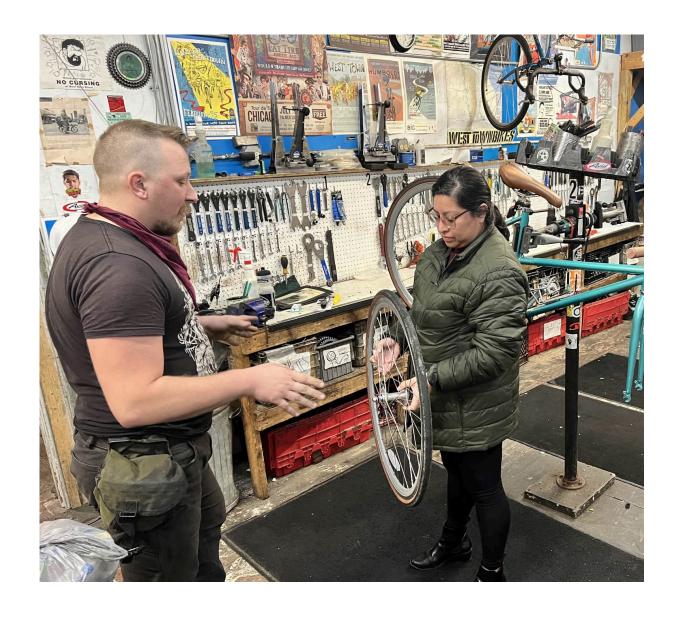
# Bike Chicago Evaluation Report

March 2024





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## Acknowledgements

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The written content, conclusions, and recommendations of this report are solely those of SUMC.

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## **Executive Summary**

In 2022, the Chicago Department of Transportation (CDOT) unveiled its Bike Chicago plan, a unique and ambitious initiative to distribute 5,000 bicycles to age- and income-eligible Chicagoans by 2026. Bike Chicago was launched in line with local and regional plans to increase road safety, enhance transportation equity, and foster a healthy biking community.

The Shared-Use Mobility Center, with support from the MacArthur Foundation, conducted an evaluation of the first 18 months of the Bike Chicago program to evaluate the impacts on program participants, and to examine how Bike Chicago and similar programs can expand biking, influence attitudes towards active transportation, improve access to destinations, and build new transportation habits.

This evaluation report provides background on the Bike Chicago program, including an examination of the program's history, operations, and local and national policy contexts. Additionally, this evaluation summarizes the results of a qualitative and quantitative assessment of the Bike Chicago program through:

- Observation and engagement at maintenance classes and distribution events
- Surveys administered to Bike Chicago participants before and after receiving a bike
- Semi-structured interviews with Bike Chicago recipients
- Semi-structured interviews with key Bike Chicago stakeholders
- Analysis of geospatial, demographic, and mobility and economic hardship data
- Analysis of Bike Chicago program data provided by CDOT

This evaluation highlights several outcomes from Bike Chicago. The program set a goal of equitably distributing bikes across Chicago, driven by the City's Mobility and Economic Hardship Index (MOBEC), which it is broadly achieving. The program is getting bikes into the hands of residents with the greatest mobility challenges: this evaluation found that areas with greater mobility challenges were the ones with a greater count of Bike Chicago recipients, particularly in areas such as North Lawndale, Belmont Cragin, and Austin. However, these findings still suggest a need for the City to continue its community outreach and investments, particularly in areas with the greatest mobility challenges.

Safety concerns emerged as a prominent barrier to cycling, with respondents citing issues such as insufficient bike infrastructure and fear of car traffic. However, participants overwhelmingly praised the program's streamlined registration and distribution process. Recipients also highlighted the program's educational resources and the overall positive experience of receiving a brand new bicycle. Diverse biking habits were observed among participants, with many incorporating biking into their daily routines and reducing reliance on cars for shorter (<3 mi.) trips. The Bike Chicago program has garnered an appreciation among bike recipients and other program stakeholders for its impact on mobility and community engagement. This underscores Bike Chicago's important role within the City's goal of promoting active transportation for Chicago residents.

Finally, this report provides recommendations for CDOT, as well as others working on biking in the city, to maximize the impact of Bike Chicago. These recommendations include expanding engagement with participants via community resources like bike shops and public events, multiplying the impact of the program through greater funding support from sources beyond the municipal budget, and continuing to support safe biking by developing Chicago's bike infrastructure as set out in Chicago's 2023 Cycling Strategy.

### Introduction

In recent years, the City of Chicago has witnessed a remarkable surge in bicycling activity. The Chicago Department of Transportation (CDOT) stated that short biking trips in Chicago have more than doubled between 2019 and 2023. Trips on Chicago's bikesharing system, Divvy, have risen by 60% over the same period. This substantial increase in cycling—among the largest of major US cities—underscores a significant shift in transportation preferences and aligns with the city's goal of enhancing opportunities for bicycle travel. This trend not only reflects a broader cultural shift towards active modes of transportation, but also signals a growing recognition of the benefits associated with biking. To date, the City has supported the growth of cycling through citywide investments in safe biking infrastructure, as well as through ongoing expansions of the bikesharing system. A more recent effort is the Bike Chicago program, through which CDOT has committed to distributing 5,000 bicycles to age- and income-eligible Chicagoans by 2026.

According to AAA, the average cost of owning a new car is now over \$1,000 a month. For targeted programs like Bike Chicago, this stark reality underscores the importance of the city's goal of increasing low-cost mobility options for areas with high economic hardship. A 2024 study of seven mid-size US cities demonstrated a positive correlation between increased bicycling activity and improved road safety for all users, emphasizing the importance of investing in cycling infrastructure and equitable programming for safer streets. Additionally, a 2023 study by German researchers highlighted the positive association between cycling and a commitment to the common good. This helps affirm the intrinsic value of promoting biking as a means of fostering healthier, more sustainable urban environments.

Against this backdrop, the Bike Chicago program expands access to bicycles and promotes cycling as a viable mode of transportation, especially for the shorter trips that make up the majority of urban journeys. By providing free bikes to residents across the city, particularly those living in areas with higher economic hardship and barriers to mobility, the program contributes to creating a safer, more accessible urban environment. Moreover, the distribution of bikes through this program is strategically aligned with the city's broader efforts to equitably enhance its transportation infrastructure and increase access to protected bike lanes and neighborhood greenways.



Participants receive their bikes during a Bike Chicago distribution event. Credit: SUMC.

With the support of the MacArthur Foundation, the Shared-Use Mobility Center (SUMC) conducted an evaluation of the first 18 months of the Bike Chicago program. This evaluation intends to illustrate the impacts of Bike Chicago on its participants, and to shed light on how Bike Chicago and similar programs can expand biking, influence attitudes towards active transportation, improve access to important destinations, and build new transportation habits.

Through this work, SUMC found that the Bike Chicago program has furthered several of the goals outlined in Chicago's 2023 Cycling Strategy, especially the strategic pillar of serving local trips. In order to further serve the goals outlined in the Cycling Strategy, the program and its bike recipients would benefit from further outreach efforts to connect new riders with the city's vast bicycle community and other available venues for promoting bicycle programs and resources.

This report is intended to highlight SUMC's findings in greater detail, present recommendations to CDOT and other community stakeholders, and serve as a resource for other cities working on similar initiatives.

## Background

Bike Chicago began in 2022 with an initial goal of distributing 5,000 single-speed, pedal bicycles to city residents by the end of 2026. In 2022 and 2023, the Bike Chicago program cost the city \$1.23 million total, or approximately \$652 per distributed bicycle (along with bike security and

safety equipment), including materials, labor, and distribution costs. The remaining distributions are projected to cost an additional \$2.03 million by the end of 2026. Funding for Bike Chicago came from the Chicago Recovery Bond program, approved by the Chicago City Council in the wake of the COVID-19 pandemic.

Applications opened in July 2022 and immediately saw over 19,000 applications from residents. Distributions began in August 2022, with the City distributing a total of 518 bicycles to residents by the end of the calendar year. Distribution events continued throughout 2023, during which time the City distributed an additional 1,371 bicycles. This brought the total number of Bike Chicago recipients to 1,889 for the first two years of the

Shameka Turner, Program Manager of the SAFE Ambassadors, has been one of the driving forces behind Bike Chicago. Her journey to working with the SAFE Ambassadors was influenced by diverse experiences, including working in marketing and encountering the vibrant biking culture in European cities. Inspired by seeing biking as a practical form of transportation abroad, Turner recognized the potential for similar initiatives in Chicago, particularly in traditionally underserved communities such as her native Austin neighborhood. When the Bike Chicago program began, Turner saw the opportunity to challenge stereotypes and to promote cycling as a means of mobility and empowerment. Shameka is the force behind making sure people who receive bikes are properly educated. Her work ensures the program includes education and engagement alongside the distribution of new bikes.

program, leaving approximately 3,100 bikes to distribute through 2026 in order to reach the 5000-bike goal. At the current rate of distribution, the City is on pace to meet this goal. Due to the timing of this evaluation, the authors only surveyed and interviewed bike recipients from the first 18 months of distribution.

### **Program Management**

CDOT works with contractors and non-profit partners to handle various aspects of Bike Chicago. CDOT's outreach and engagement team, the Streets Are For Everybody (SAFE) Ambassadors, provide education, resources, and programming to uplift active transportation in the city. The SAFE Ambassadors coordinate the bike distribution events, helping recipients find correctly sized bikes, fitting helmets, and overseeing the process. Additionally, the SAFE Ambassadors developed an interactive safety education module which they presented at 2022 distribution events for every bike recipient. For 2023 distribution events, recipients were asked to virtually

participate in the safety events prior to distribution, in order to streamline operations on event days.

SAFE Ambassadors also operate CDOT's Learn to Ride program, which is closely related to Bike Chicago, as all income-eligible participants who attend a Learn to Ride event are also eligible for the Bike Chicago program. Along with Learn to Ride and other efforts outlined in the

Cycling Strategy, Bike Chicago is helping bridge divides and advocate for inclusive access to bikes across the city.

CDOT contractor WRD Environmental works with local bike shops to procure and assemble Bike Chicago bikes prior to their distribution. For these activities, WRD Environmental primarily relies on Working Bikes, a non-profit, Chicago-based bike shop that collects and repairs donated bikes from around the Midwest. Working Bikes handles most of the bikes for the program, but contracts additional support from other local bike shops, including Bikes N' Roses in Hermosa and West Town Bikes in West Town, for bike assembly.

"It was great to receive a bike from the city and it was a pleasant surprise that they have a bike repair class too."

-Bike Chicago Recipient

Additionally, CDOT works with Bikes N' Roses, West Town Bikes, and The Recyclery in Rogers Park for post-distribution maintenance classes. These optional maintenance classes offer bike recipients helpful guidance on how to maintain and make basic repairs to their new bikes. Maintenance class attendees are also provided a kit with tools and resources, including a city bike map, bike pump, tube patch kit, and tire levers to remove tires for repairs.

### **Program Logistics**

Bike Chicago participants apply online through the City of Chicago website. Eligibility for program participation is open to Chicago residents meeting the following criteria:

- Age 14 or older;
- Household income at or below the Area Median Income for Chicago (about \$110,000 for a family of four in 2023);
- Must not already own a bicycle; and
- Must face higher mobility hardship as defined in the City's Mobility and Economic Hardship (MOBEC) index OR have previously participated in a City-supported mobility program, like Greencorps or Learn to Ride.

Once an application has been deemed eligible and selected in a lottery, CDOT contacts the applicant to attend a virtual meeting on biking safely in Chicago. Following the virtual meeting, recipients are invited to schedule a time to pick up their bike at one of several bike distribution events, which take place in the Garfield Park community. Distribution events are managed by CDOT's SAFE Ambassador team. Recipients confirm their height with CDOT so that the proper number of bikes of each size are available prior to the distribution event. On the day of each

distribution event, CDOT staff confirm that the bikes are assembled properly and all tires are inflated. CDOT staff also prepare bags for participants containing a multi-tool, chain lube, a bike lock, and rechargeable bike lights. When participants arrive to receive their bicycle, they are also fitted for a helmet.



Bikes in storage before a distribution event. Credit: SUMC

### **Local Policy Context**

Bike Chicago ties in with strategies and goals outlined in recent transportation plans from the City and other public entities in the region. These plans include the Chicago Cycling Strategy, the Cook County Bike Plan, and On To 2050, which are detailed below.

### Chicago Cycling Strategy (2023)

In Spring 2023, CDOT released its <a href="Chicago">Cycling Strategy</a>, which outlines CDOT's approach to expanding Chicago's bike network and creating a more equitable, safe, and inviting city for cycling. The strategy is built around three strategic pillars: creating a connected citywide network; developing low-stress options; and serving local trips. While the first two pillars focus more on physical infrastructure, the third emphasizes the social



Three Strategic Pillars for Chicago's approach to creating a thriving bike culture. Source: Chicago Cycling Strategy Report

infrastructure needed to create and maintain a positive culture around bicycling among all Chicago residents.

In order to create a transportation system where bicycles can sustainably serve local trips in the long term, the City places a culture of cycling alongside consistent access to bikes for all residents. Along with the ongoing expansion of the Divvy bikeshare system, Bike Chicago is a key way the City is increasing access to bikes.

### Cook County Bike Plan

The Cook County Department of Transportation and Highways released the Cook County Bike Plan in April 2023. The County's plan is built on three principles: increasing everyday cycling, creating a core low-stress bike network, and investing equitably. These principles mirror the strategic pillars and building blocks of CDOT's Chicago Cycling Strategy. The plan cites National Household Travel Survey data from 2017 showing that over half of daily trips are less than three miles. This figure includes all vehicle trips, not just bicycles, demonstrating a major opportunity for mode shift in Cook County toward bicycles for everyday trips. This is even more pronounced within the city of Chicago, with its greater population density and strong existing network of safe and calm routes for cyclists.

The Cook County Bike Plan mostly concerns the physical infrastructure making up the County's network, including on-street bike routes and off-street paths or trails. Still, its stated goals involve improving an equitably distributed network of bikes to incentivize more bicycle trips.

#### CMAP: On To 2050

The Bike Chicago distribution program also closely aligns with the public vision outlined by the Chicago Metropolitan Agency for Planning (CMAP, the region's metropolitan planning organization) in their On To 2050 plan, the result of a multi-year planning and public consultation process. This plan emphasizes the Chicago region's shared goal of creating a safe, accessible, and well-connected environment for pedestrians and bicyclists. By providing free bicycles to residents across the city, Bike Chicago directly addresses barriers to mobility, encourages active transportation, and reduces reliance on expensive auto trips, contributing to the regional goal of improving conditions for pedestrians and bicyclists outlined by CMAP.

Moreover, the Bike Chicago program complements CMAP's framing of walking and bicycling as efficient, healthy, and enjoyable modes of travel. By distributing bikes and offering educational programs, such as Learn to Ride sessions, the safety training sessions given to Bike Chicago recipients, and the associated maintenance classes at local bike shops, the program not only facilitates access to bicycles but also empowers individuals with the skills and knowledge needed to navigate urban environments safely and confidently. CDOT's efforts align with regional objectives of fostering cultural shifts and creating pedestrian- and bicycle-friendly communities.

Additionally, Bike Chicago bolsters the realization of a wider network of <u>Complete Streets</u> by contributing to a transportation system that serves all users, including pedestrians, bicyclists, persons with mobility impairments, and transit riders. More bikes on the road—particularly new bikes in the hands of residents who didn't ride previously—builds wider awareness of the need in every part of the city for dedicated safe spaces in the public right-of-way for bicycle trips. By promoting biking as a viable transportation option and advocating for the expansion of biking infrastructure, the Complete Streets approach supports the creation of a modern, efficient, and sustainable transportation network in the Chicago area.

According to David Smith, Chicago's Director of Complete Streets, this process starts with building trust in the community and listening to local needs. In an interview with SUMC, Smith noted that bringing these bike infrastructure investments to new neighborhoods "is a community-based process, where we are partnering with neighborhoods and community stakeholders to understand mobility challenges within the community, understand opportunities, and physical or invisible barriers to getting around. We're also understanding the perceptions of public space and perceptions of biking and walking within a community. And from there, we work with the neighborhood to identify destinations within the community and then ultimately streets so that we're ultimately creating a network that connects people to the most important destinations."

Overall, the Bike Chicago program contributes to advancing the walking and bicycle goals established in CMAP's planning work, ultimately enhancing mobility, accessibility, and quality of life for residents throughout the city and region.

### Similar Programs Nationally

In an effort to better understand Bike Chicago within the wider context of bike giveaway, incentive, or subsidy programs in the US, SUMC performed a scan of comparable state- and city-led initiatives. While Bike Chicago is unique in many aspects, various other cities and states have giveaway programs to encourage bike riding. The majority of these are incentive programs that focus specifically on e-bikes (as opposed to Bike Chicago's conventional human-powered bikes), and most are rebate or voucher programs rather than physical bicycle giveaways. Despite differences, these programs still provide insight into the various approaches communities have taken to incentivize biking, and can act as reference points for Bike Chicago.

### **Voucher Programs**

Most other equivalent programs take the form of rebate or voucher programs for e-bike purchases, often requiring some out-of-pocket expense for recipients. As of early 2024, at least nine US states offered statewide e-bike subsidy programs, which generally allow residents to save between \$500 and \$2000, depending on the type of bicycle purchased and the purchaser's income status. Some states have incorporated rebates for e-bikes into existing electric vehicle rebate programs. As of this writing, no state government offers a state-wide rebate for conventional bikes.

Additionally, many cities around the US have offered e-bike rebates or vouchers for residents. These programs vary not only in scale, but also in sources of funding. For instance, an e-bike rebate program in Contra Costa, CA, specifically for some low-income residents is funded through a grant from the California Energy Commission as part of a wider program focused on electric carshare, charging, and workforce development. Another rebate program in Santa Cruz, CA, received funding from the City of Santa Cruz and Ecology Action, with help from private donors and charitable foundations.

One of the largest bike incentive programs is through the City of Denver, CO, which has distributed over 6,000 e-bike vouchers to participants since launching in April 2022 (for comparison, a 2023 pilot in Bloomington, IN, had funding for 45 e-bike vouchers, and a similar program in Tampa, FL, had funding for 180 e-bike vouchers in its first year). Through the Denver program, eligible residents received vouchers to be used at one of nine participating bike shops for \$400 off a new e-bike. For income-qualified participants, a \$1,200 standard e-bike voucher was available (additional funds were available for cargo e-bike purchases, as well). Once vouchers were distributed, recipients could use them at the point of sale to be deducted from the total bicycle price.

With quality e-bikes starting at around \$1,500 and often ranging to more than \$5,000, most of these programs cover only a portion of the full cost of a new e-bike, even for low-income participants.

### Physical Bike Giveaway Programs

There are notably few recent physical bicycle distribution programs, and none as large as Bike Chicago. West Hollywood, CA, piloted a bike giveaway program in 2023 for any adult resident, with bikes provided through a partnership with Schwinn Bicycle Company. The pilot provided a total of 50 conventional bikes (recipients could choose between several Schwinn models distributed through a local bike shop) to a randomly selected group of applicants. To keep their bike, recipients committed to riding at least 20 miles per month, completing surveys throughout the pilot, and providing monthly reports and odometer readings to the city.

Another program has been ongoing since January 2023 in New York City, NY, run by the Mayor's Office of Immigrant Affairs, the NYCDOT, and Bike New York, a local education and advocacy non-profit. The program is designed explicitly for asylum seekers and uses conventional bikes donated to Bike New York by individuals. Donated bikes are refurbished through Bike New York's Recycle-a-Bicycle bike shop and distributed at Asylum Seeker Resource Center locations throughout the city. So far, 200 asylum seekers have received bicycles through the program.

Finally, Charlotte, NC, started an e-bike giveaway program in late 2023, with support from a \$300,000 grant from the Wells Fargo Championship. This program has an equity focus, and is available to new homeowners in one of the city's Corridors of Opportunity, underinvested areas where the city is focusing for better housing and economic outcomes. Charlotte aims to distribute 200 e-bikes throughout the program, and will also provide training and maintenance

classes. At the time of writing, the three-year pilot is still in its early stages, but intends to explore how bike giveaway programs can improve outcomes for low- and moderate-income families.

### Takeaways from Comparable Programs

While city and state governments incentivizing biking is not a novel idea, the Bike Chicago program is distinct in several aspects. Though there are several voucher programs, the vast majority are exclusively for e-bikes or cargo e-bikes, and most do not cover the full purchase cost of a quality bike.

Very few US cities have piloted physical bike giveaway programs. Of the few communities that have piloted or are currently piloting similar physical bike giveaway programs, none are at the scale of Bike Chicago, with the largest comparable programs distributing roughly 200 bicycles each.

Equity is a guiding principle for most of the programs, regardless of how they're specifically set up. Bike Chicago prioritizes applicants who face higher mobility and economic hardship, following the program's goal of making biking safer and more affordable for more Chicagoans. Many equivalent programs, both physical giveaways and voucher or rebate programs, similarly prioritized certain populations (most often low-income individuals) for distribution. Unlike Bike Chicago, some equivalent programs also include stipulations as part of participation to take surveys, maintain ownership, or commit to ride the bike a certain amount each month.

Some comparable programs illustrate the impacts of their incentives. For instance, based on a survey administered several months after Denver's rebate program launched, new e-bike owners rode an average of 26 miles per week, replacing more than 3 weekly round trip car trips. Furthermore, 67% of funding for the program went to income-qualified residents, who used e-bikes nearly 50% more than standard voucher recipients. While these are only preliminary results for an ongoing program, the results suggest that bike incentives under the right circumstances can further equity, climate, and mobility access goals.

## Bike Chicago Evaluation Approach

To evaluate the local impact of the Bike Chicago program, SUMC collected and analyzed qualitative and quantitative data from various sources:

- 1. Observation and engagement at maintenance classes and distribution events
- Surveys administered to Bike Chicago participants before and after receiving a bike
- 3. Interviews with Bike Chicago recipients
- 4. Interviews with other key Bike Chicago stakeholders
- General geospatial data about the city from the <u>City of Chicago's Data Portal</u>
- CDOT data including Bike Chicago program data, the Mobility and Economic Hardship index, and bike path routes

These methods are detailed in the sections below.

#### Distribution Events and Maintenance Classes

SUMC attended several Bike Chicago events to observe the program process and engage with bike recipients. Between August and November 2023, SUMC attended three bike distribution events and three maintenance classes at The Recyclery, Bikes N' Roses, and West Town Bikes. In addition to administering surveys at these events, SUMC was able to gain feedback through candid conversation with participants and observations of the distribution process and maintenance classes.



Bike Chicago participants at a maintenance class. Credit: SUMC

### **Recipient Surveys**

SUMC administered two surveys to gauge bike recipients' feelings, expectations, and experiences with the Bike Chicago program. These surveys were developed to gain a better understanding of recipients' transportation habits before and after receiving a bike, and what barriers exist for riders. Both surveys also had questions on basic demographic information, like age range, zip code, and household access to a car.

The first survey (the "pre-giveaway survey") was intended to examine recipients' travel behaviors prior to owning a bike and get a sense of how often and for what types of trips they expected to use the bike. The survey was seven questions long, and every question was multiple choice, with the exception of a question asking respondents for their zip code. This survey was administered in person at bike distribution events in Fall 2023 while participants waited to receive their bikes, and ultimately received 200 responses. The complete survey instrument is provided in Appendix 1.

The second survey (the "post-giveaway survey") was administered to past bike recipients via email or in person at maintenance classes, and meant to determine how their travel behaviors changed since receiving the bike. This survey, which was also translated and distributed in Spanish, included ten questions about recipients' biking experience, including how often recipients usually ride their new bikes, the distance they regularly travel, and the impact of owning a bike on their usage of other modes of transportation. The post-giveaway survey also included an open ended question asking for any additional thoughts on owning a bicycle. SUMC received 81 English and 17 Spanish responses, for a total of 98 responses to the post-giveaway survey. The complete survey instrument is provided in Appendix 2. Findings from both surveys are discussed in subsequent sections.

### **Recipient Interviews**

Between December 2023 and February 2024, SUMC conducted semi-structured interviews with Bike Chicago participants. SUMC selected interviewees based on interest indicated by a

"I love my bike and the program. My bike works super well and the more bike lanes there are, the easier it will be to get around the city"

-Bike Chicago Recipient [translated from Spanish]

question on the post-giveaway survey. Of the 81 respondents to the English-language post-giveaway survey, 21 indicated that they would be interested in a follow-up interview. The researchers directly reached out to all 21 interested respondents several times, but received no response from most. Ultimately, SUMC was able to conduct six semi-structured, hour-long interviews with bike recipients. The interviews were an opportunity for participants to expand on their experiences with the Bike Chicago program and discuss their biking habits both before and after receiving a bike. The interviews took place virtually over Zoom, and were recorded with participants' permission to assist in accurately recounting the interviewees' perspectives. The list of interview questions is provided in Appendix 3.

#### Stakeholder Interviews

Additionally, SUMC conducted a series of informational interviews with stakeholders from the City of Chicago, community-based organizations, and partnering bike shops. The purpose of these interviews was to gain a better understanding of the pilot from the programmatic perspective and to gain insights on successes, challenges, and lessons learned from those directly involved with the initiative. Interviews were conducted via Zoom between October and November 2023, and each interview was roughly one hour long. Overall, SUMC interviewed six representatives from five different stakeholder organizations:

- Chicago Department of Transportation
- SAFE Ambassadors
- Bikes N' Roses
- The Recyclery

#### Working Bikes

In addition to discussing program operations and each of the organizations' role in Bike Chicago, the interviews also provided an opportunity for interviewees to share thoughts and recommendations on the pilot for future implementation.

### Geospatial, Demographic, and Program Data Analysis

The City of Chicago provided SUMC with several datasets which provided information on all Bike Chicago applicants, including application date, bike receipt date if applicable, applicant age, community area and zip code of residence, and other relevant information. SUMC also accessed geospatial data from the City of Chicago's <a href="Data Portal">Data Portal</a> to examine city bikeways. Additionally, the research team used data from the Mobility and Economic Hardship Index (MOBEC) developed by the Center for Neighborhood Technology (CNT) with support from the City of Chicago. MOBEC analyzes where Chicago residents experience the highest levels of economic and mobility hardship using a number of data indicators from the ACS, and is used by CDOT for prioritizing investments and interventions in various dimensions. MOBEC combines a Mobility Hardship index comprising commute times, percentage of a population with a disability, and transportation costs as a percentage of local income (from CNT's Housing + Transportation Index) along with an economic hardship index that includes indicators such as per capita income, percent of population of working age, unemployment, poverty statistics, and percent of occupied housing units with more than one person per room. A deeper description is available in <a href="CDOT's Strategic Plan Year 1 Update">CDOT's Strategic Plan Year 1 Update</a> from the end of 2022.

The City has begun incorporating MOBEC into its own planning and transportation decisions. From the City's Strategic Cycling Plan: "MOBEC scoring is now a primary criterion in data-driven decision making at CDOT, guiding where and when infrastructure investments are made throughout the City." With these datasets, SUMC performed comparative analyses to examine how the distribution of bike recipients compared to MOBEC and bikeway density.

# **Findings**

### Program impacts in areas of high mobility and economic hardship

Using Census data from the 2019 American Community Survey 5-year estimates, MOBEC incorporates commute times, the percentage of disabled residents, and relative transportation costs as a percentage of income. Out of the 30 community areas that score in the upper half of the MOBEC index, (above 55.1, indicated by the graduated green shading in Tables 1, 2, and 3), there are 11 communities where the count of bike recipients through the end of 2023 is among the highest in the program, reaching or exceeding the 75th percentile. These community areas are Douglas, Grand Boulevard, Humboldt Park, Austin, North Lawndale, South Lawndale, South Shore, Brighton Park, New City, Gage Park and Chicago Lawn, all of which are situated on Chicago's South and West sides. In general, areas with higher MOBEC scores indicate

areas with greater potential for residents to meet their mobility needs with a bicycle, from both an economic standpoint and the existence of other mobility challenges.

Community Area	MOBEC	Bike Chicago Recipients	Bike Chicago Recipients per 10k Residents	Total Miles of Bikeways	Percentage of bikeways per street miles
Riverdale	91.3	4	5.51	0.0	0.0%
West Garfield Park	79.3	11	6.31	5.5	16.5%
Englewood	76	20	8.21	3.8	4.7%
West Englewood	75.4	15	5.06	5.2	7.3%
Fuller Park	73.4	3	11.69	0.4	1.4%
West Pullman	68.7	20	7.66	7.2	9.5%
East Garfield Park	68.1	16	8.00	10.2	21.7%
Burnside	67	2	7.91	0.2	1.8%
South Deering	66.2	17	12.05	6.1	8.0%
South Chicago	65.9	13	4.76	9.4	15.9%
Greater Grand Crossing	65.7	15	4.77	9.1	10.8%
South Lawndale	65	61	8.54	12.0	16.0%
North Lawndale	64.3	36	10.35	11.7	16.3%
Austin	64	75	7.77	17.1	11.5%
Chicago Lawn	63.9	35	6.26	4.8	6.7%
Roseland	63.8	24	6.18	11.1	10.2%
Auburn Gresham	63.6	24	5.35	9.6	11.1%
New City	63.5	30	6.88	5.5	6.6%
Woodlawn	62.7	24	9.83	7.8	19.3%
Washington Heights	62.4	18	7.18	5.1	7.1%

Table 1: Top Quartile of Community Areas by Mobility + Economic Hardship Index (MOBEC)

Table 1 shows the Top Quartile of Chicago community areas, sorted by MOBEC Index. (The complete table of all 77 community areas is available in Appendix 4.) The data show a strong relationship between higher MOBEC and a greater count of Bike Chicago Recipients.

That higher MOBEC values correspond to higher numbers of recipients demonstrates the City's success in distributing bikes to those in need through its application and distribution process. Importantly, however, MOBEC scores do not incorporate any measure of existing bike

infrastructure (note: these tables show on- and off-street bike lane mileage at the end of 2023). Although not as clear as that between MOBEC and the count of recipients, the data point to an inverse correlation between higher MOBEC areas and the percentage of streets which currently include bike lanes of any kind. This relationship highlights an opportunity for continuing to prioritize infrastructure projects in specific areas to encourage cycling and promote active transportation.

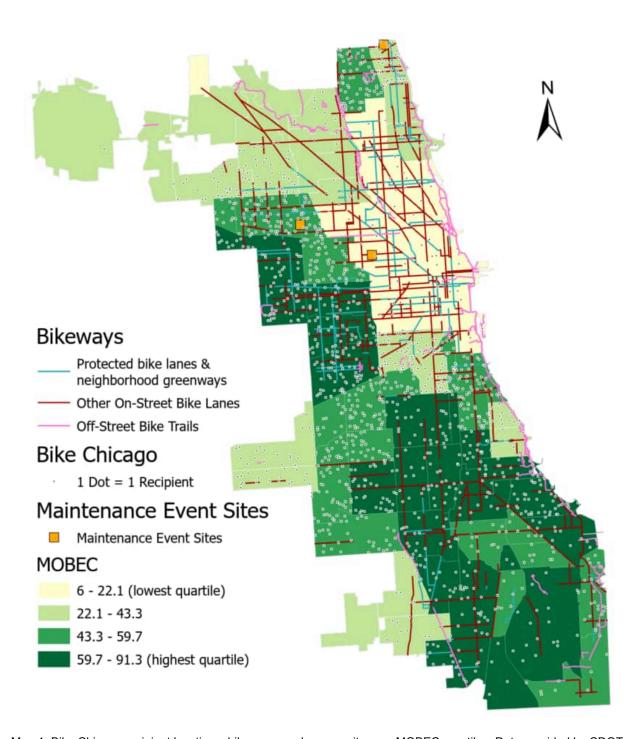
Community Area	Bike Chicago Recipients	Recipients per 10k Residents	MOBEC	Total Miles of Bikeways	Percentage of bikeways per street miles
Austin	75	7.77	64	17.1	11.5%
West Ridge	68	8.82	47.6	7.5	9.7%
Belmont Cragin	63	8.06	55.1	12.2	14.4%
South Lawndale	61	8.54	65	12.0	16.0%
Humboldt Park	57	10.52	57.4	3.7	5.1%
Brighton Park	49	10.88	59.5	0.3	0.6%
Rogers Park	43	7.73	39	8.5	14.2%
Lower West Side	43	12.74	43.3	8.7	22.7%
South Shore	41	7.60	60.9	4.1	6.0%
West Lawn	38	11.29	51.8	1.3	2.5%
North Lawndale	36	10.35	64.3	11.7	16.3%
Portage Park	36	5.71	36.9	6.9	7.5%
Bridgeport	35	10.39	40.8	4.8	6.7%
Chicago Lawn	35	6.26	63.9	4.8	9.4%
Ashburn	32	7.79	46.3	2.5	2.6%
Dunning	31	7.18	38.9	2.2	2.8%
Grand Boulevard	30	12.20	58.6	5.5	6.6%
New City	30	6.88	63.5	2.7	6.6%
Gage Park	28	7.08	59.1	1.5	3.4%
Douglas	27	13.31	58.7	7.1	19.2%

Table 2: Top Quartile of Community Areas by Total Bike Chicago Recipients

Community Area	Bike Chicago Recipients	Bike Chicago Recipients per 10k Residents	MOBEC	Total Miles of Bikeways	Percentage of bikeways per street miles
Armour Square	26	18.72	59.7	2.9	7.7%
Mckinley Park	22	13.82	47.7	1.1	3.3%
Washington Park	17	13.38	62.3	2.6	9.6%
Douglas	27	13.31	58.7	7.1	19.2%
Lower West Side	43	12.74	43.3	8.5	14.2%
Grand Boulevard	30	12.20	58.6	2.7	6.6%
South Deering	17	12.05	66.2	6.1	8.0%
Pullman	8	11.73	50.4	4.1	11.1%
Fuller Park	3	11.69	73.4	0.4	1.4%
East Side	25	11.51	59	9.6	17.8%
West Lawn	38	11.29	51.8	1.3	2.5%
Brighton Park	49	10.88	59.5	0.3	0.6%
Humboldt Park	57	10.52	57.4	3.7	5.1%
Hermosa	25	10.39	51.1	2.9	11.3%
Bridgeport	35	10.39	40.8	4.8	9.4%
North Lawndale	36	10.35	64.3	11.7	16.3%
Oakland	7	10.30	53.3	3.7	27.1%
Woodlawn	24	9.83	62.7	7.8	19.3%
West Elsdon	18	9.79	52.3	1.2	4.6%
Archer Heights	13	9.16	51	0.0	0.0%

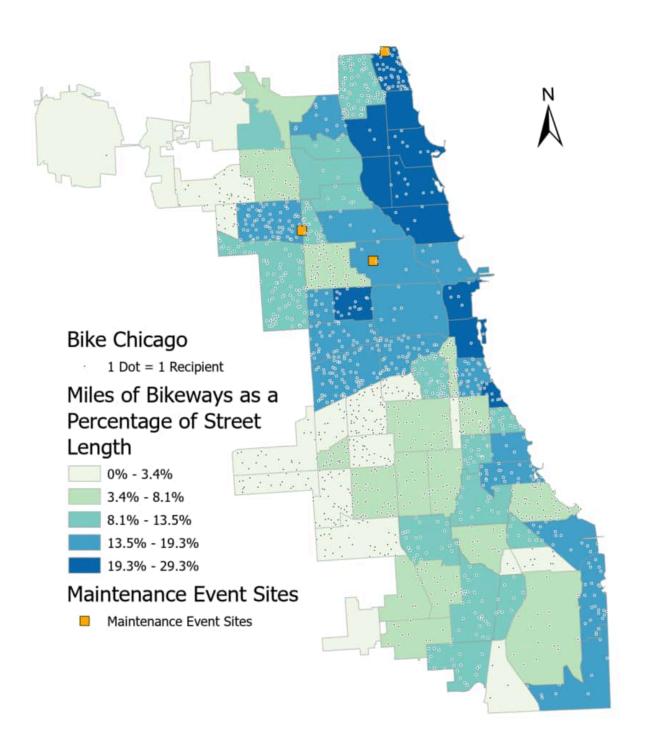
Table 3: Top Quartile of Community Areas by Bike Chicago Recipients Per Capita

The maps below are geographic visualizations of the above data. The first map marks the location of each Bike Chicago bike recipient (randomized within their community area) and all of the city's designated bike lanes overlaid on MOBEC scores by community area. Darker green indicates higher MOBEC scores (i.e., greater levels of mobility and economic hardship).



Map 1: Bike Chicago recipient locations, bikeways, and community area MOBEC quartiles. Data provided by CDOT.

Map 2 shows the data in a different way, instead indicating the density of bikeways per community area. Like the first map, this also shows where bike recipients reside. While these maps show the strong correlation between areas with higher MOBEC scores and number of bike recipients, they also show the disparity between MOBEC scores and concentration of bikeways.



Map 2: Bike Chicago recipient locations and community area bikeway density. Data provided by CDOT.

While Map 2 includes off-street bike paths in its "Percentage of Street Length" calculation, there is still a gap in total bikeways compared to where bikes were distributed by the Bike Chicago program, pointing to an ongoing need for greater infrastructure investment in these areas.

### **Key Community Findings**

The pre- and post-giveaway surveys along with semi-structured interviews and feedback from distribution and maintenance events provided opportunities for many Bike Chicago participants to shed light on how they use the bikes, the barriers they encounter when riding, and how they view the program. From this qualitative data, several key takeaways emerged on how the Bike Chicago program has impacted participants' transportation habits and lives.

### Safety is still a barrier for many people

A common theme among program participants was where, when, and how biking in Chicago felt safe or unsafe. Survey respondents and interviewees represented a broad range of ages, neighborhoods, and cycling experience levels, yet common themes emerged around safety and barriers to biking regardless of these factors. While participants had different ideas on the specifics that made them feel unsafe, safety in general was a clear barrier.

The post-giveaway survey allowed respondents to choose among several barriers that they encountered while riding, including weather conditions, distance to destinations, bike lane protection, and others. The survey also included an option for respondents to enter their own response if not listed.

For the factors preventing people from using their bike more often, safety was overshadowed only by poor weather conditions. Nearly half of all respondents (46.9%) selected "Not enough safe bike routes (protected bike lanes, etc.)" as a barrier. Other free-text responses included mentions of subpar road conditions, potholes, lack of designated bike lanes, and a general fear of passing cars.

These sentiments were corroborated by interviews. The most common safety concern shared among interviewees was with car traffic: most interviewees, regardless of neighborhood, expressed some concern about riding on streets alongside cars. One interviewee described using the bike most often on trails in a forest preserve close to her house, but still being anxious when making the 2-3 block ride between her house and the forest preserve due to traffic and poorly maintained streets.

Aside from a lack of safe biking infrastructure, survey respondents and interviewees had other comments on what made them feel unsafe while biking. For instance, one interviewee mentioned a corridor he often rode through did not have sufficient street lighting at night to make him feel comfortably visible. Also, several survey respondents and one interviewee also expressed concern over being a target for crime while riding.

Participants appreciated the streamlined signup and distribution process Participants had few, if any, critiques of the distribution process as a whole, and many expressed appreciation for the training and safety programs. Nearly every interviewee and several survey respondents noted that they felt the entire process, including the registration and bike distribution events, was smooth, organized, and straightforward.

Interviewees came from various neighborhoods in the city, and some discussed traveling to the distribution location in Garfield Park. While the distribution location did not appear to present a major barrier for any of the interviewees, several noted the need to travel long distances to get there. Even so, this did not impact interviewees' positive perceptions of the program. As one interviewee put it, "I had to travel to pick it up but I didn't mind it. I thought the sign-up was simple and easy."



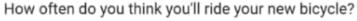
Bike Chicago Distribution Event. Credit: SUMC.

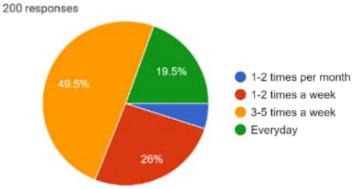
Multiple interviewees mentioned the informational programming they were offered before receiving bikes, and noted that they felt it was helpful. In particular, some interviewees thought the videos on safety and bringing a bike on CTA buses were especially valuable. One interviewee noted: "In terms of the process of picking up the bike, I thought it was pretty cool—They kind of sent us a lot of different learning opportunities; there was a station where I had to walk off the bike; there was a presentation on how to bring it on CTA, and safety, things like that."

### People ride in diverse ways

The interviews and survey responses illustrated the variety of approaches people had to biking. In the pre-giveaway survey, 50% of respondents predicted that they would ride their bikes 3-5 times per week, and 20% of respondents expected to ride every day. The post-giveaway survey showed that reality was a slight reduction from these expectations; about 28% ride 3-5 times per

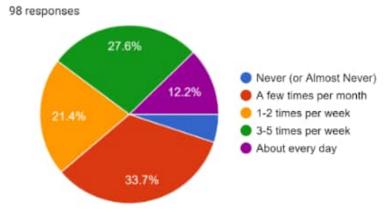
week, and 12% indicated that they ride their bike about every day. The vast majority of respondents said that they continued to ride, even if it was less than they may have predicted at first: fewer than 6% indicated that they never or almost never rode their bikes.





From the Pre-giveaway Survey

### About how often do you take a bike trip?

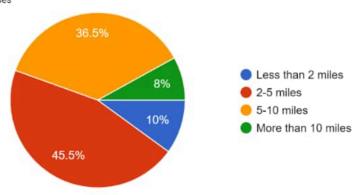


From the Post-giveaway Survey

In the pre-giveaway survey, 8% of respondents estimated their average trips would be more than 10 miles, 37% estimated an average trip length of 5-10 miles, 46% estimated an average trip length of 2-5 miles, and 10% indicated that their average trip length would be less than 2 miles.

These estimates are somewhat in line with responses to the post-giveaway survey, but again, users tended to overestimate their usage beforehand. Just 3% of respondents' average trips were over 10 miles, 26% were 5-10 miles, 44% were 2-5 miles, and 28% of average trips are less than 2 miles.

About how long would you estimate your average bicycle trip to be? (roundtrip) 200 responses



From the Pre-giveaway Survey



From the Post-giveaway Survey

This is in line with the City's own <u>Cycling Strategy</u>, "Nearly one-quarter of all car trips in Chicago are under one mile, and half of all car trips are under three miles. A vast number of car trips are made for distances which could be comfortably made by bike." Having access to a bicycle impacted several participants' travel habits by reducing short car trips in favor of bike trips. As one survey respondent expressed, "I am learning how to get around Chicago without asking my mom for a ride. I am able to ride my bike to most of the places I have to go which saves me money on [U]ber rides." This sentiment was mentioned during interviews, as well.

Several interviewees and survey respondents mentioned using bikes to travel within their neighborhoods more frequently when they previously would have relied on a car. Others noted, however, that because of the style of bike that was distributed (all Bike Chicago bicycles are single-speed and the first bikes distributed were cruiser bikes with coaster brakes), it was somewhat less viable to travel long distances in general. Even so, in the post-giveaway survey, nearly 60% of respondents indicated that they now drive less overall than before they received their bicycle.

### Views on the Bike Chicago program are overwhelmingly positive

Overall, Bike Chicago participants expressed their deep appreciation for the Bike Chicago program. This sentiment was reflected in various short-answer survey responses and was present throughout every interview. As one interviewee succinctly put it, "Outside of delivering it to my door, they couldn't have done anything better with the process. Honestly, I don't know what else, they took care of the little details and they gave me a new bicycle. And it seems like a nice bicycle."

### Recommendations

# Continue the Bike Chicago Program and Support for Other Bike-Related Initiatives

Continuing to support initiatives like the Bike Chicago giveaway program is crucial for promoting access to bicycles and advancing the goals outlined in the Chicago Cycling Strategy. By providing individuals with access to bikes, the program plays a vital role in encouraging active transportation and reducing reliance on cars, thus contributing to improved air quality, reduced congestion, and enhanced public health. The overwhelmingly positive feedback from program participants underscores the importance of initiatives that promote cycling as a viable and enjoyable transportation option.

Bolstering active transportation also involves a community-oriented focus. As an example, the Belmont Cragin community area had the highest number of Bike Chicago applications of any community area, along with the third most Bike Chicago recipients through 2023. This enthusiasm directly relates to the community-based approach that CDOT undertook in developing bikeway infrastructure for the community. CDOT worked closely with community groups like the Northwest Center to foster a strong enthusiasm for cycling. Belmont Cragin now has 17.5 miles of bikeways, which is over four times the bike infrastructure prior to the neighborhood-level planning process that CDOT initiated in 2021.

"I think it's a really great program.

I think it's especially great for communities of color who don't have access to the gym or other recreational activities. It's great that the city's doing this."

-Bike Chicago Recipient

Austin is another example of a neighborhood where the City's community engagement efforts are paying off. Along with North Lawndale and Belmont Cragin, Austin was one of the three community areas with higher MOBEC indexes where CDOT worked closely with neighborhood leadership to plan and build bike networks connecting residents to important destinations. While this community-level planning can take years to

show outcomes, the level of Bike Chicago participation demonstrates that Austin already has a high interest in cycling with the most bike recipients of any community area in the city.

The City of Chicago should not only continue the Bike Chicago giveaway program, but also maintain these community engagement efforts in conjunction with other City-led bike-related initiatives.

### Expand community bike shop involvement

Chicago benefits from a thriving bike community, which presents opportunities to leverage existing relationships and resources to further support initiatives like the bike giveaway program. Partnering with more community bike shops could enhance the program's reach and impact by providing additional support services, such as continuing the maintenance classes that began in 2023. Local bike shops also present an opportunity to expose recipients to volunteer opportunities or youth programs for recipients and their family members who are under 18. This process of including local businesses and the communities they foster can also further develop the capacity of the Bike Chicago program alongside the broader bicycle community in Chicago.

The bicycle maintenance classes offered for recipients at local bike shops in October and November 2023 represented a good step for the program in this direction. Of the five people who came to the scheduled classes, all of them were coming from the south side or far west side. According to Alex Lamers of Working Bikes, there is an opportunity to offer such classes or "clinics" in neighborhoods further away from many of the city's bike shops, which are largely concentrated on the North and Northwest sides, in areas with lower MOBEC index ratings. According to Lamers, "Simple maintenance type stuff could definitely be done outside, especially if you're talking about bike education. Obviously not in the winter, but in the summer if you just have some mobile stands and you find a park somewhere or some public space, [...] just set up outside when it's nice out." The City could also explore hosting such events in other public spaces such as schools or even community centers through the Park District.

However, providing such classes outside of typical bike shops would present other challenges that need to be considered. Resources would be limited to whatever organizers are able to transport in their trucks or bike trailers, so the curriculum of any such class would likely need a higher level of planning and precise logistical coordination. But bringing the benefits and resources of maintenance classes closer to the recipients with the highest mobility challenges would be an opportunity to meet these recipients where they live.

Furthermore, community bike shops represent a potentially valuable resource as distribution centers, even for the current supply chain of new bicycles. Currently, Bike Chicago only uses a single distribution site in Garfield Park. While this single, City-owned central distribution point creates some logistical efficiencies, bike recipients reside in neighborhoods throughout the city. Implementing a dispersed distribution process across multiple locations could make the distribution process easier for recipients across different neighborhoods who face mobility hardships. This approach would require close support with local shops, but it could lead to long-term benefits for Bike Chicago recipients and the city's broader bicycling community.

In the same way that Chicago's Strategic Cycling Plan relies on a community-centric approach to planning and building physical infrastructure, there is an opportunity for a similar community-based approach to the social infrastructure that comes alongside deploying thousands of bikes across the city. Social infrastructure begins with promoting access to related bike resources and programs for existing bike recipients, and many local bike shops are already doing the great work of promoting the bicycle community by hosting such resources and programs. But while hosting distribution events in multiple locations may make the program more accessible for recipients and provide an opportunity to develop deeper partnerships with bike shops, it may also produce logistical challenges and put additional strain on CDOT, so a careful balance is needed between reach and resources in any expansion.

### Provide recipients with ongoing exposure to bicycle community events

Outreach to existing Bike Chicago recipients could further this level of engagement between the new cyclists and the broader community. CDOT has email contact information for every recipient, and could contract out the task of sending a newsletter (at monthly or quarterly intervals) detailing specific bike events by neighborhood. Chicago has numerous group rides every month across the city. Some of these events—like the Boulevard Lakefront Tour or the annual Bike the Drive event on DuSable Lake Shore Drive—involve thousands of participants. But there are also neighborhood-scale events including those run by Chicago Family Biking on the North Side, the neighborhood walk-and-ride events in North Lawndale operated by Equiticity, and the annual Roll N Peace ride through Englewood. The city has an opportunity to support these community-led initiatives by leveraging the contact information of Bike Chicago recipients.

In addition to these community bike rides, ongoing outreach to past recipients can also highlight other opportunities to get involved in the bike community. These include volunteer opportunities with programs operated by the city or local bike shops, open shop hours, and youth-specific opportunities for kids to get involved. If City employees are unable to directly promote some of these activities due to internal policies, the task of preparing and distributing a newsletter would be a great chance to leverage a connection with one of the stakeholder groups involved in the program such as the SAFE Ambassadors or another local group. Within this outreach is an opportunity to continue the maintenance classes for past recipients that began in 2023. While the maintenance classes had a strong impact for those that attended, only a handful of people showed up across three separate classes. It would be beneficial to explore additional locations for these classes to make them more accessible for recipients in different neighborhoods.

### Leverage the program's impact with additional outside support

While the program currently focuses on distributing physical bikes assembled specifically for Bike Chicago, exploring alternative approaches such as a voucher program connecting applicants to local bike shops could offer more flexibility and efficiency in meeting participants' needs and preferences. By leveraging funding sources outside of Chicago Recovery Bonds, the city can explore innovative partnership solutions to increase access to bikes while supporting local businesses and reducing strain on CDOT and the SAFE Ambassadors' labor-intensive

distribution efforts. These funding sources could include philanthropic support or public support from state or federal government. Other private funding opportunities include community grants available from Chicago-area railroads like Norfolk Southern's Thriving Communities Grant or Union Pacific's Community Ties Giving Program.

### Bicycle-related Recommendations Beyond Bike Chicago

In addition to the direct changes to Bike Chicago recommended above, other programming and infrastructure recommendations surfaced through the interviews and surveys with recipients and stakeholders.

### Capacity building through high school programs

Expanding capacity-building initiatives in historically underserved neighborhoods through programs in high schools presents a promising avenue for enhancing mobility and fostering a culture of cycling among youth. These could build upon the success of existing youth programs like Greencorps, the City's sustainability-focused employment training program, which provides opportunities for participants to learn about bike maintenance and assembly. Similar initiatives—tailored specifically for high school students—could yield significant benefits. By integrating bike education and skill-building activities into school curricula and structured, after-school activities, CDOT can continue to empower young people with the knowledge and confidence to embrace cycling as a mode of transportation as well as a potential vocational path.

Not only would such programs contribute to the development of a new generation of cyclists, but they would also promote active lifestyles and sustainable mobility choices from an early age. Moreover, by targeting under-resourced neighborhoods, these initiatives have the potential to address disparities in access to transportation options and promote equity in urban mobility. Through partnerships with schools, community organizations like Equiticity, and other local groups including bike shops and advocacy organizations, CDOT can leverage these programs to create lasting positive impacts on the mobility landscape of Chicago's diverse neighborhoods.

### Bicycle infrastructure beyond physical paths and bike lanes

Infrastructure for cars is normally described as physical spaces for driving, like streets, highways, and bridges. However, there are many other services that keep vehicles fueled, parked, or maintained throughout their lifecycle. The same is possible for bikes, and the City of Chicago has an opportunity to help provide some of these services to help cyclists on their trips beyond providing safe spaces for travel.

One possibility to address this is to establish new resources by strategically planning bike-part vending machines in community centers in high-need areas or schools with existing after-school bike programs. By providing convenient access to essential bike parts and accessories, such as tires, tubes, and lights, these vending machines can support the maintenance and upkeep of bicycles, particularly for individuals who rely on cycling as their primary mode of transportation.

Reviving initiatives like the Hub312 bike facility in Millennium Park—equipped with amenities such as showers and maintenance facilities—could address some barriers identified by survey respondents. In the post-giveaway survey, 7 of the 98 respondents mentioned that one of the barriers keeping them from biking more is "Hot weather (too hot to ride, or don't want to arrive sweaty)." The Millenium Park facility was one possible place to address this, but this also demonstrates a potential market for the city to use paid showers along existing bike infrastructure like the 606 biking and walking path along the Bloomingdale Trail or the Lakefront Trail.

Similar to the city's recently announced plan to explore a municipally owned grocery store, there is an opportunity for a city-owned bike shop in one or more of the underserved neighborhoods where Bike Chicago applications indicate a clear interest in biking. Many of the existing bike retail stores and community-led bike shops are concentrated on the North and Northwest sides. There is an opportunity for a city-led effort to help support burgeoning bicycle communities in neighborhoods like Austin or North Lawndale, where the city has already begun the work of community engagement through bicycle infrastructure projects and distributions of Bike Chicago bikes to residents.

### Conclusion

During the course of this evaluation, CDOT received an unsolicited email from a participant, thanking the department for establishing this program. Though the sender of the email did not participate in the interviews, the email reflects the sentiments of many program participants: "I wanted to thank your organization for providing me with that bike last August. You don't know how much it has changed my life in showing me that at any age, you can learn something new. I didn't know how to ride a bike. My 7 year old knew and learned when she was 4. Getting that bike allowed me to learn and now I can bike with her. Lack of time kept me from taking advantage of the free lessons you provided but I just practiced by myself and realized that I could do it. Now my daughter and I ride together by the lake."

In line with the sentiment expressed in the email, it is evident that the Bike Chicago program has had a profound impact on the lives of its participants. This anecdote resonates with the broader themes we observed throughout the evaluation, where participants shared stories of empowerment, newfound mobility, and community engagement facilitated by the program. Feedback from maintenance classes and distribution events, along with

"Outside of delivering it to my door, they couldn't have done anything better with the process. Honestly, I don't know what else, they took care of the little details and they gave me a new bicycle. And it seems like a nice bicycle."

-Bike Chicago Recipient

surveys administered to Bike Chicago participants, consistently highlighted the program's positive impact on individuals' confidence in cycling and their ability to navigate the city safely.

Moreover, interviews with program participants and other key stakeholders provided valuable insights into the multifaceted benefits of the program, from promoting physical activity and healthy lifestyles to fostering a sense of belonging and connectivity within communities. This qualitative data, complemented by quantitative analysis of GIS and demographic data, underscores the program's success in achieving its objectives and serving the diverse needs of Chicago residents.

Bike Chicago represents a strong foundation through which the City is increasing access to bicycles. Through the first two years of bike distributions, the program has demonstrated an effective, cost-efficient model for getting bicycles into users' hands for transportation throughout the entire city—particularly in historically underserved neighborhoods. Chicago's geography—with its flat landscape, temperate summer weather, and robust network of on- and off-street bicycle paths—presents a unique opportunity for mode shift from short automotive trips towards active transportation. Initial applications for the program were triple the maximum amount of bikes that CDOT has budgeted to distribute currently, which shows that increases in funding and scope could easily serve a larger population. Furthermore, future private support—along with community involvement through the city's vast community of bicycle shops and advocacy groups—could help the program grow in the long term and even become self-sustaining.

# **Appendices**

Appendix 1: Pre-Giveaway Survey Questionnaire Appendix 2: Post-Giveaway Survey Questionnaire Appendix 3: Semi-Structured Interview Questionnaire

Appendix 4: Full Survey Results

Appendix 5: Data Tables from GIS Analysis

# Appendix 1: Pre-Giveaway Survey Questionnaire

Below is a copy of the survey questionnaire administered to Bike Chicago participants at distribution events prior to receiving their bikes. For full results of this survey, see Appendix 4.

- 1. What is your age range?
  - o <18
  - 0 18-25
  - o 26-35
  - o 36-45
  - o 46-55
  - o 55+
- 2. What's your home zip code?
- 3. Do you or your household own a car?
  - Yes
  - No
  - No, but I'm able to borrow one/get a ride if needed
- 4. The average American drives about 14,000 miles per year (~38 miles every day). Compared to this, about how much would you say you drive?
  - N/A (I don't drive)
  - Way below average
  - Slightly below average
  - About average
  - Slightly above average
  - Way above average
- 5. What types of trips do you plan on taking via bicycle? Check all that apply
  - Work
  - School
  - Doctor appointments
  - Groceries or other errands
  - Visiting friends and families
  - Community events
  - Other recreation (including exercise)
- 6. How often do you think you'll ride your new bicycle?
  - 1-2 times per month
  - 1-2 times a week
  - o 3-5 times a week
  - Everyday
- 7. About how long would you estimate your average bicycle trip to be? (roundtrip)
  - o Less than 2 miles
  - o 2-5 miles
  - 5-10 miles
  - More than 10 miles

# Appendix 2: Post-Giveaway Survey Questionnaire

Below is a copy of the survey questionnaire administered to bike recipients via email and at maintenance events. For full results of this survey, see Appendix 4.

- 1. What is your age range?
  - a. <18
  - b. 18-25
  - c. 26-35
  - d. 36-45
  - e. 46-55
  - f. >55
- 2. What is your zip code?
- 3. About how often do you take a bike trip?
  - a. Never (or Almost Never)
  - b. A few times per month
  - c. 1-2 times per week
  - d. 3-5 times per week
  - e. About every day
- 4. About how long is your average bike trip? (roundtrip)
  - a. Less than 2 miles
  - b. 2-5 miles
  - c. 5-10 miles
  - d. More than 10 miles
- 5. What are some barriers that make it difficult to choose riding your bike?
  - a. Not enough safe bike routes (protected bike lanes, etc.)
  - b. Cold weather
  - c. Hot weather (too hot to ride, or don't want to arrive sweaty)
  - d. Lack of safety equipment (helmet, lights, etc.)
  - e. Distance to destinations
  - f. Other
- 6. Compared to before you received your bicycle, have you used Divvy more or less than previously?
  - a. N/A, I don't use Divvy bikes
  - b. I use Divvy bikes much less than before
  - c. I use Divvy bikes slightly less than before
  - d. I use Divvy bikes about the same as before
  - e. I use Divvy bikes slightly more often
  - f. I use Divvy bikes much more often
- 7. Do you or your household own a car?
  - a. Yes
  - b. No
  - c. No, but I'm able to borrow one/get a ride if needed

- 8. Compared to before getting the bicycle, would you say you drive more or less than before?
  - a. N/A (no car available)
  - b. I drive much less than before
  - c. I drive slightly less than before
  - d. I drive about the same as before
  - e. I drive slightly more than before
  - f. I drive much more than before
- 9. Do you have any more thoughts about owning a bicycle?
- 10. Would you like to share your thoughts in an interview? We'd love to hear from you. If so, please write your email address below and we will contact you shortly.

# Appendix 3: Semi-Structured Interview Questionnaire

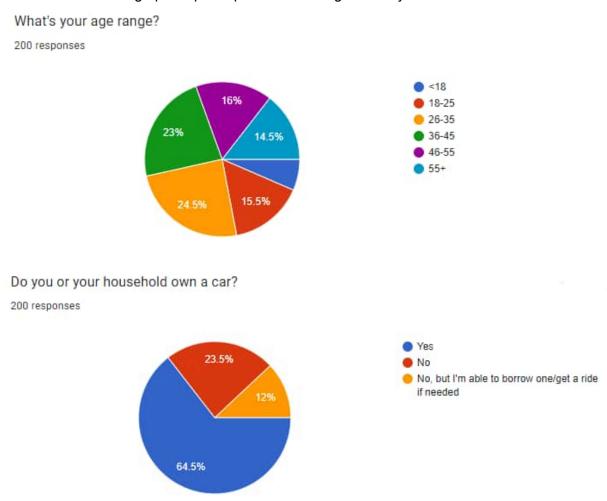
These questions served as the basis for every recipient interview. The conversations ran up to an hour in length, and often branched into more specific questions based on the experiences of each interviewee.

- 1. When did you learn to ride a bike? Can you describe your history with bike riding?
- 2. How did you hear about this program, Bike Chicago?
- 3. Can you describe the process of picking up the bike? How did that go for you? What went well, didn't go well?
- 4. What do you like or not like about biking in your current neighborhood?
- 5. What are some bigger barriers to biking in your neighborhood?
- 6. How do you normally get around? How did you get around before you got the bike?
- 7. How have your transportation choices changed since you received the bike?
- 8. What types of trips do you use your bike for? How often do you take these trips?
- 9. Have you met anyone else in the bicycle community since getting your bike from the city?

# Appendix 4: Full Survey Results

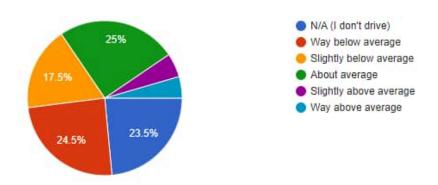
## Pre-giveaway survey

Below are the results from the pre-giveaway survey, which was administered at distribution events to Bike Chicago participants prior to receiving their bicycles.

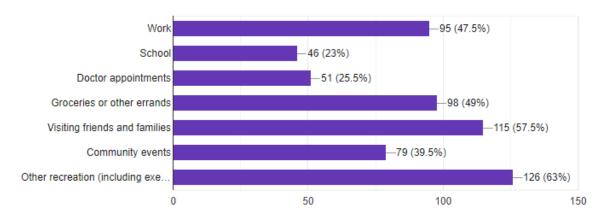


The average American drives about 14,000 miles per year (~38 miles every day). Compared to this, about how much would you say you drive?

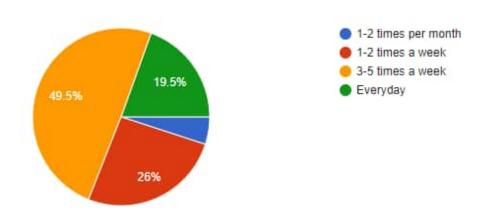
200 responses



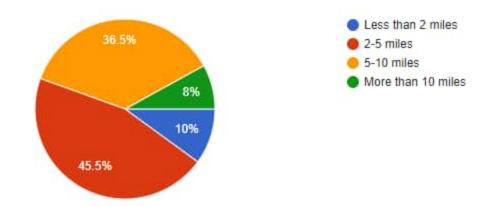
What types of trips do you plan on taking via bicycle? Check all that apply 200 responses



How often do you think you'll ride your new bicycle?



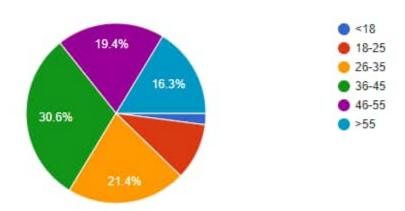
About how long would you estimate your average bicycle trip to be? (roundtrip)
200 responses



## Post-giveaway survey

Below are the results from the post-giveaway survey (administered to all 2022 bike recipients and some of the 2023 bike recipients via email).

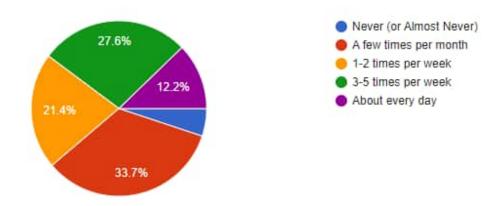
What is your age range?



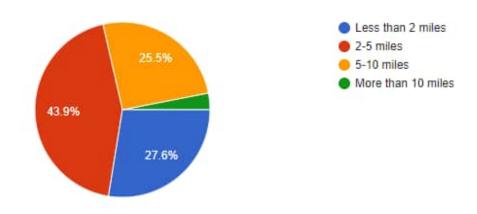
	Number of
Zip Codes	
60202	1
60608	5
60609	2
60610	1
60612	1
60613	2
60615	1
60616	6
60617	3
60619	1
60620	7
60622	1
60623	10
60624	3
60625	1
60626	4
60629	2
60632	3
60633	1
60634	6
60636	1
60637	6
60638	1
60639	5
60641	2
60643	1
60645	3
60651	4
60652	2
60653	2
60657	2
60659	3
60804	1
60827	3
69634	1

#### About how often do you take a bike trip?

98 responses

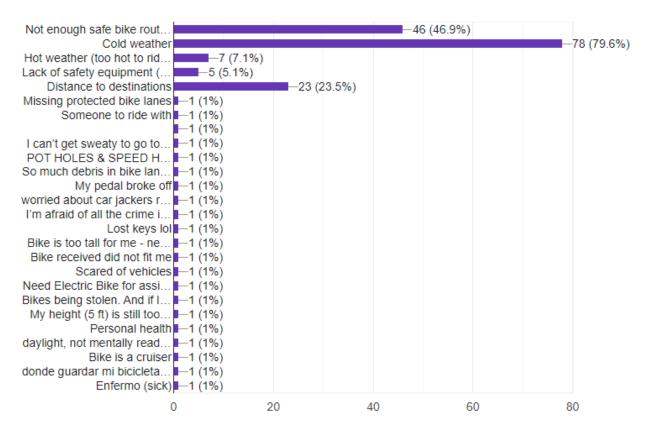


#### About how long is your average bike trip? (roundtrip)

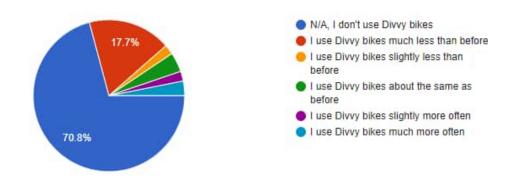


What are some barriers that make it difficult to choose riding your bike?

98 responses

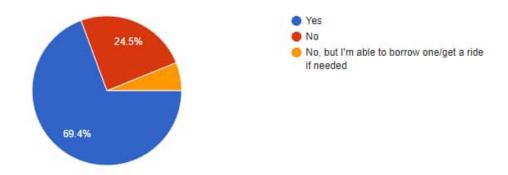


Compared to before you received your bicycle, have you used Divvy more or less than previously?



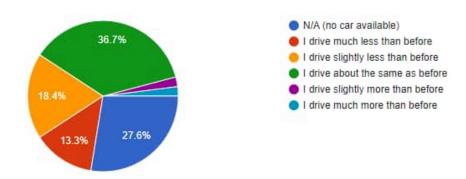
Do you or your household own a car?

98 responses



Compared to before getting the bicycle, would you say you drive more or less than before?

98 responses



### Do you have any more thoughts about owning a bicycle?

I think it's a really great program. I think it's especially great for communities of color who don't have access to the gym or other recreational activities. It's great that the city's doing this

I see the benefit of it. I was wondering when the program would be willing to train people in my area. (Portage Park)

It was great to receive a bike from the city and it was a pleasant surprise that they have a bike repair class too.

love it

It's nice having an alternative in transportation

I love my bike!

I love it

Excellent

I really like the exercise I can now attain biking. I was not able to do that before.

Everyone should at least know how to ride a bicycle

It's a option when my kids are in school as far as exercise and saving money on public transportation

I love it so much. I receive a lot of compliments on the bike too!

I actually love it, thank you for this program. I kept telling people Chicago taught me biking and gave me a bike. It saved me many time when my car broke down before the cold weather came proper.

I love it. I've lost weight

It's very good to ride in my neighborhood to Forest preserve

I'm really thankful for receiving this bike. It's helped me get around much easier while also getting in exercise.

I love my bicycle

Just have a appreciative for the bike

It's improved my health because I love riding when I'm physically able to do so. I have Lupus.

Should have come with specific repair instructions

It's get from leisure for me

I love it. Thanks for giving me the opportunity.

Worked great until vandals stripped the handle bars, seats and front and rear brakes.

I am very happy

Great exercise

I am learning how to get around chicago without asking my mom for a ride. I am able to ride my bike to most of the places I have to go which saves me money on uber rides.

Just good fun times in the summer

It's good

It is great for exercising

Looking forward to summer been wanting a bike for some years.

Raised curbs to define the bike lanes to make it safer for everyone!

I love my bike! Can't wait til the spring comes back around!

Thank you for the bicycle. I am grateful for it

It has been a great blessing to receive this bicycle!! My 14 year old loves it and uses it to get to his High School!!

Due to the high crime and theft, I'm afraid for my life or getting robbed in the streets.

I love it gets me places faster

They need to measure accordingly - lady who sized me was aware it was too tall- lowered seat & i kept saying still too tall then she said it wont go any lower- fully aware it was too tall for me- She should of went in back & switched it was a bike that was the proper fit for me- dont feel safe on if due to how tall it is/ My feet dont even touch the ground making me leary im going fall

I love it

It would have been good if the bicycle fit me.

If feels good, just need more practice

I got complimented about my bike and I can't wait to use it next summer.

I need repairs made and maintenance. I noticed the invite for Maintenance, but could not register for the event. I barely use the bike cause it now requires maintenance.

Yes, thank you for the bike. I love the bike. It is lightweight that I can carry it inside the house (I'm afraid of it being stolen, if I tie it outside). The bike has allowed me to easily jump on it to go to the store, family member's house about 1 mile away, or ride along with my son to school, about 3 miles one way. I also like that I don't have to deal with parking because I can just tie it somewhere. (Though I did notice since riding that there are many places that don't have a bike rack to tie bike). And finally, I appreciate the bike because I don't have to spend money on train or bus.... One negative, which I haven't experienced, but worries me is replacing the tires. Since it's not a regular bike, I do worry about it being easy to fix when it needs repairs.

I'm glad that bike Chicago was able to give me a bike. Really appreciate it

I think it's been a great form of exercise and seeing the city while traveling. It's more efficient than taking CTA's buses which is my main mode of transportation where I live.

Luv it I walked a lot before I got the bike but since then I can go a lot further and it feels good to get out

i like having my own bike. utilized more during the warmer months

I love it

more fun than I thought

I'm really grateful to this program, I love my bike

I love it! It helps me stay healthy mentally and physically. I truly feel it has contributed significantly to my well-being.

Wish I was given a different bike compared to a cruiser

Owning a bicycle at uni is super useful since it's really bike friendly. :)

It gives me good exercise

Besides walking, riding a bicycle is a great way to physically get around.

It save me money on gas and good exercise for me.

I've never owned a bike before and just learned thanks to your program and free bike and it has been life-changing. It has positively impacted my mental, physical and financial health. Thank you!!!

K fue de gran utilidad ya k me ahorro tiempo y me encanta (It was very useful since it saved me time and I love it)

me encanta mi bici (I love my bike)

Me encanta mi bicicleta y el programa.Mi bici funciona super bien y cuantos más carriles bici haya, más fácil será circular por la ciudad. (I love my bike and the program. My bike works super well and the more bike lanes there are, the easier it will be to get around the city.)

También deberían hacer el mismo sorteo para niños (They should also do the same giveaway for children)

Gracias (Thank you)

Gracias, cuando no está tan frío,me voy a comprar mi comida en ella ,ha sido de mucha utilidad, (Thank you, when it is not so cold, I go to buy my food on it, it has been very useful,)

Deberían hacer un sorteo de bicicleta para niños (They should do a bike raffle for kids.)

#### me saca de apuros (gets me out of trouble)

Necesitamos mas bicicletas para los demas miembros de la familia para salir todos en bisicleta. Gracias por la que ya nos dieron para mi hijo. (We need more bicycles for the other members of the family so we can all go out on bikes. Thank you for the one you already gave us for my son.)

#### ayuda a mi salud (helps my health)

Muy bonito poder pasear y a la vez ejercitarse físicamente. (It is very nice to be able to ride and at the same time exercise physically.)

# Appendix 5: Data Tables from GIS Analysis

Below is the complete table of data used in GIS analysis. Relevant columns are shaded green to salmon to demonstrate higher to lower values.

Comm. Area	Bike Chicago recip. count	Bike Chicago recip. per 10k residents	MOBEC score	Total length of bike lanes (mi.)	% bike ways per street miles	Recip.	Recip. per capita rank	Pop,	Recip.	Recip. per cap quartile	MOBEC quartile	Street Length (mi.)
Austin	75	7.8	64	17.1	11.5%	1	31	96,557	1	2	1	148.8
West Ridge	68	8.8	47.6	7.5	9.7%	2	22	77,122	1	2	3	77.9
Belmont Cragin	63	8.1	55.1	12.2	14.4%	3	26	78,116	1	2	2	84.8
South Lawndale	61	8.5	65	12.0	16.0%	4	23	71,399	1	2	1	75.2
Humboldt Park	57	10.5	57.4	3.7	5.1%	5	13	54,165	1	1	2	72.5
Brighton Park	49	10.9	59.5	0.3	0.6%	6	12	45,053	1	1	2	53.1
Lower West Side	43	12.7	43.3	8.5	14.2%	7	5	33,751	1	1	3	59.9
Rogers Park	43	7.7	39	8.7	22.7%	8	33	55,628	1	2	3	38.5
South Shore	41	7.6	60.9	4.1	6.0%	9	36	53,971	1	2	2	69.2
West Lawn	38	11.3	51.8	1.3	2.5%	10	11	33,662	1	1	2	51.1
North Lawndale	36	10.3	64.3	11.7	16.3%	11	16	34,794	1	1	1	71.8
Portage Park	36	5.7	36.9	6.9	7.5%	12	46	63,020	1	3	3	92.5
Bridgep.	35	10.4	40.8	4.8	9.4%	13	15	33,702	1	1	3	51.5
Chicago Lawn	35	6.3	63.9	4.8	6.7%	14	44	55,931	1	3	1	71.5
Ashburn	32	7.8	46.3	2.5	2.6%	15	30	41,098	1	2	3	98.1
Dunning	31	7.2	38.9	2.2	2.8%	16	37	43,147	1	2	3	78.4
Grand Blvd	30	12.2	58.6	2.7	6.6%	17	6	24,589	1	1	2	40.5

New City	30	6.9	63.5	5.5	6.6%	18	41	43,628	1	3	1	83.8
Gage	00	0.0	00.0	0.0	0.075	10	71	40,020			'	00.0
Park	28	7.1	59.1	1.5	3.4%	19	39	39,540	1	2	2	45.3
Douglas	27	13.3	58.7	7.1	19.2%	20	4	20,291	1	1	2	36.9
Armour Square	26	18.7	59.7	2.9	7.7%	21	1	13,890	2	1	2	38.1
East Side	25	11.5	59	9.6	17.8%	22	10	21,724	2	1	2	53.9
Hermosa	25	10.4	51.1	2.9	11.3%	23	14	24,062	2	1	2	25.4
Woodlawn	24	9.8	62.7	7.8	19.3%	24	18	24,425	2	1	1	40.7
Roseland	24	6.2	63.8	11.1	10.2%	25	45	38,816	2	3	1	109.7
Auburn Gresham	24	5.3	63.6	9.6	11.1%	26	49	44,878	2	3	1	86.7
Mckinley Park	22	13.8	47.7	1.1	3.3%	27	2	15,923	2	1	3	33.5
Englew.	20	8.2	76	3.8	4.7%	28	25	24,369	2	2	1	80.3
West Pullman	20	7.7	68.7	7.2	9.5%	29	34	26,104	2	2	1	76.1
Garfield Ridge	20	5.6	41.6	0.1	0.2%	30	47	35,439	2	3	3	83.8
Clearing	19	7.8	39.2	1.0	2.1%	31	32	24,473	2	2	3	48.4
West Elsdon	18	9.8	52.3	1.2	4.6%	32	19	18,394	2	1	2	26.9
Wash. Heights	18	7.2	62.4	5.1	7.1%	33	38	25,065	2	2	1	71.9
Wash. Park	17	13.4	62.3	2.6	9.6%	34	3	12,707	2	1	2	26.9
South Deering	17	12.1	66.2	6.1	8.0%	35	7	14,105	2	1	1	75.9
East Garfield Park	16	8.0	68.1	10.2	21.7%	36	27	19,992	2	2	1	47.1
Kenwood	15	7.8	38.5	2.7	12.5%	37	29	19,116	2	2	3	21.6
West Englew.	15	5.1	75.4	5.2	7.3%	38	51	29,647	2	3	1	71.6
Greater Grand Crossing	15	4.8	65.7	9.1	10.8%	39	52	31,471	2	3	1	83.9

Archer												
Heights	13	9.2	51	0.0	0.0%	40	20	14,196	3	1	2	33.0
South Chicago	13	4.8	65.9	9.4	15.9%	41	53	27,300	3	3	1	59.2
Montclare	11	7.6	45.9	0.0	0.0%	42	35	14,401	3	2	3	21.7
West Garfield Park	11	6.3	79.3	5.5	16.5%	43	42	17,433	3	3	1	33.2
North Park	11	6.3	41.2	6.4	16.3%	44	43	17,559	3	3	3	39.1
Morgan Park	11	5.2	41.9	3.0	4.2%	45	50	21,186	3	3	3	72.0
Chatham	11	3.5	54.6	3.9	6.0%	46	54	31,710	3	3	2	65.4
Hegew.	9	9.0	46	6.5	16.6%	47	21	10,027	3	2	3	39.2
Calumet Heights	9	6.9	53.2	1.5	3.4%	48	40	13,088	3	3	2	43.6
Lake View	9	0.9	7.8	15.0	20.4%	49	61	103,050	3	4	4	73.2
Pullman	8	11.7	50.4	4.1	11.1%	50	8	6,820	3	1	2	36.6
Avalon Park	8	8.5	58.5	3.1	9.6%	51	24	9,458	3	2	2	32.7
Uptown	8	1.4	28.6	12.5	29.3%	52	57	57,182	3	3	4	42.5
Oakland	7	10.3	53.3	3.7	27.1%	53	17	6,799	3	1	2	13.6
Near West Side	7	1.0	21.9	28.2	19.2%	54	60	67,881	3	4	4	147.2
Beverly	6	3.0	32.6	5.1	8.1%	55	55	20,027	3	3	3	62.8
Avondale	6	1.7	33	6.9	13.4%	56	56	36,257	3	3	3	51.6
Near North Side	6	0.6	6.2	12.4	16.5%	57	65	105,481	3	4	4	75.3
Loop	5	1.2	8.1	11.7	21.6%	58	59	42,298	3	4	4	54.1
Riverdale	4	5.5	91.3	0.0	0.0%	59	48	7,262	4	3	1	33.5
Hyde Park	4	1.4	29.8	6.3	18.4%	60	58	29,456	4	3	4	34.3
Albany Park	4	0.8	37.8	6.7	13.5%	61	62	48,396	4	4	3	49.4
Lincoln Park	4	0.6	6	17.3	24.5%	63	66	70,492	4	4	4	70.8
Logan Square	4	0.6	21.2	16.9	17.6%	62	67	71,665	4	4	4	96.2

West Town	4	0.5	11.2	22.2	18.2%	64	69	87,781	4	4	4	121.9
Fuller Park	3	11.7	73.4	0.4	1.4%	65	9	2,567	4	1	1	25.7
Burnside	2	7.9	67	0.2	1.8%	66	28	2,527	4	2	1	9.5
Near South Side	2	0.7	11.9	9.8	25.5%	67	64	28,795	4	4	4	38.3
Lincoln Square	2	0.5	21.9	10.8	21.1%	68	68	40,494	4	4	4	51.1
Irving Park	2	0.4	28.7	8.8	10.4%	69	70	51,940	4	4	4	84.6
Ohare	1	0.7	36.1	0.5	0.4%	70	63	13,418	4	4	3	132.8
Jeff. Park	0	0.0	32.6	6.6	11.0%	71	74	26,216	4	4	4	59.5
Edgew.	0	0.0	31.2	8.5	21.7%	72	77	56,296	4	4	4	39.0
Forest Glen	0	0.0	30.2	4.6	6.6%	73	75	19,596	4	4	4	69.3
Mt. Greenw.	0	0.0	28.7	0.0	0.0%	74	76	18,628	4	4	4	47.4
Norwood Park	0	0.0	27.5	3.2	2.9%	75	73	38,303	4	4	4	107.4
Edison Park	0	0.0	22.1	0.4	1.3%	76	72	11,525	4	4	4	28.4
North Center	0	0.0	13.4	11.1	23.0%	77	71	35,114	4	4	4	48.2