CHICAGO ★ MOVES ★ ELECTRIC

an electric vehicle & e-mobility framework plan

DRAFT FOR PUBLIC COMMENT
April 2025

CDOT


STOP
PAY TO PARK

CONTENTS

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A Message from the Mayor

My Fellow Chicagoans,

As we look to the future, it is more important than ever to transition to a cleaner, more sustainable transportation system. My administration is committed to making Chicago a leader in these efforts, investing in infrastructure and policies to accelerate the shift to electric vehicles (EVs) and other e-mobility options.

The Chicago Moves Electric Framework Plan, developed by the Chicago Department of Transportation (CDOT), lays the foundation for this work. It aligns with and supports our city's broader climate goals, including ambitious but necessary goals to reduce transportation-related emissions.

Expanding EV and e-mobility infrastructure must be done in an equitable way, ensuring that all residents can reliably charge EVs regardless of where they live and what type of housing they reside in – whether it's in a multi-family apartment or single-family home.

Too often, communities facing the greatest economic and transportation barriers also experience the most air pollution. By prioritizing investments in historically underserved areas and making clean transportation options more affordable and accessible, we can improve both mobility and public health. Working in partnership with residents, businesses, state and regional agencies, aldermen, and other community stakeholders, we will ensure that these efforts create lasting benefits across all neighborhoods.

My administration will continue taking bold action to build a transportation network that is cleaner, more reliable, and equitable. Together, we can create a future where Chicago meets its climate and clean air goals while ensuring every resident has access to safe, sustainable ways to get around our city.

Sincerely,

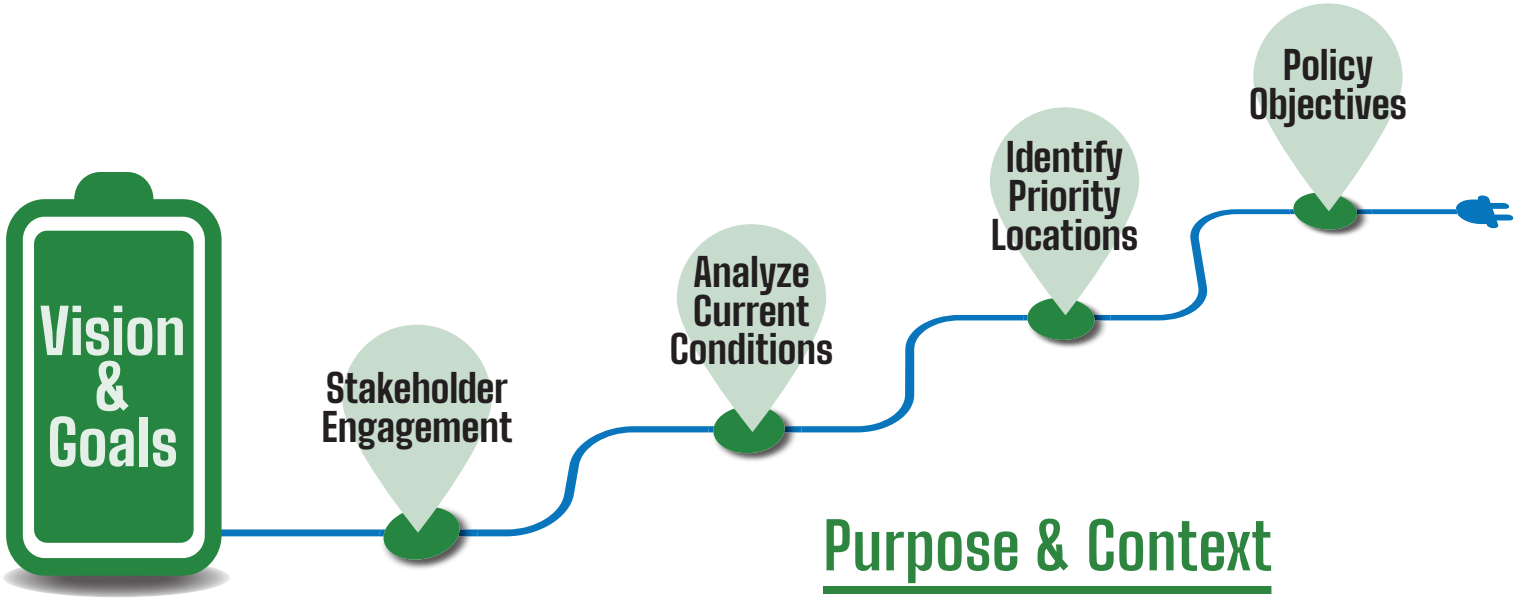
Brandon Johnson
Mayor, City of Chicago

1 EXECUTIVE SUMMARY

The Chicago Department of Transportation (CDOT) has developed this Electric Vehicle (EV) and E-Mobility Charging Infrastructure Framework (EV Framework) to serve as a critical component of the City of Chicago's (the City's) wider transportation mission and sustainability vision. This plan aims to increase electric transportation options, improve sustainability, and support economic growth through the deployment of EV charging infrastructure, development of policies, and continued strategies to support EVs and e-mobility solutions.

The EV Framework emphasizes equity, accessibility, and technological innovation while aligning with federal, state, and regional goals. It is built on stakeholder engagement and a data-driven approach to deploy EV and e-mobility charging infrastructure in underserved areas and support citywide electrification strategies.

The EV Framework is designed to provide continued support in transitioning Chicago's transportation system to cleaner, more equitable, and more efficient



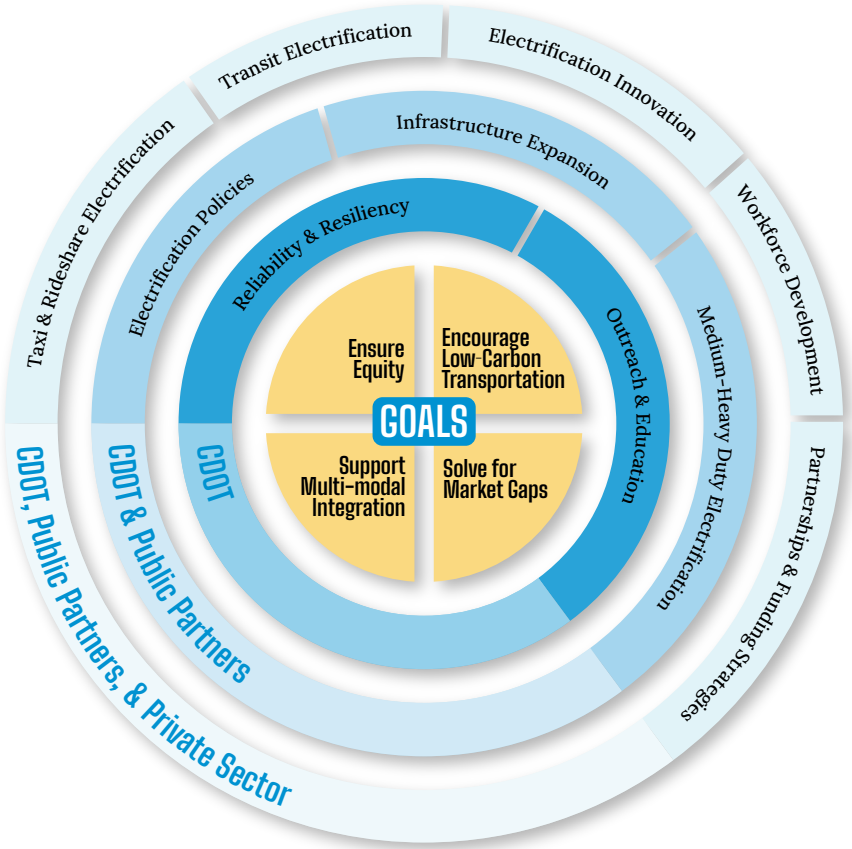
transportation options with a focus on EVs and e-mobility solutions. Key components of the EV Framework include expanding public charging infrastructure, enhancing multi-modal electric transportation options, and integrating EV infrastructure with the City's broader climate and sustainability goals. Through ongoing community involvement, collaboration with key stakeholders, targeted deployment projects, and new policy objectives, CDOT aims to support Chicago's continued transition to sustainable, electric transportation options.

Purpose & Context

The City aims to create an equitable, sustainable, and accessible citywide network of EV charging infrastructure. This effort aligns with wider sustainability and transportation electrification goals, including those of Cook County, the state of Illinois, and federal agencies. The EV Framework also complements Chicago's Climate Action Plan, which sets specific targets, such as electrifying the entire municipal fleet by 2035 and supporting the electrification of ride-hail and taxi fleets by 2030. With goals of addressing both climate and transportation inequalities, The EV Framework is designed to position the city of Chicago as a regional leader in electrification, ensuring that historically underserved areas share in the benefits of clean transportation solutions.

Goals & Strategies

CDOT envisions a transportation network that is safe, reliable, and environmentally sustainable. The four primary goals of the EV Framework center on ensuring equity, encouraging low-carbon transportation, closing market gaps, and supporting multi-modal integration. With transportation equity as a primary goal, the City is committed to ensuring that all residents, particularly those in underserved communities, have access to EV infrastructure. In addition to equity, the EV Framework seeks to reduce emissions by encouraging low-carbon transportation solutions, such as EVs and e-mobility devices, while addressing gaps in the market where private investment alone cannot meet community needs. Finally, the EV Framework emphasizes the integration of EV infrastructure with other transportation options, such as bicycles and public transit, to provide diverse, sustainable transportation choices.

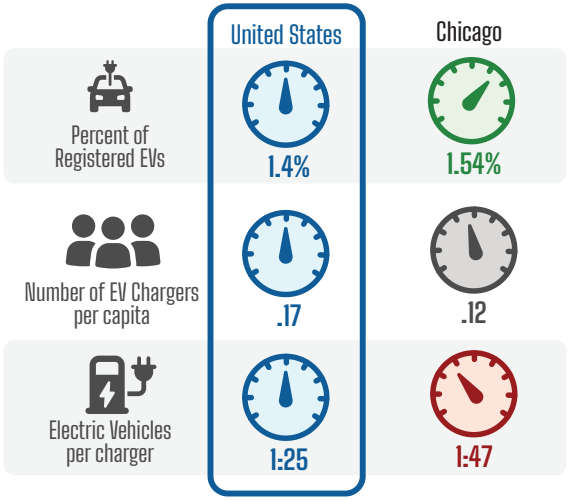


Stakeholder Engagement

Stakeholder engagement is fundamental to the success of the EV Framework. CDOT has conducted outreach through public surveys, meetings, and focus groups, gathering input from residents, commercial fleet operators, and community organizations. This feedback helped shape the policy objectives and infrastructure deployment strategies outlined in the EV Framework. CDOT will continue to engage with key stakeholders, including residents, community-based organizations, utility providers, business leaders, and environmental justice advocates, to ensure that the EV Framework meets the diverse needs of the community and fosters equitable access to clean transportation.

Existing Electric Transportation Context

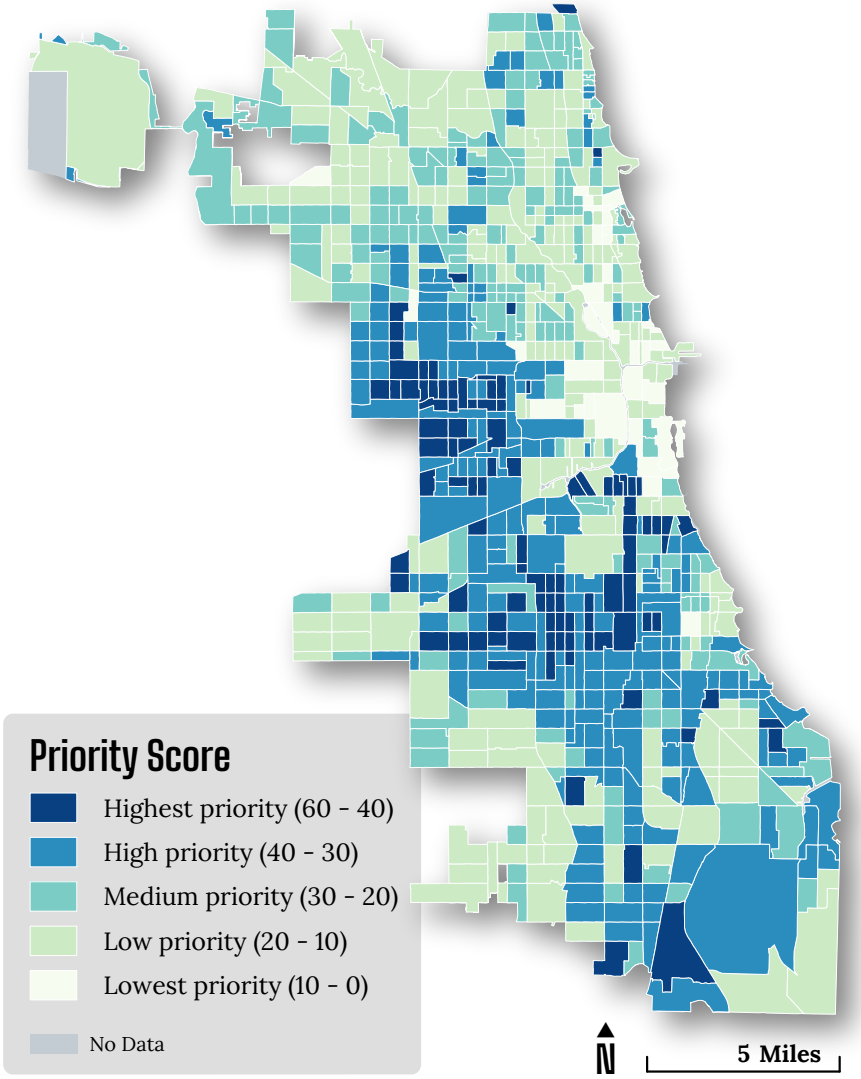
The existing transportation landscape section of the EV Framework presents both opportunities and challenges for EV infrastructure deployment in Chicago. Chicago currently has over 300 publicly available EV charging locations, but these are concentrated in certain geographic areas, leaving gaps in underserved communities. Analysis of current transit networks, vehicle usage patterns, and population density revealed key areas in need of additional infrastructure. Projections indicate that EV adoption will rise significantly, emphasizing the need for expanded, resilient, and accessible charging infrastructure.



Priority Indicator Analysis

The EV Framework utilizes a data-driven approach to prioritize locations for EV charging stations. Five key indicators—equity, mobility opportunities, population density, land use, and economic development—are used to identify the most impactful areas for investment. Equity plays a central role in determining priority locations, ensuring that underserved and environmentally burdened communities benefit from the transition to EVs. Additionally, areas with high traffic volumes, transit gaps, and commercial activity are prioritized to maximize public benefit and ensure efficient use of resources. This indicator-based analysis enables the City to strategically plan EV infrastructure that supports broader transportation and sustainability goals, while being flexible and adaptable to the changing conditions of the City based on evolving developments and updated data sets.

This map is the result of the indicator-based analysis and assigns a priority score to all census tracts in the City. A higher score identifies priority locations for EV charging infrastructure, while a lower score indicates lower priority investment areas for the City's EV charging investments.



Policy Objectives to Achieve Equity

The City's policy objectives are centered on equity-focused electrification strategies, aiming to increase EV adoption in underserved areas. Key initiatives include creating a community-informed charging network plan, simplifying the permitting process for residential EV charger installations, creating workforce training programs to support the EV industry, and developing a public charging pilot program. The pilot will identify the types of use cases served and test different ownership, operational, and maintenance models to determine effective strategies for expanding Chicago's public EV charging network. By streamlining EV-related processes and offering targeted incentives, the City seeks to create an inclusive and accessible EV ecosystem that benefits all residents. Additionally, the EV Framework supports the electrification of medium- and heavy-duty vehicles, with a focus on reducing emissions in areas disproportionately affected by poor air quality and pollution.

Engage	Expand	Execute
Create an ongoing **public learning initiative**	Continue improving **micromobility** and e-mobility options	Centralize **e-mobility resources**
Coordinate an **electrification working group**	Continue leading **EV investment initiatives**	Streamline **EV charger installation** process
Continue to create a community-informed **charging plan**	**Collaborate with utilities** to build out infrastructure	Implement **Low Emissions Zone (LEZ)** program

Next Steps

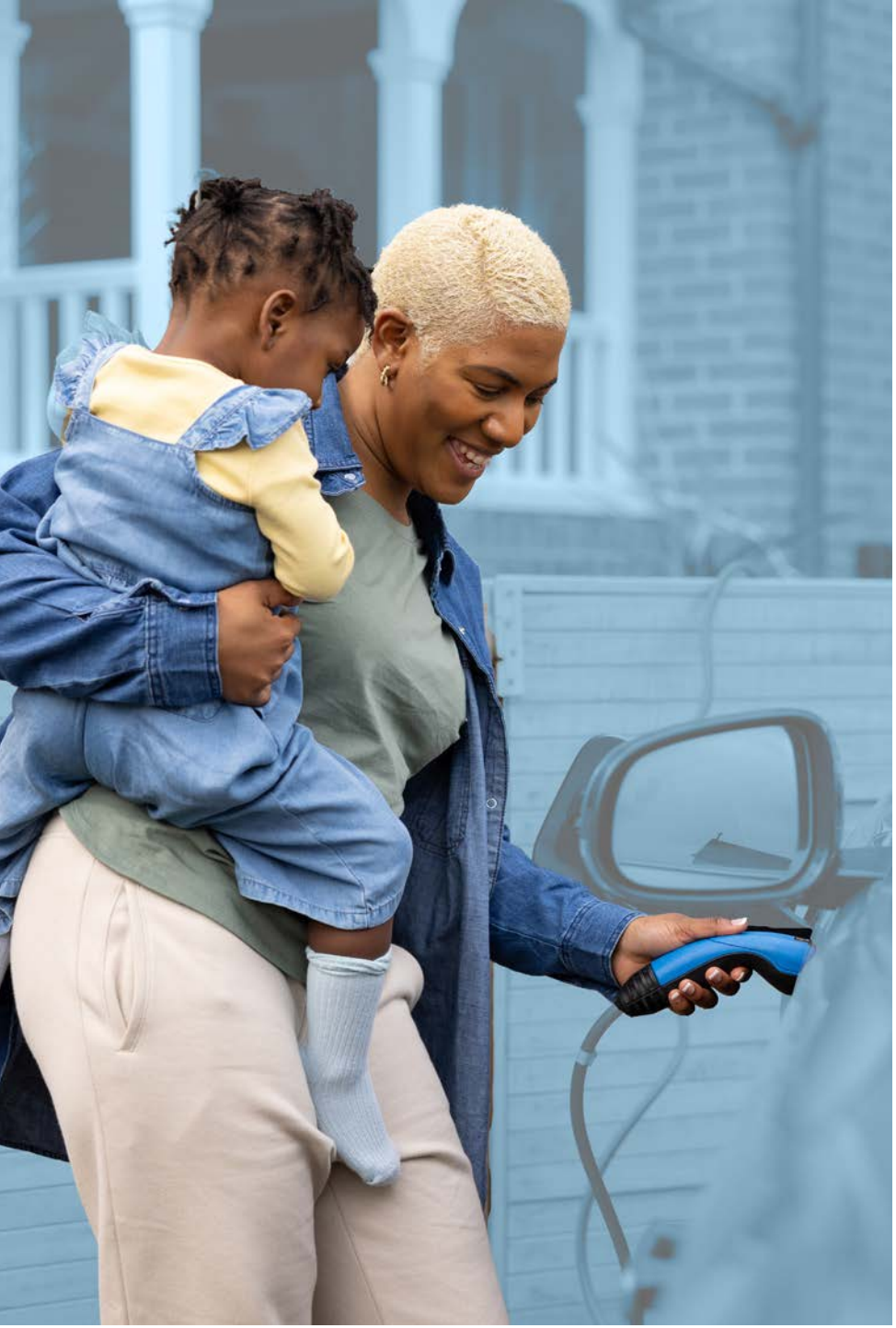
CDOT will continue to refine and implement the EV Framework by:

Continuing Public Engagement & Input: Ongoing public input ensures EV infrastructure reflects community needs.

Developing a Curbside Charging Pilot Program: The pilot provides charging for residents without off-street parking.

Implementing Charging & Fueling Infrastructure Funding (CFI): CDOT recently received USDOT CFI funds to expand EV charging in key areas, supporting low-carbon goals.

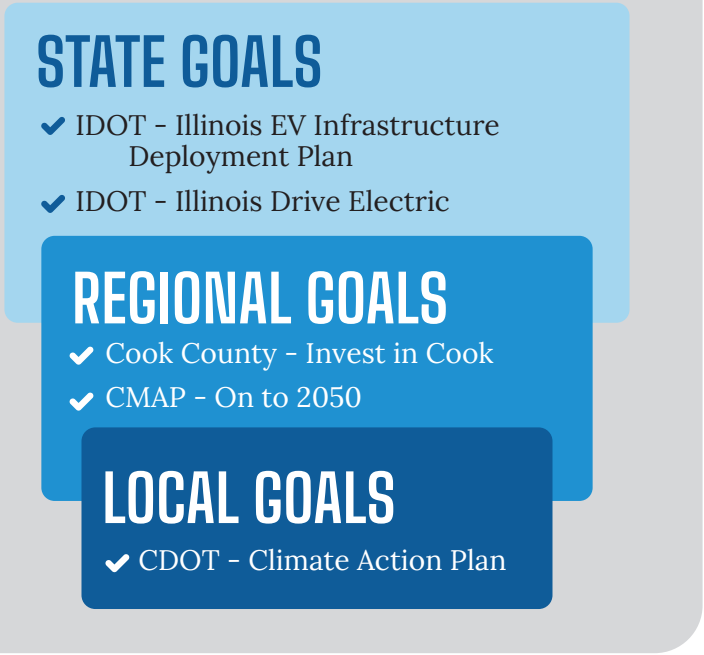
Pursuing near-term policy objectives: Near-term policy actions streamline EV infrastructure deployment processes.



2 PURPOSE & CONTEXT

The Chicago Moves Electric Framework Plan (EV Framework) is a key component of the City of Chicago's broader mission to promote a sustainable, equitable, and multi-modal transportation network. Designed to align with the City's Climate Action Plan and sustainability initiatives, the EV Framework supports the transition to electric vehicles (EVs) and e-mobility options. The EV Framework not only addresses the goals of the Chicago Department of Transportation (CDOT), but also aligns with the sustainability goals of Cook County, the Chicago Metropolitan Agency for Planning (CMAP), and the State of Illinois, creating a cohesive regional effort toward reducing emissions and enhancing transportation equity for residents.

Partner Aligned Electrification Goals



State of Illinois Goal

Enable adoption of 1,000,000 EVs on the road in the state by 2030.

Cook County Goal

Deploy 75 dual-port public EV charging stations in the south and west suburbs of Cook County, where more transportation infrastructure gaps occur and greenhouse gas (GHG) emissions are higher.

City of Chicago Goals

Chicago's 2022 Climate Action Plan goals include:

- Support equitable electrification of ride-hail and taxi fleets by 2030.
- Electrify 100% of the City's fleet by 2035.
- Achieve zero-emission transit fleets across Chicagoland by 2040.
- Enable electric freight loading docks at new commercial and industrial (C&I) buildings by 2025 and existing C&I buildings by 2030.
- Enable 100% electrification of delivery fleets by 2035.
- Enable 2,500 new public passenger EV charging stations by 2035.

CDOT is using the EV Framework to set clear goals and outline a variety of strategies to achieve EV and e-mobility adoption and ensure that transportation infrastructure contributes to better public health and environmental outcomes. By working closely with regional and state partners and incorporating detailed feedback from Chicago residents, Alderpeople, and community stakeholders, CDOT aims to align policy goals and funding resources to create a more resilient and inclusive electric infrastructure network in Chicago.

3 GOALS & STRATEGIES

CDOT's mission is to keep the city's surface transportation networks and public way safe for users, environmentally sustainable, well-maintained, and visually appealing so that its diverse residents, businesses, and visitors can enjoy a variety of quality transportation options, regardless of ability or destination. CDOT's vision is to ensure that Chicago continues to be a vibrant international city, successfully competing in the global economy with a transportation system that provides high-quality service to residents, businesses, and visitors – a system that offers a solid foundation for the city, regional and national economies, yet is sensitive to its communities and environment. The EV Framework is an important component in CDOT's broader initiatives that are designed to implement this mission and vision.

CDOT understands that successful EV infrastructure deployment must encompass the needs of residents, integrate and account for electric grid capacity, create infrastructure designs that are conducive to and

accessible for public use, and align deployments with broader City and community initiatives. To ensure that this wide array of needs is met, CDOT developed the EV Framework goals and strategies outlined in this section.

The EV Framework goals were developed through internal discussions with CDOT staff, feedback from public meetings and surveys, and reviews of peer cities' transportation electrification plans. After reviewing and aligning various options with the City's current initiatives and community feedback, four main goals and ten supporting strategies were identified.

Achieving these goals will help CDOT continue to create a transportation system that is safe, equitable, reliable, affordable, and sustainable for residents and visitors.

ENSURE EQUITY

Ensure equitable expansion of EV charging infrastructure to meaningfully benefit residents who have less access to low-carbon transportation solutions.

Why Equity Matters: The primary goal of the EV Framework is to ensure all residents can access and charge EVs and e-mobility devices, no matter where or in what type of housing they live, from multi-unit buildings to single-family homes. Residents who face mobility and economic hardship often lack transit access, face harmful emissions, and experience poor air quality, making clean transportation solutions critical. As such, equity is a top priority, guiding all decisions and recommendations in the EV Framework.

ENCOURAGE LOW-CARBON TRANSPORTATION

Facilitate EV infrastructure deployment that supports public health by reducing transportation emissions and mitigating impacts on climate.

Why Sustainability Matters: Personal vehicle travel is a major source of carbon emissions and harmful pollutants that impact health. EVs and e-mobility options provide a crucial opportunity to improve

air quality and advance climate mitigation goals. As part of Chicago's Climate Action Plan, the City aims to reduce its carbon footprint by 62% by 2040, with the adoption of EVs, e-mobility devices, and CDOT's support for EV charging infrastructure playing a key role in reducing transportation emissions.

SUPPORT MULTI-MODAL INTEGRATION

Develop EV and e-mobility infrastructure that supports diverse transportation options and promotes sustainable travel choices.

Why Multi-Modal Integration Matters: Beyond personal EVs, electrification is enhancing mass transit and active transportation options such as cycling, scooters, and other e-mobility devices. Nearly 30% of Chicago residents do not have a personal vehicle as their primary mode of transportation, demonstrating a need for reliable alternatives. Public transit and active transportation options are significantly more sustainable than personal vehicles, including EVs. Creating reliable and convenient first- and last-mile solutions, such as e-bikes and e-scooters, can replace personal vehicle trips, reduce congestion, and enhance access to existing transit, supporting greater accessibility and sustainable options across the city's transportation system.

SOLVE FOR MARKET GAPS

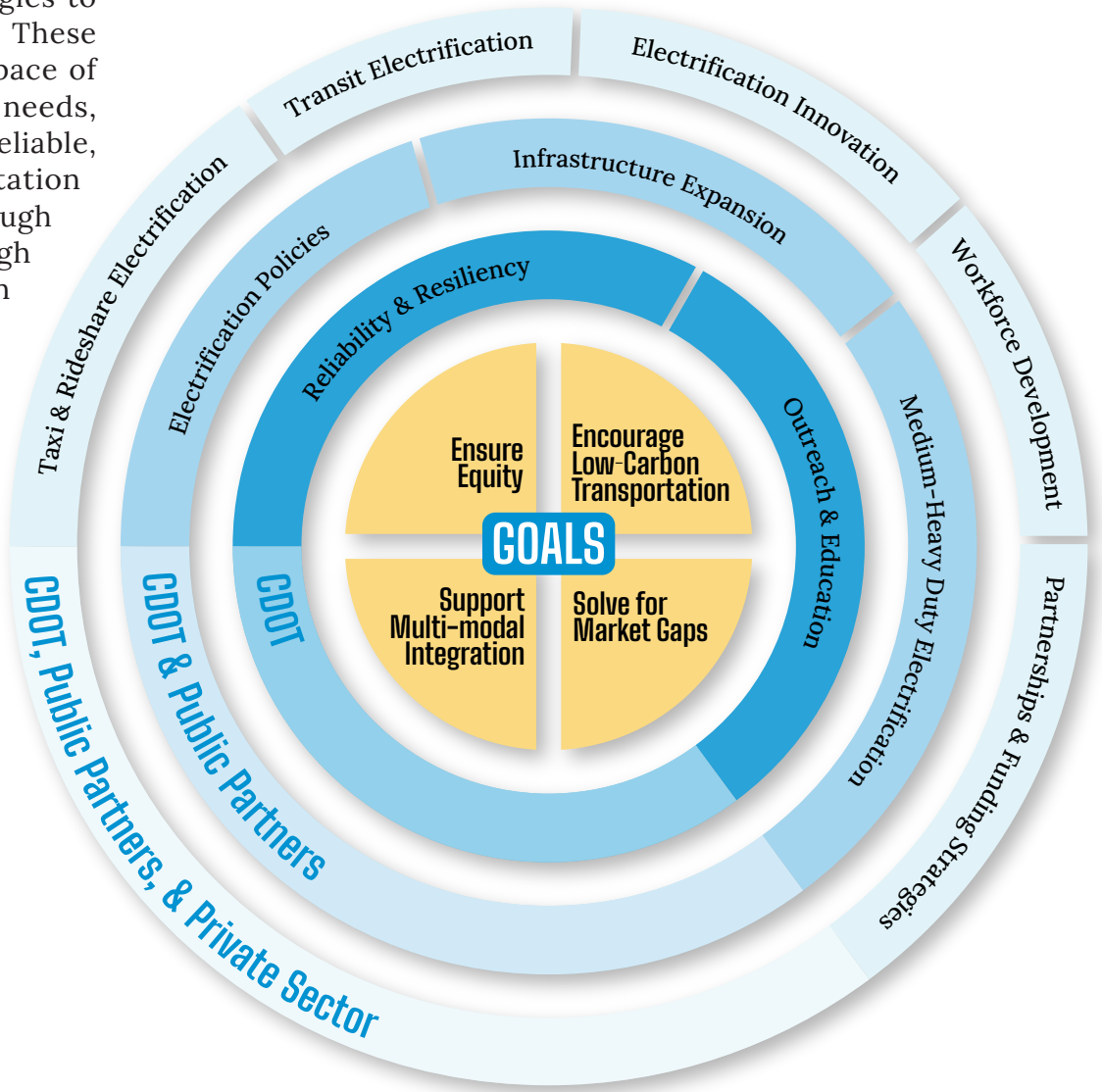
Identify and address critical gaps in EV and e-mobility infrastructure access where market forces alone fail to deliver convenient, reliable, safe, and affordable access.

Why Solving for Market Gaps Matters: Private companies tend to concentrate EV and e-mobility infrastructure investments in specific areas, based on factors such as available financing, profitability, and commercial convenience. CDOT aims to identify and prioritize addressing the resulting market coverage gaps in its planning efforts. Market gaps may include specific locations, transportation modes, technology types, or other EV infrastructure aspects that, if unaddressed, may limit Chicago's efforts to ensure equity and increased adoption of low-carbon transportation. This goal addresses these challenges.

Private companies tend to concentrate EV and e-mobility infrastructure investments in specific areas, based on factors such as available financing, profitability, and commercial convenience. CDOT aims to identify and prioritize addressing the resulting market coverage gaps in its planning efforts.

Strategies to Achieve Goals

CDOT has outlined ten flexible strategies to achieve the four EV Framework goals. These strategies can scale and adapt to the pace of EV adoption and the city's evolving needs, helping CDOT build a safe, equitable, reliable, affordable, and sustainable transportation system for residents and visitors through direct CDOT initiatives, and through initiatives undertaken in coordination with both public and private partners.



CDOT-Led Strategies

While each of the identified strategies will require collaboration with other partners, CDOT will be able to lead execution and deployment of several of these strategies, whether entirely focused within CDOT or a partnership between several City departments.

1. Reliability & Resiliency

Developing an EV network that achieves CDOT's goals includes charging station design standards that ensure all equipment deployed is durable, accessible, safe, monitored, and maintained, making resiliency and reliability a key strategy. Through comprehensive planning, stakeholder engagement, and a focus on equity and environmental justice, the City aims to reduce transportation emissions and create a cleaner, more resilient future.

2. Outreach & Education

Outreach and education efforts raise awareness, supporting EV and e-mobility adoption, and ensure equitable access to charging infrastructure while fostering community input and support for ongoing investments. CDOT is committed to collaborating with communities that face higher mobility and economic hardship to identify needs and address barriers to adopting EVs and e-mobility options.

CDOT & Public Partner Strategies

Many of the identified strategies involve zoning, land use, transit, and other design or infrastructure upgrades that involve public sector partners such as the Mayor's Office, Department of Planning & Development, and the Chicago Transit Authority.

3. Electrification Policies

Achieving the City's goals for EVs, e-mobility, and charging infrastructure will require adopting policies that align planning efforts, incentivize infrastructure deployment, increase technology adoption, simplify City processes, and remove barriers to adoption. Additionally, policies can help promote fair access to EVs and e-mobility options while streamlining processes for businesses and individuals installing electric charging stations.

4. Infrastructure Expansion

With new technologies in electrification constantly emerging and growing, understanding how technologies can scale and be deployed effectively in the Chicago market will be critical to success.

5. Medium & Heavy-Duty Electrification

Chicago is a central hub for national truck freight and intermodal facilities, with medium- and heavy-duty trucks producing significant emissions daily. Developing solutions for low-carbon freight trucks will be crucial in addressing market gaps and significantly reducing pollution in some of the City's most environmentally burdened communities.

CDOT, Public Partners, & Private Sector Strategies

Due to the wide-reaching impacts and market opportunities that come with EV adoption, achieving CDOT's electrification goals also requires support, buy-in, and partnerships from the private sector. This includes various industries: large vehicle emitters such as Transportation Network Providers (TNP) and commercial freight operators, technology firms, and utility companies, all of which can contribute to workforce development initiatives. Establishing strong partnerships with the private sector will be key to the EV Framework's ongoing success.

6. Taxi & Ride-hail Electrification

Electrifying high-mileage vehicles, such as taxis and ride-hail vehicles, achieves greater emissions reductions. With taxi and ride-hail vehicles comprised of a mix of both personal vehicles and privately-owned fleets, the cost and potential complexities of EV adoption create market challenges and a need for public intervention. For these reasons, taxi and ride-hail electrification is a key strategy.

7. Transit Electrification

Public transit is one of the most efficient and sustainable ways to transport people. There is a major opportunity to continue to shift transit services toward electrification. Additionally, connecting transit stations with reliable first/last mile solutions (i.e. e-bikes and e-scooters) can reduce vehicle trips and enhance transit access and use.

8. Electrification Innovation

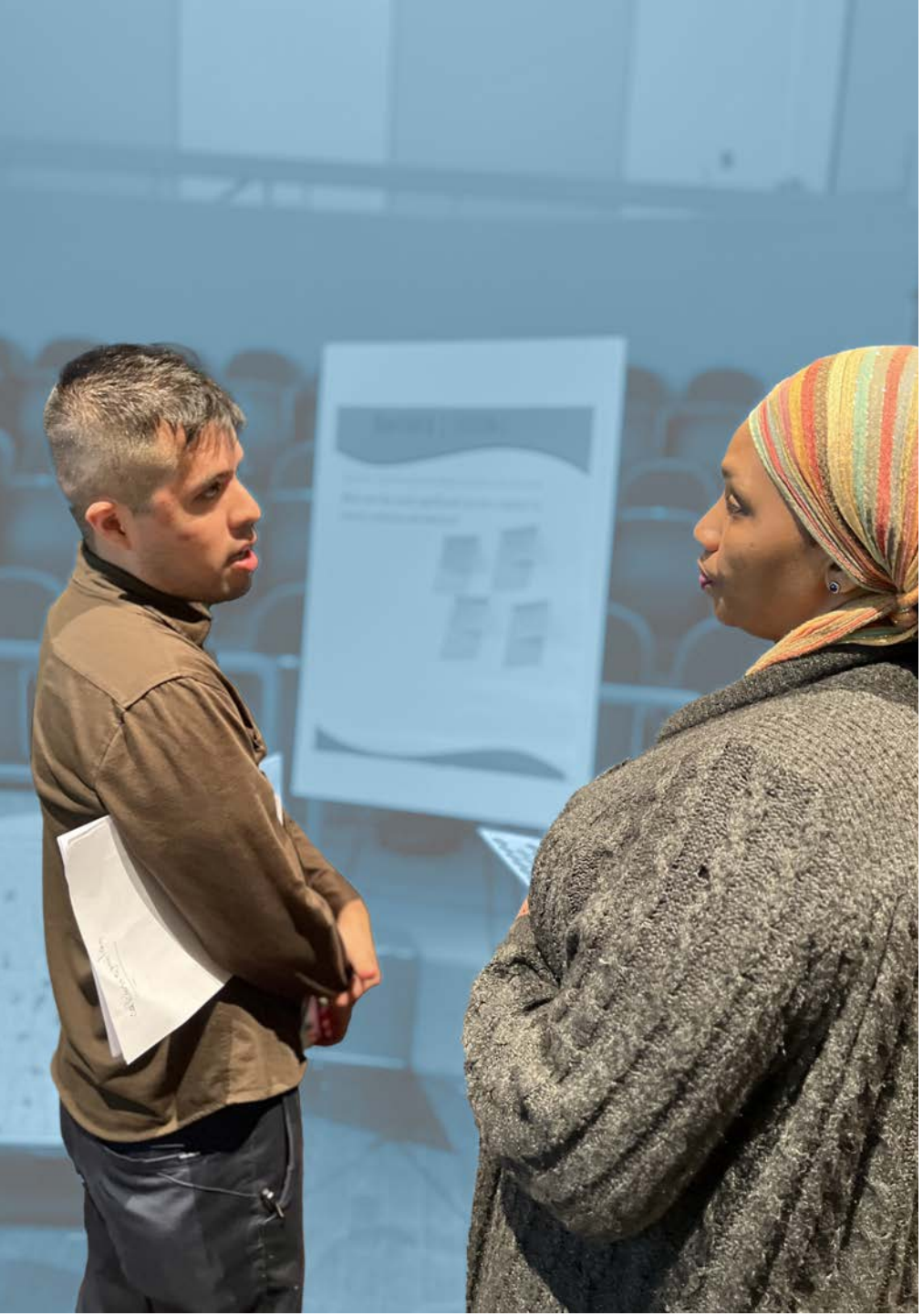
The electric transportation market continues to innovate and evolve at a rapid pace. This includes innovations in electrification technology, both vehicles and charging stations, as well as the operations, communications, and processes surrounding them to enhance the customer experience. Focusing on deploying innovative solutions is a key strategy to ensure infrastructure features industry best practices.

9. Workforce Development

As access to good-paying jobs and economic opportunity is critical to establishing equitable communities, workforce development will be a priority strategy within the EV Framework. Implementing the EV Framework represents a major opportunity for local workforce development initiatives and public-private partnerships.

10. Partnerships & Funding Strategies

Initiating and sustaining partnerships, as well as pursuing available public and private funding opportunities, will be a key element for addressing market gaps and achieving the EV Framework goals.



4 STAKEHOLDER ENGAGEMENT

Public input played an essential role in shaping the EV Framework, helping align community needs, opportunities, and equity concerns, while promoting accessible use of EV and e-mobility infrastructure throughout the planning process. This section summarizes the initial public engagement conducted by CDOT, including the information shared and feedback collected through surveys, meetings, and public comments. Phase one of community engagement took place from fall 2023 to summer 2024 and included two online surveys for residents and commercial fleet operators (in both English and Spanish), a virtual meeting, a hybrid meeting, and two in-person meetings.

Stakeholder Engagement Summary

SURVEYS

2 total surveys

1 survey for public daily users of the transportation system + 1 survey for commercial fleet operators

1,042 responses

Purchase cost and lack of charging stations were main stated barriers to EV purchases.

Respondents supported advancing e-mobility infrastructure and creating more jobs in the EV industry.

PUBLIC MEETINGS

4 public meetings

2 in person + 1 hybrid + 1 follow-up virtual meeting

Respondents stated need to prioritize equitable adoption of electric infrastructure.

Stated need to electrify commercial vehicles near regional freight hubs where air quality is poor.

TARGETED LISTENING SESSIONS

10 targeted stakeholder listening sessions

3 City Alderpeople + 7 community-based organizations

Stated need for increased community engagement and education to reveal benefits of EVs locally.

Stated interest in low-cost e-mobility options and transit electrification options.

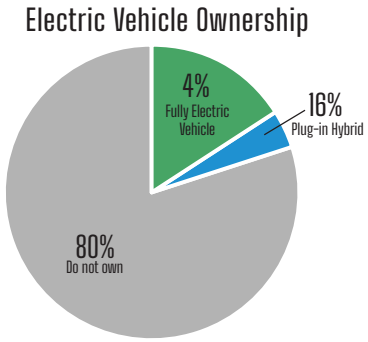
Education and Outreach Materials

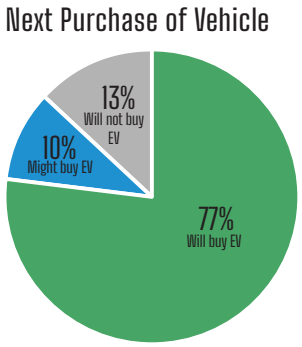
CDOT took a multifaceted approach to outreach, leveraging both digital and in-person engagement to involve diverse audiences, including:

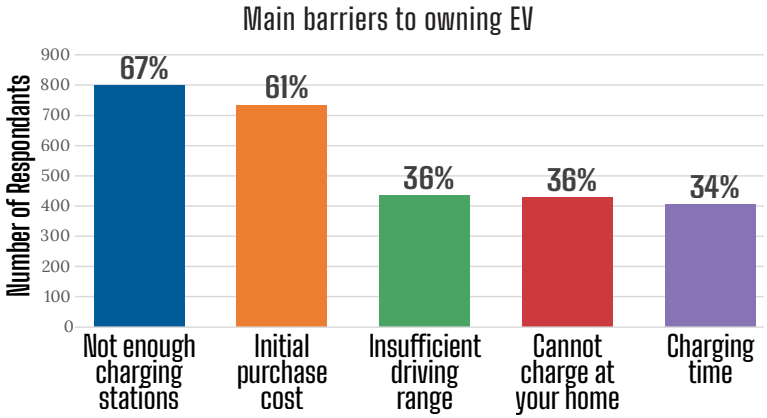
- **Web page:** Developed a web page for the EV Framework, communicating the planning process and promoting opportunities for public involvement through events and online surveys.
- **Direct Communications:** Directly reached out to stakeholders, elected officials, organizations, businesses, and residents to raise awareness and encourage participation in the public discussion on EV and e-mobility infrastructure.
- **Media Coverage:** Utilized local media outlets to amplify the message and reach an even wider audience.

General Public and Commercial Fleet Operator Surveys

CDOT issued two surveys—one for daily travelers and one for commercial fleets—to gather input on EV and e-mobility needs. The online surveys asked key questions to assess stakeholders' knowledge, attitudes, and beliefs. CDOT received 1,042 responses, providing valuable insights into perceptions and barriers to EV adoption, as outlined in the key themes below.







Key Survey Themes

- Most respondents do not own an EV or battery-powered e-mobility device currently, citing the initial purchase cost and lack of charging stations as major barriers.
- Respondents acknowledged the benefits of EVs and e-mobility devices, including environmental advantages, lower charging costs compared to gasoline, and the convenience of home charging.
- There is strong support for the City to advance EV infrastructure, emphasizing the construction of more charging stations, creating job opportunities in the EV industry, offering incentives for EV adoption, and expanding e-mobility facilities, such as bike lanes and bikeshare stations.

Chicago Moves Electric Public Meetings

In addition to the surveys, CDOT hosted four public meetings, two in-person meetings, one hybrid (virtual and in-person), and one virtual meeting to facilitate deeper public feedback. All meetings included collaborative activities and group discussions, gathering valuable insights from the public on EV and e-mobility infrastructure challenges, needs, and future locations.

Key Public Meeting Themes

- Key themes included expanding public charging stations, providing incentives to lower EV ownership costs, and improving infrastructure to create a connected, protected street network for e-mobility devices (particularly e-bikes and e-scooters).
- Participants identified specific infrastructure gaps in historically underserved communities and emphasized the need for EV and e-mobility charging stations to support equitable adoption in these areas.
- Participants also emphasized the need to electrify commercial vehicles, especially in communities disproportionately affected by environmental justice and air quality issues, often located near regional freight and logistics hubs.


Barriers
Electric vehicles do have enough range to handle daily travel demands.


Improvements
STATION 2
Instructions: Please let us know your thoughts by placing a sticky note below.
What resources and oppportunities would increase the use of electric vehicles and devices?

Targeted Stakeholder Listening Sessions

CDOT also conducted ten targeted stakeholder listening sessions, three with City alderpeople and seven with community-based organizations who represent key geographic regions of the city or have transportation as an organizational focus.

CDOT has had ongoing meetings with ComEd to develop opportunities for collaboration on upcoming electrification initiatives including preliminary pilot plans, communication/education materials, and ComEd's Beneficial Electrification Plan ("BE Plan"). These meetings will continue as CDOT moves forward with Phase II of its EV Framework planning efforts.

Key Listening Session Themes

- Key themes included the need for increased community engagement and education to dispel myths and expand on the opportunities EVs and e-mobility can provide to communities and residents.
- Stakeholders voiced the need for additional education and awareness of electrification benefits beyond single occupancy vehicle ownership, including opportunities for low-cost e-mobility options and transit electrification options for residents who utilize other modes of transportation or do not currently own vehicles.
- Stakeholders emphasized the need to make connections to wider electrification workforce development opportunities, such as educational and career centers, job fairs, or other employment opportunities to work as electricians, EV technicians, or support staff for EV infrastructure operations and maintenance activities.

"If you live in an apartment, odds are you don't have access to charging at home. Chicago should leverage parking lots at libraries, parks, and other public buildings to build out their own charging network. More competition would bring costs down, and that would help apartment renters... gain easier, and cheaper, access to chargers."

Engagement Next Steps

CDOT remains committed to ensuring wide ranging and diverse community engagement as it prioritizes building out the footprint of Chicago's EV and e-mobility infrastructure. Engagement conducted to date emphasizes the importance of continuing to expand EV and e-mobility infrastructure in Chicago to address environmental justice and equity concerns. CDOT's community engagement next steps will include:

Public Comment Period: Invite residents to provide valuable input on the EV Framework through a formal comment period.

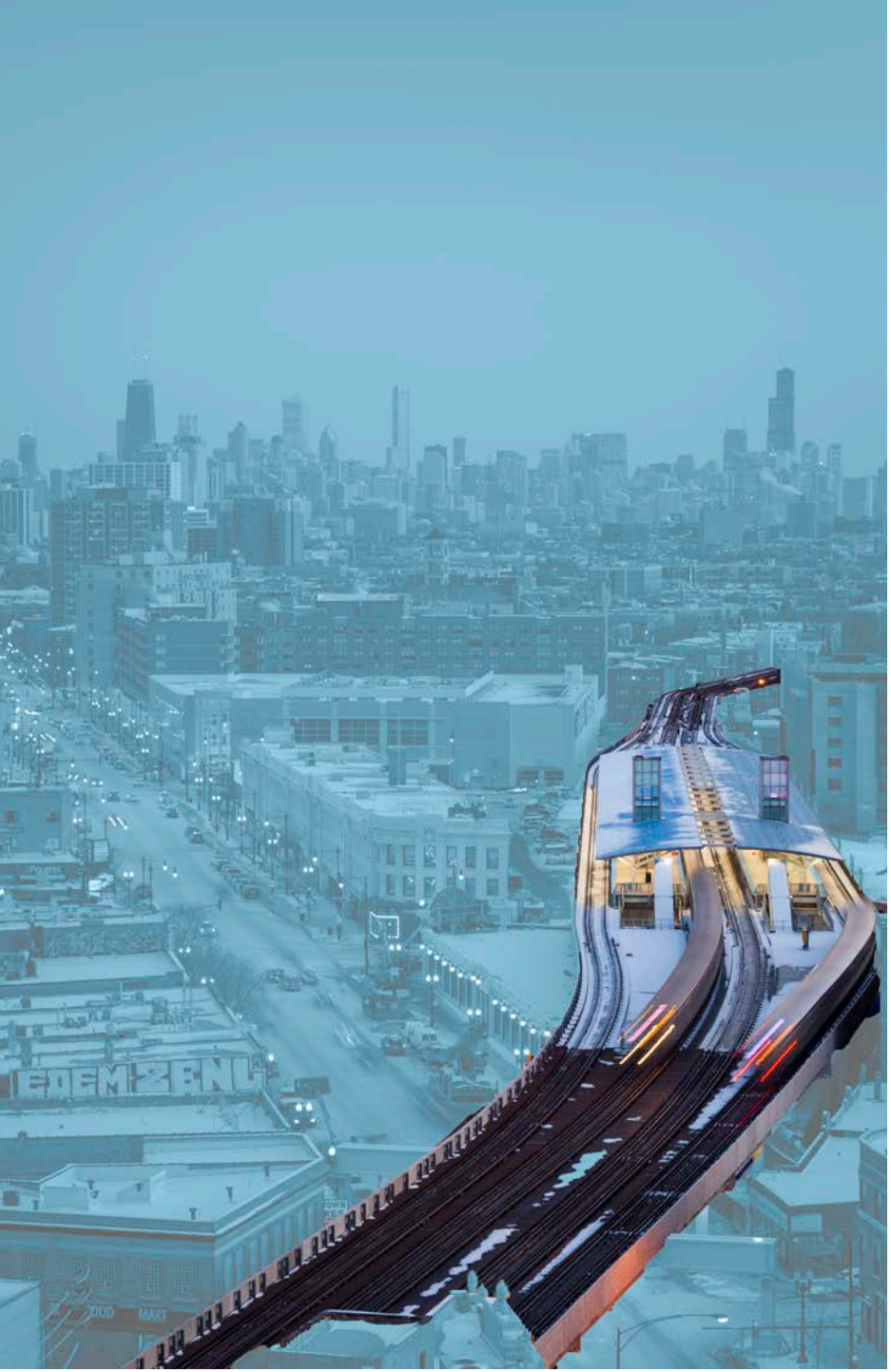
Surveys: Distribute community surveys to gather feedback on EV and e-mobility infrastructure needs and preferences across neighborhoods.

Focus Groups: Host targeted focus groups to engage diverse voices in developing the community-informed EV charging pilot.

In Person Events: Engage with residents at community meetings and events to discuss the EV Framework and hear feedback.

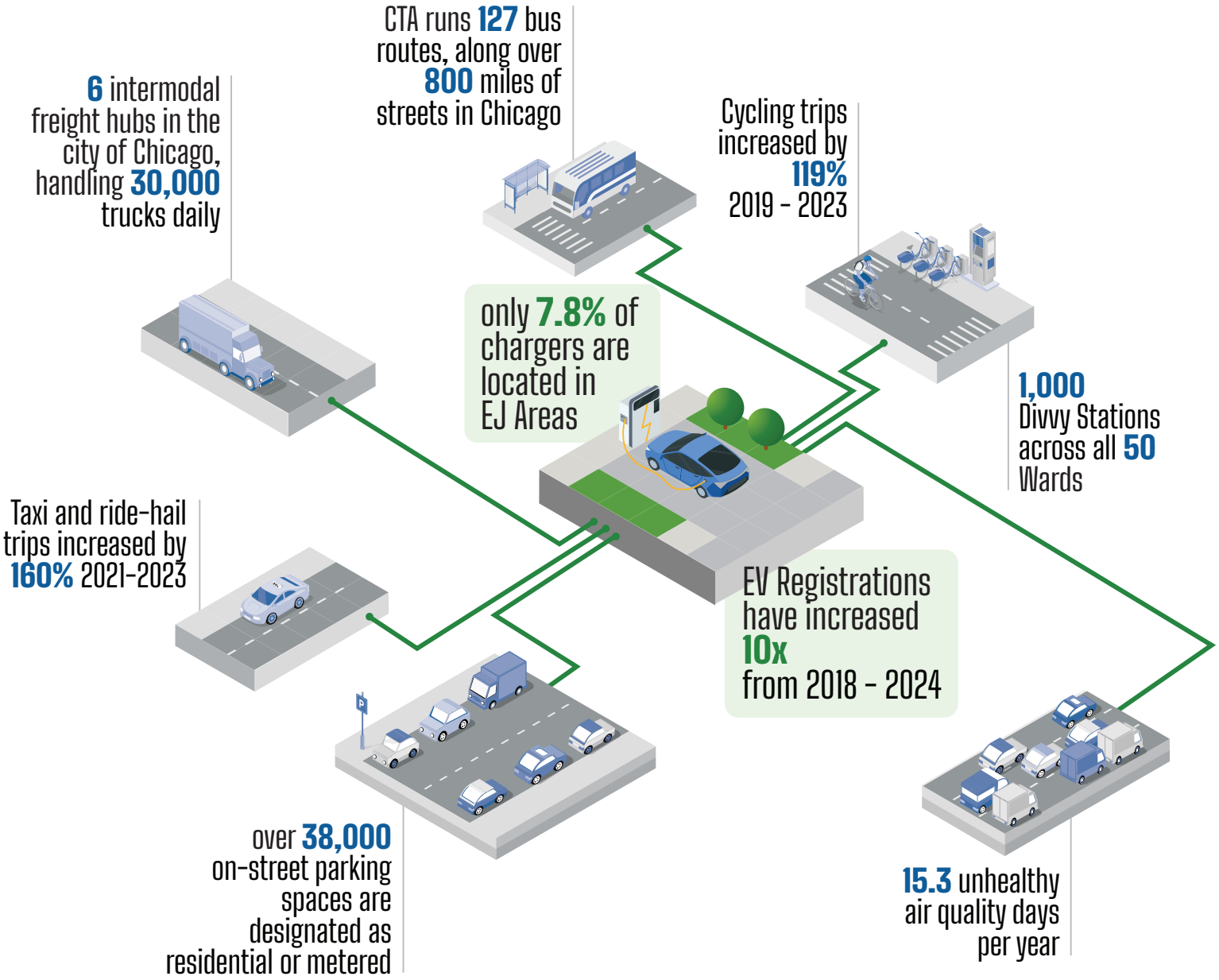
Virtual Events: Offer virtual town halls to broaden participation in EV charging planning and collect input from all residents.

Key Stakeholder Connections: Maintain direct collaboration with key stakeholders, including ComEd, to align strategies and initiatives that ensure the EV Framework reflects diverse needs and opportunities.



5 EXISTING CONDITIONS

The electric transportation market is rapidly expanding in Chicago and nationally, with projections indicating increased adoption across all market categories for EVs such as Plug-In Hybrid EVs and Battery EVs, as well as e-mobility options (e-bikes, e-scooters, etc.). Recognizing the critical role this emerging technology plays in the future of mobility and in providing reliable transportation to city residents, CDOT has evaluated existing transportation data and trends, EV ownership patterns, and transit mobility service gaps to lay the foundation for identifying and prioritizing locations of high need and priority for EV and e-mobility infrastructure investments. Key data points characterizing Chicago's current transportation landscape are summarized at the right.

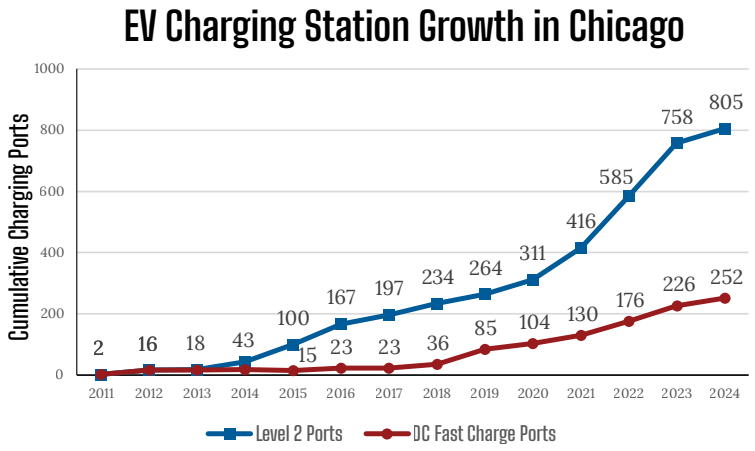

CTA runs 127 bus routes, along over 800 miles of streets in Chicago
6 intermodal freight hubs in the city of Chicago, handling 30,000 trucks daily
Cycling trips increased by 119% 2019 - 2023
only 7.8% of chargers are located in EJ Areas
1,000 Divvy Stations across all 50 Wards
Taxi and ride-hail trips increased by 160% 2021-2023
EV Registrations have increased 10x from 2018 - 2024
over 38,000 on-street parking spaces are designated as residential or metered
15.3 unhealthy air quality days per year

Transportation Electrification

Understanding the volume and characteristics of Chicago's existing EV registrations and charging infrastructure will help guide strategies for implementing equitable and effective EV Framework solutions.

Public EV Charging Stations

As of October 2024, Chicago has 860 publicly available EV charging station locations comprising 4,829 charging ports, of which 3,705 ports (77%) are Level 2 EV charging stations, while 1,124 ports (23%) are Direct Current Fast Chargers (DCFC) (as further described on page 39).



EV Registrations

According to the Illinois Secretary of State's office, as of October 2024, there were 20,328 registered battery electric vehicles (BEVs) in Chicago (plug-in hybrids are not counted in these data). The number of registered BEVs in Chicago has shown consistent growth year over year from October 2018 to October 2024. In 2018, there were 1,865 BEVs registered in Chicago. This number increased to 3,095 in 2019 (+65.9%), 4,297 in 2020 (+38.8%), 6,179 in 2021 (+43.8%), 9,373 in 2022 (+51.7%), 15,453 in 2023 (+64.9%), and 20,328 in 2024 (+31.5%).

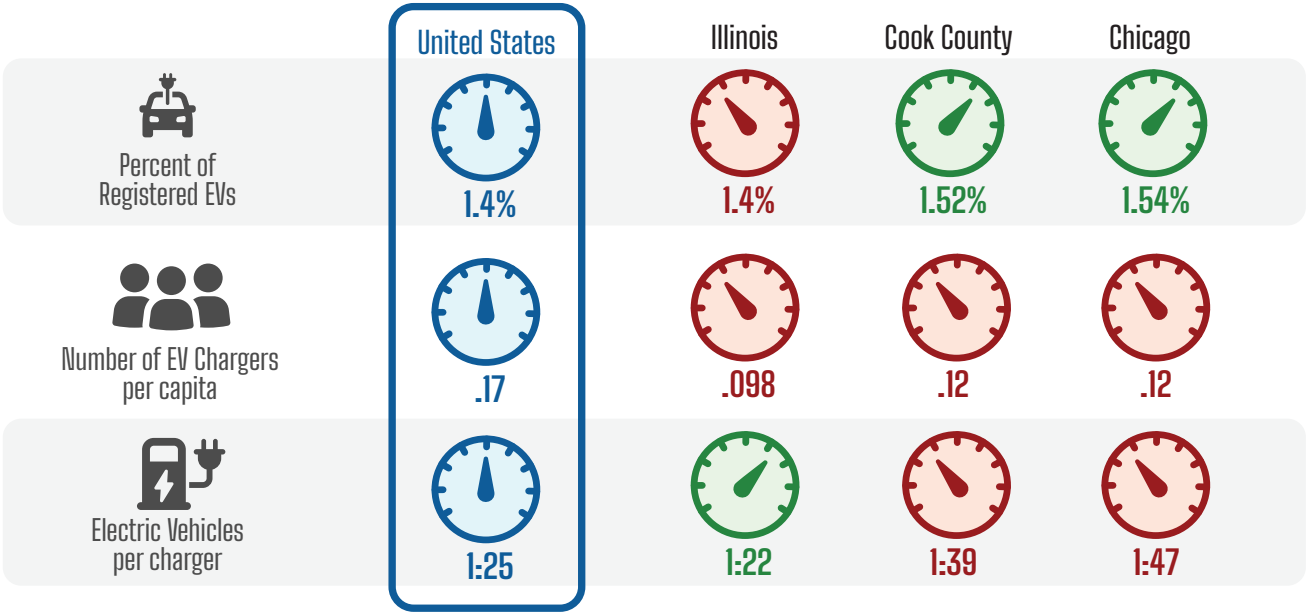
Utility Coordination

CDOT continues to regularly engage ComEd, Chicago's electric utility provider, on grid capacity and feasibility data for current and future electrification projects. ComEd has published its EV Load Capacity Map, which details information on the current power available throughout the city for EV charging station deployment projects. CDOT will continue to engage ComEd in close partnership throughout the ongoing implementation of this EV Framework.

Regional & National Electrification Comparisons

To put these numbers in context, registration metrics, charger availability, and vehicles-per-charger ratios were identified to measure the adoption, growth, and success of EV infrastructure penetration – comparing Chicago's progress to the county, state, and nation.

The high percentage of EV registrations and low number of chargers per capita give the city of Chicago an electric vehicle per charger ratio of 1:47, meaning Chicago has a lower number of chargers per vehicle than the country, state, and County. While no industry standard ratio or number of chargers has been established to achieve widespread EV adoption, it is essential to distribute publicly accessible EV charging infrastructure throughout Chicago to fill charging gaps and ensure equitable access.

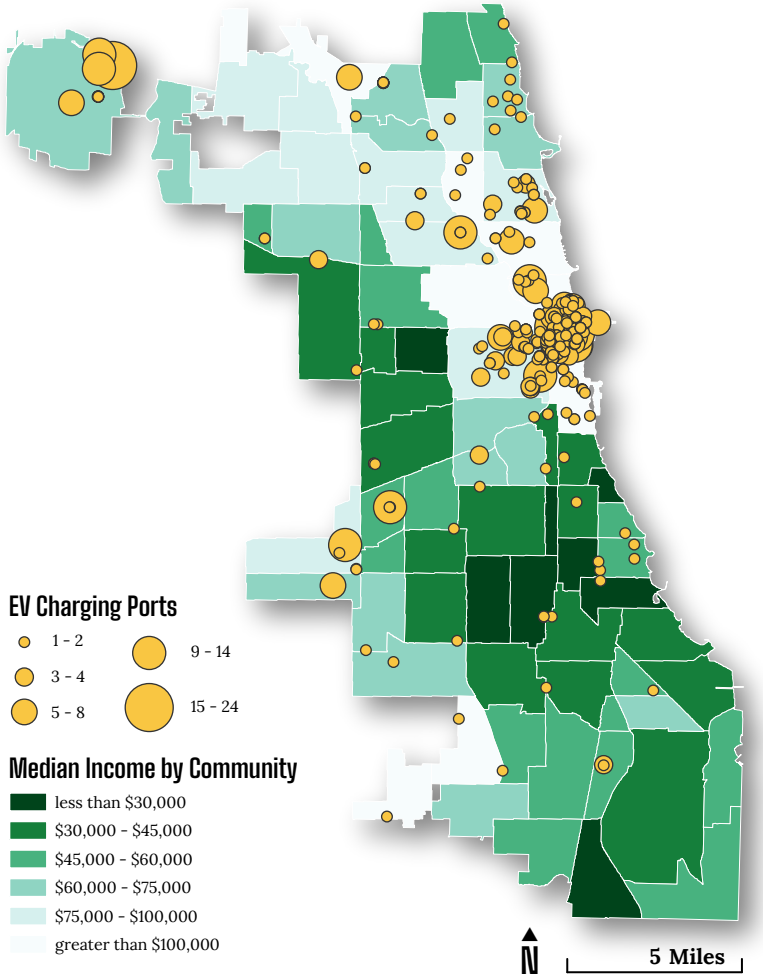


Public EV Charging Stations

The placement and distribution of existing public charging infrastructure further guides where EV infrastructure should be prioritized. The highest concentration of EV charging stations is in downtown Chicago. The existing distribution of EV charging infrastructure creates gaps, particularly on the south and west sides of the city.

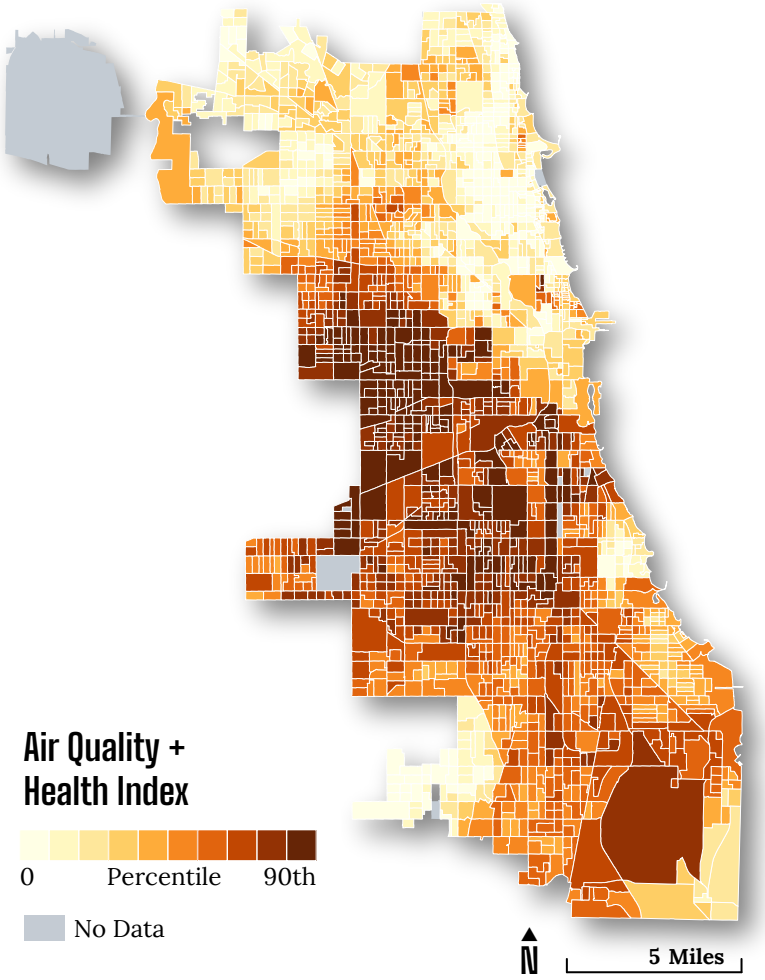
When comparing the location of chargers with the USDOT Climate and Environmental Justice (EJ) Screening Tool, which identifies neighborhoods more vulnerable to poor environmental and air quality issues, only 7.8% of the city's charging stations are in environmental justice areas. Furthermore, EJ neighborhoods in Chicago often contain heavy concentrations of manufacturing and industrial land uses, limited access to transit, and higher traffic volumes from freight rail, trucks, and personal automobiles. Prioritizing EV infrastructure in these communities presents an opportunity to have a meaningful impact to improve air quality.

The City is committed to meeting its sustainability and mobility goals, which will require a greater geographic distribution in EV infrastructure and e-mobility enhancements, such as bike facilities and operational improvements. This underscores the need to prioritize the south and west sides when planning for EV and e-mobility infrastructure.



Air Quality & Transportation Emissions

The expansion of low carbon transportation networks through EV adoption and e-mobility use presents a unique opportunity to reduce emissions and improve air quality, particularly in communities that experience poor air quality. Neighborhoods on the south and west sides bear a disproportionate burden of air pollution largely due to transportation emissions. Poor air quality can result in increased risk of heart and asthma attacks, reduced productivity, and even premature death. In addition, by causing adverse human health impacts, poor air quality strains the economy by increasing costs associated with healthcare and pollution mitigation. Addressing poor air quality is a priority of the City's Climate Action Plan and has been consistently highlighted as a top concern in several Chicago communities.



Public Transit Landscape

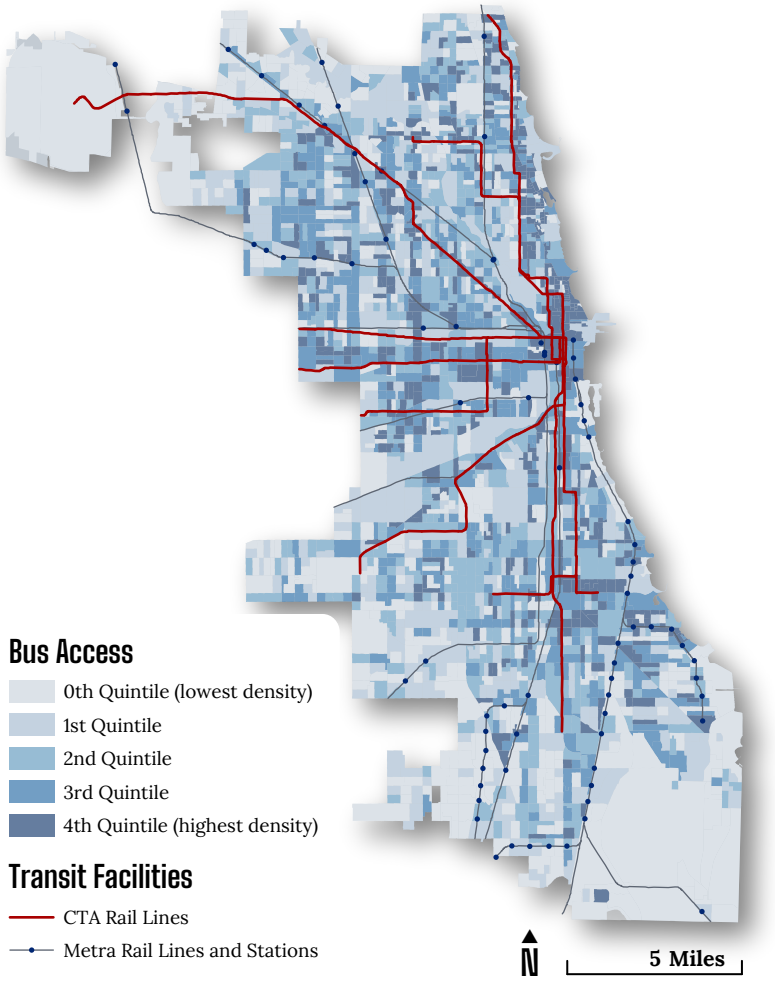
To better understand commuter options, three transit modes were examined.

CTA Bus

A bus service access indicator was developed to identify areas with varying levels of CTA bus service. The map highlights areas with higher bus frequency and stop density in dark blue and areas with lower service levels in light blue. Lighter blue areas indicate limited bus service and longer distances to bus stops, highlighting opportunities to expand mobility options, such as EV infrastructure, for better first/last mile connections.

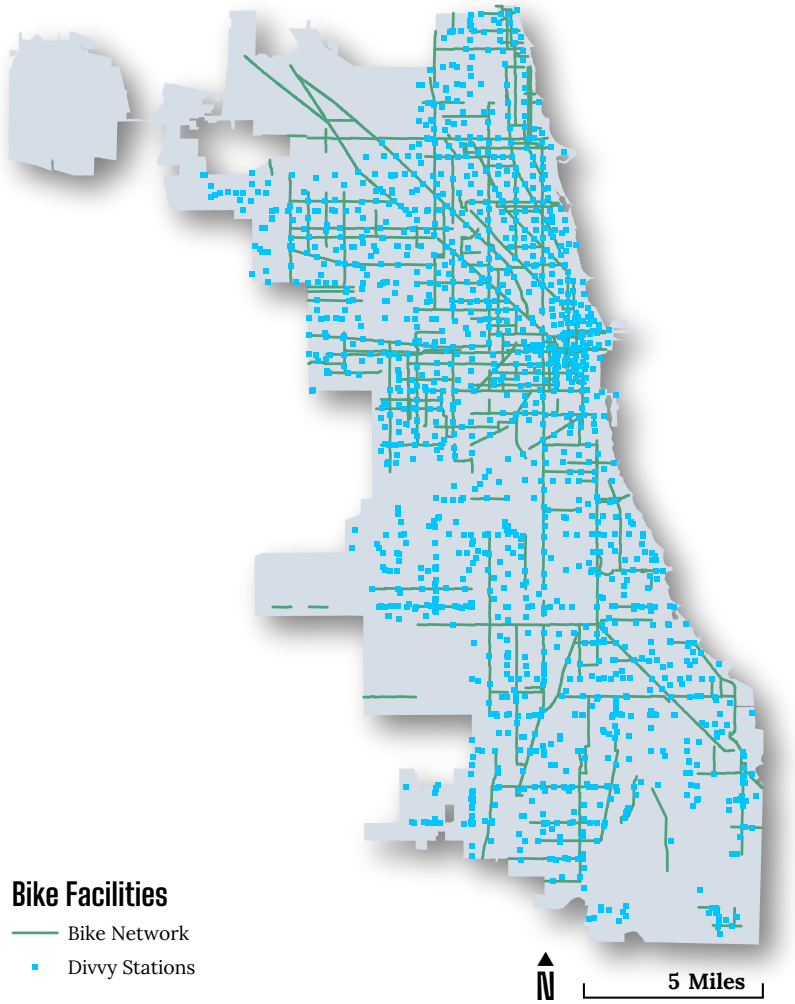
Passenger Rail

Chicago has over 200 rail stations, including CTA and Metra stops. Partnering with Metra and CTA to install EV charging stations and e-mobility hubs at park-and-ride facilities could enhance accessibility. Electrifying transit options could improve air quality in the region and reduce congestion from single occupancy vehicles.



E-mobility and Bike Network

The City owns the Divvy shared micromobility system. The Divvy program launched in 2013 with classic pedal bikes, and the City has since added e-bikes and e-scooters to the system and expanded the service footprint to all 50 wards. To further increase e-mobility use, safe, reliable, and consistent bicycle infrastructure is essential. CDOT continues to enhance, expand, and construct new bikeways throughout the city. Once all 2023 Chicago Cycling Strategy projects are implemented, 70% of Chicagoans will live within one-half mile of a low-stress bikeway. Along with these investments in Divvy and bike infrastructure, biking increased by 119% from 2019 to 2023. Chicago's expansion of micromobility and bicycle infrastructure has advanced the City's goals of reducing vehicle miles traveled and single occupancy vehicle use, thereby lowering emissions and creating more livable neighborhoods. The continued growth in e-mobility services and supportive infrastructure is critical for the City to achieve its goals.



Among bus, rail, and micromobility infrastructure, much of the city is served by convenient and reliable transportation services. Where gaps within the transit network exist, the City leverages e-mobility solutions, including licensed e-scooter services, to better connect residents with transit options. Maps of these transit modes on the previous pages highlight service gaps on the west, southwest, and south sides of the city. In these areas, first and last mile connections to transit are difficult, discouraging transit use. Therefore, e-mobility options, combined with EV infrastructure, can improve access to transit that would otherwise be underutilized.

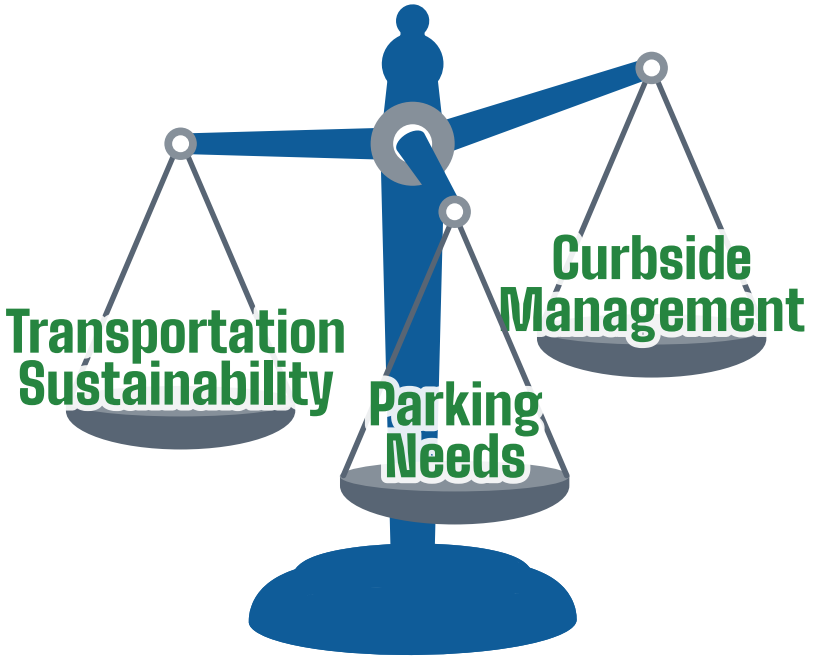
Parking Landscape

The introduction of EV technology brings opportunities to address air quality issues by replacing gas-powered engines with electric motors. However, changing propulsion technology will not solve problems related to parking constraints and curbside competition, making the siting of EV charging a parking concern. Personal vehicles are just one mode in a broader transportation ecosystem. When planning for EV infrastructure, CDOT must balance multiple priorities, including:

Transportation Sustainability: Minimize single occupancy vehicle miles traveled (VMT), reduce congestion, expand multimodal transportation options (bike, pedestrian, transit, etc.), and enhance economic mobility opportunities for residents throughout the city.

Curbside Management: Manage curbsides to prioritize safety and maximize curb use, including options for bike lanes, bike parking, transit, outdoor dining, and loading zones.

Parking Needs: Manage parking to ensure residents and businesses have necessary parking access.



Types of Parking

Land use characteristics and population densities create varying parking demand volumes. Managing distinct demand volumes and user groups has resulted in various kinds of parking in the city that must be considered when planning EV infrastructure placement:

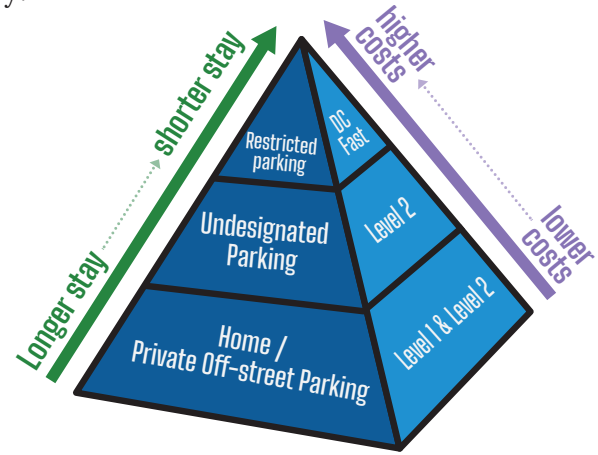
Restricted Parking: Restricted parking includes metered parking, residential permit parking, loading zones, other timed spaces, and private garages. These parking sites are not priorities for deploying EV chargers. Most EV drivers cannot access these sites due to their restrictions. These locations tend to be in areas with high demand for residents and commercial activity, limiting availability of spaces dedicated solely to EV charging. Private paid parking is not under CDOT's purview and will not be prioritized by the EV Framework, but it will be important for future public-private partnership opportunities.

Undesignated Parking: Undesignated parking includes free public parking lots and undesignated curbside parking. These locations will be prioritized, with site-specific factors analyzed to determine which are best suited to certain charging infrastructure power levels and vehicle dwell times.

Institutional Parking: Institutions such as churches, schools, municipal buildings owned and/or operated by the county, city, and other agencies can provide long-term parking to a variety of users. First-tier partners may include publicly owned land from key agencies including CDOT, CTA, Cook County, and other key agency partners. Second-tier partners may include privately owned/publicly available parking such as colleges, hospitals, religious institutions, and schools.

Types of Charging Infrastructure

Alongside parking designations, different EV charging infrastructure requires vehicles to remain parked for varying time periods. Accordingly, CDOT must consider EV charging use cases, charging power levels, utility power availability, and financial feasibility that best fits each parking location type and any competing uses for the public right-of-way.

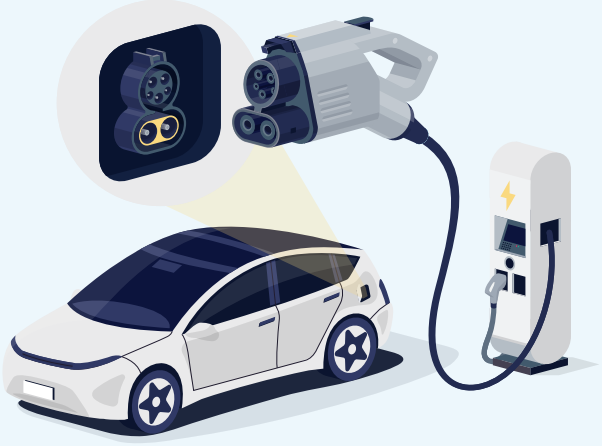


Level 2 (L2) Charging: Lower power charging is best for residents and workplaces, where vehicles will dwell for 6-12 hours and have time to charge slowly on L2 Chargers.

Pros: Cost-effective hardware and installation; easier to install in more places because chargers use residential level utility power, and they are less likely to require utility service upgrades.

Cons: Requires multiple hours for an EV to get a full charge.

Site Parameters: Requires parking locations where users can park for extended periods of time, including overnight. Locations to avoid include sites that have time limits on parking.



Direct Current Fast Charging (DCFC): High power charging is best for EVs that need a quick charge (~30 min or less) and plan to continue their trip immediately after charging.

Pros: Fast charging times offer an experience closer to conventional vehicle fueling.

Cons: Significantly higher costs for hardware and installation; requires commercial-level utility power service, which may necessitate utility upgrades or limit site options.

Site Parameters: Best suited for sites likely to have high utilization to ensure financial viability of both capital and operations costs. Locations to avoid DCFC include restricted parking, or curbsides on streets planned for multiple competing uses, such as bikeways, transit, or other multimodal uses.

Planning Policy Landscape

While use of CDOT's right-of-way is competitive throughout the city, specific roadways and curbsides have been identified for multimodal initiatives. Understanding the location of these planning efforts is essential for developing policies that support the City's multimodal goals. Below is a list of key planning efforts where the City has stated intentions to prioritize specific roadways for bike infrastructure, bus infrastructure, and reducing car dependency.

CTA's *Better Streets for Buses*: This plan lays the groundwork for improved bus services citywide, through ongoing investments in street, signal, and sidewalk infrastructure–all designed to achieve faster and more reliable bus service, improved access to bus stops, and better overall bus facilities. The Better Streets for Buses (BSB) Plan was developed with public input and includes a network of 17 corridors across the city targeted for improvements.

CDOT's *Streets for Cycling* and updated *Chicago Cycling Strategy*: These strategy documents identify and plan for bikeway infrastructure that meets the needs of residents and reflects the rapidly evolving nature of the city's transportation system. The updated Chicago Cycling Strategy outlines plans to implement 150 miles of bikeways within the city in the coming years.

DPD's *Connected Communities Ordinance*: This ordinance was adopted in 2022 to attract reinvestment and create jobs by encouraging and creating predictable standards for equitable development near transit stations. As part of the ordinance, the City expanded TOD incentive eligibility, made parking requirements more flexible, tied density bonuses more directly to on-site affordability, and created a new "parking swap bonus."

Commercial Transportation Landscape

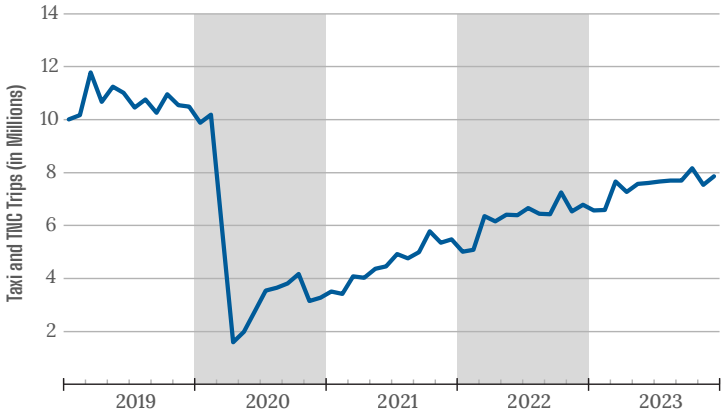
Beyond personal vehicles and first/last mile connections, electrification presents significant opportunities for taxis, ride-hail, and freight transportation.

Taxis and Ride-hail Vehicles

City data shows that taxi and ride-hail trips dramatically decreased during the pandemic, and have steadily increased post-pandemic, as seen in the figure to the right. According to a recent World Resources Institute report, ride-hail drivers travel three times farther per day than typical motorists, leading to a greater impact on air pollution. Additionally, research from 2019 shows that taxi and ride-hail usage peaks on Friday and Saturday nights, when transit and other modes may be less attractive due to limited service or safety concerns. The graph illustrates how service usage is returning to pre-pandemic levels.

The high volumes of taxi and ride-hail trips contribute to traffic congestion, increased climate emissions, and worsening air quality. With some drivers reporting that they drive around 200 miles per day, these commercial trips significantly impact pollution levels. Given that taxi and ride-hail vehicles consistently travel farther than typical motorists, prioritizing their transition to EVs is essential.

Taxi and ride-hail trips per month, 2019-2023



On-Road Freight

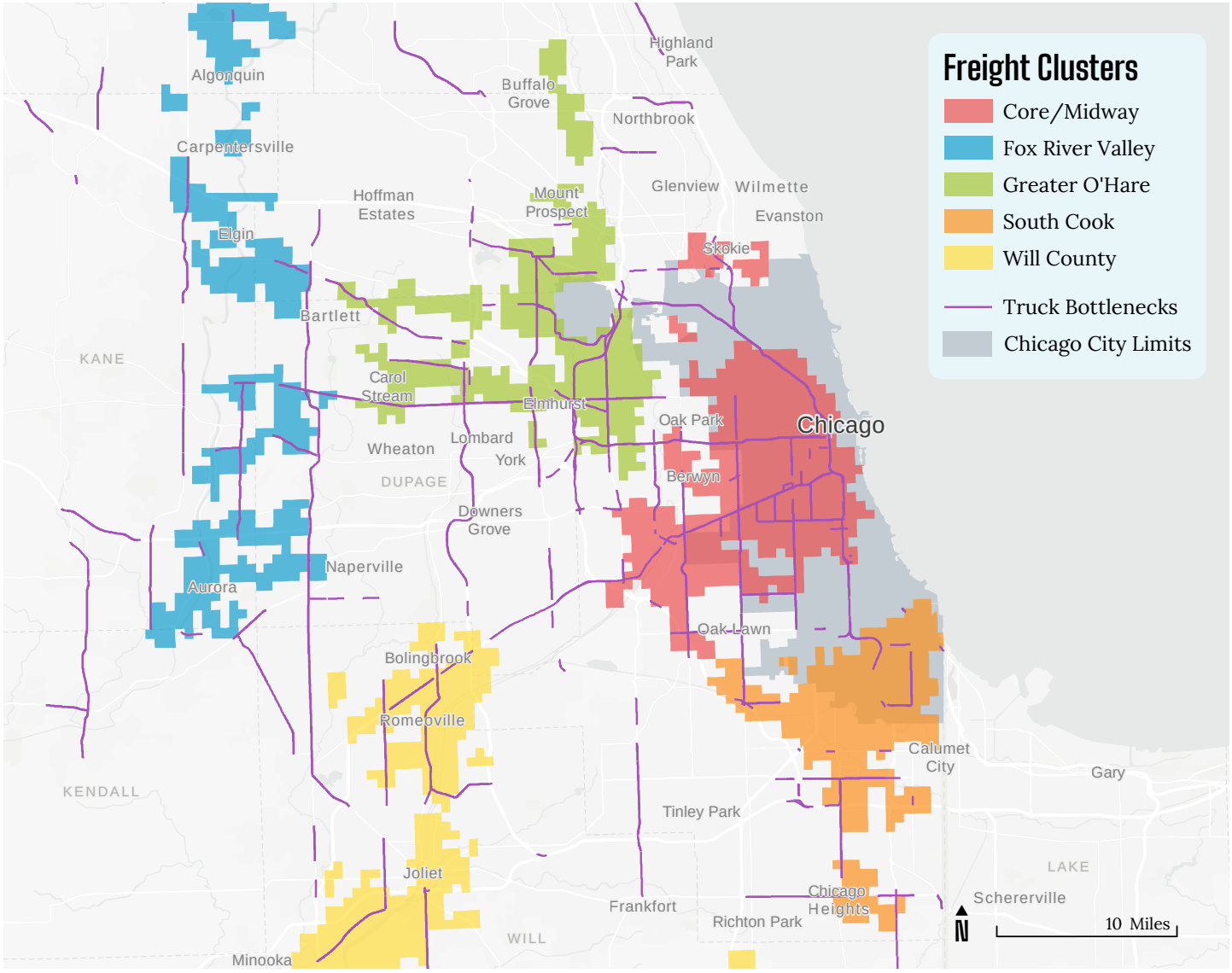
Serving as North America's primary intermodal freight hub, Chicago is one of largest transportation and logistics terminals in the U.S., making freight transport a significant contributor to Chicago's vehicle miles and air emissions. According to CMAP's *On To* 2050 regional plan, approximately 25% of all freight trains and 50% of all intermodal trains in the U.S. pass through metropolitan Chicago. Trucks account for nearly one in seven vehicles on the urban interstate highways in Illinois, and some facilities in metropolitan Chicago carry over 30,000 trucks each day. Data shows truck average daily traffic (ADT) is concentrated along major highways and arterial roadways on the south and west sides of the city. As residents living in areas neighboring these roadways experience poorer air quality, the urgency to accelerate the electrification of freight and medium/heavy-duty trucks in these corridors is underscored.

Six major intermodal freight clusters are located in Chicago, where air cargo, rail, maritime, and truck transportation converge to move freight throughout the city. The largest concentrations of truck traffic volumes are seen in and around intermodal facilities, producing increased traffic, idling, and air pollutants in the surrounding communities.

Electrifying on-road commercial freight trucks is crucial for reducing emissions but comes with challenges, including vehicle availability, cost, range, and technology limitations. Medium- and heavy-duty EVs need fast, high-power charging for large batteries, driving up charging station costs and limiting locations due to power and operational constraints. However, advancements in vehicles, batteries, and charging technologies are steadily enabling the broader adoption of fully electric trucks for commercial freight and fleets.

While electric trucks do not currently make up a significant portion of on-road vehicles today, policies and programs can accelerate their adoption to benefit regional economics, climate, and air quality. EV freight adoption is happening fastest for shorter distance and last mile deliveries, with charging occurring when vehicles are being loaded or between loading shifts. Charging locations that best serve these uses are at fleet properties or within intermodal hubs, ideally accessible by multiple fleets over time.

Policies and deployment programs focused on the six major intermodal freight clusters in greater Chicago will provide the City with strategic opportunities to invest its resources in locations that serve multiple fleet users at critical points in the regional freight network.


Freight Clusters
Core/Midway
Fox River Valley
Greater O'Hare
South Cook
Will County
Truck Bottlenecks
Chicago City Limits
Highland Park
Algonquin
Buffalo Grove
Northbrook
Carpentersville
Glenview
Wilmette
Hoffman Estates
Mount Prospect
Evanston
Elgin
Skokie
Bartlett
KANE
Carol Stream
Elmhurst
Oak Park
Chicago
Lombard
Wheaton
York
Berwyn
DUPAGE
Downers Grove
Naperville
Aurora
Oak Lawn
Bolingbrook
Romeoville
Calumet City
Gary
KENDALL
Tinley Park
Joliet
LAKE
Chicago Heights
Schererville
Frankfort
Richton Park
WILL
Minooka
N
10 Miles

6 PRIORITY INDICATORS ANALYSIS

To effectively guide the deployment of EV charging infrastructure under the EV Framework, CDOT developed a data-informed process using Priority Location Indicators. These indicators ensure that infrastructure investments align with the City's goals of equity, sustainability, and multi-modal integration while also addressing market gaps. By analyzing Chicago-specific data across four key categories—equity, mobility opportunities, population density, and land use characteristics—the City seeks to strategically target and prioritize areas for the deployment of new EV charging stations. This approach not only maximizes public benefit and efficient resource use but also aligns location priorities with equitable access goals, particularly in communities traditionally underserved by market-driven solutions.

Key Deployment Questions

While the goals, strategies, and existing conditions analysis provide broad guides for City planning, the EV Framework ultimately seeks to answer two specific EV charging infrastructure deployment questions:

> Which EV charging infrastructure deployment locations will best achieve the City's goals?

> How can the City prioritize locations that maximize the highest benefits for residents?

The EV Framework answers these questions by analyzing multiple data sets within each of the four priority indicator categories. The priority indicator analysis is designed to be flexible, allowing for ongoing refinements to location priorities as new data and additional community input become available.

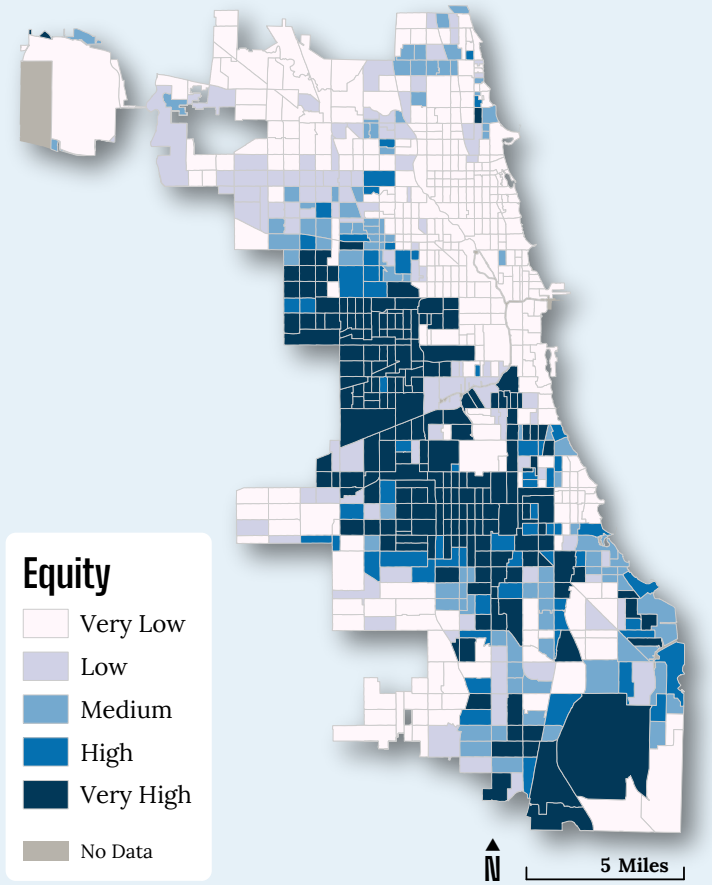
Location Priority Methodology

CDOT evaluated multiple data sets within each of the four indicator categories to prioritize locations for EV charging infrastructure that best achieve the EV Framework goals. To do this, each data set within an indicator category was assigned a point score. For example, under the equity category, air quality data was weighted so that areas with higher air pollution were prioritized with higher point scores. Once all data sets were scored, each land parcel in the city of Chicago was assigned a score based on its performance across all data sets. All scores from the underlying data were normalized and combined into a total score for each land parcel. These scores were then aggregated into an overall score for each of Chicago's census tracts, identifying high-priority areas for the City to target for continued community input and potential EV charging infrastructure deployment investments.

Indicator Data Details

This section provides a detailed breakdown of the EV Framework location priority indicators, the associated scoring method, and views of the underlying map layers for each of the four main metrics: equity, mobility opportunities, people density, and land use.

EQUITY



CDOT is committed to ensuring that all communities have access to EV infrastructure and e-mobility services. Using data and metrics prioritizing equity helps minimize EV infrastructure gaps and supports environmental justice communities by considering factors from the US Department of Transportation's Climate and Environmental Justice Screening Tool.

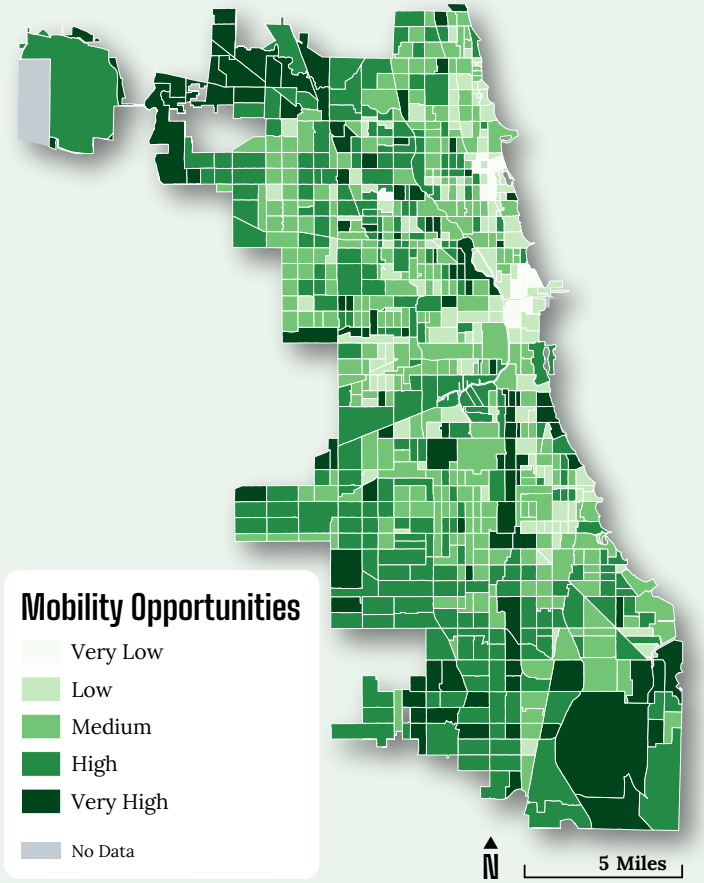
Data Sets

- Health, Housing, Transportation, Legacy Pollution, Climate Risk, Energy Burden, Water Quality, and Workforce Development Data
- Data Sources: US DOT Climate and Environmental Justice Screening Tool (CEJST).

Scoring Considerations

- High burdens were scored higher to address equity gaps.
- Equity scores received double weight in the overall aggregation, emphasizing their importance.

MOBILITY OPPORTUNITIES



Analyzing "Mobility Opportunities" ensures EV chargers are placed where transit options are limited or not available. By considering transit access, traffic volumes, and current EV charging access, the City can prioritize high-need areas, support EV adoption, and promote a more integrated, efficient transportation network.

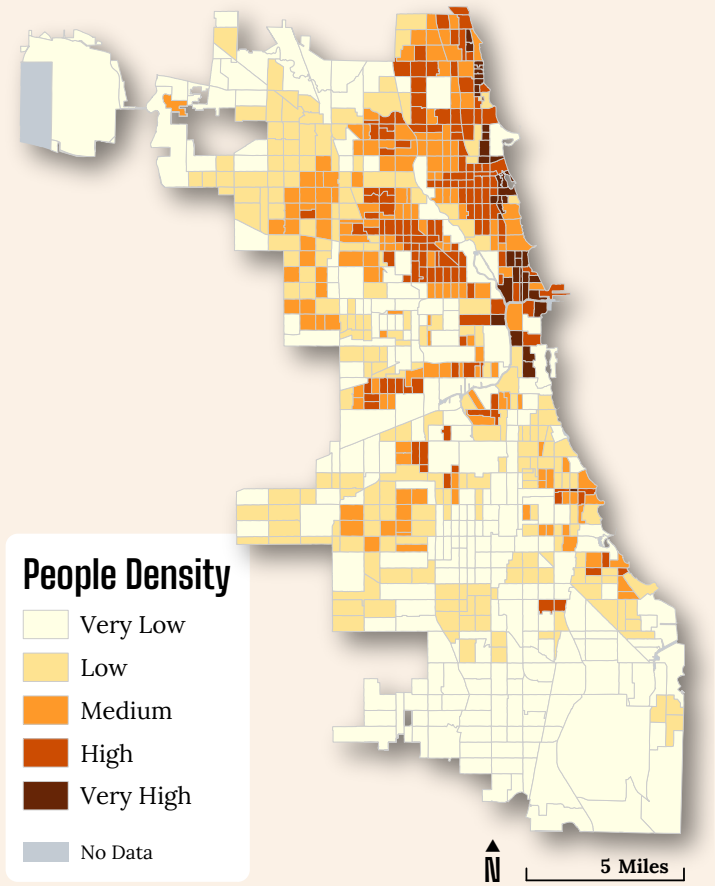
Data Sets:

- Transit Gaps, Traffic Volumes, Existing EV Chargers
- Data Sources: CTA data; Average Annual Daily Traffic data

Scoring Considerations:

- Areas with fewer transit resources and high traffic volumes scored higher, supporting underserved communities, and ensuring public charger use.

PEOPLE DENSITY



Analyzing "People Density" highlights areas with high employment and/or population densities, indicating higher potential demand for EV infrastructure and e-mobility services. High-density areas, especially those with multi-family housing, often lack private garages for EV chargers. Prioritizing these areas ensures efficient resource use and maximizes infrastructure access where people live and work, two use cases that lend themselves to EV charging.

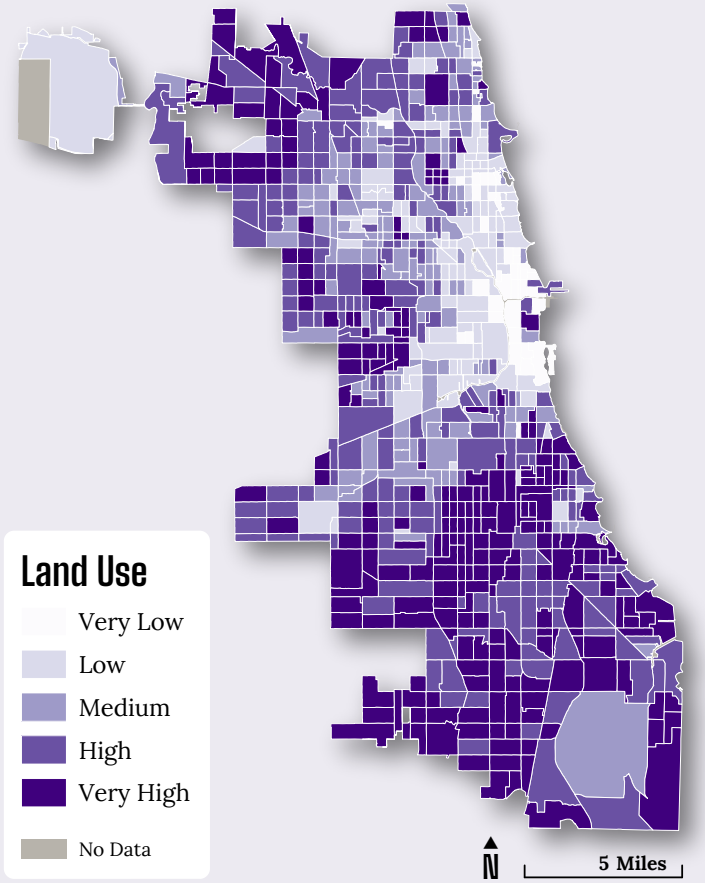
Data Sets

- Residential and Employment Density

Scoring Considerations

- Areas with higher population or employment densities scored higher, reflecting increased demand for charging options serving high density, multi-unit buildings.

LAND USE



Analyzing "Land Use" highlights areas where ownership patterns, zoning, economic activity, and parking availability are best suited for EV charging infrastructure and e-mobility services. City-owned land and optimal zoning ensures equitable access and timely installation, while proximity to nearby businesses and unrestricted parking enhances the infrastructure's effectiveness and accessibility, ensuring equitable distribution and utilization.

Data Sets:

- City-Owned Land, Parking Access, Zoning, and Business licenses
- Data Sources: Chicago Data Portal – City of Chicago

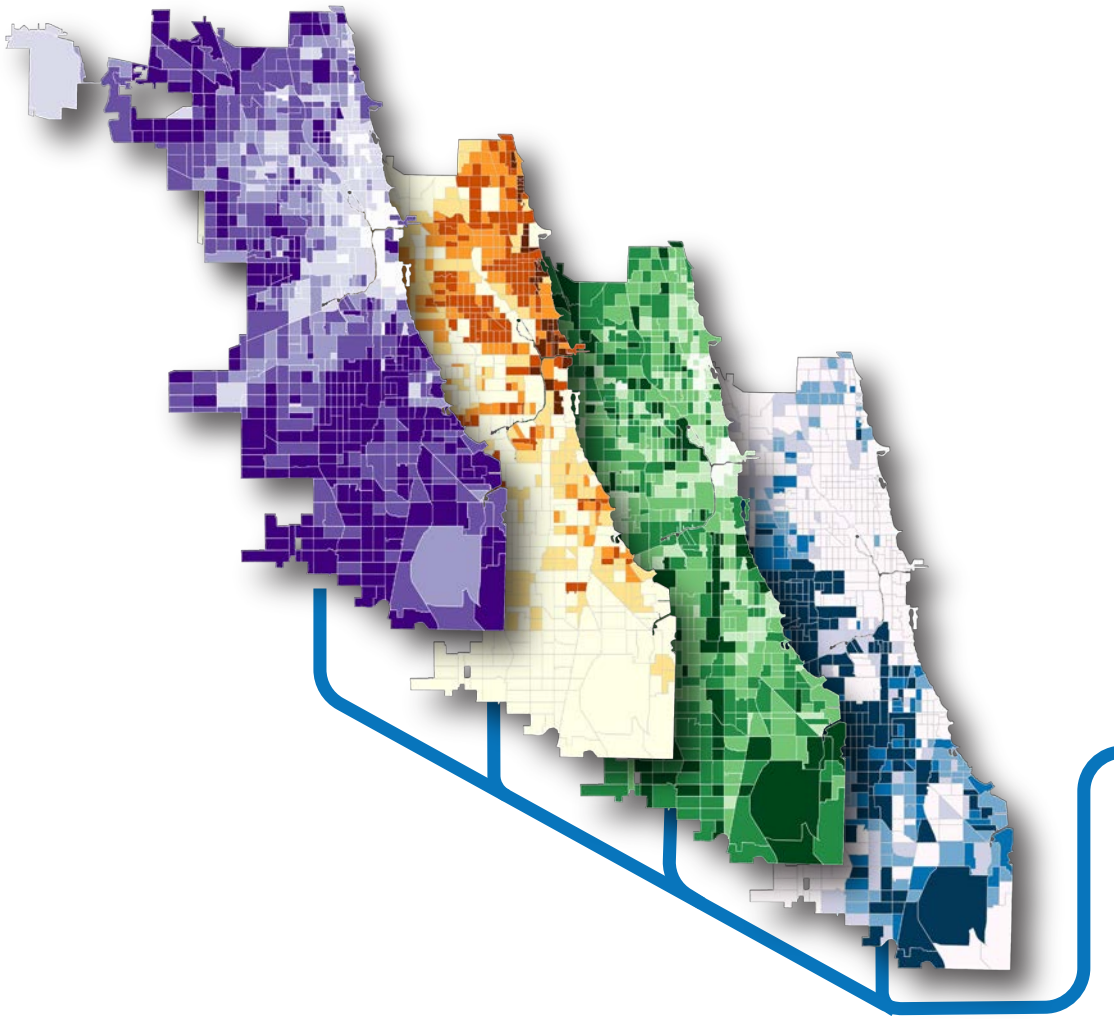
Scoring Considerations:

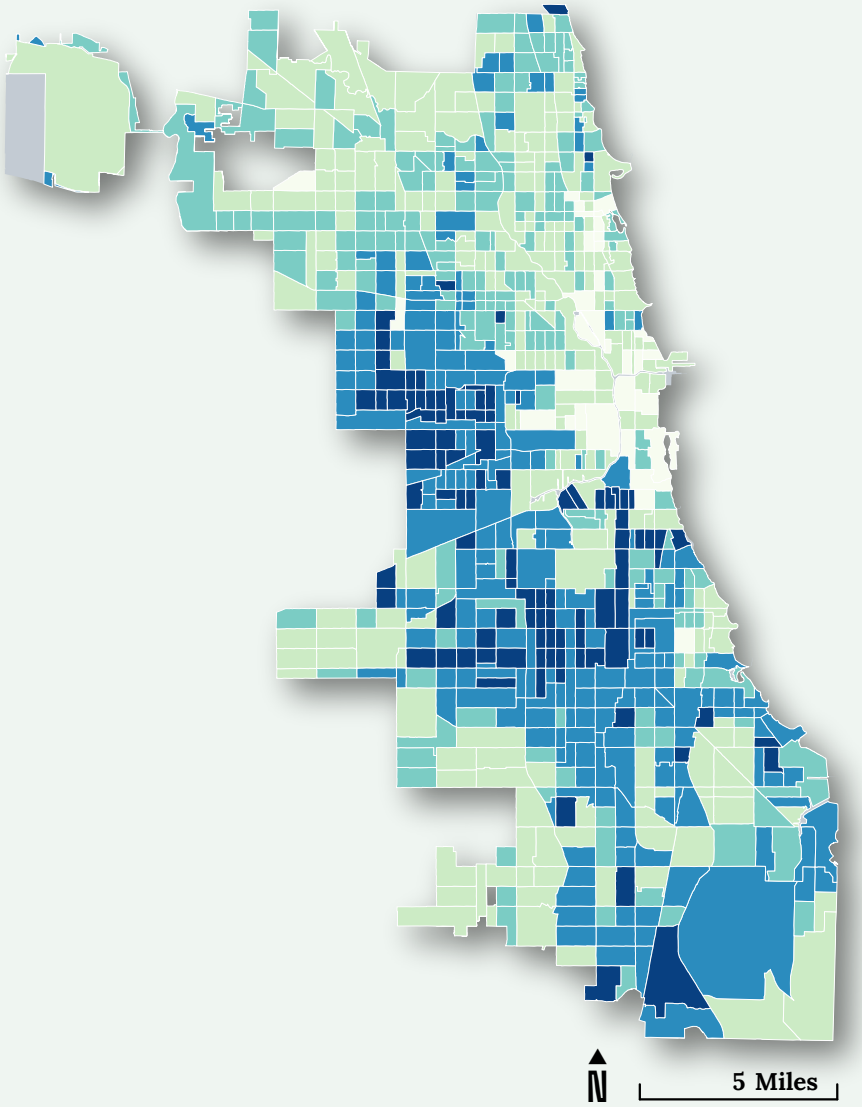
- Public land and well-zoned areas received higher scores, supporting efficient and accessible charger deployment. Areas with more businesses scored higher, promoting user convenience and economic activity.

Unifying the EV Infrastructure Priority Map

Based on the data sets and scoring methods detailed above, each parcel of land in the city was assigned a total aggregate score, combining all the scores from each of the priority indicator data sets into an overall score per parcel. All parcel scores in each Chicago census tract were then aggregated into an overall census tract score.

Census tracts with the highest combined scores indicate the highest-priority locations for deploying EV charging station infrastructure, with low scores indicating lower priorities for City-initiated EV charging investments. Low indicator scores only suggest that these locations will not be considered a priority for public funding via CDOT.





EV Priority Location

The following map represents an aggregation of the mentioned indicators to identify and prioritize preliminary locations for publicly funded EV charging infrastructure, to ensure that all Chicagoans have convenient access.

Priority Score

- Highest priority (60 - 40)
- High priority (40 - 30)
- Medium priority (30 - 20)
- Low priority (20 - 10)
- Lowest priority (10 - 0)
- No Data

7 POLICY OBJECTIVES

This section presents a summary of the comprehensive electric transportation readiness policy analysis the City performed, as well as the EV and e-mobility policy objectives CDOT aims to pursue. The intent of these EV policy recommendations is to assist the City in achieving the specific goals of the EV Framework, including facilitating an equitable transition to EVs, e-mobility options, and EV charging stations for public and commercial charging use cases. The three policy categories and nine associated actions outlined in this chapter aim to increase EV adoption, develop ongoing equity-focused community engagement approaches, and establish a robust foundation for continued citywide electrification.

EV Readiness Program

In September 2024, the city of Chicago received the Bronze designation by the Metropolitan Mayors Caucus EV Readiness Program. This regional program examines cities' support for transportation electrification across 11 key categories, shown below.

EV READINESS CATEGORIES

- Commitment to EV Readiness
- Zoning and Planning
- Permitting and Inspection
- Safety and Training
- Parking and Access
- New Construction
- Access to EV Charging
- Municipal Fleets
- Utility Engagement
- Community Engagement
- Market Development and Finance

For each category, the EV Readiness Program provides a list of actions that can be met at either a Bronze, Silver, or Gold designation level, with actions under each category contributing to a city's overall EV readiness designation in the program.

The City aims to achieve the Gold designation to ensure residents have ease of access to EV and e-mobility options. The following section summarizes the 11 readiness categories and briefly describes key actions that the City has already taken.

Commitment to EV Readiness

The City has demonstrated commitments to EV Readiness by publicly supporting EV adoption and reporting baseline metrics, including the power level and quantity of publicly accessible and municipally owned EV charging stations, the number of municipal fleet EVs, and the number of registered EVs in the city.

Zoning and Planning

The City has classified EV charging stations as an accessory use when they are not the primary use of the site. Zoning regulations have been established to facilitate EV charging station installation, ensuring they are no more difficult to site than similar infrastructure. Additionally, the City has integrated EV readiness into local plans, including strategic, energy, and comprehensive plans, incorporating specific goals, quantifiable metrics, and specific actions.

Permitting and Inspection

The City actively supports EV infrastructure development. This includes posting standard checklists and permitting forms online, providing a list of applicable local, state, and federal codes, laws, regulations, and best practices, and creating an online permit approval process. The City also advises multi-family and commercial EV charging station permit applicants on the need to submit utility modification applications for substantial load increases.

Safety and Training

The City has launched initiatives to equip first responders and public safety personnel with the necessary knowledge and skills to handle EV-related incidents. This includes providing awareness and hands-on training for emergency situations involving EVs and EV charging stations, as well as adopting standard operating procedures to manage such incidents effectively.

Parking and Access

The City is integrating ADA requirements to ensure equitable access to EV charging stations for both disabled and non-disabled patrons. Additionally, digital tools are being promoted to help residents locate available EV charging stations more easily.

New Construction

The City has established targets and timelines requiring all new buildings to be EV-Capable, EV-Ready, or equipped with EV charging. This includes targets and timelines for single-family residential, multi-family residential, and commercial properties. Developers are encouraged to include EV readiness in their building plans and utilize available incentives to support these efforts.

Access to EV Charging

The City encourages property owners, managers, and employers to support easy and equitable access to EV charging. Additionally, consumer resources are available to help residents make informed decisions about EV purchases and charging options.

Municipal Fleets

The City is actively identifying suitable EVs for the City's fleet needs by compiling information on vehicle requirements, costs, and maintenance, as well as investigating new EV models and placing orders for new fleet EVs.

Utility Engagement

The City is collaborating with ComEd to help align the City's EV initiatives with utility programs, supporting grid stability and efficient energy use, as well as to educate residents about dynamic rate offerings and encouraging EV owners to register with the utility.

Community Engagement

The City has established a "Chicago Moves Electric" website to facilitate public outreach and collaboration with local businesses, organizations, and institutions advancing EV readiness and access to charging.

Market Development and Finance

The City continues to monitor and pursue public and private grants and incentive programs to support EV readiness and keep the community informed about available incentives.

Policies & Actions

The EV Framework policy categories outlined here were developed to achieve the goals detailed in Chapter 3, and align with the actions necessary to attain Gold designation in the Metropolitan Mayors Caucus EV Readiness Program. Each recommendation is based on an analysis of current City policies and supported by case studies of other jurisdictions that demonstrate equitable outcomes achieved through similar actions.

Some policy recommendations in this section are long-term and require legislative action or coordination across multiple City departments. For instance, implementing electrification policies such as updating zoning laws and streamlining the EV charging station permitting process will require both input from various stakeholders and regulatory or legislative approvals. On the other hand, near-term policy recommendations, such as creating a centralized website for EV resources or implementing a public information initiative can be enacted more quickly as they fall under the purview of CDOT and do not require external legislation or approvals.

Create and Implement an Ongoing Public Information and Community Learning Initiative

CDOT recognizes the importance of ongoing engagement with residents through an accessible community learning initiative that provides credible information on transitioning to EVs and utilizing e-mobility options. Ensuring access to reliable, multi-format information from trusted sources is essential for effectively communicating the benefits of EV adoption, including improved air quality and community wealth generation.

Ongoing public information and learning initiatives will help equip residents with the knowledge and resources needed to make informed decisions while fostering collaboration on sustainable transportation solutions.

Focus on the Basics: Collaborate with community-based organizations and other trusted institutions to promote the community-level benefits of EVs and e-mobility devices.

Meet Residents Where They Are: Tailor outreach to address concerns and ensure residents understand that EVs are a viable option for them, building trust and participation.

Partner with Alderpeople: Collaborate with Alderpeople to promote programs, ensuring new initiatives reach their constituents and fostering cooperation across City leadership.

Highlight Workforce Development: Showcase job opportunities in engineering, electrical work, and manufacturing, encouraging trade schools to recruit from communities that will benefit most.

Gather Community Feedback: Engage residents to identify where EV chargers, e-bike stations, and e-mobility solutions are most needed, ensuring their insights shape planning efforts.

Maintain Ongoing Engagement: Build lasting relationships with community groups, faith leaders, and local activists to ensure the City can respond to evolving needs.

Coordinate a Working Group to Lead Electrification

Scaling transportation electrification at the citywide level requires coordination across various areas of expertise. A cross-agency working group can improve collaboration between City departments, public agencies, businesses, and utilities—streamlining communication, minimizing delays, and accelerating the deployment of EV infrastructure. By designating key points of contact, the City can facilitate ongoing engagement, promote private investment in charging infrastructure, and ensure an efficient transition to electrified transportation.

A dedicated working group will help foster collaboration, accelerate EV infrastructure deployment, and ensure the City meets its electrification goals efficiently.

Continue to lead and learn: CDOT's Clean Transportation Team will oversee the working group and provide structure and accountability to ensure efficient operations. They will use working group feedback to align infrastructure deployment with the specific needs of businesses and commuters to drive private-sector investment in charging hubs.

Engage Key Stakeholders: Include representatives from such agencies and partners as the Chicago Park District, the Department of Buildings, the Public Building Commission, the Department of Planning and Development, the Department of Aviation, Metra, the Chicago Transit Authority (CTA), and ComEd to align efforts across stakeholders and streamline approval processes for projects.

Set Clear Process Improvement Goals: Focus on improving key approval times to meet or exceed peer city standards with incremental benchmarks to track progress.

Establish Agency and Utility Points of Contact: Identify the relevant points of contact from each participating agency and utility that can identify and recommend process improvements and enable smoother coordination.

Monitor Disruptions and Provide Updates: Identify and address potential project delays and publish regular updates on the EV website to keep residents and businesses informed.

Continue to Develop a Community-Informed Charging Network Plan

To support the successful adoption of EVs and expansion of charging infrastructure, the City will actively collaborate with residents to identify optimal charging locations. Engaging local community groups is essential to understanding where residents gather and where charging infrastructure will provide the greatest impact. This collaborative approach ensures charging networks align with community needs and support equitable access to sustainable transportation. Potential locations include libraries, parks, community centers, churches, schools, and municipal buildings owned and/or operated by the county, city and other agencies, especially in neighborhoods with limited access to large retailers or essential services.

Establishing EV and e-mobility hubs at centralized community locations will further encourage zero-emission transportation by integrating EV chargers and e-mobility docks into key public spaces.

Public Comment Period: Invite residents to provide valuable input on the EV Framework through a formal comment period.

Surveys: Distribute community surveys to gather feedback on EV infrastructure and e-mobility opportunities and preferences across neighborhoods.

Focus Groups: Host targeted focus groups to engage diverse voices in developing the EV framework.

In-Person Events: Engage with residents at community meetings and events to discuss the EV Framework and hear feedback firsthand.

Virtual Events: Offer virtual town halls to broaden participation in EV charging planning and collect input from all residents.

Key Stakeholder Connections: Maintain direct collaboration with key stakeholders to ensure the EV Framework reflects diverse needs and opportunities.

Continue Enhancing Micromobility and E-Mobility Options

Implementing policies that support micromobility solutions, such as electric bikes and electric scooters, helps promote equitable access to electric transportation options across all communities. By investing in micromobility infrastructure and ensuring affordability, the City can create a more inclusive, sustainable transportation network that supports zero-emission travel for all residents and visitors.

Targeted Expansion of Divvy Stations: Continue installing additional Divvy stations in neighborhoods with significant service gaps, prioritizing areas previously without access, such as Belmont Cragin and the 18th Ward, to ensure equitable distribution of micromobility options.

Focus on Communities Underserved by Transit Options: Continue to prioritize infrastructure investments in communities historically underserved by transit options, with a focus on the south, far south, and west sides, building upon the success of reaching the milestone of 1,000 Divvy stations in 2024.

Building a Connected and Accessible Network: Continue to create a coherent and seamless Divvy system by ensuring equitable station density, with a goal of achieving four stations per square mile, enabling residents across Chicago to access both affordable classic bikes and e-devices.

Comprehensive Community Coverage: By strategically increasing station density in areas like Gage Park, Brighton Park, Archer Heights, Dunning, and East Garfield Park, the City will enhance mobility options for all residents, ensuring that every neighborhood benefits from a low-cost, connected transportation system.

Continue to be a leader in direct investment in EV Infrastructure, E-Mobility and EVs

The City has made progress toward transportation electrification, including electrifying it own fleet and providing point of sale incentives for medium- and heavy-duty fleet owners. CDOT will continue to lead these efforts through leveraging City assets such as libraries, parks, community centers, churches, schools, and municipal buildings owned and/or operated by the county, city and other agencies to develop an equitable public charging network. To further accelerate EV adoption, CDOT will actively seek state, federal, and utility funding to support the transition of private fleets and personal vehicles to EVs. The department will also explore models for public charging in the right-of-way, including the development of a pilot program. Additionally, CDOT will explore incentives to help make EVs more accessible and affordable for residents, and work with community partners to install community charging hubs where EV or e-mobility device users can easily charge while working, shopping, or taking care of other daily needs.

By facilitating targeted financial incentives, enhancing convenience through parking benefits, and establishing accessible charging hubs, the City can drive EV and e-mobility device adoption while ensuring that all communities benefit from sustainable transportation solutions.

Fleet Electrification: Continue to electrify City fleet and build the network of chargers for City fleet vehicles.

Leverage City Land Assets: Leverage City land assets, such as parking lots and major community destinations, as potential locations for charging infrastructure.

Seek and Secure Funding: Continue to seek funding (e.g. state, federal, and utility) to help support and accelerate transition to EVs.

Public Charging in ROW: Continue to explore models for public charging in the ROW, including developing a pilot program.

Facilitate Rebates: Facilitate rebates to residents, especially those in areas with limited public transit or high pollution, to bridge the cost gap and encourage adoption. Partnering with ComEd and state government can expand these efforts for low-income communities.

Designate EV Parking: Reserve convenient parking spaces for EVs to incentivize switching to electric vehicles.

Create Community Charging Hubs: Build hubs in high-traffic areas near amenities like grocery stores and restaurants to make charging more convenient. In underutilized spaces, hubs can attract local businesses, creating new community hubs and encouraging further adoption.

Collaborate with Utilities to expand infrastructure capacity

Working closely with ComEd is essential to enhancing electric grid capacity and increasing reliable infrastructure for EV growth.

Collaboration with ComEd will enhance infrastructure capacity and support grid reliability, while promoting equitable EV access, especially in communities that have historically not received the same level of infrastructure investment or experience environmental justice issues. This partnership can help both the electricity provider and the City support their long-tern goals.

Expand Grid Capacity for Future Needs: Collaborate with ComEd to proactively increase grid capacity, focusing on areas with anticipated public investment, such as the south and west sides of Chicago.

Ensure Ample Charging Access Points: Partner with utilities to develop sufficient charging hubs to ensure the infrastructure can handle the increased electricity demand.

Address Multi-Family Housing Challenges: Work with ComEd to expand grid access for existing multi-family buildings, which may install multiple chargers simultaneously, placing higher immediate strain on the grid.

Share Data for Planning Purposes: Coordinate efforts to share utility grid capacity data with planners and developers to ensure future EV charging infrastructure is prioritized in areas with readily available or cost-effective power service upgrades. By investing in micromobility infrastructure and ensuring affordability, the City can create a more inclusive, sustainable transportation network that supports zero-emission travel for all residents and visitors.

Centralize and Simplify City EV and E-Mobility Resources

Simplifying access to essential EV information in a user-friendly, centralized manner for residents, businesses, and developers is a key strategy to assist adoption. CDOT will continue to improve access to EV and e-mobility information by expanding the information available on the existing Chicago Moves Electric web page and exploring additional opportunities. Creating a centralized, reliable resource will make it easy for users to access guidance, permits, and relevant updates, streamlining the transition to electric transportation. This centralized approach will help reduce frustration and ensure that residents, businesses, and developers have the necessary resources to support the City's electrification goals.

Dedicated Resource Pages: Develop information tailored to single-family residents, multi-family residents, businesses, and developers, providing targeted information for each group.

Step-by-Step Instructions: Provide detailed guides that outline the entire process, including required permits, inspections, and timelines, helping users understand what to expect from start to finish.

Unified Permit Submissions: Allow all necessary permits and paperwork to be submitted through a single application to eliminate delays caused by multiple agency processes.

Direct Points of Contact: Offer clear contact information for each user group, ensuring easy access to support and minimizing errors or delays during the application process.

Comprehensive Information Hub: Include additional resources such as state and local EV rebates, utility incentives, upcoming City EV events, and relevant reports to keep users informed and engaged.

Streamline and Articulate the EV Charger Installation Process

The City should continually revise and articulate the EV charger installation process to ensure barriers are removed and the time to delivery is improved, making it easier for residents and businesses to deploy EV chargers.

These changes will make the installation process more efficient, empower more residents and businesses to install chargers, and aid in accelerating the transition to EV adoption.

Formalize Processes and Communicate: Create a "one stop shop" experience on the Chicago Moves Electric web page for residents and businesses looking to install EV chargers, including providing relevant up to date information, permit application materials, answers to FAQs, and streamlined communication tools for making inquiries and following up on applications. Additionally, provide resources, quick reference guides, and information to help users learn about EVs and charging stations, make informed decisions, and navigate the permitting and installation process.

List Certified Installers: Share Illinois Commerce Commission (ICC) certified EV charging installers and registered contractors directory.

Streamline Necessary Inspections: Consider removing the requirement for building inspector approval and rely on certified electricians to sign off on installations, following the model used by other leading cities like Los Angeles.

Online Application Tracking Portal: Continue providing a tracking tool where property owners can monitor their permit application status and expected timelines, reducing the need for follow-up inquiries.

Implement a Low-Emission Zone (LEZ) program

Implementing Low-Emission Zones (LEZs) can help improve air quality, reduce emissions, and address problems in environmental justice areas, ensuring that the health benefits of clean transportation reach the communities that face the highest environmental and social burdens.

Establishing LEZs in areas disproportionately affected by poor air quality and heavy vehicle emissions will prioritize public health and environmental equity.

Target High-Impact Areas: Focus LEZs on neighborhoods with heavy through-traffic where residents experience higher pollution and health risks.

Reduce Pollution and Emissions: Limit or restrict medium- and heavy-duty vehicles during peak hours, improving air quality and reducing greenhouse gas emissions.

Incorporate Community Input: Work with residents and alderpeople to adjust LEZ boundaries and policies based on feedback, ensuring the program meets local needs and promotes fairness.

Use Flexible Implementation: Allow restricted vehicles during off-peak hours to minimize community disruptions and measure the impact to adjust strategies over time.

Combine LEZs with Other Strategies: Integrate LEZs with tree planting efforts, financial incentives for clean transportation, and increased access to mobility solutions.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8 NEXT STEPS

The EV Framework is designed to establish a clear path toward achieving sustainability, equitable access, and transportation electrification. Through comprehensive planning, stakeholder engagement, and a focus on equity and environmental justice, the City will address transportation emissions and create a cleaner, more resilient future. By fostering innovation, expanding EV infrastructure, supporting the adoption of electric vehicles, and continuing to enhance e-mobility services and amenities, the City will improve public health, reduce pollution, and promote economic growth through a cleaner transportation network and job creation.

The EV Framework will be continuously refined and implemented through strategic initiatives that emphasize equitable access and technological advancement. Five major next steps have been identified as pivotal early actions to maintain current momentum. These initiatives ensure that the City remains responsive to evolving transportation needs, maximizes public participation, and leverages

available funding to accelerate its sustainability goals.

Continuing Public Engagement & Input

Public engagement remains a cornerstone of the EV Framework and ongoing implementation. By seeking ongoing input from residents, businesses, and community groups, the City can confirm that EV infrastructure deployments address specific concerns and reflect community needs. CDOT's engagement processes will continue to incorporate various outreach efforts including surveys, public meetings, and focus groups to capture diverse perspectives and maintain transparency. Feedback from commercial stakeholders, historically under-resourced communities, and neighborhoods that experience poorer air quality will play a vital role in shaping future stages of infrastructure deployment.

CDOT will continue to work with alderpeople, transportation experts, and community-based organizations to refine EV charging deployment strategies.

In addition to these outreach activities, CDOT will continue to work with alderpeople, transportation experts, and community-based organizations to refine EV charging deployment strategies and enhancements to continue e-mobility ridership growth. By maintaining open lines of communication with these stakeholders, the City can make informed adjustments to policy, prioritizing infrastructure investments in areas with the greatest need. CDOT's public engagement strategies are designed to foster collaboration and buy-in from residents, key community groups and stakeholders to help achieve the City's broader sustainability goals.

Developing a Public Charging Pilot Program

The development of a public EV charging pilot program is a critical component of the City's EV infrastructure deployment efforts. This pilot program will be designed to test approaches for increasing the footprint of the public EV charging network in Chicago, both in the kind of use cases served as well as different ownership, operations, and maintenance models. A key goal of this pilot is to reduce barriers to EV ownership for residents who rely on street parking, thereby encouraging broader EV adoption. The pilot program will prioritize the installation of EV chargers based on need, such as in high-density residential areas, with a particular emphasis on historically underserved neighborhoods facing mobility and economic hardships.

Establish a pilot program that reduces barriers to EV ownership for residents who rely on street parking while encouraging broader EV adoption.

The pilot will also serve as a testbed for integrating public-private partnerships in the deployment

of charging stations on the public way. Through collaboration with local utilities, private developers, and EV technology companies, the City will pilot new technologies and funding models, assessing how best to scale charging infrastructure deployments efficiently and establishing formal CDOT permitting guidelines for such a program. Data gathered from the pilot, including usage patterns and feedback from residents, will inform the broader rollout of public charging across the city, ensuring that infrastructure investments align with demand and community needs.

Implementing Federally Funded EV Projects

The City was recently awarded federal funding through the U.S. Department of Transportation's Charging & Fueling Infrastructure (CFI) program. Implementing this $15 million EV charging project will significantly expand the City's EV infrastructure deployment. These funds will be used to strategically expand public charging networks, focusing on high-traffic corridors, transit hubs, and communities that have historically not received the same level of infrastructure investment. The CFI projects will include the installation of Level 2 and fast-charging stations in key public locations such as City libraries and Midway Airport, supporting not only personal EVs but also electric taxis, ride-hail, and commercial fleets.

The City will also utilize funding available from the USDOT's Congestion Mitigation and Air Quality (CMAQ) to support commercial fleet electrification projects, a critical step toward cleaner air and progress toward environmental justice goals for communities facing higher pollution from the concentration of nearby commercial truck facilities and traffic. Through CDOT's ongoing partnerships with Illinois Department of Transportation and the Chicago Metropolitan Agency for Planning, the City has access to CMAQ funding for transportation projects that improve air quality and reduce congestion. By assisting businesses in transitioning to electric vehicles, the City can cut harmful emissions and improve community health.

The City will leverage existing and incoming funding to strategically expand public charging networks, focusing on high-traffic corridors, transit hubs, and communities that have historically not received the same level of infrastructure investment.

Pursuing Near-term Policy Objectives

CDOT will focus on advancing key near-term policy objectives to support the continued expansion of EV infrastructure. These objectives focus on creating a regulatory environment that fosters growth, simplifies processes, and enhances accessibility. A crucial aspect of this effort is prioritizing communities affected by environmental justice issues in these policy actions. By aligning policies with equity goals, the City will continue to address environmental justice issues and create more accessible transportation options. Collaboration with businesses, utilities, and City departments through an electrification working group will further strengthen these policies, helping to close existing market gaps and promote the widespread adoption of EVs across the city. These near-term actions will lay the groundwork for long-term electrification goals.

By aligning policies with equity goals, the City will continue to address environmental justice issues and create more accessible transportation options.

Tracking and Applying for Additional Funding

CDOT is committed to pursuing local, state, and federal funding to advance public charging and commercial fleet electrification goals. By aligning these efforts with the City's Climate Action Plan, regional electrification targets, and the EV Framework's goals, pursuing additional funding will accelerate the City's transition to a low-carbon transportation system. The City will continue pursuing funding opportunities for electrification projects designed to address critical gaps in charging infrastructure, enhance grid capacity, and expand charging infrastructure access for businesses and residents. These initiatives not only meet immediate needs but also will continue to position Chicago as a leader in EV innovation nationwide.

These five major next steps will continue the City's positive momentum on this important initiative, ensuring that the City remains responsive to its transportation electrification and mobility goals, maximizes public participation and partnerships, and leverages available funding effectively to electrify Chicago.

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