



## Chicago, Illinois Uses Regulatory Approaches to Improve E-Scooter Equity

### Challenge

Chicago's E-Scooter Pilot Evaluation aimed to assess whether and how electric scooters (e-scooters) can support the city's goal of providing safe and affordable transportation options, as a means to increase equitable neighborhood access and lower congestion and emissions.<sup>1</sup> In order to ensure the City-funded pilots would address and not reinforce existing barriers to e-scooter access, the city creatively exercised its regulatory authority and embedded specific requirements into provider permits and regularly monitored providers to gauge compliance. The Pilot Evaluation was administered by the Chicago Department of Transportation (CDOT) and Department of Business Affairs and Consumer Protection (BACP) and was based on the results of two pilots conducted in the 2019-2020 period.

In the first 4-month pilot, which ran from June to October 2019, the city issued Emerging Business Permits to ten private operators to deploy a total of 2,500 e-scooters (250 e-scooters each). The pilot area<sup>2</sup> was limited to the west side of the city, bounded by Halsted Street, Irving Park Road, Harlem Avenue, and the Chicago River, which covered a racially and socioeconomically diverse section of the city that had a number of existing transit options. A goal of the pilot was to see how different households with varying access to transportation assets would use e-scooters.<sup>3</sup>

Informed by the findings of the first pilot, Chicago conducted the second 5-month pilot from August to December 2020. Four of the original 10 vendors applied and three were selected to participate and the total number of scooters was quadrupled to 10,000 (3,333 e-scooters each).<sup>4</sup> This time, Chicago expanded the pilot area to encompass almost the entire city as well as addressing parking concerns with a "lock-to" requirement for e-scooters.

In rider surveys, both pilots found that at least 30 percent of e-scooter trips replaced car trips, supporting the city's congestion and emission reduction goals.



*E-scooter parked at bike rack. Image source: CDOT*

<sup>1</sup> [CDOT, Scooter Sharing in Chicago](#)

<sup>2</sup> [CDOT, E-Scooter Pilot Evaluation, January 2020, page 12](#)

<sup>3</sup> [CDOT, E-Scooter Pilot Evaluation, January 2020](#)

<sup>4</sup> [CDOT, E-Scooter Pilot Evaluation, May 2021](#)



## Community Input Shaped Program Design

At the outset of the design process, through in-person and virtual engagement with mobility advocates, the disability community, and other stakeholders, Chicago's program designers identified multiple populations burdened by barriers to e-scooter access, including those:

- Living outside of the densest, most highly populated areas where private e-scooter providers typically deploy the bulk of their fleets, such as the Loop and areas along Lake Michigan which were designated as an exclusion zone in the second pilot.
- Who could not afford e-scooter service.
- Who were unbanked or underbanked (i.e., those with no or limited access to traditional financial services – no debit and/or credit cards)
- Without access to a smartphone or data plan
- With limited physical mobility
- Without knowledge of e-scooter programs or experience riding an e-scooter.



Seated scooter. Image source: CDOT

## Solutions

Anticipating inequitable outcomes if the pilots did not address these barriers, the city set specific requirements to advance their equity, climate, and access goals, and monitored e-scooter providers to ensure their compliance.

### Deploy E-Scooters in Underserved Areas

To address geographic inequity, the city specified distributional requirements compelling providers to deploy a specific portion of their fleets in underserved areas. In the first pilot, each provider was required to deploy 50 percent of its fleet in the Equity Priority Area (EPA), identified because of its historic disinvestment and lack of transit access and mapped on the previous page. The second pilot included additional stipulations that required each provider to deploy 2.5 percent of its fleet in each of 20 priority *sub-areas* and rebalance the fleet twice per day to ensure consistent coverage and availability. To gauge compliance, Chicago used the [Remix](#)<sup>4</sup> platform as well as periodic field investigations.<sup>5</sup>

### Offer Variable Pricing

To address financial inequity, Chicago required that providers offer discounted pricing plans to individuals enrolled in local, State, or Federal low-income assistance programs. Some providers discounted trips starting and/or ending in the Equity Priority Area by as much as 50 percent. The city required that providers include payment options for unbanked or underbanked individuals. Some providers gave riders the option to prepay in cash at a network of retailers around the city, while another sold "cash cards" at their warehouse and a partner site.

<sup>4</sup> The U.S. Government does not endorse products or manufacturers. Trademarks or manufacturers' names appear herein only because they are considered essential to the objective of this document.

<sup>5</sup> [CDOT, E-Scooter Sharing Pilot Program Enforcement Procedures, August 2021](#)



### *Provide Text-to Ride*

To bridge the digital divide, the city required that providers include access options for those without smartphones or data plans. Accordingly, all the providers offered a text- or call-to-ride feature whereby riders could unlock e-scooters via text message or phone call.

### *Add Seated Scooters to Fleets*

The city also included provisions to expand access to those with difficulty standing. In its second pilot, Chicago encouraged but did not require that providers deploy seated scooters. Some providers retrofitted a few of their existing scooters with pole-mounted seats, while another deployed a new, moped-like e-scooter design.



*Parked scooters available to ride. Image source: CDOT*

### *Conduct Awareness & Education Efforts*

To raise awareness of the program and build comfort with e-scooters, Chicago required that each provider hold at least two community events per month as well as learn-to-ride events and helmet giveaways.

### **Conclusion**

Chicago has applied insights from the pilots to the design of its permanent scooter sharing program. In 2021, Chicago created a new business license category for e-scooter sharing providers and launched permit applications in January 2022. The city received six applications and issued two-year, 1000-scooter licenses to three providers.<sup>6</sup> The city's bikeshare system, Divvy, also began offering a docked scooter option to members and, in June 2023, increased its docked e-scooter fleet to 1,500 vehicles.<sup>7</sup> Consistent with the pilots, the licenses require<sup>8</sup> the providers to:

- Deploy at least 50 percent of their fleet within ten designated Equity Priority Areas, with at least 3 percent in each sub-area.
- Support a 24/7 customer service hotline, with the number printed on devices in text and braille, and with English, Spanish, Polish, Korean, Arabic, Hindi, and Mandarin translations available.
- Provide a low-income pricing program that does not require a bank account or credit/debit card.
- Provide free or discounted helmets to Chicago residents.
- Provide the option of renting a scooter without a smartphone.
- Make at least 5 percent of scooters accessible to those with limited physical mobility and work with the Mayor's Office for People with Disabilities, and disability organizations in Chicago to make a plan for implementing these accessible scooters.
- Conduct at least 26 education and outreach events per year.

In addition, licensees are encouraged to set contracting goals for minority-owned, women-owned, and disadvantaged businesses and to create local workforce development and training programs. Specifically, the

<sup>6</sup> [CDOT, Scooter Sharing in Chicago.](#)

<sup>7</sup> [CDOT, "CDOT and Lyft: New Divvy E-Scooters Rolling Out in Chicago with Features to Improve Safety and Reliability" June 14, 2023](#)

<sup>8</sup> [CDOT, Scooter Sharing Business Rules, June 2023.](#)





license encourages licensees to hire Chicago residents for 75 percent of staff positions. Graduates from job training programs in the city should account for 30 percent of staff.

### Successes and Lessons Learned

E-scooter ridership climbed in Chicago since the citywide rollout in 2022. After the program launched in May, riders took 1.49 million scooter trips that year, and from January to September 2023, people took over 2.3 million trips.<sup>9</sup>

There is still an opportunity to learn more about rider safety. During the e-scooter pilots, CDOT and BACP collected data on scooter-related injuries by obtaining emergency department data from Chicago-area hospitals in 2019 and using an analysis of emergency visits from the Chicago Department of Public Health in 2020. They found 192 probable scooter-related injuries in 2019 (0.23 injuries per 100,000 trips) and 171 in 2020 (0.27 per 100,000 trips), 98 percent of which were non-serious injuries. Chicago does not regularly gather scooter-related injury information but does collect road fatality information; there has been one e-scooter fatality in the city since 2022.<sup>10</sup>

During the pilots, the city also found a low proportion of e-scooter trips started in EPAs. 14.7 percent of the trips in the 2019 pilot program and 23 percent of trips in the 2020 citywide pilot program came from EPAs. An independent analysis of the public May-December 2022 data found that 36 percent of dockless e-scooter rides originated in one of the city's EPAs, which are the same as the 2020 pilot EPAs.<sup>11</sup> In 2023, 42% of the trips originated in EPAs, mirroring the population of the city that lives in the EPAs. This growth over time indicates demand for e-micromobility in these areas.

Chicago's experience highlights the importance of continuous evaluation and modification of programs as needed, to better serve all users of all abilities. To enable effective monitoring, the license requires real-time reporting for oversight by Chicago's Department of Business Affairs and Consumer Protections. During the pilot and permanent programs, citations were issued for failing to redistribute scooters, pick up scooters at night, and maintain accurate data. Chicago's program design emphasized the importance of setting [clear, quantifiable goals](#) at the beginning of the process. The city chose to put equitable access to transportation and addressing transportation disinvestment at the heart of its program parameters, and then closely monitored provider compliance to ensure those equity goals were realized.

### Protected Lanes for Riders

*E-scooters are banned on Chicago sidewalks and their speed is capped at 15 mph, much slower than car travel, so they are best suited to ride in bike lanes and on trails. [As of January 2024, only 47 miles or 10 percent of Chicago's 474 miles of bike lanes are protected.](#) Excluding the city's 81 miles of recreationally focused off-road trails, 20 percent of on-road lanes are protected.*

*Safe, comfortable infrastructure encourages active transportation trips. Chicago's [2023 Cycling Plan Update](#) proposes building 150 more lane-miles that, when realized, will place 70 percent of Chicagoans living across all neighborhoods within a half mile of a low-stress bikeway.*

<sup>9</sup> [Chicago Data Portal. E-Scooter Trips](#)

<sup>10</sup> [CDOT Vision Zero Data Resources](#)

<sup>11</sup> Patrick Spauster and Cameron Bolton. ["Chicago's e-scooter program is zooming ahead, but equity gaps remain"](#) Streetsblog Chicago, August 25, 2023.



Equitable shared micromobility projects such as this can be scaled and replicated in other cities across the country. E-scooter sharing programs are likely eligible for funding under several DOT [surface transportation funding programs](#). Allowable costs may include capital and equipment expenditures as well as education and encouragement activities related to safe access for micromobility riders.

***Additional FHWA Resources***

- [\*Micromobility\*](#)
- [\*Bicycle and Pedestrian Program\*](#)
- [\*Bicycle and Pedestrian Funding Opportunities\*](#)
- [\*Bicycle and Pedestrian Program Guidance\*](#)
- [\*Technical Assistance Resources for Active Transportation\*](#)