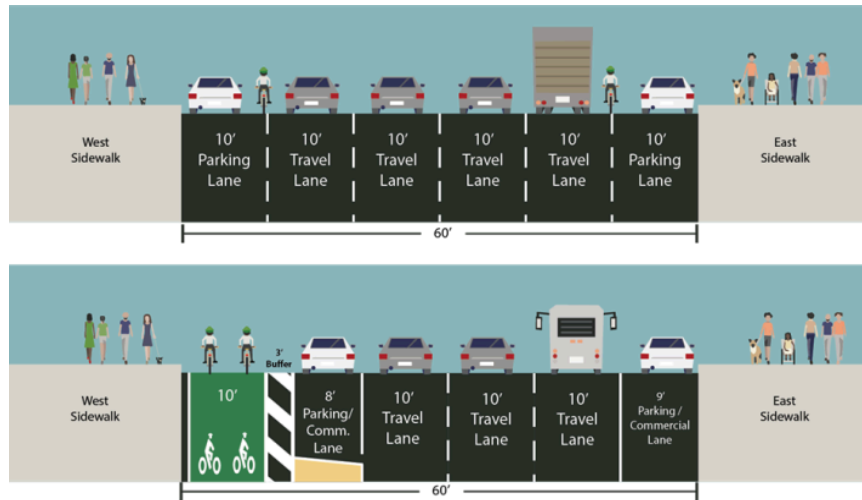
New York's street users can no longer be easily categorized as pedestrians, cars, or cyclists, therefore the design of our streets should adapt. 25 mile-per-hour e-bikes, for instance, are still too vulnerable to ride alongside 4,000 pound cars, but should also be separated from a child on a bike. DOT has already built what it calls double-wide bike lanes on 8th, 9th, and 10th Avenues in Hell's Kitchen (Figure 2). As mentioned above, the typical six-foot wide lane doesn't allow for comfortable passing. Given the divergence in micromobility speeds, a double-wide lane would provide more space and increased safety for slower riders – including families. This policy could be coupled with variable bike lane speeds to account for the different types of vehicles using them. A number of advocacy groups have already called for a similar policy.<sup>12</sup>

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<sup>12</sup> See [Transportation Alternatives](#), "Building an E-Micromobility Future," 2023; [Open Plans](#), "Safe, Successful, Sustainable: Sharing the Street with E-micromobility," 2023



Figure 2



Source: NYCDOT

### Expand Daylighting to More Intersections in New York City

“Daylighting” is a street-safety policy that involves removing parking within 20-25 feet of the intersection.<sup>13</sup> By increasing visibility around intersections, cars are better able to see pedestrians and cyclists. While New York State law bans cars from parking within twenty feet of a crosswalk at an intersection, it also empowers New York City to make its own parking laws.<sup>14</sup> Currently, Local Law 66 of 2023 requires the DOT daylight a minimum of 100 intersections per year beginning on January 1, 2025.

The safety impacts of daylighting in cities where it's been implemented are notable. A study in San Francisco found that daylighting at 80 intersections in one neighborhood saw a 14% decrease in reported collisions.<sup>15</sup> In Hoboken, daylighting has helped the city hold a seven year streak without a single traffic death.<sup>16</sup> Daylighting has the potential to be especially impactful given that “approximately one-quarter of traffic fatalities and one-half of all traffic injuries in the United States are attributed to intersections,” according to the Federal Highway Administration (FHWA).<sup>17</sup>

<sup>13</sup> [NACTO](#) Urban Street Design Guide, “Visibility/Sight Guidance”

<sup>14</sup> VTL § 1202 and VTL § 1642

<sup>15</sup> SFMTA, “‘Daylighting’ makes San Francisco Crosswalks Safer,” 2015.

<sup>16</sup> [Associated Press](#), “A New Jersey City That Limited Street Parking Hasn’t Had a Traffic Death in 7 Years,” 2024

<sup>17</sup> [USDOT](#), “About Intersection Safety,” 2024.

To expand daylighting in New York City, the State Legislature should pass **S9769/A9985 (Hoylman-Sigal/Simon)**, which would revise VTL § 1642 to no longer exempt New York City from VTL § 1202.<sup>18</sup> As a result, New York City would have to ban parking within twenty feet of crosswalk, increasing visibility for drivers, cyclists, and pedestrians and promoting a safer streetscape for all users.

### **Increase the Number of Two-Way Bike Lanes**

Pedestrians frequently complain about observing bikes on sidewalks. Under New York City law, it is illegal to ride a bike on a sidewalk, unless a rider is under 14 years old. Participants in the symposium characterized the pervasiveness of this issue as “the last 400-foot problem.” In this case, e-bikes and mopeds are not typically riding multiple blocks at full speed. Instead, riding on the sidewalk serves a purpose – to access a house, a restaurant, or a bike corral. This behavior reflects a need that the built infrastructure is not accommodating.

Bikes on sidewalks is not a new issue, and DOT has successfully addressed it in the past. In the case of Prospect Park West in Brooklyn, for instance, DOT built a two-way bike lane, which reduced the percentage of cyclists riding on the sidewalk to 3% from 46%.<sup>19</sup> By building more two-way bike lanes, infrastructure can help resolve the “last 400-foot problem” by allowing delivery workers (and other cyclists) better access to their destinations.

### **Install an Expansive Network of Protected Bike Parking**

New York City could further disincentivize delivery workers from riding on the sidewalk by expanding protected bike parking at key intersections. DOT has already sought to expand the number of bike corrals and has even implemented bike parking in some of the few intersections that already benefit from daylighting.

At the same time, bike parking in New York City has evolved very little over the past decades – for the most part, it still resembles metal corrals to which riders affix their bicycles. This pales in comparison, of course, to Northern European cities, with their “bicycle garages.” Even less traditionally cycling-friendly cities such as London have over 10,000 “cycle hangars,” which are covered and locked on-street structures for bike parking.<sup>20</sup>

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<sup>18</sup> Bills introduced in the state legislature are referred to by its Senate bill number, beginning with an S, as well its Assembly bill number, beginning with an A. For this report, I will then list the respective lead sponsors in each house in parentheses – Senate followed by Assembly.

<sup>19</sup> [DOT](#), “Prospect Park West: Traffic Calming & Bicycle Path,” 2012

<sup>20</sup> [Transport for London](#), “Cycle Parking.”

## Other Measures to Reduce E-bike Speed

In addition to the larger street-safety developments listed above, New York should actively explore less intrusive changes. For instance, the City should explore ways to reduce pedestrian-cyclist conflicts at major intersections. This could include the installation of light rumble strips to signal caution to cyclists when approaching pedestrian crossings. The ways we use our streets are changing rapidly. Our street design must advance with the same flexibility.

# Problem #2: Delivery Workers Are Incentivized to Behave Dangerously Due To Exploitative Algorithms

## Delivery Workers are Incentivized to Ride Mopeds

Since the pandemic, many delivery workers have shifted to using gas-powered mopeds, as opposed to battery-powered electric bikes. This transition is occurring for two main reasons. First, delivery workers struggle to find places to safely charge e-bike batteries. In 2023, lithium-ion battery fires resulted in 250 fires and 18 deaths.<sup>21</sup> Second, delivery workers are being pressed by delivery apps to carry out deliveries over long distances in short periods of time, with algorithms that reward workers for timely deliveries.<sup>22</sup>

Despite existing New York City and State laws prohibiting this behavior, many moped riders ride in bike lanes – especially across bridges – and fail to maintain vehicle registration and insurance. Wide, 200-pound vehicles that can easily reach speeds of 30 miles per hour should not safely share thin bike lanes with cyclists. Given many of these vehicles lack license plates (in violation of the law), they cannot easily be held accountable for running red lights and stop signs. According to Crash Mapper, which compiles city data on crashes, two pedestrians were killed by motorcycles or mopeds in 2023, while 223 were injured.<sup>23</sup>

## Delivery Apps Incentivize Dangerous Riding

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<sup>21</sup> [NYT](#), “E-bike Battery Fire Caused Fire That Killed Young Journalist, Officials Say,” 2024

<sup>22</sup> Technically, delivery workers can set limits on how far they can travel without fear of retaliation (§ 20-1521 of the NYC Administrative Code). Enforcement, however, can be difficult for reasons explored below. Additionally, if a worker only decides to take orders within a small radius, the app can simply offer them less jobs.

<sup>23</sup> [NYC Crashmapper](#)

At the symposium, delivery workers described in great detail the dangerous incentives they are subject to by third party delivery apps. Many delivery apps assign workers a timeframe in which they must complete a delivery. If workers fail to complete a delivery within the assigned time frame, they can be subject to an opaque and punitive disciplinary process. DoorDash, the largest food-delivery app in New York City by market share, provides a prime example.

DoorDash estimates an arrival time to the merchant for pickup as well as an arrival time to the customer for drop-off. While DoorDash claims to provide some flexibility for extenuating circumstances and other delays, late arrivals – what DoorDash calls a “lateness contract violation” -- can result in deactivation for the worker. A deactivation denies a worker access to the DoorDash platform and is tantamount to being fired. Furthermore, late arrivals (or arrivals that the customer perceives as late), can result in a lowered “Consumer Rating,” which can also result in deactivation.<sup>24</sup>

The pressure to arrive “on time” is exacerbated by the punitive consequences and the opaque disciplinary process. When a worker is deactivated, they lose access to their livelihood and can no longer drive for that food-delivery service.<sup>25</sup> According to delivery workers at the March Symposium, while a deactivation can technically be appealed, the appeals process is nontransparent. Workers are informed of their deactivation via an impersonal email. They are not given the opportunity to ask questions or fully understand the specific reasons behind deactivation. In a testament to the difficulties in appealing, DoorDash only presents their appeal in five languages, none of which include some of the most common languages among delivery workers, such as Kiche, Fuzhounese, or Bengali.<sup>26</sup>

In other words, workers have to drive as fast as possible or risk termination.

### **Food-Delivery App Companies Are Not Required to Provide Workers with Liability Insurance**

In New York State, the owners of cars, mopeds, and motorcycles are required to obtain a minimum amount of liability coverage.<sup>27</sup> The New York City Taxi and Limousine Commission requires liability coverage beyond standard minimums for licensees.<sup>28</sup> Rideshare drivers in New York are also required to maintain minimum coverage under

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<sup>24</sup> [DoorDash](#), “Lateness-Based Violations Explained”

<sup>25</sup> [Doordash](#), “How We’re Enforcing Our Policies Fairly and Proportionately,” 2023

<sup>26</sup> [Cornell ILR](#), “Essential, But Unprotected: App-based Food Couriers in New York City,” 2023, p. 23

<sup>27</sup> NYS VTL § 311. This requires the minimum, so-called “25/50/10” policy.

<sup>28</sup> NYCRR § 59A-12

state law.<sup>29</sup> In the case of food-delivery, there are no insurance requirements beyond those already existing for mopeds – many of which are unregistered and uninsured. This puts both the drivers and the potential victims at risk should they get in an accident. Nor would accidents involving delivery workers necessarily be covered by New York State’s Motor Vehicle Accident Indemnification Corporation (MVAIC) – the insurer-of-last-resort for uninsured victims.<sup>30</sup>

## Proposals to Protect Delivery Workers from Dangerous Algorithms

### Require mopeds Be Registered at the Point-of-Sale

Requiring moped dealers to register mopeds at the point-of-sale – that is, when they’re selling the vehicle – would assist customers in fulfilling the legal requirements for moped operation. **S7860/A8052 (Krueger/Bores)** would increase penalties for motor vehicle dealers that operate without a license and further empower the DMV to regulate such dealers to ensure they sell only mopeds with vehicle identification numbers. Bill number **S7703/A8450 (Hoylman-Sigal/Bores)** would require dealers to register all mopeds at the time of sale. The latter bill was signed into law by Governor Hochul in July of 2024.

In order to further point-of-sale regulation, the City Council should pass **Intro. 132 (CM Brewer)**, which would require DCWP and DOT to jointly develop and require retailers to distribute materials at the point-of-sale related to safe and legal operation of mopeds.

Rather than allocating significant police resources to the seizure and storage of thousands of illegal mopeds, the State and City can cut off the flow of unregistered vehicles through upstream regulation. This would also protect consumers from unknowingly breaking the law, incurring hundreds of dollars in penalties, and losing access to their means of employment.

### Regulate the Algorithms used by Food Delivery Apps

Policies to constrain the structure and scope of food delivery algorithms would promote greater dignity, freedom, and safety for food delivery workers.

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<sup>29</sup>NYS VTL § 1693

<sup>30</sup> Insurance Law § 5202

The Legislature should pass **S8215/A8070 (Jackson/Rosenthal)**. This bill would require a fair, transparent process for deactivation, as well as prohibit deactivation based *solely* on standards such as customer ratings. Delivery companies would be required to conduct an investigation prior to deactivation, as well as provide workers a substantive opportunity to challenge a deactivation.

**S7623A (Hoylman-Sigal)** – also known as “The BOT Act,” would also regulate so-called “bossware” across most sectors of the economy. In doing so, this legislation would especially protect food-delivery workers from unjustified, sudden deactivation and exploitative incentives.

First, the bill forbids the use of an “electronic monitoring tool in such a manner as to threaten the health, welfare, [and] safety...” of its employees. Second, it prevents employers from relying solely on output from an “automated employment decision tool” when making termination or disciplinary decisions (among other decisions), and mandates “meaningful human oversight” of such decisions. Third, the bill creates a process and timeline through which employees are able to dispute employment decisions assisted by an automated employment decision tool. Fourth, employers must provide workers with written notice about employment decisions, including the specific data and information used to make the decision. Finally, workers, the Attorney General, and the Department of Labor are all empowered to take legal action to enforce these requirements.

The BOT Act doesn't specifically target the food-delivery economy by name. Instead, it addresses the plight of food-delivery workers as part of a larger disturbing trend – the unaccountable control and discipline of workers through electronic monitoring technology.

### **Require Food Delivery Companies to Provide Liability Insurance for Workers**

While moped riders are already required to maintain minimum liability insurance, workers who use e-bikes are not subject to the same requirement.<sup>31</sup> As stated above, an uninsured pedestrian or cyclist who is hit by an e-bike – especially in a hit-and-run – would not be able to receive compensation through the MVAIC. Bills like **S6760A/A7318** (Hoylman-Sigal/Rosenthal) would address this by requiring food delivery companies to maintain a minimum level of liability insurance for their

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<sup>31</sup> § 311 NYS VTL

workers. By placing the burden on food delivery companies, this bill would protect other street-users, while also promoting an equitable distribution of costs.

### **Require Registration of E-bikes Used for Commercial Purposes**

New York must regulate the use of e-bikes without disincentivizing their use. Electric bikes are an essential component of New York City's transportation infrastructure. In addition to serving as the vehicle of choice for food-delivery workers, e-bikes are widely used as part of the Citi Bike network. Increasing e-bike mode share in New York City would further a number of policy goals, including reducing congestion, fighting climate change, and closing transit gaps. Studies have shown that an increase in e-bike mode share can have proportionate reductions in transportation-related CO<sub>2</sub> emissions.<sup>32</sup> Much of this comes from e-bikes' ability to replace car trips.<sup>33</sup>

In order to promote e-bike use while safely integrating them into New York City streets, regulations should be narrowly targeted. Successful policy would punish bad actors without discouraging the use of e-bikes. Given the extent to which food delivery services uniquely incentivize dangerous behavior by drivers, commercial e-bikes are a prime target for regulation. **S7587/A7833 (Hoylman-Sigal/Simone)** upholds this principle by requiring e-bikes used for commercial purposes to be registered and carry license plates. By establishing a visual identification system for commercial e-bikes, S7587/A75833 would allow police to enforce traffic rules without engaging in dangerous, high speed chases. It would also facilitate traffic-camera enforcement of e-bikes, which would minimize police interaction with food delivery workers and reduce the potential for racial bias.

### **Make the Delivery Companies Pay for Worker Protection Policies and Street Safety Upgrades**

The tremendous growth of food delivery in New York City has yielded equally perceptible negative externalities – namely, dangerous working conditions for delivery workers, hazardous streets for pedestrians and other cyclists, and increasingly common e-bike fires. Delivery companies like DoorDash have built their success on public infrastructure, such as New York City's comparatively robust network of bike lanes and greenways. These companies have done next to nothing to mitigate these externalities.

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<sup>32</sup> "The E-Bike Potential: Estimating Regional E-Bike Impacts on Greenhouse Gas Emissions," McQueen et. al., [Transportation Research](#), 2020.

<sup>33</sup> "Impacts of E-bike Ownership on Travel Behavior: Evidence from Three Northern California Rebate Programs," Johnson et. al., [National Center for Sustainable Transportation](#), 2023.



The delivery industry's primary architects should pay to cure the harms they've caused. This is not an unprecedented idea for New York City. In 2018, New York State implemented a congestion surcharge of \$2.75 on for-hire vehicle trips below 96th Street in Manhattan.<sup>34</sup> Like other municipalities, New York's surcharge on for-hire vehicles sought to address the challenges these services posed – namely, siphoning passengers from public transit and increasing congestion in key business districts.<sup>35</sup> Revenue from New York City's congestion surcharge is placed in the New York City Transportation Assistance Fund, which supports MTA operating and capital costs.<sup>36</sup>

Delivery companies have also placed burdensome demands on New York City government and infrastructure. For one, they have crowded bike lanes with e-bikes, mopeds, and e-scooters, requiring the expansion of existing bike lanes and the construction of new street safety infrastructure. New York City mandated a significant buildout of street infrastructure when it enacted Local Law 195 of 2019, also known as the "NYC Streets Plan." According to the law, the City must construct 50 new miles of protected bike lanes per year between 2023 and 2026, totaling 250 miles in the five years from 2022 to 2026.<sup>37</sup> The law also mandates significant new mileage of bus lanes and busways, as well as intersection improvements. (The New York City Council Committee on Oversight and Investigations, chaired by Councilmember Brewer, held an oversight hearing on the Streets Plan in September of 2023 to examine DOT's progress and lack thereof.<sup>38</sup>)

Unfortunately, DOT has thus far failed to fulfill it. In its "roadmap" towards compliance with the NYC Streets Plan, DOT estimated their annual capacity of protected bike lane construction at 30 miles per year – short of the 50 mile goal mandated by law.<sup>39</sup> While DOT received \$900 million to implement the plan, this falls far short of the \$3.1 billion the City Council and advocacy groups requested.<sup>40</sup> In turn, DOT has failed miserably to meet the legally-mandated goals and has so far installed only 68.9 out of the 250 required miles of protected bike lanes required by 2026.<sup>41</sup> Like most capital projects in New York City, bike lanes are expensive. According to DOT, the 26th and 29th St. protected bike lanes in Manhattan cost \$500,000 each in 2018.<sup>42</sup>

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<sup>34</sup> Tax Law § 1299-A. This predated and should not be confused with the Congestion Pricing program in New York City, which was enacted in 2019 as part of the State budget and delayed in 2024.

<sup>35</sup> [NYT](#), "When Calling an Uber Can Pay Off for Cities and State," 2018.

<sup>36</sup> Public Authorities Law § 1270-I

<sup>37</sup> New York City Administrative Code § 19-199.1

<sup>38</sup> [New York City Council](#), Oversight - Streets Plan Update

<sup>39</sup> [DOT](#), "NYC Streets Plan," 2021.

<sup>40</sup> "[The New York City Council Response](#) to the Fiscal 2023 Preliminary Budget and Fiscal 2022 Preliminary Mayor's Management Report," April 1, 2022.

<sup>41</sup> [Transportation Alternatives](#), "Protected Bike Lane Tracker, October 15, 2024.

<sup>42</sup> [Curbed](#), "Midtown Will Finally Get Protected Crosstown Bike Lanes," January 17, 2018.



Finally, the delivery boom has strained New York City’s worker protection capabilities. With the passage of legislation specifically protected food-delivery workers, the City has expanded its regulatory mandate. As a result, DCWP reported a 260% increase in “worker protection complaints” between fiscal years 2023 and 2024, which it credited in part to “an increase in complaints from delivery workers.”<sup>43</sup> Despite its expanded mandate, DCWP actually saw a small decrease in its budget for personnel services over that time frame.<sup>44</sup>

According to DCWP data, there were approximately 137.5 million food deliveries in NYC last year.<sup>45</sup> Therefore, all things being equal, a \$2 surcharge could raise \$275 million – an amount that could fund significant efforts to improve street safety and worker protection.

## **Problem #3: New Yorkers are Endangered by Lithium-ion Battery Fires**

### **Delivery Workers Have Few Safe Places to Charge Their Bikes**

The threat of lithium-ion batteries in New York City is stark – 23 people have been killed by battery fires since 2021.<sup>46</sup> Many of these fires are due to unsafe charging practices. In certain instances, e-bike stores help delivery workers charge back-up batteries while delivering food, but end up charging the batteries in crowded circumstances – sometimes with faulty chargers and extension cords.<sup>47</sup>

Currently, the infrastructure for safe e-bike charging or battery swapping is sparse. While a \$1 million federal grant was allocated to transform existing infrastructure to create “deliverista hubs,” none have materialized. Charging stations at New York City Housing Authority (NYCHA) developments have also hit a snag, while New York City is gradually unveiling e-bike charging stations and battery-swapping infrastructure at five locations.<sup>48</sup>

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<sup>43</sup> [“Fiscal 2024 Mayor’s Management Report,”](#) September, 2024.

<sup>44</sup> [“Report on the Fiscal 2025 Preliminary Plan](#) and the Fiscal 2024 Preliminary Mayor’s Management Report for the Department of Consumer and Worker Protection,” March 20, 2024.

<sup>45</sup> [DCWP](#), “Restaurant Delivery App Data: January-March 2024.” DCWP confirmed to the authors of this report that their figures represent average weekly delivery numbers. The annual delivery number is extrapolated from this.

<sup>46</sup> [NYT](#), “How E-Bike Battery Fires Became a Deadly Crisis in New York City, 2023.

<sup>47</sup> [Gothamist](#), “Battery Fires a Risk for Workers as Food Delivery Booms in NYC,” 2023.

<sup>48</sup> NYCDOT, “E-bike Programs.”

## Delivery Workers Don't Have Access to High Quality Batteries

Lithium-ion batteries with UL certification – a national safety standard utilized by the Consumer Product Safety Commission – can cost between \$500 and \$1000.<sup>49</sup> Up until last year's implementation of Local Law 115 of 2021, which established a minimum pay standard for food-delivery workers, workers received net earnings (including tips) of approximately \$12 an hour.<sup>50</sup> Even with the current minimum pay rate of \$19.56, UL-certified batteries are expensive. Many workers, therefore, opt for second-rate or used batteries – the same batteries that are responsible for catastrophic fires around the world.<sup>51</sup>

New York City has seen some successes in tackling unsafe e-bike batteries. Thanks to the City's battery-swapping pilot, as well as greater regulation, the number of e-bike deaths and injuries have declined in 2024.<sup>52</sup> The City is also rolling out a trade-in program for battery-powered micromobility after the passage of Local Law 131 of 2023, authored by Councilmember Powers.

# Proposals to Protect New Yorkers from Battery Fires

## Implement a Rebate for E-bikes

Delivery workers opt for dangerous bikes and batteries because they can't afford higher quality, safer alternatives. To address this, the State can pass **S314A/A275 (Salazar/Carroll)**, which would implement a fifty percent rebate for the purchase of e-bikes and e-scooters that meet safety standards. This mirrors the rebate that the New York State Energy and Research Development Authority already maintains for electric cars and tax breaks instituted under the Inflation Reduction Act.

## Implement Greater Regulation for Online Sellers

In 2022, the New York City Council passed Local Law 39, which prohibited the sale of micromobility and batteries in New York City that fail to meet safety standards, such as

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<sup>49</sup> [Streetsblog](#), "Is The Solution to Deadly Lithium-Ion Battery Fires a Trade-In Program?" 2023.

<sup>50</sup> DCWP, "Minimum Pay Rate," p21.

<sup>51</sup> [CPSC](#), Letter to Manufacturers . . . of Micromobility Devices for Consumer Use," 2022.

<sup>52</sup> [NYT](#), "Why Deaths from E-bike Fires are Declining in New York City," 2024.

UL. The City Council also passed Local Laws 42 and 38 – both by Councilmember Brewer – which prohibited the sale of lithium-ion batteries assembled with used battery cells and mandated an FDNY-led informational campaign on micromobility safety. Councilmember Brewer also passed laws that require businesses to post lithium-ion battery safety information and increase penalties for illegal micromobility sales.<sup>53</sup>

Currently, Local Law 39 applies both to online sellers, as well as brick-and-mortar retailers. In 2023, FDNY sent letters to Amazon, Ebay, and Walmart urging them to remove micromobility merchandise that doesn't comply with Local Law 39 safety standards.<sup>54</sup> Only Amazon agreed (partially), while Walmart and Ebay still appear to offer e-bikes that are illegal in New York City. In order to restrict this major pipeline for dangerous micromobility vehicles, New York City and State should more forcefully pursue online retailers.

### **Optimize Potential Locations of Battery Charging Stations**

Currently, New York City has chosen five locations for battery-charging and battery-swapping stations in New York City. While these stations are essential for providing delivery workers with access to safe and affordable batteries, the City must ensure they are located in areas that are likely to draw a significant amount of delivery-worker traffic. Otherwise, the locations would be irrelevant to the base they aim to serve. The City should draw on data by food-delivery companies to optimize site location.

## **Problem #4: Delivery Workers are Often Victims of Labor Violations and Exploitative Practices**

### **Some Food Delivery Companies Engage in Wage Theft**

During the symposium, representatives from DCWP, as well as Deliveristas, described situations in which – after deactivating a worker – food delivery apps fail to pay that worker their final wages. DCWP, the New York State Department of Labor (DOL) and the New York Attorney General (NYAG) are all empowered to recover stolen wages. Given the limited capacity of all these actors, however, the process to recover back

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<sup>53</sup> These bills are Local Law 49 and Local Law 50 of 2024, respectively.

<sup>54</sup> [FDNY](#), “Fire Commissioner Laura Kavanaugh Releases Letter to Amazon,” 2023.

wages can be lengthy. According to the Mayor’s Management Report, DCWP’s Office of Labor Policy & Standards closed investigations in a median time frame of 112 days in the first four months of Fiscal Year 2024.<sup>55</sup> The State DOL is notoriously overburdened and has struggled to effectively recover wages from wage theft actions.<sup>56</sup>

Furthermore, most food delivery workers are subject to mandatory arbitration agreements.<sup>57</sup> Under such contractual agreements, employers can prevent workers from pursuing wage theft and labor violations in court via private lawsuits, instead forcing them into closed-door arbitration. Workers are also frequently barred from joining their cases together in class actions, which is one of the most effective ways for workers to recover damages for violations.<sup>58</sup> In combination with the limited capacity of the government, victims of wage theft are left without adequate remedies and employers can continue their abusive practices.

### **Food Delivery Companies Limit Workers Tips**

Delivery workers also reported receiving less tips, due to changes in how food delivery companies have configured the in-app tipping process. Prior to the implementation of the minimum pay scale in 2023, customers had the option to tip at any point in the delivery practice – both when placing their order and after the order had been assigned to a worker. Now, however, customers can only tip when an order after a delivery worker is assigned to an order. According to delivery workers, this change has lowered the amount of tips they collect. And while delivery workers are technically guaranteed a minimum pay regardless, certain stakeholders have argued that the effective base wage would instead be closer to \$13.00, after considering various deductions and expenses.<sup>59</sup>

### **Delivery Workers Aren’t Always Informed of Their Rights**

Since 2020, food-delivery workers in New York City have accumulated many important rights. For instance, in addition to the minimum pay standard, food-delivery workers have the right to use the bathroom at restaurants when picking up orders, apps must inform delivery workers of their route details, and workers must be provided with a free, insulated food delivery bag after six deliveries.<sup>60</sup> At the symposium, deliveristas,

<sup>55</sup> [Preliminary](#) Mayor’s Management Report, January 2024, p. 146

<sup>56</sup> [New York Focus](#), “A Hands Off Labor Department Retreats from Wage Theft Enforcement,” 2023.

<sup>57</sup> See for instance: [DoorDash](#), “Independent Contractor Agreement”

<sup>58</sup> [Center for Popular Democracy and the Economic Policy Institute](#) “Unchecked Corporate Power: Forced Arbitration, The Enforcement Crisis, and How Workers are Fighting Back,” 2019.

<sup>59</sup> [Testimony](#) from Comptroller Brad Lander to the Department of Consumer and Worker Protection on Minimum Pay Rules for Delivery Workers

<sup>60</sup> [DCWP](#), “Delivery Worker Rights”

DCWP, and others who work directly with food-delivery workers recounted instances in which restaurants illegally denied workers access to the bathroom and workers decided not to engage DCWP to recover back wages. In some situations, this is simply due to ignorance, while in others, workers are afraid to engage with City government due to their immigration status. Food-delivery work is one of the few jobs available for recently arrived asylum-seekers who are not yet able to work legally.<sup>61</sup> Language barriers also play a role.

## Proposals to Protect Food Delivery Workers from Labor Violations and Other Exploitative Practices

### Circumvent Forced Arbitration Clauses

Forced arbitration clauses prevent workers from filing claims to recover stolen wages, as well as from joining together in class-action suits. The DOL and DCWP don't have the capacity to thoroughly investigate every complaint they get – nor do workers always trust these actors. New York can increase their enforcement capacity by permitting workers to bring suit on behalf of the Department of Labor. This enforcement model – known officially as a *qui tam* suit – has a strong precedent and has appeared in certain federal laws for almost two centuries.<sup>62</sup> In California, the Department of Labor similarly empowers workers to file suit on their behalf, while reaping the financial penalties. The California DOL's revenue from such suits totalled over \$34 million in 2018.<sup>63</sup>

New York could similarly circumvent forced arbitration clauses by passing **S541B/A9012 (Hoylman-Sigal/Simon)**, also known as the EmPIRE Worker Protection Act. This bill imitates the California model, and would empower a worker, their union, or the Attorney General to bring suit in collaboration with and on behalf of the New York Department of Labor. Such a policy would especially serve food-delivery workers, by providing them with a means to seek justice outside of the overburdened, "official" actors.

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<sup>61</sup> [NYT](#), "Illegal Mopeds and Fake Names: Migrants Scrape By in Underground Economy," 2023.

<sup>62</sup> [Department of Justice](#), "The False Claims Act," 2024.

<sup>63</sup> Center for Popular Democracy and the Economic Policy Institute, "Unchecked Corporate Power," p. 15-16, 2019

## **Increase Civil Penalties for Unpaid Back Wages**

As delivery workers and DCWP staffers suggested, workers are forced to turn to the City government to recover unpaid back wages. And while the EmPIRE Worker Protection Act would provide another avenue to seek recourse, employers should be disincentivized from withholding wages in the first place. This could be done by increasing the penalties imposed by DCWP or the DOL.

## **Obligate Companies to Share Contact Information with DCWP**

While food-delivery apps regularly communicate with all their employees – including to lobby against the minimum pay law – New York City has no way of using that same communication channel to educate workers on their rights.<sup>64</sup> According to delivery workers at the symposium, food delivery apps *do* provide workers with limited information about their rights. However, food delivery companies should not be the primary source for workers regarding their rights. In contrast, the Taxi and Limousine Commission has the contact information for all their taxi and rideshare drivers, given they dispense special licenses.

New York City could build on this model by requiring delivery workers to register with the City. Or, companies could be required to disclose contact information for their workers to DCWP. That way, DCWP can independently communicate with delivery workers without the mediation of food-delivery companies. While such a policy would certainly raise concerns about civil liberties and immigrant rights, these concerns could likely be assuaged by careful collaboration and communication with stakeholders. In the end, better communication between the City and food-delivery workers uphold labor rights.

## **Force Companies to Implement Fair Tipping Policies**

New York City has already limited the extent to which app companies can force workers to accept long-distance orders.<sup>65</sup> New York City can go further to control the in-app experience by ensuring customers have the option to tip delivery workers at all stages of their order. The City Council should pass Intro 738 of 2024 (Abreu), which would ensure a food-delivery app solicits a gratuity in a “conspicuous manner before or at the same time the online order is placed.”

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<sup>64</sup> DoorDash sent a message to workers claiming that the minimum pay law “would restrict workers’ ability to choose which deliveries they accept,” ([The City](#), “Food Delivery Workers Veer Into Warfare Over Breakthrough Wage Proposal,” 2023)

<sup>65</sup> Local Law 114 of 2021

# Conclusion

New infrastructure, technology, consumption habits, and the Coronavirus Pandemic have dramatically altered the way New Yorkers interact with their streets. The emergent food-delivery economy now presents legitimate dangers for both pedestrians and delivery workers. This report, based on a March, 2024 Symposium with experts and stakeholders, defines four issue areas and proposes solutions that range across various levels of government. It also recognizes that micromobility safety inherently implicates many policy areas, from urban planning and street design to labor law. Given their breadth, the proposals here take a both-and approach: New York can and must protect pedestrians and food delivery workers without rolling back street-safety improvements or unduly persecuting immigrant workers. Such an expansive perspective can ensure New York becomes a safer and more just city for all its inhabitants.

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