

# VILLAGE OF BEDFORD PARK LAST MILE MOBILITY ACTION PLAN



JUNE 2020



The Village of  
**Bedford Park**



**COOK COUNTY  
GOVERNMENT**

# VILLAGE OF BEDFORD PARK

## LAST MILE MOBILITY ACTION PLAN

JUNE 2020

The Action Plan was funded through Cook County's Invest in Cook Program.



**COOK COUNTY  
GOVERNMENT**

### PREPARED FOR

The Village of Bedford Park



The Village of  
**Bedford Park**

### PREPARED BY

Antero Group, Shared-Use Mobility Center, and Active Transportation Alliance



Curtis Witek  
Senior Project Manager  
312.344.3186  
cwitek@anterogroup.com  
www.anterogroup.com



### CONSULTANT TEAM

Curtis Witek, Antero Group, Senior Project Manager

Eric Neagu, Antero Group, Principal

Allison Kappeyne, Antero Group, Senior Planner

Andrew Johansson, Antero Group, Senior Project Manager

Randal Bernthal, Antero Group, Planner

Colin Murphy, Shared Use Mobility Center, Director of Research and Consulting

Heather Schady, Active Transportation Alliance, Senior Transportation Planner

# ACKNOWLEDGEMENTS

## COOK COUNTY

Toni Preckwinkle, President  
John Yonan, Superintendent, DOTH\*  
Benet Haller, Transit Manager, DOTH\*  
Tomohiko Music, Transit Planner, DOTH\*  
Katrina Errant, Trustee  
Anthony Kensik, Trustee  
Robert Regep, Trustee  
Gail Rubel, Trustee  
Terry Stocks, Trustee  
Nancy Wesolowski, Trustee

## VILLAGE OF BEDFORD PARK

David Brady, President  
Jim Butler, Hoefflerle Butler Engineering  
Marilyn Curnutte, Chief Administrative Officer Finance  
Larry Gryczewski, Village Administrator  
Tom Hansen, Chief of Police  
Chris Lesniak, Superintendent, Water Department  
Sean Maloy, Chief, Fire Department  
Kevin Ormins, Superintendent, Public Works Department  
Jerry Ponio, Building Coordinator  
Joe Ronovsky, Chief Business Officer  
Yvette Solis, Village Clerk

## LAST MILE RESOURCE GROUP

Loretta Spiak, ACH Food Companies, Inc.  
Donna Smith, BPCIA\*\*  
Dawn Welch, Cintas  
Lisa Van Kampen, Cintas  
Emily Drexler, CTA  
Katherine Branch, CTA  
Pamela Coan, GRM, LLC  
Frank Flores, Home Chef  
Eva Perez, Ingredient  
Kelly Anderson, Ingredient  
Rob Mead, Ingredient  
Mike Daley, Innova EV  
David Bruce, Lapham-Hickey Steel  
John Malnar, Lapham-Hickey Steel  
Sonsere Hatch, Metra  
Mark Weglarz, Midway Hotel Center  
Tammy Knor, Midway Hotel Center  
Mary Koutek, Nalco  
Rory Neill, Neill Cartage  
Lewie Neill, Neill Cartage  
Will Hansen, Nexus Distribution  
Jessica Rybarczyk, Pace  
Ryan Ruehle, Pace  
Jovita Gamboa, Pactiv  
Terry Lynch, Paine Wetzel Associates  
Edward Grzywacz, Professional Freezing Services  
Peter Fahrenwald, RTA\*\*\*  
Peter Kersten, RTA  
Kelsey Mulhausen, Southwest Conference of Mayors  
Matt Ginsberg, Tai Ginsberg & Associates, LLC  
Robert Elliot, UPS  
Terri Bonneville, UPS  
Felicia Coleman, USPS

\*Department of Transportation and Highways (DOTH)

\*\*Bedford Park-Clearing Industrial Association (BPCIA)

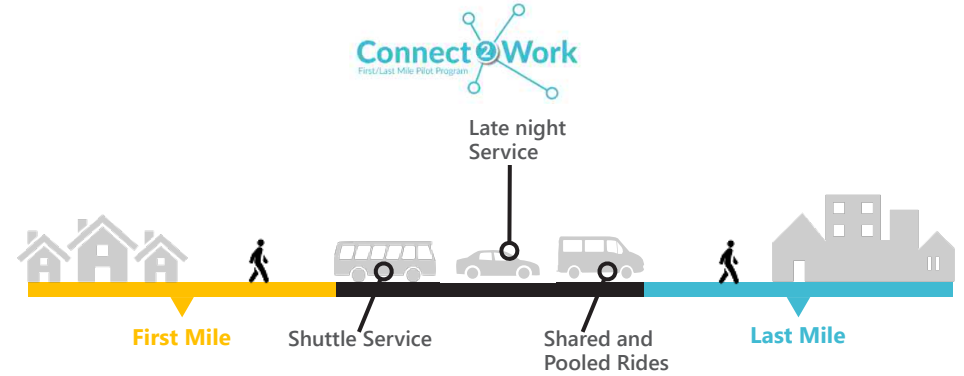
\*\*\*Regional Transportation Authority (RTA)

# EXECUTIVE SUMMARY

Getting to work is a challenge for over 30,000 workers who commute to and from Bedford Park every day. To address these challenges, the Village of Bedford Park launched an initiative to better understand the area's mobility challenges and develop a toolkit of potential solutions. In 2019, the Village released the findings of this effort through the Bedford Park Last Mile Mobility Study. This study defined the various regional and "last mile" mobility challenges that make it difficult for workers to access jobs by any means other than driving alone, and outlined a toolkit for the four mobility networks (e.g., Pedestrian Network, Bike Network, Transit Network, and Freight and Mobility Network) and 16 last mile strategies that could be implemented in Bedford Park and the broader Bedford Park area.

This Bedford Park Last Mile Mobility Action Plan further outlines these 16 last mile mobility strategies with nearly 50 specific last mile actions. These actions range from pragmatic recommendations, such as repairing and expanding the existing sidewalk network, to more innovative ideas, such as deploying new First-Mile/Last-Mile (FLM), Mobility on Demand (MOD) and Mobility as a Service (MaaS) solutions and technologies. Each proposed last mile solution is designed to contribute to a more integrated and equitable mobility system that achieves the Village's four last mile goals, which are as follows:

	<p><b>Goal 1. Establish a safe and continuous pedestrian network village-wide.</b></p>
	<p><b>Goal 2. Develop a connected network of protected bike and micromobility facilities.</b></p>
	<p><b>Goal 3. Expand access to public transit and shared mobility services.</b></p>
	<p><b>Goal 4. Create a network of smart and complete streets.</b></p>

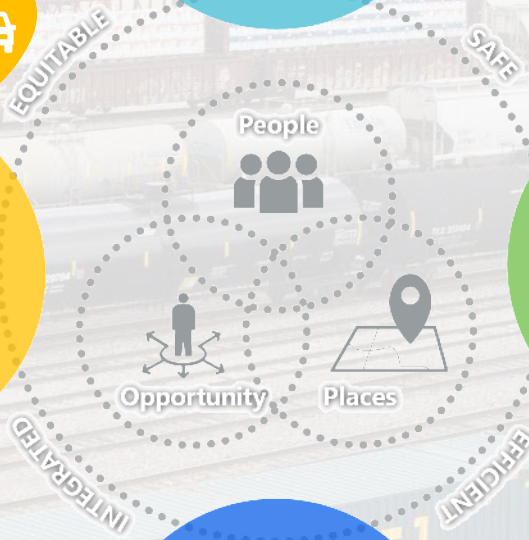


Elements of the First- and Last- Mile Solutions for the Connect2Work Pilot Program

This Action Plan also provides design guidance, funding and financing opportunities, and suggested technical assistance and partnerships to help the Village advance mobility improvement strategies. Key recommendations of this Plan also reveal priority projects and the interrelated elements of the the four mobility networks and how strategic projects should be advanced in tandem to ensure an integrated, equitable, safe, and efficient connected mobility system (see figure on the following page). The recommended priority projects include:

- ▶ Launch the Connect2Work Pilot Program (see figure above)
- ▶ Adopt and Implement this Plan
- ▶ Apply for Funding Opportunities
- ▶ Continue to Convene the Bedford Park Last Mile Mobility Resource Group
- ▶ Secure a dedicated revenue stream for implementing FLM and congestion-mitigation projects, programs, and policies

Implementation of many of the recommended actions goes beyond what Bedford Park can accomplish alone. Many of the recommended projects, programs, and policies will require a concerted effort amongst the Village of Bedford Park, neighboring municipalities, the business community (including area businesses and private transportation companies), Cook County, IDOT, CTA, Pace, RTA, and other local and regional partners. This plan provides a clear path forward for coordinating the efforts of these stakeholders in a way that creates a more integrated and equitable mobility system in Bedford Park and the surrounding Bedford Park area. Strategic actions taken to improve the area's Pedestrian, Bike, Transit, and Motorist and Freight Networks will not only make it easier for people to access opportunity in Bedford Park, but will also provide an array of other mobility, economic, and environmental benefits for the region.





Summit Station

43

55

50

171

W Archer Ave

S Narragansett Ave

W 55th St

Chicago Midway Airport

Midway Station

W 63rd St

W 65th St

Central Ave

Cicero Ave

Event Center

Midway Hotel Center

# Village of Bedford Park

Bridgeview Transit Center

Ford City Mall

171

Bethania Cemetary

S Harlem Ave

43

W 79th St

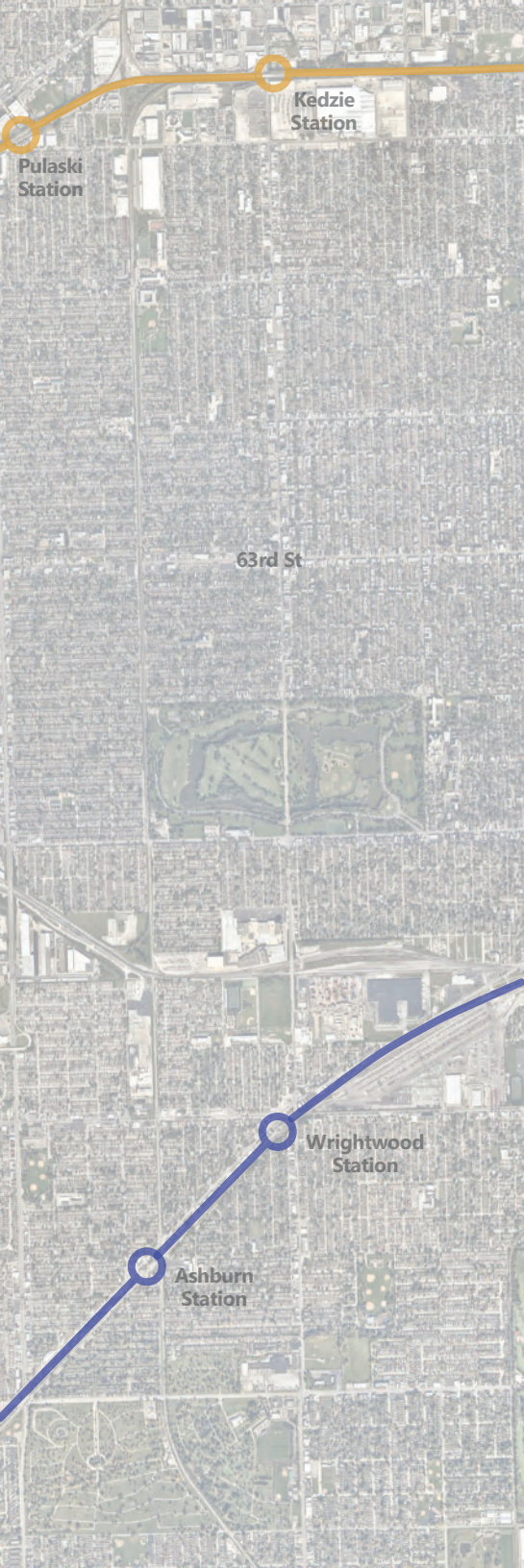
50

294

W 87th St

Central Ave

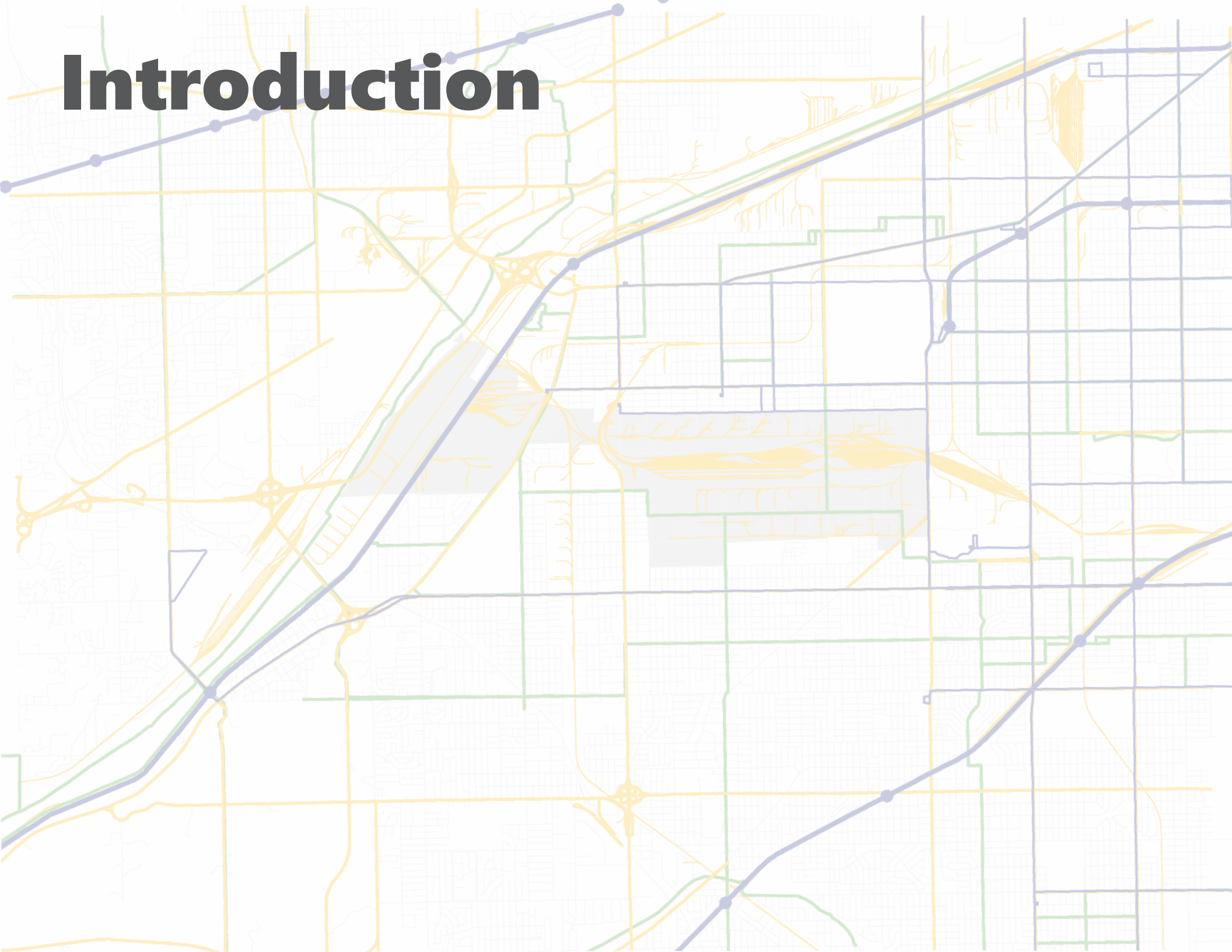
Cicero Ave



# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY</b>	<b>i</b>
<b>INTRODUCTION</b>	<b>1</b>
Project Overview	
Vision and Goals	
Planning Process	
How to use this Plan	
<b>PEDESTRIAN NETWORK</b>	<b>6</b>
Pedestrian Network Goal and Strategies	
Pedestrian Network Action Plan	
Pedestrian Network Design Guidance	
<b>BIKE NETWORK</b>	<b>12</b>
Bike Network Goal and Strategies	
Bike Network Action Plan	
Bike Network Design Guidance	
<b>TRANSIT NETWORK</b>	<b>18</b>
Transit Network Goal and Strategies	
Transit Network Action Plan	
Transit Network Design Guidance	
<b>MOTORIST AND FREIGHT NETWORK</b>	<b>24</b>
Motorist and Freight Network Goal and Strategies	
Motorist and Freight Network Action Plan	
Motorist and Freight Network Design Guidance	
<b>IMPLEMENTATION</b>	<b>30</b>
Overview of Implementation Strategies	
Funding and Financing Opportunities	
Technical Assistance and Partnerships	
<b>CONCLUSION</b>	<b>36</b>
<b>APPENDICES</b>	<b>38</b>
A. Implementation Matrix	
B. Additional Resources and References	
C. Pilot Program Service Models	
D. Connect2Work Marketing	
E. Conceptual Renderings	

# Introduction





# PROJECT OVERVIEW

In July 2019, the Village of Bedford Park completed a *Last Mile Mobility Study* with funding through Cook County’s Invest in Cook program. This study identified “last mile” transportation challenges that Bedford Park employees face on a daily basis. The study also outlined a toolkit of potential last mile solutions, including improvements to the pedestrian, bike, transit, and motorist and freight transportation networks. The *Bedford Park Last Mile Mobility Action Plan* (“Plan”) is intended to accompany the *Bedford Park Last Mile Mobility Study* (“Study”) and provide a roadmap for advancing specific last mile mobility solutions that will contribute to a safer and more integrated, efficient, and equitable mobility system that seamlessly connects people to places and economic opportunity (Figure 1.1).

This plan is based on the premise that resolving last mile challenges and addressing commuter frustrations (see Figure 1.2) will require physical, operational, technological, and policy interventions that make it easier for commuters to walk, bike, or take transit and other shared modes of travel to work. The plan also assumes that shared mobility services, such as ridesharing (i.e., shared ridehailing trips), ridesourcing, and microtransit can supplement fixed-route transit service and potentially decrease rates of solo driving by providing commuters an alternative to driving alone in instances where transit is not available.

Resolving Bedford Park’s last mile mobility challenges is no small feat. Indeed, implementing last mile mobility strategies will require a concerted effort amongst neighboring municipalities, county, and state governments; transit agencies; employers; mobility companies; civic organizations; and many other partners. This plan provides a clear path forward for implementing last mile mobility solutions in a coordinated fashion. Implementation of the last mile strategies and actions outlined in this plan will not only improve the last mile journey for Bedford Park area commuters, but also help ensure the long-term economic competitiveness and resilience of the area by supporting access to opportunity for all, regardless of their mode of travel.

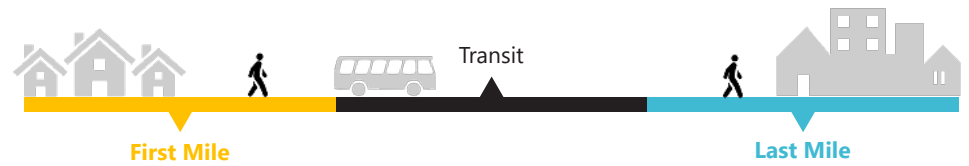
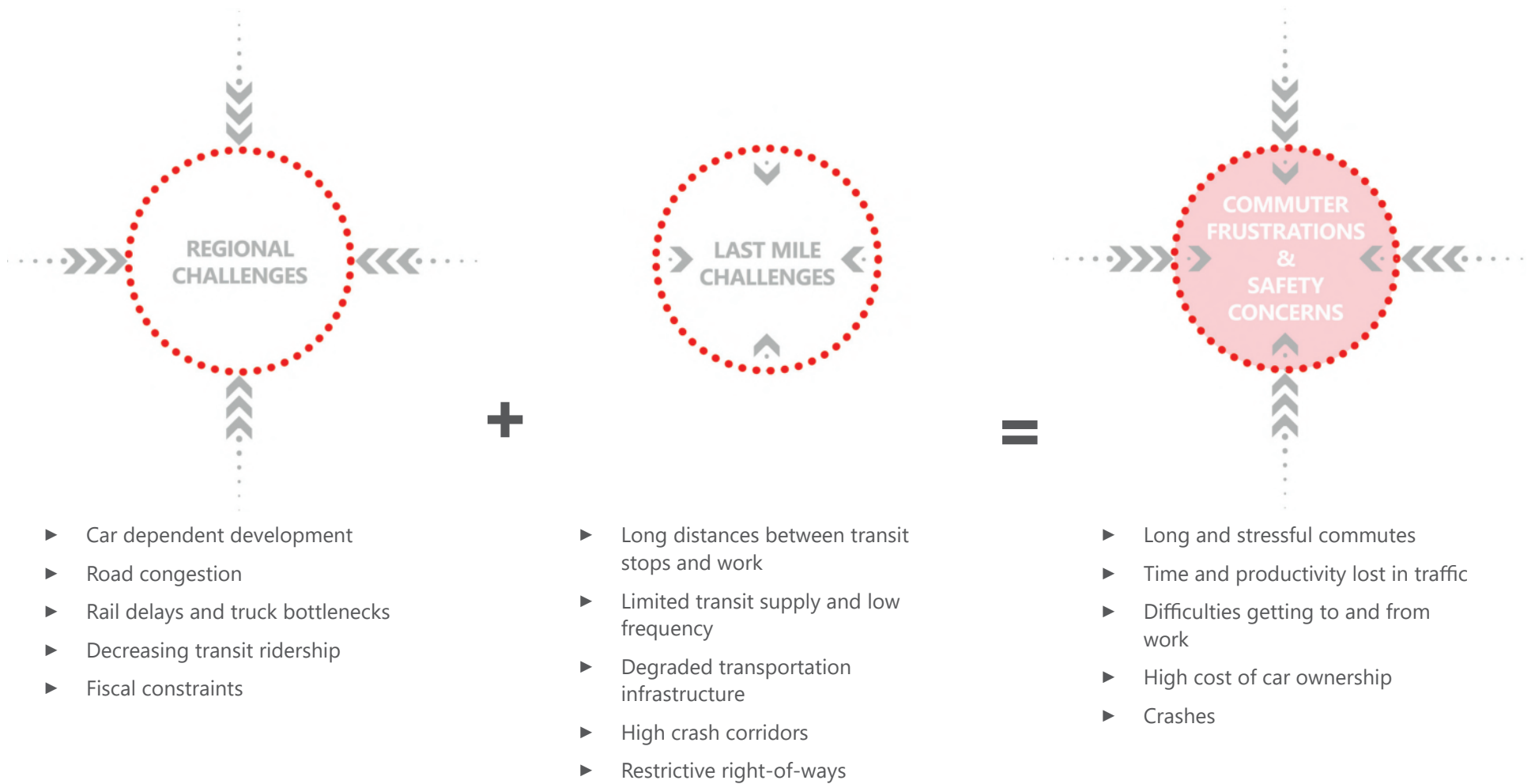


Figure 1.1. A Framework for Integrated and Equitable Mobility



Figure 1.2. Regional and Last Mile Mobility Challenges



# VISION AND GOALS

This plan is guided by a vision for the future of Bedford Park and a set of four specific goals that align with that vision. The following vision statement and goals were developed iteratively with input from the Village staff, leadership, businesses and other local and regional partners.

**Vision Statement.** Within the next 10 years, Bedford Park will continue to be a key industrial anchor and employment center for the Chicago region. It has become a national model for industrial areas seeking to provide integrated and equitable mobility solutions for commuters and visitors. More specifically, we envision a future in which...

- ▶ People will be able to walk or bike to work safely and comfortably;
- ▶ Transit service will be frequent, reliable, convenient, and seamlessly integrated with shared mobility services;
- ▶ Smart and complete streets that work for all people will be commonplace; and,
- ▶ Freight will flow efficiently, safely, and reliably while continuing to drive economic growth in Bedford Park and the region.

To realize this vision, the Village of Bedford Park will work with local and regional partners to implement strategies that align with the following goals:



**Goal 1. Establish a safe and continuous pedestrian network village-wide.**



**Goal 2. Develop a connected network of protected bike and micromobility facilities.**



**Goal 3. Expand access to public transit and shared mobility services.**



**Goal 4. Create a network of smart and complete streets.**

# PLANNING PROCESS

This Action Plan was developed based on community input and data collected through the Study. Data collection methods included the following:

- ▶ **Desktop Analysis.** 10,000s of data points mapped and analyzed; 40+ map products created; 15 plan, programs, and reports reviewed; 15 case studies collected.
- ▶ **Field Assessment.** 1 Field Assessment (8/14/2018); 100s of field observations and photos collected; Interactive online map created from field assessment data.
- ▶ **Mobility Survey.** Mobility Survey for Bedford Park Employees (in English and Spanish) and Employers; 268 Employee Surveys collected; 20 Employer Surveys collected.
- ▶ **Stakeholder Outreach.** 17 mobility industry interviews; 10 stakeholder interviews; 4 Resource Group Meetings; 1 Public Presentation; The Bedford Park Last Mile Mobility Demo Day (May 23, 2019). The Bedford Park Last Mile Mobility Demo Day created a forum for the Village, Cook County, transit agencies (i.e. RTA, Metra, Pace), and transportation companies to discuss potential last mile solutions that could be applied in Bedford Park.



# HOW TO USE THIS PLAN

This plan outlines 16 strategies and nearly 50 specific recommendations for improving last mile mobility along the Bedford Park area’s Pedestrian, Bike, Transit, and Motorist and Freight Networks. **Chapter One** frames Bedford Park’s last mile mobility initiatives as part of a broader effort to create a more integrated and equitable mobility system. This chapter provides an overview of the project, articulates a future vision and goals that will guide the Village’s efforts to create a more integrated and equitable mobility system, and summarizes the process through which this plan was developed. **Chapters Two, Three, Four, and Five** of this plan correspond with the Pedestrian Network, Bike Network, Transit Network, and Motorist and Freight Network, respectively.

Each chapter begins with a goal statement, a description of the network and its various components, and a list of the last mile strategies. Each chapter also identifies high priority projects, policies, programs, and provides additional design guidance to support implementation. **Figure 1.3, 1.4 and 1.5** provide guidance on how to navigate this Plan. **Chapter Six** provides a list of implementation resources (e.g., funding and financing opportunities, partnership and technical assistance opportunities) that correspond with each mobility network. A complete list of proposed last mile strategies and actions for each mobility network is provided in **Appendix A**. Additional design guidance resources are provided in **Appendix B**. **Appendix C** shows a table of last mile service models that are public and/or privately owned. **Appendix D** and **E** outline the *Connect2Work* (C2W) Pilot Program marketing strategy and partnership program respectively.

**Appendix A** includes a complete list of the recommended last mile strategies and actions. Each last mile strategy has a unique code (e.g., P1, P2, etc.) as does each of the corresponding actions (e.g., P1.1., P1.2, etc.). A matrix of useful information that can support project implementation is provided for each last mile action, including: project locations; related recommendations; implementation leads (i.e., Village of Bedford Park, Businesses, Cook County, IDOT, Transit Agencies, Regional Partners); project phasing (i.e., short-term = 0-1 year, medium-term = 1-3 years, long-term = 3+ years); implementation resources (i.e., internal and external resources); and an assessment of which mobility goal(s) the recommendation supports.

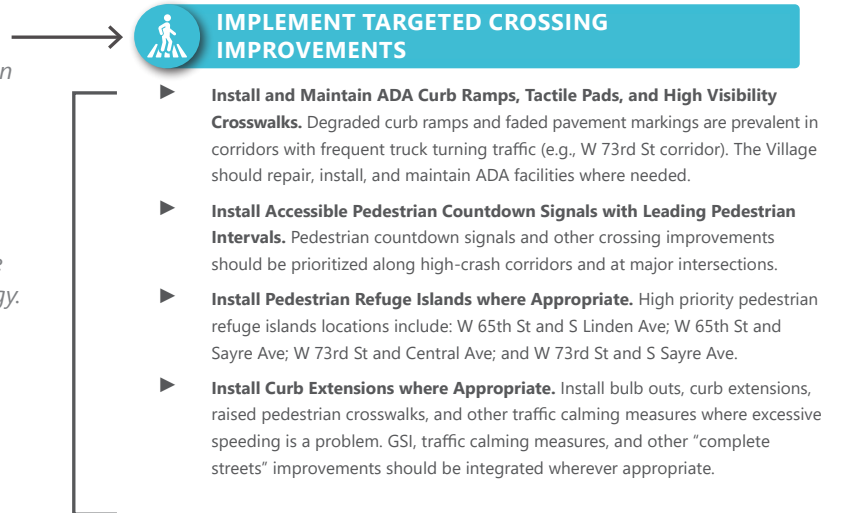
**Figure 1.3.** How to Navigate the Strategies of this Action Plan

*FOR EXAMPLE: Here is one of the Pedestrian Network’s strategies and related recommendations.*

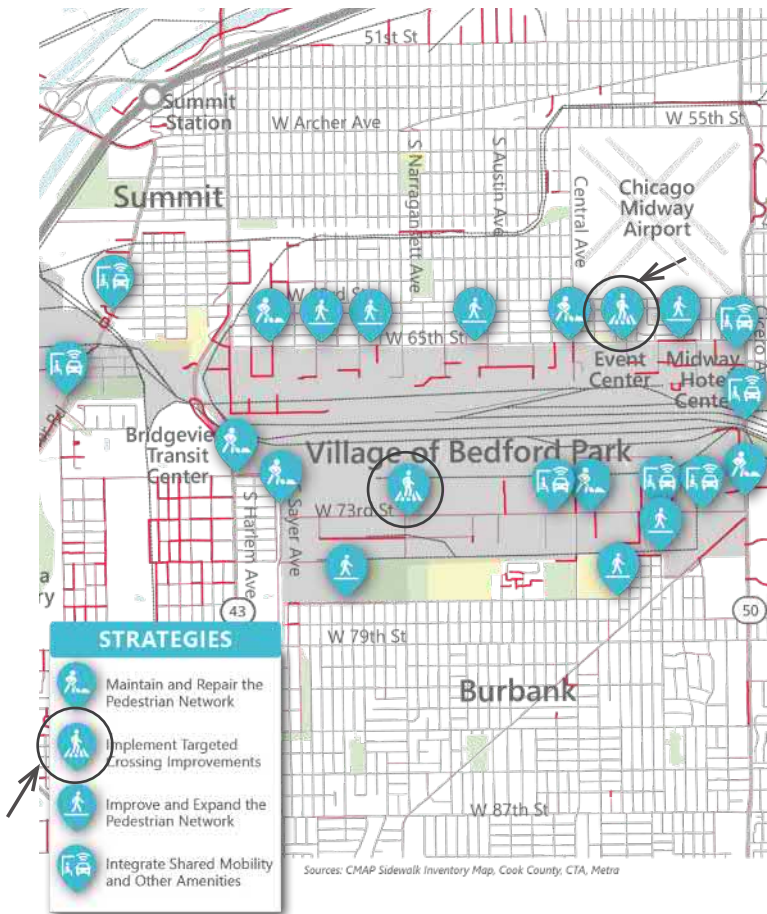
*Each last mile strategy has a unique icon that can be used to cross reference between the last mile strategy map, priority, list, and additional design guidance section.*

*High priority actions are listed under each strategy. A complete list of action recommendations is provided in Appendix A.*

*There are 4 last mile strategies for each mobility network.*



**Figure 1.4.** How to Navigate the Last Mile Strategy Map



The last mile strategy icons indicate a priority action's approximate location in Bedford Park. A complete list of priority actions and their recommended location can be found in Appendix A.

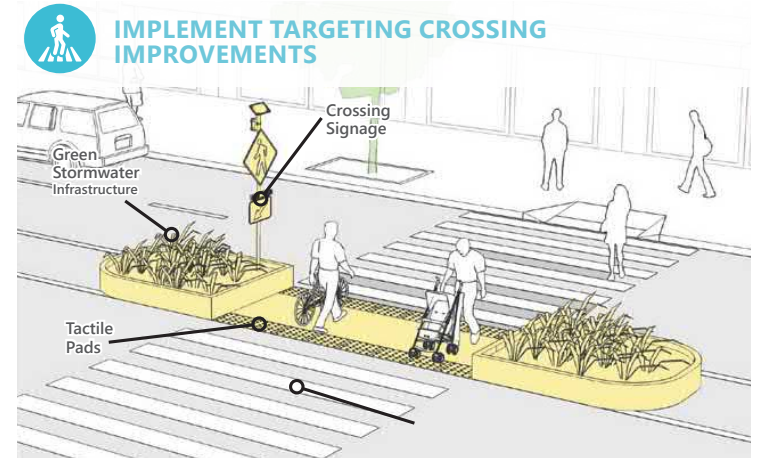
Additional information regarding the mobility network is also provided in each network's map (i.e., sidewalk inventory, bike and micromobility facilities, public transportation routes, and arterial freight routes).

**Figure 1.5.** How to Navigate this Design Guidance of this Action Plan

A rendering is provided for each last mile strategy that illustrates how specific last mile action could be combined and applied.

Refers to Goal 1  
Refers to Goal 2  
Refers to Goal 3  
Refers to Goal 4

Each recommended action supports one or more plan goals (see Page 3). Filled circles indicate the goal(s) that are supported by the recommendation.



- ▶ **Install and Maintain ADA Curb Rmps, Tactile Pads, and High Visibility Crosswalks.**
  - ADA facilities should be provided at all intersections with sidewalks and multi-use paths. Curb ramps enable people in wheelchairs to cross streets and detectable warning pads direct people with visual impairments through an intersection at a crosswalk. All street crossings not controlled by signals or stop signs should have longitudinal crosswalks. Crosswalks should be as wide as an approaching sidewalk.
- ▶ **Install Accessible Pedestrian Countdown Signals with Leading Pedestrian Intervals.**
  - Pedestrian signals with a countdown timer indicate the amount of time pedestrians have available to safely cross a street. A leading pedestrian interval ("LPI") provides 3-7 seconds of lead time for pedestrians to enter a crosswalk before the start of a vehicle signal phase. This enhances pedestrian visibility and provides pedestrians right of way. LPIs should be used at intersections with high pedestrian and vehicle turning volumes.
- ▶ **Install Pedestrian Refuge Islands where Appropriate.** Refuge islands buffer and protect pedestrians and bicyclists crossing wide or busy streets, enabling two stage crossings. They should be wide enough to accommodate the length of a standard bicycle with at least one foot of clearance on either side (e.g., about 7-feet). Cut-through widths should equal the width of the pedestrian crossing. Crossing islands should be paired with pedestrian crossing signage. They are most appropriate for mid-block and unsignalized crossings on 4-lane roads.
- ▶ **Install Curb Extensions where Appropriate.** Curb extensions (e.g., bulb outs, bump outs) facilitate shorter intersection crossing distances for pedestrians and can improve sightlines and slow the speed of turning vehicles. They are most appropriate for local roads where they intersect arterial and collector streets. Benches, green infrastructure, and other streetscaping elements can be added to them, and if space permits, they can be used at bus stops to house amenities for riders.



The Bedford Park Last Mile Mobility Action Plan and other resources can be accessed here: [learn.sharedusemobilitycenter.org](https://learn.sharedusemobilitycenter.org)

# PEDESTRIAN NETWORK

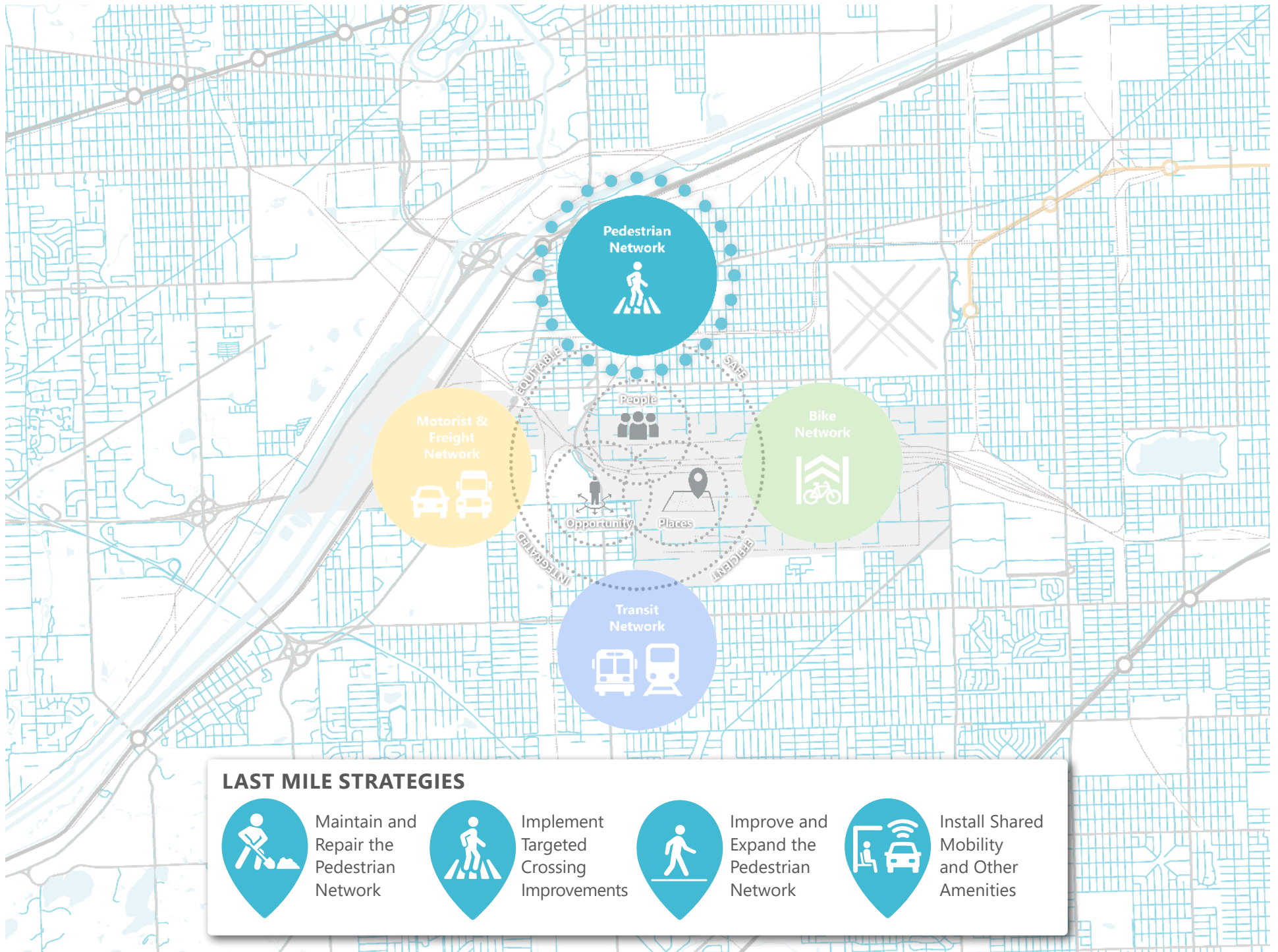


Every trip begins and ends with walking, so all commuters are pedestrian at some point during their journey. The Pedestrian Network is therefore the most foundational component of an integrated and equitable mobility system. Pedestrians need continuous and unobstructed paths, well-lit spaces, shaded places to rest and walk, and clear wayfinding signage for a safe and comfortable last mile experience. The Pedestrian Network should be safe, comfortable, and enjoyable for all users, especially the most vulnerable users, including the young, elderly, and people with disabilities. Sidewalks are the primary component of the Pedestrian Network, but other critical elements include: **crosswalks | pedestrian refuge islands | sidewalk extensions | pedestrian ramps | guidance for the visually impaired | signage and wayfinding | pedestrian countdown signals | lighting | seating | water fountains | weather protection | curbs | waste receptacles | active building edges | trees | landscaping | American with Disabilities (ADA) Facilities | and more...**

The Village should use this plan as a springboard for completing a village-wide sidewalk assessment aimed at identifying and prioritizing necessary Pedestrian Network maintenance, repair, and improvement and expansion projects. Once the Pedestrian Network is brought up to a state of good repair, the Village should install shared mobility and other amenities that help facilitate seamless mobility for employees, residents, and visitors. Many of the proposed strategies and actions outlined in this plan can be implemented through public-private partnerships ("P3"). For example, the Village could implement a 50/50 cost-share program in which the Village splits the cost of sidewalk repairs with adjacent property owners.

This chapter provides a map and description of recommended last mile strategies and actions for the Bedford Park area's Pedestrian Network. Additional design guidance for each action recommendation is provided in **Appendix B**.

GOAL  
**ESTABLISH  
A SAFE AND  
CONTINUOUS  
SIDEWALK  
NETWORK  
VILLAGE-WIDE**



**LAST MILE STRATEGIES**



Maintain and Repair the Pedestrian Network



Implement Targeted Crossing Improvements

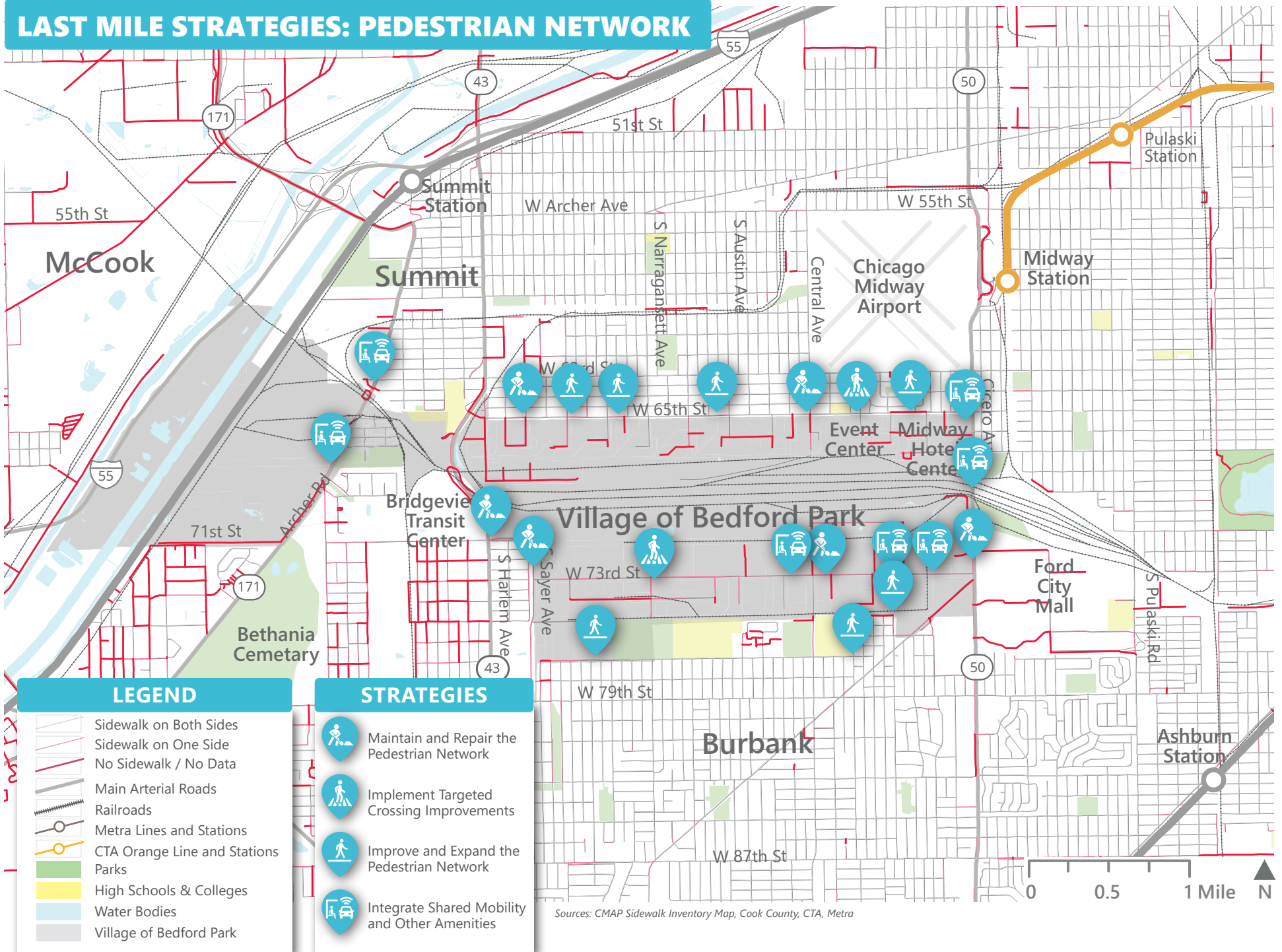


Improve and Expand the Pedestrian Network



Install Shared Mobility and Other Amenities

# LAST MILE STRATEGIES: PEDESTRIAN NETWORK







## MAINTAIN AND REPAIR THE PEDESTRIAN NETWORK

- ▶ **Conduct a Village-Wide Sidewalk Assessment.** A sidewalk assessment will help identify and prioritize sidewalk repairs and expansions. This assessment should inform the Village’s ongoing capital improvement planning and budgeting processes, such as the Village’s Five-Year Capital Improvement Plan.
- ▶ **Identify and Repair High Priority Sidewalks.** High priority sidewalk repairs include the following: South side of W 65th St from S Lorel Ave to Central Ave; West side of S Cicero Ave from W 67th St W 73rd St. See **Appendix A** for a complete list of sidewalk repairs and other Pedestrian Network improvements.
- ▶ **Improve Snow Removal Practices.** The Village should remind businesses of their responsibility to keep the sidewalk in front of their property “free from snow, ice and any and all obstacles”. Village monitoring enforcement efforts should be focused on travel corridors with high volumes of pedestrian traffic, including W 65th St, W 73rd St, and Cicero Ave.
- ▶ **Install Green Stormwater Infrastructure.** Prioritize Green Stormwater Infrastructure (“GSI”) where street ponding and excessive speeding is a problem. GSI can provide traffic calming, stormwater management, and other benefits.



## IMPLEMENT TARGETED CROSSING IMPROVEMENTS

- ▶ **Install and Maintain ADA Curb Ramps, Tactile Pads, and High Visibility Crosswalks.** Degraded curb ramps and faded pavement markings are prevalent in corridors with frequent truck turning traffic (e.g., W 73rd St corridor). The Village should repair, install, and maintain ADA facilities where needed.
- ▶ **Install Accessible Pedestrian Countdown Signals with Leading Pedestrian Intervals.** Pedestrian countdown signals and other crossing improvements should be prioritized along high-crash corridors and at major intersections.
- ▶ **Install Pedestrian Refuge Islands where Appropriate.** High priority pedestrian refuge islands locations include: W 65th St and S Linden Ave; W 65th St and Sayre Ave; W 73rd St and Central Ave; and W 73rd St and S Sayre Ave.
- ▶ **Install Curb Extensions where Appropriate.** Install bulb outs, curb extensions, raised pedestrian crosswalks, GSI, “complete streets” improvements, and other traffic calming measures where excessive speeding is a problem.



## IMPROVE AND EXPAND THE PEDESTRIAN NETWORK

- ▶ **Connect Gaps in Sidewalk Network.** The map on Page 8 identifies streets that have sidewalks on both sides, one side, or no sidewalks. The Village should prioritize sidewalk construction activities in high pedestrian traffic areas where there are no sidewalks, or sidewalks on only one side of the street.
- ▶ **Widen Sidewalks and Create Buffer Zones.** The Village should gradually create wider sidewalks and buffer zones between the edge of streets and walking paths, which will improve pedestrian safety and comfort. In some places, a sidepath or cycle track could be coupled with a buffer zone to create a shared use bike and pedestrian corridor. The north side of W 73rd St from Cicero Ave to S Sayre Ave is one possible location for a “Micromobility Corridor”.\*
- ▶ **Formalize Pedestrian Cut-Throughs and Improve Internal Parking Lot Circulation.** High priority cut-throughs include the Midway Hotel Center, Bedford Park’s commercial district, and W 75th St and S Sayre Ave.

\*Micromobility is defined by NACTO as bikes, e-bikes, scooters, and e-scooters For more details on micromobility and Micromobility Corridors see the Bike Network section.



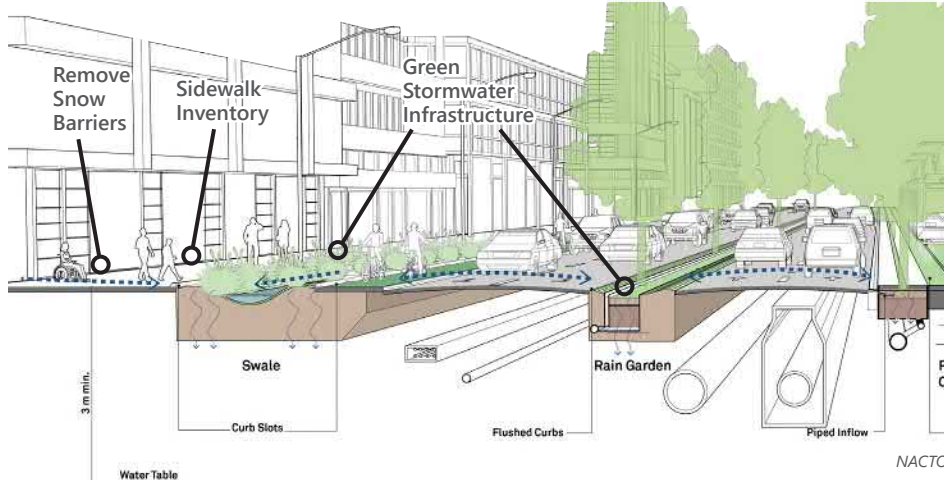
## INSTALL SHARED MOBILITY AND OTHER AMENITIES

- ▶ **Rationalize and Regulate Transportation Network Company Pickup and Drop-Off Activities.** Locate Transportation Network Company (TNC) pickup and drop off zones near key employment and event centers (e.g., Midway Hotel Center, 73rd Street/Central Ave, commercial district, Bridgeview Transit Center). Pick-up and drop-off zones should be situated off of travel lanes and designed to minimize impacts to motorist and freight traffic and not conflict with CTA or Pace bus stops.
- ▶ **Install Pedestrian-Scaled Lighting.** Prioritize lighting improvements along high foot traffic corridors (e.g., W 65th St, Cicero Ave, W 73rd St). Consider the incremental installation of smart lighting, which can be coupled with sensors and Intelligent Transportation Systems (“ITS”) technologies.
- ▶ **Install More Seating and Weather Protection.** Install and maintain seating, weather protection, and other pedestrian amenities (e.g., garbage cans, wayfinding signage) near high frequency bus stops and TNC pickup and drop-off zones.

# DESIGN GUIDANCE: PEDESTRIAN NETWORK



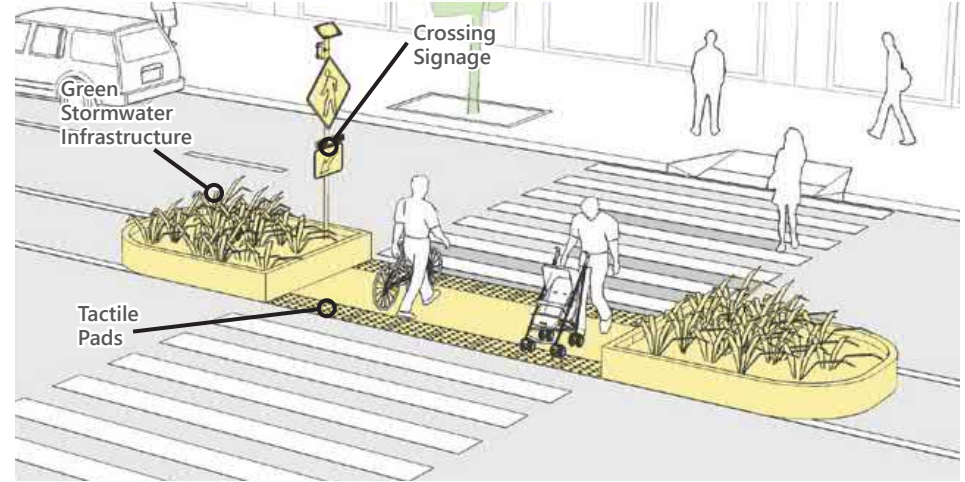
## MAINTAIN AND REPAIR THE PEDESTRIAN NETWORK



- ▶ **Conduct a Village-Wide Sidewalk Assessment.** This plan developed recommendations based on a high-level assessment of the Village's Pedestrian Network. The Village should conduct a more detailed, village-wide sidewalk assessment that achieves the following objectives: 1) Develop a complete and accurate map of the Pedestrian Network; 2) Systematically assess the condition and connectivity of the network; 3) Identify all Pedestrian Network maintenance, repair, and improvement needs; and, 4) Prioritize and phase projects.
- ▶ **Identify and Repair High Priority Sidewalks.** Continuous, smooth, and level sidewalks should be provided throughout the Village. Sidewalks with cracks and spalling are tripping hazards and could cause injuries to pedestrians. Ensure that sidewalks are without major gaps or deformities that would make them non-traversable for wheel-chairs and other mobility devices.
- ▶ **Improve Snow Removal Practices.** Snow covered sidewalks can force pedestrians onto streets in the winter months, impacting their safety. Snow Removal is critical for winter mobility, especially for people with disabilities. The Village has an ordinance requiring that all businesses keep the sidewalk in front of their property "free from snow, ice and any and all obstacle" (#566, 2-13-1969). The Village should send an annual notification to all businesses reminding them of their responsibilities and enforce this policy through fines, if needed.
- ▶ **Install Green Stormwater Infrastructure.** Street and sidewalk ponding can be a major impediment for pedestrians, especially those with disabilities. GSI, such as bioswales, permeable pavement, and stormwater bump outs, is a cost-effective and resilient approach to managing stormwater that provides many community benefits and should be considered as part of future streetscape enhancement efforts. GSI can provide flood mitigation and improve the pedestrian environment and experience.



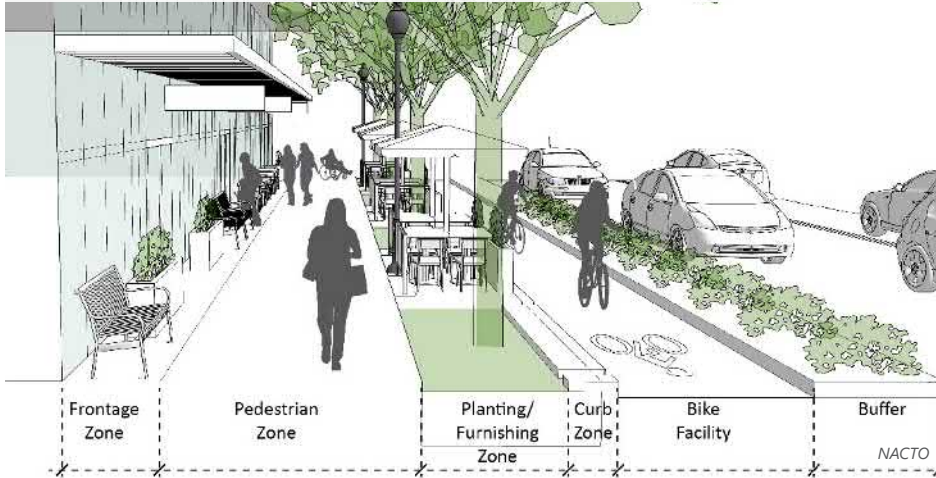
## IMPLEMENT TARGETING CROSSING IMPROVEMENTS



- ▶ **Install and Maintain ADA Curb Ramps, Tactile Pads, and High Visibility Crosswalks.** ADA facilities should be provided at all intersections with sidewalks and multi-use paths. Curb ramps enable people in wheelchairs to cross streets and detectable warning pads direct people with visual impairments through an intersection at a crosswalk. All street crossings not controlled by signals or stop signs should have longitudinal crosswalks. Crosswalks should be as wide as an approaching sidewalk.
- ▶ **Install Accessible Pedestrian Countdown Signals with Leading Pedestrian Intervals.** Pedestrian signals with a countdown timer indicate the amount of time pedestrians have available to safely cross a street. A leading pedestrian interval provides 3-7 seconds of lead time for pedestrians to enter a crosswalk before the start of a vehicle signal phase. This enhances pedestrian visibility and provides pedestrians right of way. These should be used at intersections with high pedestrian and vehicle turning volumes.
- ▶ **Install Pedestrian Refuge Islands where Appropriate.** Refuge islands buffer and protect pedestrians and bicyclists crossing wide or busy streets, enabling two stage crossings. They should be wide enough to accommodate the length of a standard bicycle with at least one foot of clearance on either side (e.g., about 7-feet). Cut-through widths should equal the width of the pedestrian crossing. Crossing islands should be paired with pedestrian crossing signage. They are most appropriate for mid-block and unsignalized crossings on 4-lane roads.
- ▶ **Install Curb Extensions where Appropriate.** Curb extensions (e.g., bulb outs, bump outs) facilitate shorter intersection crossing distances for pedestrians and can improve sightlines and slow the speed of turning vehicles. They are most appropriate for local roads where they intersect arterial and collector streets. Benches, green infrastructure, and other streetscaping elements can be added to them, and if space permits, they can be used at bus stops to house amenities for riders.



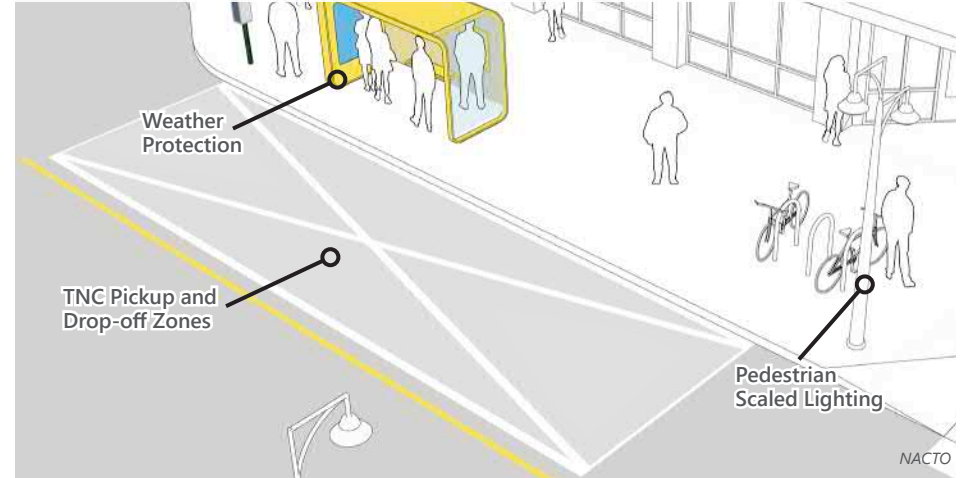
## IMPROVE AND EXPAND THE PEDESTRIAN NETWORK



- ▶ **Connect Gaps in Sidewalk Network.** A complete and connected network of sidewalks will support last mile connectivity. Where feasible, sidewalks should be provided on both sides of a street. Where it is not feasible, sidewalks should be provided on at least one side of a street and filling in gaps in the sidewalk along that street should be prioritized. Pedestrian “desire lines” can be used to identify high priority sidewalk gaps. A list of proposed sidewalk construction projects is provided in **Appendix A**.
- ▶ **Widen Sidewalks and Create Buffer Zones.** Sidewalks should be continuous, smooth, and level, and free of obstructions, such as utility poles, signs, and overgrown vegetation. A minimum of five feet of unobstructed sidewalk space should be provided. On busier streets, sidewalks should be six to eight feet wide, if feasible, to provide a buffer from moving traffic. Sidewalks in high traffic areas should have a “Clear Path Zone”, that is wide enough to permit two people using wheelchairs or strollers to comfortably pass each other. Sidewalk design should go beyond the minimum in terms of width and safety measures, especially for streets with high traffic volumes where pedestrians may avoid the area because they feel unsafe. The Village should encourage the incremental and strategic installation of buffer zones and other pedestrian amenities through the development process.
- ▶ **Formalize Pedestrian Cut-Throughs and Improve Internal Parking Lot Circulation.** Pedestrian circulation to and from parking lots, bus stops, and mobility hubs to building entrances can be improved by installing sidewalks, painting crosswalks, and striping walking lanes. Formalized cut-throughs and shortcuts can shorten walking distances and make walking a safer and more convenient way to get around town. Wayfinding signage can help establish a cut-through as a safe route. These areas should be well-lit and clear of snow in the winter to increase pedestrian safety and comfort.



## INSTALL SHARED MOBILITY AND OTHER AMENITIES



- ▶ **Rationalize and Regulate Transportation Network Company Pickup and Drop-Off Activities.** TNC companies like Uber, Lyft, and Via need a safe and convenient curbside space to pickup and drop-off passengers. TNC pickup and drop-off activities should be regulated to minimize potential conflicts with bike, motorist, and freight traffic, especially where bike lanes, bus-only lanes, and bus stops are present. While curbside management is an ongoing challenge in high-traffic areas, the Village can adopt and enforce curbside management regulations that help ensure safe multimodal operations along key corridors. The Village could collaborate with TNCs to locate pickup and drop-off zones near key points of interest (e.g., large employers, popular retail locations). Additionally, TNCs collected data could be used to identify safe pickup and drop off zones and to adjust these zones based on site- and time-specific factors (e.g., the presence of bus stops and bike lanes, construction activities, and hyper-local traffic patterns).
- ▶ **Install Pedestrian-Scaled Lighting.** Lighting contribute to a safer and more comfortable pedestrian experiences and can add character to neighborhoods and business districts. By illuminating sidewalks at the pedestrian level, pedestrian-scaled lighting makes pedestrians more visible to motorists, provides a well-lit area for people to wait for transit, and improves safety after dark, which is especially beneficial for late night workers. Light poles can be mounted on sidewalks, where space permits, combined with streetlights, or coordinated with building and property owners to be mounted on buildings or on private property in cases where poles would obstruct sidewalks.
- ▶ **Install More Seating and Weather Protection.** Benches and other seating areas are essential, providing comfortable places to rest, eat, socialize, or wait for transit. Where feasible, seating should be located under trees or covered to protect people from the elements. Benches should not obstruct sidewalks.

# BIKE NETWORK



The Bike Network is becoming increasingly important as cities and communities seek to promote healthier and more affordable, equitable, and sustainable modes of transportation. Biking provides commuters with a faster alternative to walking, and it also decreases congestion and emissions caused by motorist traffic. By providing commuters a means to quickly access nearby transit stations, biking and bikesharing systems can also make it easier for people to use public transit and is therefore becoming an increasingly popular first- and last-mile solution.

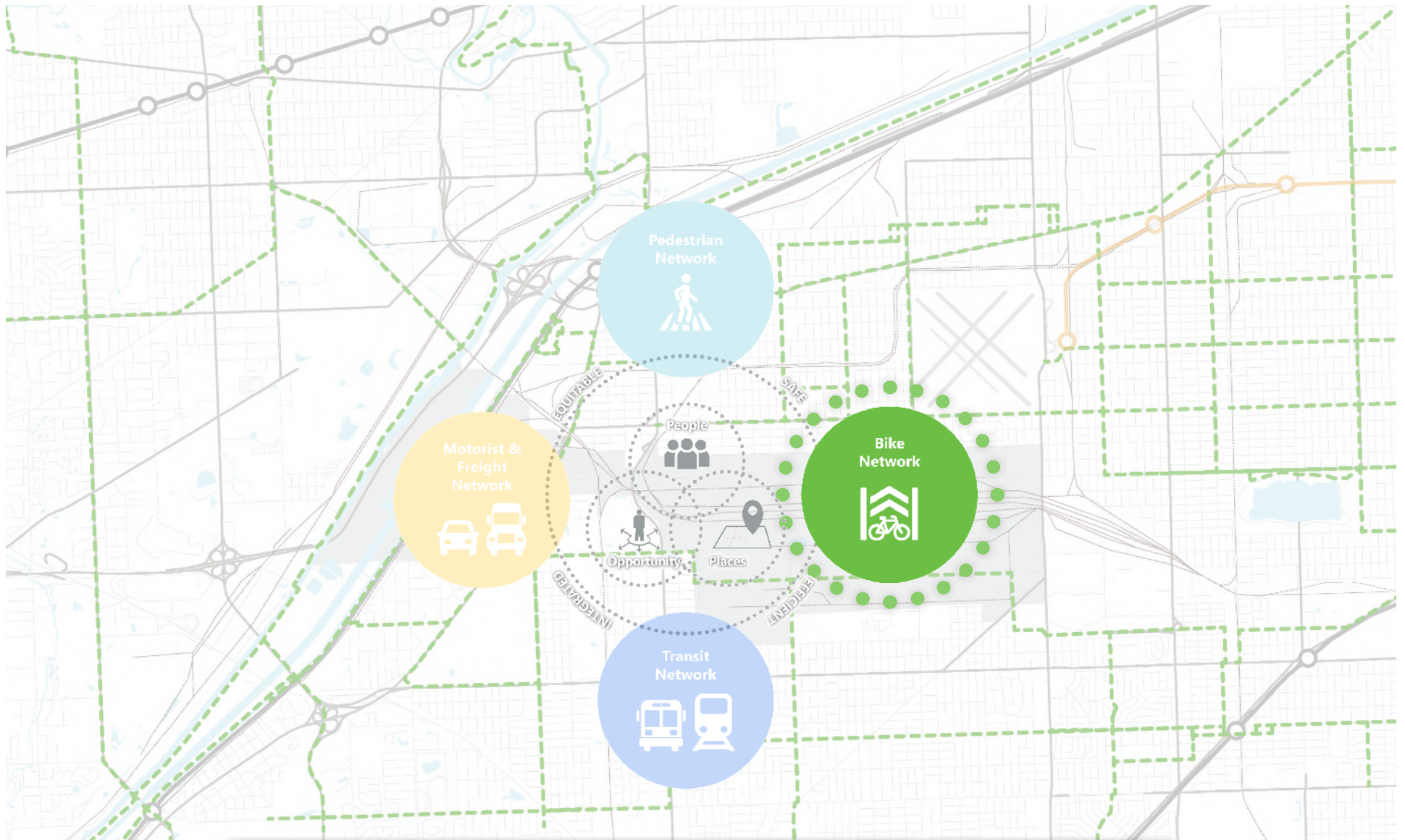
Establishing biking as a safe and attractive mode of transportation in the Bedford Park area will require the construction of an interconnected network of protected bike facilities. New bike facilities could include: **Conventional marked bike lanes | sharrows | buffered bike lanes | protected bike lanes | side paths | cycle tracks | shared-use trails | greenways | bike bridges and tunnels | advanced stop bars | bike boxes | two-stage turn queue boxes | corner refuge islands | bike signals | wayfinding signage | bikesharing stations | bike racks and corrals | bike parking structures | micromobility parking| and more...**

The Village should partner with neighboring municipalities and other regional partners to develop an interconnected network of facilities that support biking and micromobility (e.g., electric scooters, shared bikes, e-bikes, and more). This network could include neighborhood greenways comprised of conventional bike facilities, regional micromobility corridors comprised of sidepaths, cycle tracks and other protected and off-road micromobility facilities. Once a sufficient Bike Network has been established, the Village should partner with area businesses, bike advocacy organizations, and mobility companies to expand bikesharing and micromobility solutions, and to promote biking as a viable commuter option.

This chapter provides a map and description of recommended last mile strategies and actions for the Bedford Park area's Bike Network. Additional design guidance for each action recommendation is provided in **Appendix C**.

## GOAL

**DEVELOP A  
CONNECTED  
NETWORK OF  
PROTECTED  
BIKE AND  
MICROMOBILITY  
FACILITIES**



**LAST MILE STRATEGIES**



Install  
Conventional  
Bike Lanes



Install  
Protected  
Cycle Tracks  
and Bike Trails

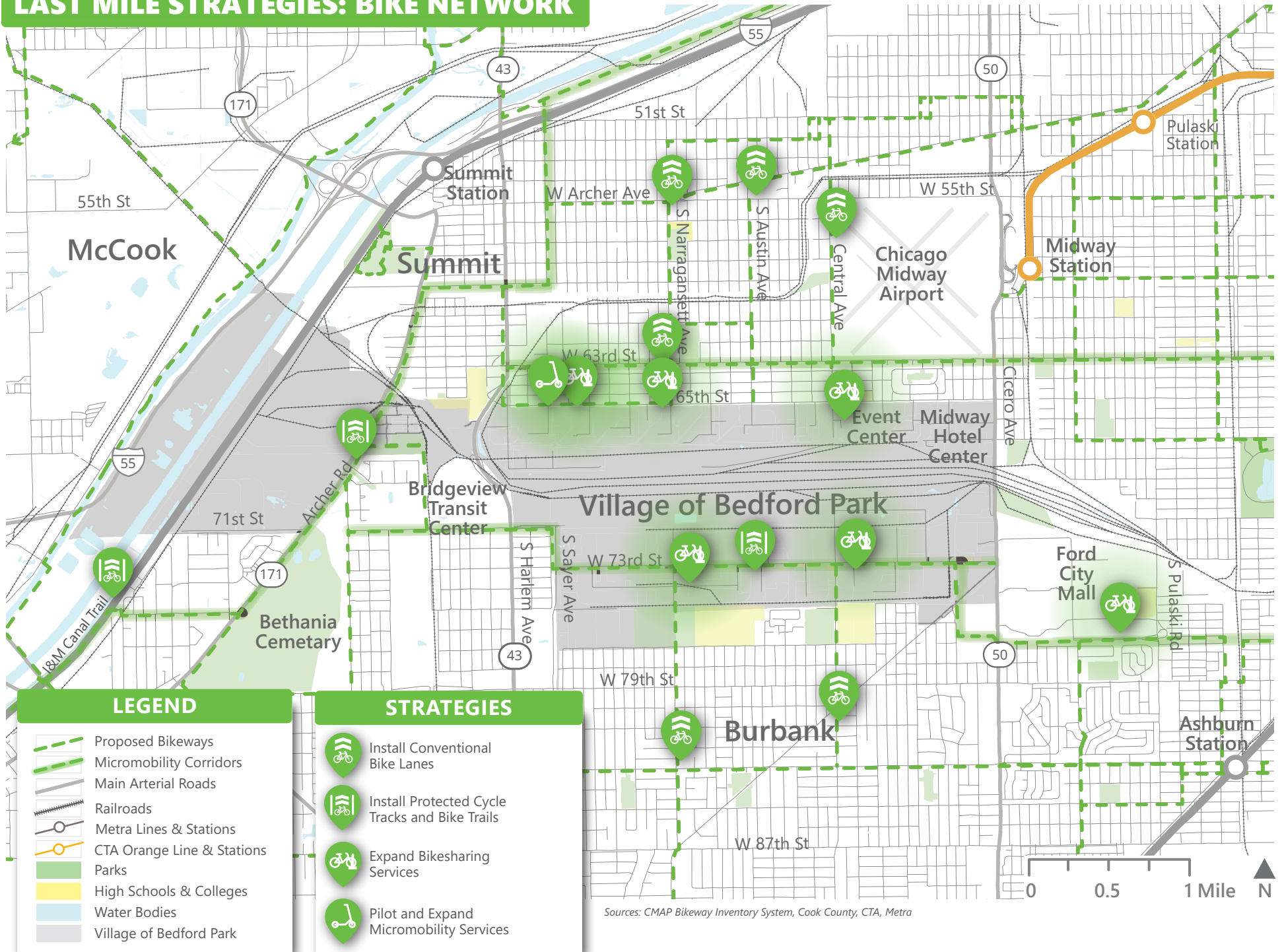


Expand  
Bikesharing  
Services



Pilot and  
Expand  
Micromobility  
Services

# LAST MILE STRATEGIES: BIKE NETWORK





## INSTALL CONVENTIONAL BIKE LANES

- ▶ **Create Neighborhood Greenways.** The Village should partner with neighboring municipalities to create a network of neighborhood greenways that improve connectivity to Bedford Park. These bikeways could be created using sharrows, marked shared lanes, buffered bike lanes and other conventional bike facilities.
- ▶ **Install Colored Bike Facilities.** The Village should install colored bike facilities (e.g., bike boxes, conflict area markings, intersection crossing markings) along neighborhood greenways, especially at major crossings. Colored bike facilities provide more prominent road markings that increase the visibility of the bike lane, identify potential road conflict areas, and give priority to bicyclists.
- ▶ **Install Bikeway Signage.** The Village should install bikeway signage to alert motorists and commercial drivers to the potential presence of bicyclists. Wayfinding signage will also assist bike commuters with navigation and help bikers stay on dedicated Neighborhood Greenways.
- ▶ **Install Bike Racks and Corrals.** The Village should partner with area businesses to install bike racks and bike corrals along Neighborhood Greenways and other types of bikeways. Safe and secure bike parking will help make biking a viable commuter option.



## EXPAND BIKESHARING SERVICES

- ▶ **Partner with a Bikeshare Program.** The Village should partner with a bikeshare program (i.e., Divvy and other micromobility providers) during the planning, design, and construction phase of new and expanded bike facilities.
- ▶ **Identify Candidate Bikesharing Station Locations.** The map on Page 14 identifies potential dock-based bikesharing station locations. The Village should consider several factors when siting bikesharing stations, including: area land use, the regional bikesharing network, site specific conditions, as well as feedback from area residents, business owners, and employees.
- ▶ **Promote Divvy for Everyone.** The Village should promote programs like Divvy for Everyone, which make bikesharing more affordable and accessible. Programs like this one can later be incorporated into a MaaS platform that integrate information from different mobility services.



## INSTALL PROTECTED CYCLE TRACKS AND BIKE TRAILS

- ▶ **Create Regional Bikeways and Micromobility Corridors.** While Neighborhood Greenways and conventional bike facilities are suitable in surrounding residential areas, expanding the Bike Network within Bedford Park will require protected bike facilities, due to the industrial land use, street design, and heavy truck traffic. Bedford Park should coordinate with surrounding municipalities to create a network of regional bikeways or “Micromobility Corridors”. These Micromobility Corridors could be comprised of protected bike lanes, cycle tracks, side paths, and shared use trails that are integrated with the motorist network, but separated from motorist and freight traffic. The proposed corridors on Page 14 are intended to connect mobility hubs to key employment centers, retail locations, and other points of interest.
- ▶ **Support the I&M Canal Trail Expansion Project.** The Village should continue to support the I&M Canal Trail Expansion Project. If constructed, this shared use trail could function as a Micromobility Corridor and be connected to the proposed 63rd St corridor and Bridgeview Transit Center - Ford City Mall Corridor and other proposed bikeways.
- ▶ **Promote Biking and Micromobility as a Commuter Option.** Once a baseline network of conventional and protected bike facilities (e.g., Micromobility Corridors and Neighborhood Greenways) are installed in the Bedford Park area, the Village should promote biking and other micromobility vehicles as commuter options.



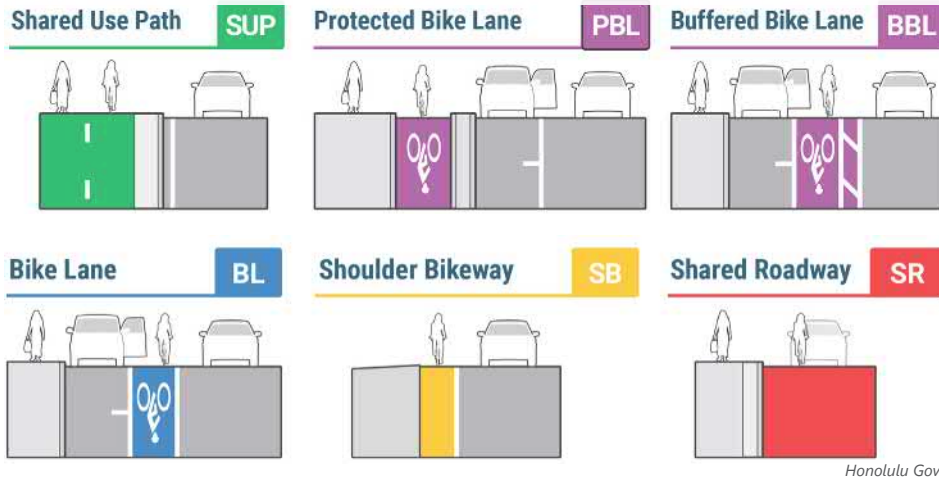
## PILOT AND EXPAND MICROMOBILITY SERVICES

- ▶ **Launch a Micromobility Pilot Program.** The Village should launch a micromobility pilot program prior to issuing business licenses to micromobility technology and service. This pilot should occur after an interconnected network of protected bike and micromobility facilities have been constructed in Bedford Park and surrounding areas.
- ▶ **Scale Up Micromobility Services.** The Village should use data and user feedback collected through the micromobility pilot program to determine if micromobility is a safe and viable commuter option and will be permitted long-term.
- ▶ **Install Micromobility Supportive Infrastructure.** If the Village of Bedford Park, agency partners, area businesses, residents, and users collectively determine that micromobility is a viable commuter option, the Village should partner with providers to install micromobility parking, charging stations and other supportive infrastructure.

# DESIGN GUIDANCE: BIKE NETWORK



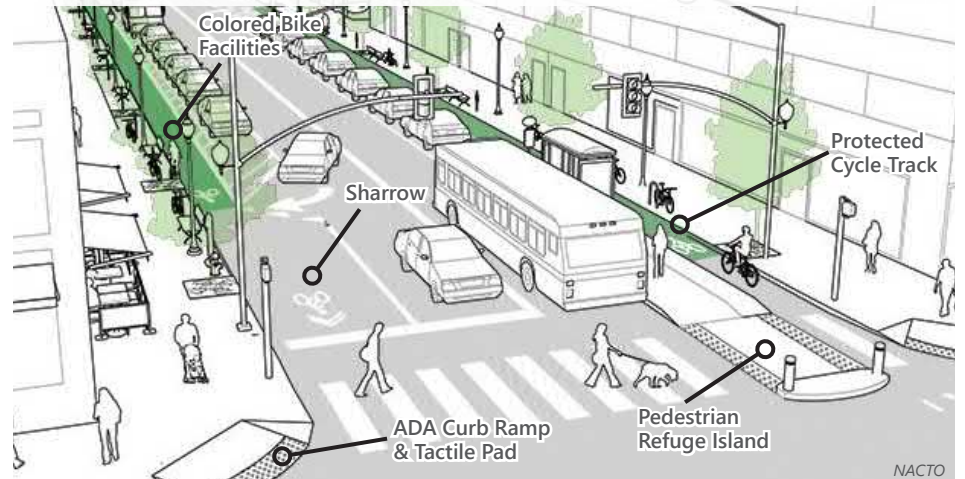
## INSTALL PROTECTED CYCLE TRACKS AND BIKE TRAILS



- ▶ **Create Neighborhood Greenways.** The Village should coordinate with surrounding municipalities, CDOT, and transit agencies to create a network of Neighborhood Greenways along local roads that connect key points of interest. Neighborhood Greenways may include marked shared lanes, lanes with sharrows, and buffered bike lanes. At minimum, bike lanes should be 5 feet wide. In absence of on-street parking, a bike lane provides separation between vehicle lanes and abutting sidewalks. Bike lane pavement markings should be used to define and designate a bike lane. Like designated bike lanes, buffered bike lanes provide a dedicated space for bicyclists separated from vehicle traffic by a painted buffer. Buffers can be placed on the vehicle side of the bike lane, the parking side, or both. On roads with higher traffic volumes and/or speed limits, buffered bike lanes are more comfortable for bicyclists than a conventional bike lane.
- ▶ **Install Colored Bike Facilities.** Colored pavement markings (e.g., green, orange, others) can be used to delineate a bike lane or other bike facility. Colored bike facilities can be used to emphasize the presence and improve the visibility of bicyclists at busy intersections, driveways, shared use crossings, and other areas where the bike traffic mixes with motorist and freight traffic.
- ▶ **Install Bikeway Signage.** Bike signage should clearly indicate designated bikeways, aid in wayfinding, caution vehicles to yield to bikes, and alert pedestrians and motorists to the potential presence of bicyclists. Bikeway signage should be highly visible, legible, easily identifiable, and account for motorist and bicyclist movements in relation to the marking placement.
- ▶ **Install Bike Racks and Corrals.** Bike racks and corrals should be located in high visibility areas near key employment centers, transit stops, mobility hubs, popular retail locations, and other points of interest to make it convenient for commuters to safely access and store their bikes.



## INSTALL PROTECTED CYCLE TRACKS AND BIKE TRAILS

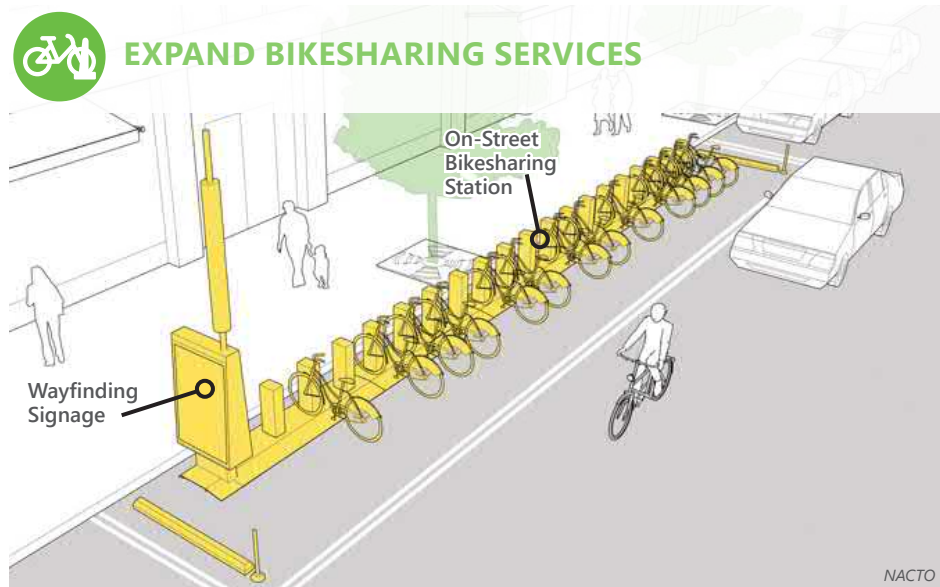


- ▶ **Create Regional Bikeways and Micromobility Corridors.** Micromobility Corridors can be comprised of protected shared use trails, sidepaths, cycle tracks, and other protected facilities. Protected cycle tracks provide dedicated space for bicyclists separated from vehicle traffic by a curb or bollards; they should be at least 5 feet wide with a 2 feet wide painted with flexible delineator posts or curbed buffers. Protected bike lanes require careful design at street and driveway intersections with blindspots. They reduce the risk of injury from opening car doors and merging traffic, prevent double parking, improve comfort and safety, and have a low-implementation cost by utilizing pre-existing pavement and drainage. Raised cycle tracks are separated vertically from traffic by raising bike lanes above street level. They're best used along higher speed streets with few driveways and cross streets. If constructed at the same level as a sidewalk, a buffer (e.g., landscaping), a change in pavement type, or striping, should be provided to prevent bicyclists from riding on the sidewalk.
- ▶ **Support the I&M Canal Trail Expansion Efforts.** The I&M Canal is a planned shared use path that could improve Bedford Park's connectivity to Chicago and other southwest municipalities. The I&M Canal Trail can be thought of as a key north-south Regional Bikeway that could connect to key east-west Micromobility Corridors, including the proposed "Bridgeview Transit Center-Ford City Mall Corridor" and the "63rd Street Corridor," and others. These Micromobility Corridors could then be connected to the local network of Neighborhood Greenways and other bikeways that provide connectivity to key employment centers.
- ▶ **Promote Biking and Micromobility as a Commuter Option.** The Village can promote biking and micromobility commuting by providing easily accessible bikeshare stations and micromobility vehicles (e.g., scooters) near bus, train, and transfer stations that have few last mile commuter options.





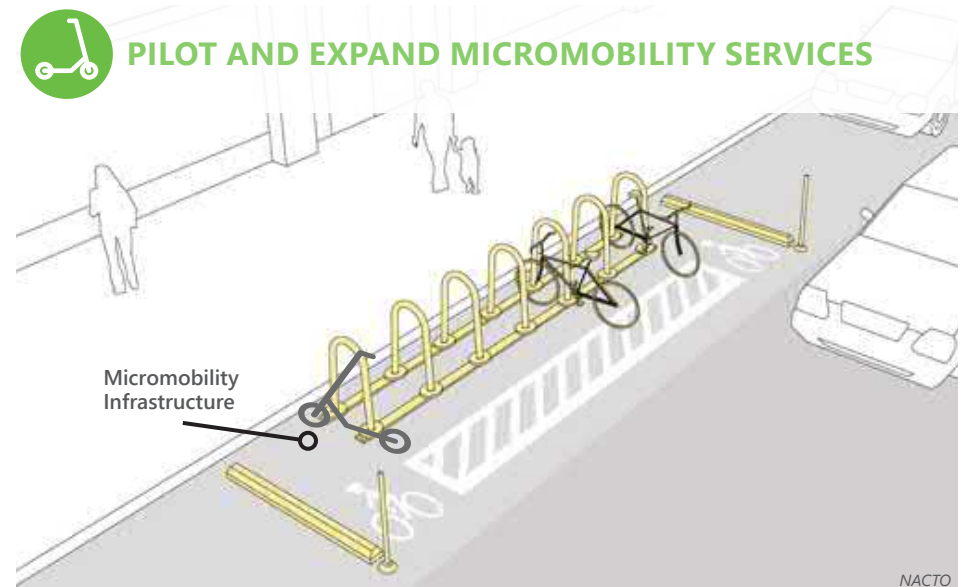
## EXPAND BIKESHARING SERVICES



- ▶ **Partner with a Bikeshare Program.** Many Bedford Park employees live in Chicago neighborhoods that will soon have access to Divvy's bikesharing network. The forthcoming expansion of Divvy into these neighborhoods will open up an alternative commuter options. The Village should partner with Lyft (i.e., the parent company of Divvy) to install that infrastructure that will make bikesharing a viable commuter option for Bedford Park commuters.
- ▶ **Identify Candidate Bikesharing Station Locations.** Bikeshare stations should be placed in safe and visible locations along major routes where demand is likely to be high, such as employment centers, transit stations, popular retail locations, and others. Factors to consider when siting bikesharing stations, include: area market and land use (e.g., employment and household density, demand for micromobility); overall bikesharing network (e.g., distances between stations, connections to bike network); site specific conditions (e.g., clearances, on-street vs. off-street considerations, amount of sun light, site visibility, potential traffic impacts, surface); and station access and serviceability (e.g., use of right-of-way and connecting driveways or paths).
- ▶ **Promote Divvy for Everyone.** Assuming that the bike and micromobility facilities are constructed and bikesharing becomes a viable commuter option, the Village should promote bikesharing through programs like Divvy for Everyone. This program aims to make bikesharing an affordable and accessible transit option by providing lower income individuals with a reduced membership fee and cash payment option for people who are unbanked. Information about Divvy for Everyone and other transit benefits programs should aggregated in one place, such as a website, mobile app, and/or a MaaS platform.

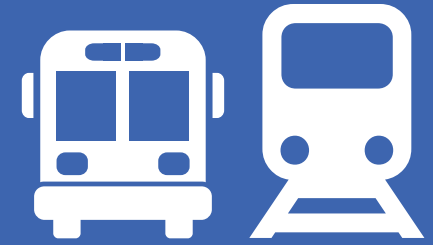


## PILOT AND EXPAND MICROMOBILITY SERVICES



- ▶ **Launch a Micromobility Pilot Program.** Once sufficient bike facilities are built-out the Village should launch a micromobility pilot program in partnership with micromobility technology and service providers. This pilot program should be guided by clearly-defined goals, objectives and service parameters (e.g., pilot zones, parking restrictions, sidewalk use restrictions, user rates). The pilot should collect data that can be used to evaluate the performance of different service models and individual companies. Strict enforcement of the pilot program service parameters, especially safety provisions, will be critical for the success of the pilot and in determining the viability of expanding micromobility service in the Bedford Park area.
- ▶ **Scale Up Micromobility services.** Data collected through the pilot should be evaluated by the Village and other stakeholders (e.g., area businesses, IDOT, CDOT, and others). If the pilot is successful and reveals a demand for micromobility services, the Village should re-engage the top performing companies in a longer-term program and service deployment.
- ▶ **Install Micromobility Supportive Infrastructure.** Bike corrals can double as micromobility parking spots and should be placed in highly visible locations adjacent to building entrances or near the curb line on streets. Charging stations (for e-scooters and e-bikes) can be located off the street in parking lots, garages, gas stations and other spots. Dedicated micromobility parking will reduce the risk of scooters and bikes from littering and creating potential hazards along sidewalks and the right of way. If the Village decides to scale up micromobility services in Bedford Park they should partner with selected micromobility technology and service providers to install supportive infrastructure (e.g., micromobility parking, charging stations, bike racks and corrals, signage, etc.).

# TRANSIT NETWORK



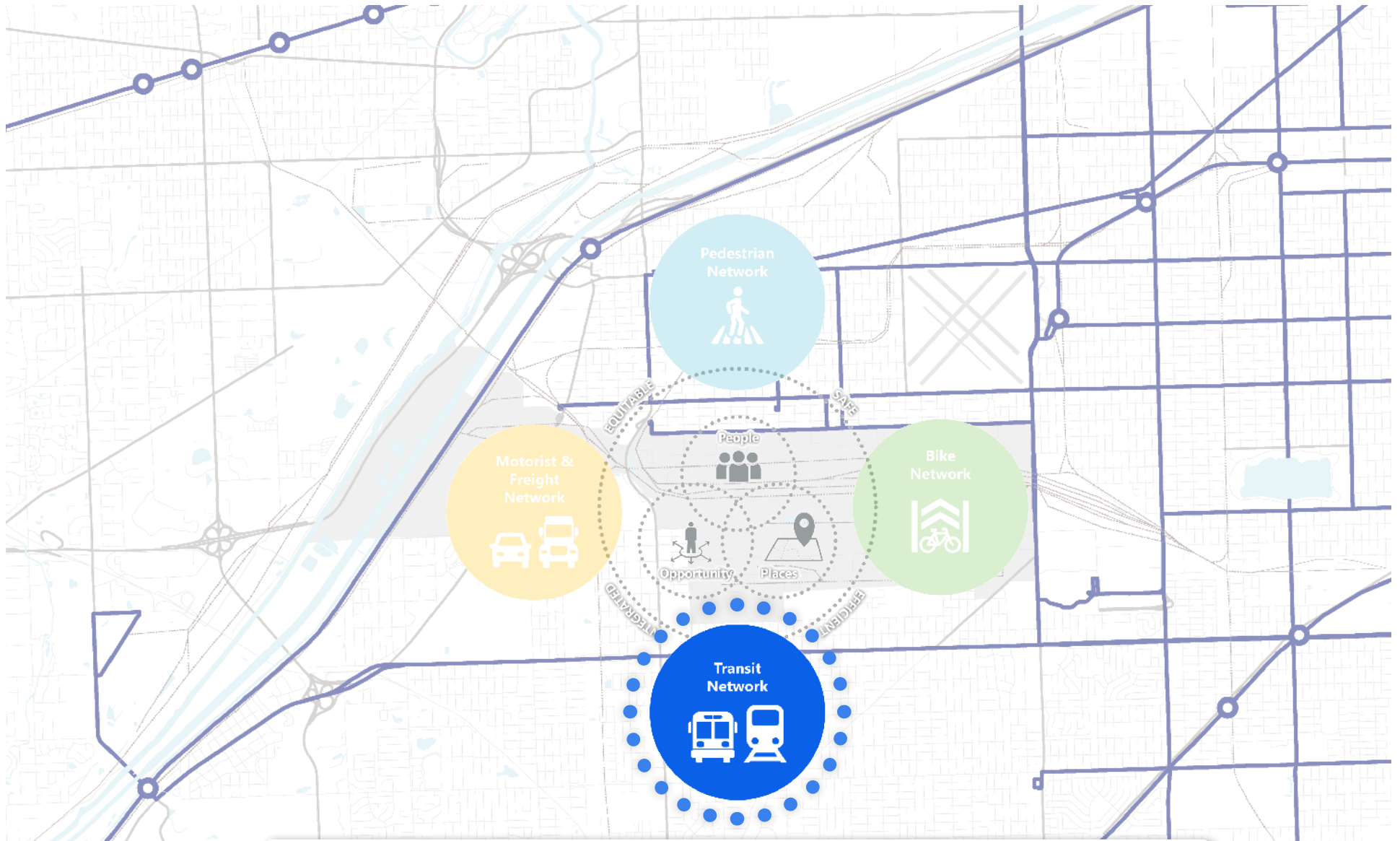
High quality public transit is the backbone of an integrated and equitable mobility system. While new, shared mobility services and technologies are providing exciting mobility options and catalyzing a much-needed disruption in the urban mobility industry, public transit will continue to play a leading role in urban mobility moving forward. A high-quality transit system is characterized by frequent, reliable, comfortable, and convenient service. A wide array of physical and digital elements are involved with providing high-quality transit service, including: **buses and bus fleets | rolling stock | transit lines | transitways | railway | bus stops | stop amenities | train stations | station amenities | accessible boarding areas | transit signals | real-time arrival screens | bike-equipped vehicles | transit apps & platforms | mobility hubs | and more...**

This action plan is based on the premise that new, shared mobility services and technologies can potentially be integrated with the region's existing fixed-route and para-transit services in ways that are mutually-beneficial and that support the delivery of high-quality transit service. For example, new on-demand mobility services (MOD), such as demand-responsive microtransit services, can provide a cost-effective way to extend the reach of fixed-route transit. Similarly, new MaaS platforms that integrate all mobility options on a single app and fare payment system can make accessing, paying for, and using transit easier for all users.

While many of the proposed last mile Transit Network strategies are outside the scope of what the Village can accomplish internally, Bedford Park stakeholders can advocate for improvements to the regional transit system and pilot specific components of a MOD system or MaaS platform that—if successful—can be scaled up to other industrial areas throughout the region. Towards that end, the Village should continue to partner with the CTA, Pace, and RTA to optimize bus routes and schedules, and experiment with different service models. The Village should also implement improvements to the pedestrian, bike, and motorist networks that improve access to transit. The Village should continue to partner with employers and transit agencies to incentivize and promote transit as a commuter option. Finally, the Village should pilot and scale up FLM, late night service, MOD, and MaaS solutions that were identified through the C2W Pilot Program.

This chapter provides a map and description of recommended last mile strategies and actions for the Bedford Park area's Transit Network. Additional design guidance for each action recommendation is provided in **Appendix D**.

GOAL  
**EXPAND  
ACCESS  
TO PUBLIC  
TRANSIT  
AND  
SHARED  
MOBILITY  
SERVICES**



### LAST MILE STRATEGIES



Optimize Bus Routes and Schedules



Improve Access to Transit

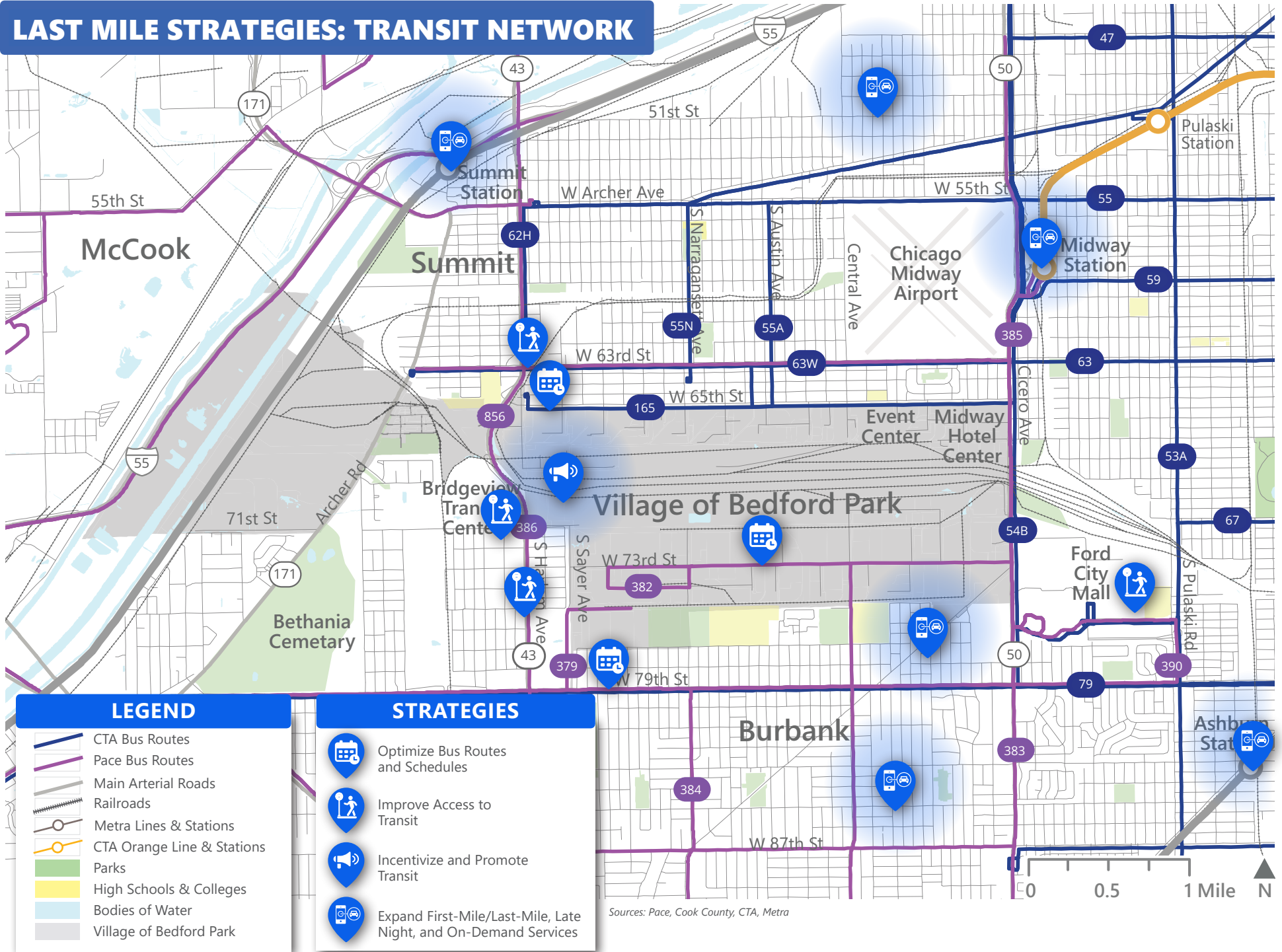


Incentivize and Promote Transit



Expand First-Mile/Last-Mile, Late Night and On-Demand Services

# LAST MILE STRATEGIES: TRANSIT NETWORK





## OPTIMIZE BUS ROUTES AND SCHEDULES

- ▶ **Provide Feedback to CTA and Pace Regarding Shift Change Times and User Requests.** The Village should periodically consolidate information about employee shift times and relay this information to CTA and Pace to inform potential changes to bus routes and schedules. The Southwest Conference of Mayors' Transportation Committee could be an appropriate venue to provide periodic feedback.
- ▶ **Work with CTA and Pace to Align Bus Schedules with Shift Changes.** Through Bedford Park's *Last Mile Mobility Study*, the need for additional eastbound service in the evening on Route #165 and late night service on Cicero Avenue on Route #54B and #353 to meet shift times was identified. The Village should coordinate with CTA and Pace to determine how service can potentially adjust and best meet the level of demand along these routes.
- ▶ **Optimized Routes and Services Types.** Pace Bus 383 provides weekday rush hour service along 73rd, Central, and 103rd. Simplifying the route by removing the infrequent O-Trip (i.e., route to USPS) and F-Trip (i.e., route to Ford City Mall) legs, and replacing those services with a more frequent route-based or on-demand shuttle service could make it easier for commuters to take transit.



## INCENTIVIZE AND PROMOTE TRANSIT

- ▶ **Promote Ventra's Pre-Tax Benefit Program.** The Internal Revenue Code allows employees to use pre-tax salary towards their transit and vanpool commuting costs (IRS Code, section 132(f) Qualified Transportation Fringe). This "Transit Benefit Program" program benefits both employees and employers. Employees using transit or vanpool to get to work save by not paying income tax on some of their salary, reducing their payroll taxes, and employers save on the payroll taxes for each employee participating.
- ▶ **Encourage Employers to Offer Transit Benefits.** Bedford Park employers are becoming increasingly aware of the costs associated with transportation-driven employee turnover and are offering benefits to mitigate this turnover, such as, covering all or some of the costs of a monthly transit pass. The Village should encourage employers to offer transit benefits, acknowledge companies that do, and foster a friendly competition between employers to encourage participation and creativity.
- ▶ **Encourage and Support Carpooling and Vanpooling.** The Village should work with employers to promote existing carpool and vanpool services and test out new carpooling and vanpooling services and technologies through C2W.



## IMPROVE ACCESS TO TRANSIT

- ▶ **Expand Access to Transit.** The Village should prioritize pedestrian and Bike Network improvements that make it easier and safer for commuters to access transit. For example, sidewalk improvements, future Neighborhood Greenways, and Micromobility Corridors could all improve access to transit. The Village should plan to create multimodal connections to the forthcoming Harlem Avenue Pace Pulse Route. The Village should also plan to improve connectivity between the forthcoming Pulse route and proposed east-west Micromobility Corridors. Similarly, any forthcoming FLM, late night, and MOD services that emerge through the C2W Pilot Program should connect to the Harlem Avenue Pulse route and stations.
- ▶ **Locate Bus Stops and Pulse Stations Near Key Employment and Activity Centers.** The Village should advocate for a Pulse Station at Harlem Avenue and 75th Street. This station coupled with Pedestrian Network improvements (e.g., lighting, crosswalk at Sayer) along 75th Street will allow for safe passage across Sayer Avenue.



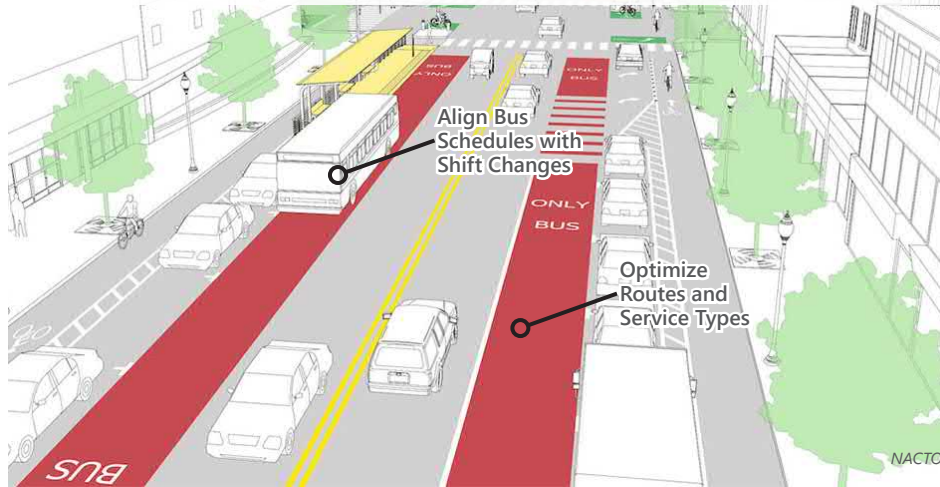
## EXPAND FIRST-MILE/LAST-MILE, LATE NIGHT AND ON-DEMAND SERVICES

- ▶ **Launch the *Connect2Work* Pilot Program.** The Village should leverage funding from Cook County's Invest in Cook program to launch the C2W Pilot Program. This program should be designed to test a range of innovative FLM, late night, on-demand microtransit, and MaaS solutions that can address the last mile challenges identified through the Village's *Last Mile Mobility Study*. The Village should utilize data collected through the C2W Pilot Program to evaluate different service models and determine which models to support or permit long-term.
- ▶ **Develop and test a MaaS Platform Through the *Connect2Work* Pilot Program.** The Village should test MOD and microtransit solutions through the C2W Pilot Program. The Village should also partner with Pace and the RTA to explore the feasibility of creating an on-demand service for the Bedford Park area. This collaboration should test more active procurement models, service models, and public partnerships that lead to the accelerated delivery of cost-effective on demand mobility solutions.

# DESIGN GUIDANCE: TRANSIT NETWORK



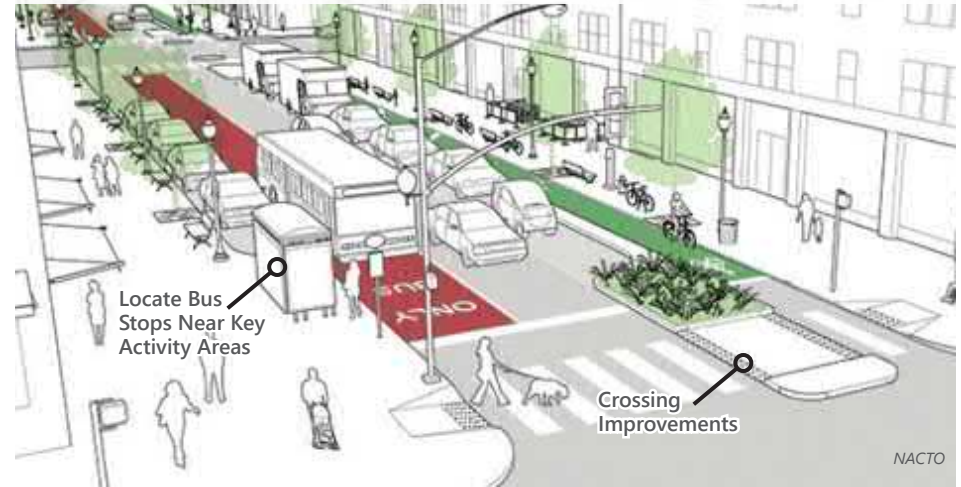
## OPTIMIZE BUS ROUTES AND SCHEDULES



- ▶ **Provide Feedback to CTA and Pace Regarding Shift Change Times and User Requests.** The Village should continue to gather insights from surveys and direct outreach to employers and employees regarding shift times and relay this information to CTA and Pace. This information should be periodically relayed to transit agencies through the SCM and direct communications.
- ▶ **Work with CTA and Pace to Align Bus Schedules with Shift Changes.** Understanding the business operations and shift changes in key employment centers can allow for better coordination with transit that serves employees. Potential bus service changes could include: adjusting bus schedules, relocating bus stops, altering routes, and more. The Village should continue to work with the CTA to explore potential contracted service models for specific routes.
- ▶ **Optimized Routes and Services Types.** Because bus routes can be adjusted to better serve existing riders, this could increase ridership. Bus routes should be optimized to gain the highest number of riders, while also moving those riders at an efficient pace. This includes changes such as optimizing the schedule with shift changes and consolidating stops with low-ridership. Riders will walk slightly farther to access higher quality service. Therefore, stops and routes can be spaced farther apart. The figure above illustrates several different types of service models that Pace currently provides, including conventional fixed route bus service on local roads and arterials, as well as newer models for Arterial Rapid Transit, Expressway-Based, and other MOD models.



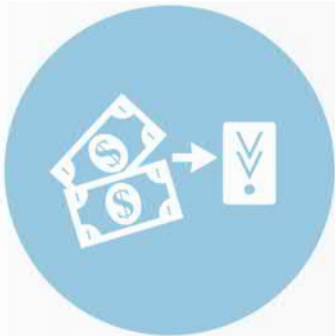
## IMPROVE ACCESS TO TRANSIT



- ▶ **Expand Access to Transit.** The Village should partner with transit agencies and neighboring municipalities to improve and expand access to transit at the site, corridor, and regional scales. Projects that improve access to transit include, among others: maintaining, repairing, and improving the sidewalks that connect to a transit stop, crossing improvements, rail crossing improvements, and expanding the Bike Network and creating connections between the Bike and Transit Networks (e.g., routing bikeways adjacent to or near transit, placing bike racks and corrals at transit stations, bus stops, and mobility hubs).
- ▶ **Locate Bus Stops and Pulse Stations Near Key Employment and Activity Centers.** Some high utilization bus stops should have a transit shelter to fully shield passengers. Bus stop signage should be included at all bus stops. They should feature the route number(s) that serve the stop. Bus stops should be designed to facilitate comfortable, easy passenger access. Bus stop areas should be clear from obstructions, allowing adequate room for waiting passengers who may be carrying parcels or baggage, or who may be traveling with bicycles. The space directly adjacent to bus loading areas should be free of all street-level obstacles. If space is not available, these items can be placed outside the bus loading area between the curb and sidewalk. A clearance zone extending at least 4-feet from the curb is required so that street furniture does not block opening bus doors. 8-feet of clearance from the curb should be provided for a wheelchair lift. Bus shelters and informational kiosks can include route maps, wayfinding information, and schedules to give riders more information about upcoming routes and their expected time of arrival. These signs can be installed at transit hubs, bus stops, and at large places of employment where people congregate.



## INCENTIVIZE AND PROMOTE TRANSIT



### A Program that Benefits Everyone

The Ventra Transit Benefits Program is an employee benefit program administered by employers - big and small. It allows employees to set aside pre-tax income - up to \$270 per month - for travel on CTA, Pace and Metra, lowering their taxes and easing their commute. How's that for an attractive recruiting benefit? Read on to learn more.

Ventra Chicago

- ▶ **Promote Ventra's Pre-Tax Benefit Program.** Bedford Park employers can participate in pre-tax transit programs, allowing employee transit riders to pay for rides using pre-tax dollars up to \$270 per month. Through this program, employers can directly deposit monthly passes or fixed dollar amounts onto employees' Ventra cards. This program can save employees up to \$1,000 per year. Employers can enroll in the program through Ventra Chicago.
- ▶ **Encourage Employers to Offer Transit Benefits.** The Village should encourage employees to offer transit benefits such as pre-tax transit benefits, monthly transit passes, and others. Employers could also help employees organize vanpools and carpooling and offer fuel cards or other incentives for employees that organize such options. The Village could partner with the Bedford Park-Clearing Industrial Association ("BPCIA") to issue a "Transit-Friendly Business Award" to exemplary companies every quarter. This award can be issued during the BPCIA's quarterly luncheons and explain what that company did to improve the commuter experience.
- ▶ **Encourage and Support Carpooling and Vanpooling.** The Village should work with employers, the BPCIA, Pace, and others to encourage and support carpooling and vanpooling programs. Parking incentives, employer-supported programs, distributing information on Pace's vanpool program, and gamification are all strategies that could increase participation. Some employers have had success reducing the number of single occupancy vehicle (SOV) trips to work by charging fees to park on-site. This approach should be coupled with increased transit service, new shared mobility options, and subsidies to encourage non-SOV trips to be successful. Additionally, employers have also had success in changing commuter behavior through "gamification". Gamification can be combined with other strategies, such as reward programs, to "nudge" people towards more sustainable travel behaviors. Learn more about the recommendations in **Appendix B**.



## EXPAND FIRST-MILE/LAST-MILE, LATE NIGHT, AND ON-DEMAND SERVICES



- ▶ **Launch the Connect2Work Pilot Program.** The Village should launch the C2W Pilot Program in the Summer of 2020. The program should deploy a variety of innovative FLM, late night, on-demand microtransit, and MaaS solutions that can address the last mile challenges identified through the Village's last mile mobility study. The Village should partner with the RTA to pilot a MaaS platform through the C2W Pilot Program. The Village should document and share information regarding the procurement, operations, and integrations with the RTA, which can inform similar deployments and pilots elsewhere in the region. More specifically, lesson-learned on integrating fare payment options, "deep integration" between apps and services (e.g., Google Maps, Transit App, Moovit, Uber, Lyft, etc.), shared user acquisition and marketing strategies, and strategies for avoiding "vendor lock-in," would be very valuable for transit agencies and other communities in the Chicagoland region.
- ▶ **Develop and test MaaS platform through the Connect2Work Pilot Program.** The Village should continue to work with the RTA and Pace Connect to and/or through the C2W Pilot Program to design, test, and scale up innovative on-demand microtransit models.
- ▶ **ADA Accessible Services.** Both CTA and Pace provide ADA accessible transit options. All of CTA's buses are ADA compliant and Pace's accessible services include: ADA Paratransit, transferring to/from paratransit (including Dial-A-Ride), Pace Fixed Route Buses (accessible to those with disabilities), and a Dial-A-Ride program. Eligible riders can reserve a ride by making a pre-arranged trip via ADA Paratransit. Additionally, eligible riders can transfer to and from paratransit by receiving a Transfer Voucher when transferring between ADA Paratransit and/or Dial-a-Ride services and a fixed route bus. The Dial-A-Ride program would be in partnership with the Village of Bedford Park with specified boundaries and eligibility requirements.

# MOTORIST & FREIGHT NETWORK



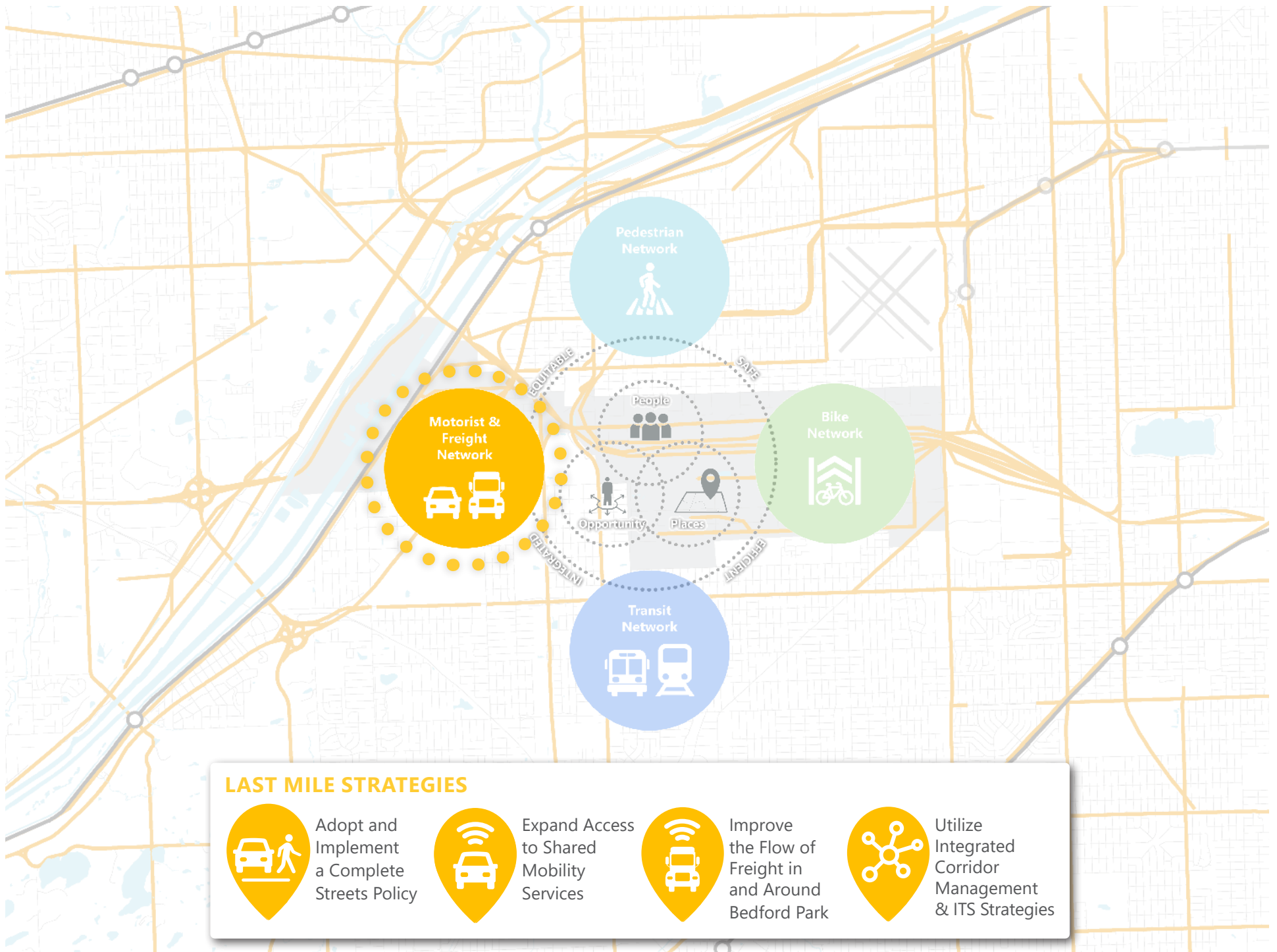
Congestion was the #1 commuter concern identified through the Study. The Bedford Park area's severe road congestion is caused by a high reliance on solo driving and freight traffic. Many of the last mile strategies proposed in this plan, if implemented, could reduce congestion by making it easier for people to get to work by means other than driving alone. The Village should therefore create a network of smart and complete streets that integrate the Pedestrian, Bike, and Transit Network improvements proposed in this plan. The Village should also formalize and streamline the process for planning, designing, operating, and maintaining streets that enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of travel. The Motorist and Freight Network is a critical component of an integrated and equitable mobility system, and like the other networks, the Motorist and Freight Network is comprised of an array of physical, digital, and operational components and sub-systems that support the safe and efficient transportation. Elements of the Motorist and Freight Network include: **pavement markings | road signs | travel lanes | intersection monitoring and detection devices | adaptive traffic signals | emergency vehicle preemption (EVP) | transit signal priority (TSP) | dynamic message systems | close circuit television cameras (CCTV) | pedestrian push buttons and countdown signals | streetlights | freight rail networks | railroad crossings | truck routes | loading zones | distribution networks | and more...**

A smart and complete street is one that supports the safe and efficient movement of people and goods. A complete street, however, goes beyond ensuring a high level of service for a given road segment. They allow buses to run on time and make it safe for people to walk and bike to and from train stations and bus stops. Creating smart and complete streets in Bedford Park and broader Bedford Park area will be critical for ensuring shared economic prosperity, and it will require planners and engineers to expand their definitions of a great street, including how they understand, operationalize, and plan for efficiency, safety, and equity. Bedford Park should adopt an industrial area-focused complete streets policy that codifies the goals and strategies of this action plan. The Village should then implement complete streets projects incrementally and strategically. The Village should partner with area businesses to expand access to ridesourcing, ridesharing, and carsharing services that reduce dependence on SOVs. The Village should continue to partner with regional partners to improve the flow of freight in and around Bedford Park-Clearing Industrial Area through the implementation of high-priority CREATE program projects. Finally, the Village should deploy and utilize integrated corridor management technologies and ITS, that support the smart movement of people and goods and facilitate a safe and seamless transition to new connected and autonomous vehicle (CAV) technologies. This chapter provides a map and description of recommended last mile strategies and actions for the Bedford Park area's Motorist and Freight Network. Additional design guidance for each action recommendation is provided in **Appendix B**.

## GOAL

# CREATE A NETWORK OF SMART AND COMPLETE STREETS





**LAST MILE STRATEGIES**



Adopt and Implement a Complete Streets Policy



Expand Access to Shared Mobility Services

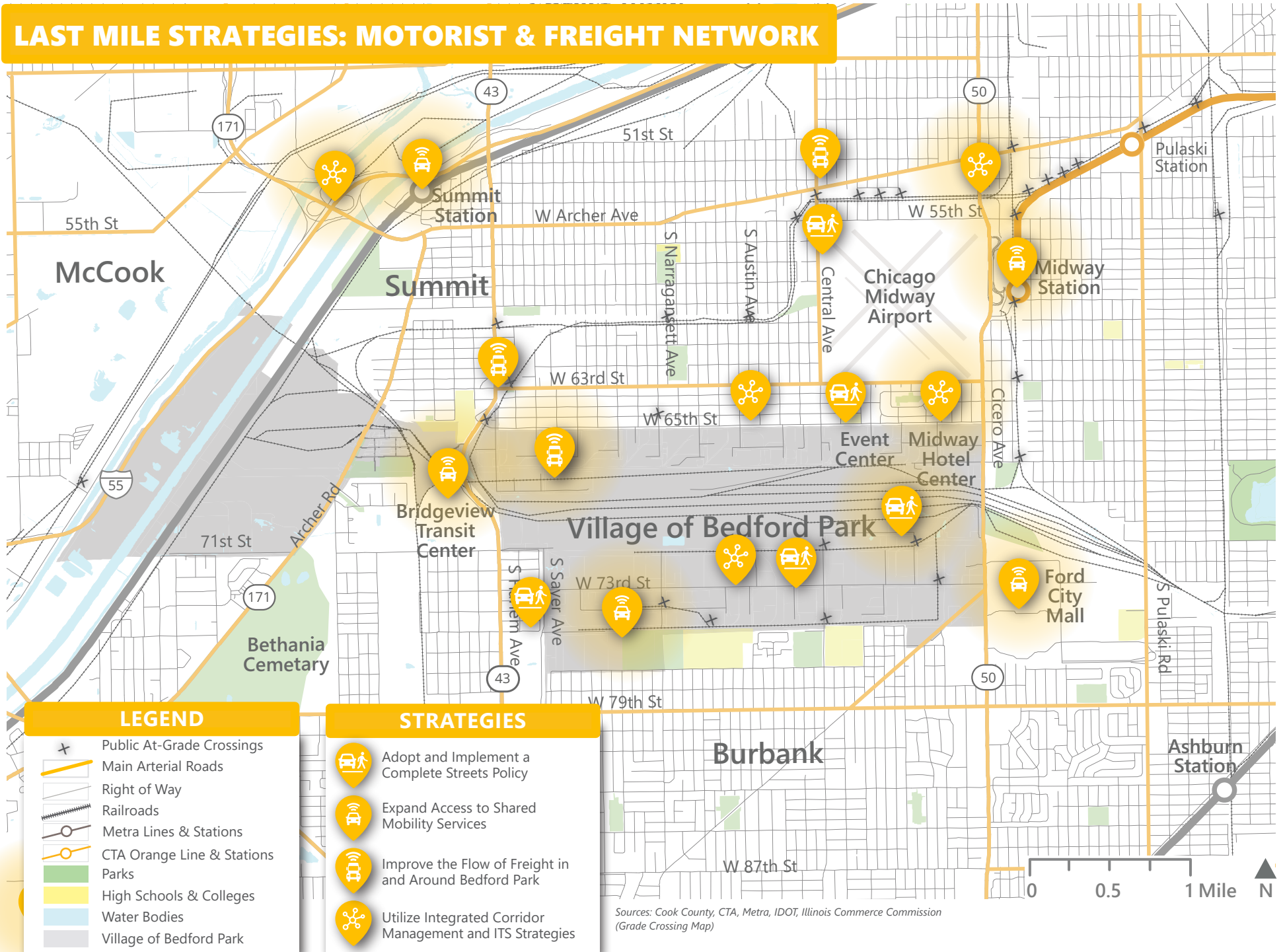


Improve the Flow of Freight in and Around Bedford Park



Utilize Integrated Corridor Management & ITS Strategies

# LAST MILE STRATEGIES: MOTORIST & FREIGHT NETWORK



## LEGEND

- Public At-Grade Crossings
- Main Arterial Roads
- Right of Way
- Railroads
- Metra Lines & Stations
- CTA Orange Line & Stations
- Parks
- High Schools & Colleges
- Water Bodies
- Village of Bedford Park

## STRATEGIES

- Adopt and Implement a Complete Streets Policy
- Expand Access to Shared Mobility Services
- Improve the Flow of Freight in and Around Bedford Park
- Utilize Integrated Corridor Management and ITS Strategies

Sources: Cook County, CTA, Metra, IDOT, Illinois Commerce Commission  
(Grade Crossing Map)

0 0.5 1 Mile N



## ADOPT AND IMPLEMENT A COMPLETE STREETS POLICY

- ▶ **Create a Smart and Complete Streets Framework Plan for the Bedford Park Area.** The Village should adopt a Complete Streets Framework Plan that responds to the unique opportunities and challenges of its industrial area. Coordinated projects, policies, and programs should encourage multimodal projects, such as those presented in this plan, and promote the use of ITS technologies.
- ▶ **Implement Complete Streets Improvements Incrementally.** The Village should incrementally, but strategically, implement traffic calming, intersection improvements, and other Complete Streets measures that make Bedford Park's roads safe and accessible for all users. Projects should be prioritized in areas where there is a conflict between pedestrian and motorist traffic (e.g., W 65th Ave and S Linder St, W 73rd St and Central Ave, W 75th St and S Sayre Ave). Complete Streets improvements should be integrated and coordinated with other proposed improvements to the Pedestrian, Bike, and Transit Networks wherever feasible.
- ▶ **Continue Bedford Park's exemplary Operations and Management Practices.** The Village should continue to invest in preventative maintenance and ongoing ("O&M") efforts (e.g., pothole repairs, road resurfacing, pavement markings repair). The new projects recommended in this plan should be incorporated into the Village's ongoing capital improvement planning, annual budgeting, and O&M activities.



## EXPAND ACCESS TO SHARED MOBILITY SERVICES

- ▶ **Connect2Work First-Mile, Last Mile Pilot Program.** The Village should launch the C2W Pilot Program to test innovative FLM solutions, including those that expand ridesourcing, ridesharing, and carsharing options.
- ▶ **Late Night Service.** The Village should incorporate late night service into the mix of solutions tested through the C2W Pilot Program. Late night service can be designed to provide commuters with door-to-door service within the pilot area or connect them to transit stops with 24/7, late night, or early morning service.
- ▶ **Expand Access to Shared and Pooled Rides.** The Village should promote shared and pooled rides through the C2W Pilot Program. The Village could partner with TNCs like Uber, Lyft, and Via, to offer subsidies for commuters within the pilot service area and those traveling to and from transit stations and mobility hubs.
- ▶ **Expand Carsharing Services.** The Village should partner with employers and carsharing companies to expand carsharing throughout the Village. New carsharing services and locations will provide workers a vehicle for quick trips and thus reduce the need for commuters to own their own vehicle.



## IMPROVE THE FLOW OF FREIGHT IN AND AROUND BEDFORD PARK

- ▶ **Implement High Priority Grade Crossing Projects.** There are 40 at-grade rail crossing delay locations within the Bedford Park area (See Page 26 and Figure 3.12 in the Study). Bedford Park should continue to partner with Chicago Metropolitan Agency for Planning (CMAP), SCM, the Belt Railway Company of Chicago (BRC), the Illinois Commerce Commission (ICC) and others to advance the following CREATE Program projects: GS1 (63rd St/Harlem Ave); GS2 (Central Ave/54th St); GS9 (Archer Ave/Kenton Ave); B9/EW1 (Argo), and P6 (Canal).
- ▶ **Create a Center for Smart Logistics.** Given the volume of freight that originates from and flows through the Bedford Park-Clearing Industrial Area, Bedford Park could be an ideal location for a Center for Smart Logistics. The Center for Smart Logistics will test and scale up technologies that improve the flow of freight with intermodal facilities and along the shared right-of-way. Creation of the Center for Smart Logistics will help position Bedford Park as a national leader among industrial areas seeking to provide integrated and equitable mobility (see **Introduction, Page 3**).



## UTILIZE INTEGRATED CORRIDOR MANAGEMENT AND ITS STRATEGIES

- ▶ **Utilize Transportation Demand Management Strategies.** TDM is the application of strategies and policies to reduce travel demand or to redistribute this demand across space or time. Many of the recommendations put forth in this plan are TDM strategies.
- ▶ **Utilize Integrated Corridor Management Strategies.** The Village should work with IDOT, surrounding municipalities, and other partners to implement integrated corridor management systems along key arterials and intersections in the Bedford Park area (see map on page 26). The Village should integrate ITS technologies where appropriate.
- ▶ **Support the Transition Towards Connected and Autonomous Vehicles.** Bedford Park should support the transition towards CAVs through strategies that promote safe and equitable, and seamless urban mobility. Strategies could include developing the Center for Smart Logistics, piloting CAV technologies, deploying a low-speed people mover along local commuter routes, and more.

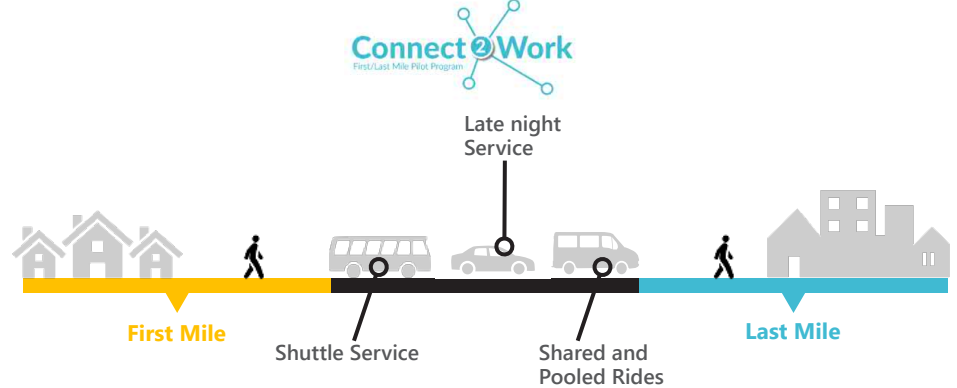
# DESIGN GUIDANCE: MOTORIST & FREIGHT NETWORK

## ADOPT AND IMPLEMENT A COMPLETE STREETS POLICY



- ▶ **Create a Smart and Complete Streets Framework Plan for the Bedford Park Area.** Complete streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained in ways that enable safe, convenient and comfortable travel access for all users, regardless of their age, abilities, or transportation mode. Many recommendations of this Plan will require a broader plan that equips various public, private, and civic sector partners with a framework for coordinated action. Creating a “network of smart and complete streets” will require the implementation of projects, policies, and programs in coordination with neighboring municipalities, IDOT, Cook County, and other partners. The Village should therefore explore opportunities (e.g., funding, partnerships, technical assistance) to develop a smart and complete streets Framework Plan for the Bedford Park Area.
- ▶ **Implement Complete Streets Improvements Incrementally.** Complete streets improvements include sidewalk upgrades, new bike and micromobility facilities installation, urban design that contributes to a more vibrant pedestrian environment, and more. This plan proposes a variety of multimodal improvements that when implemented together, can create a “Complete Street”. Complete streets need not be implemented all at one time. In fact, gradually testing complete streets elements through short-term, or “tactical” interventions is a proven method for gradually testing and scaling up solutions.
- ▶ **Continue Bedford Park’s Exemplary Operations and Management Practices.** Roads with high truck volumes will require frequent restriping and maintenance to ensure pavement markings are visible and potholes are patched in a timely manner. Bedford Park should develop a method to monitor, schedule, and replace markings that have deteriorated to ensure that a minimum level of reflectivity is maintained. Potholes should be patched as soon as possible, either as an emergency repair or incorporated into regular maintenance. See **Appendix B** for a list Federal Highway Administration references.

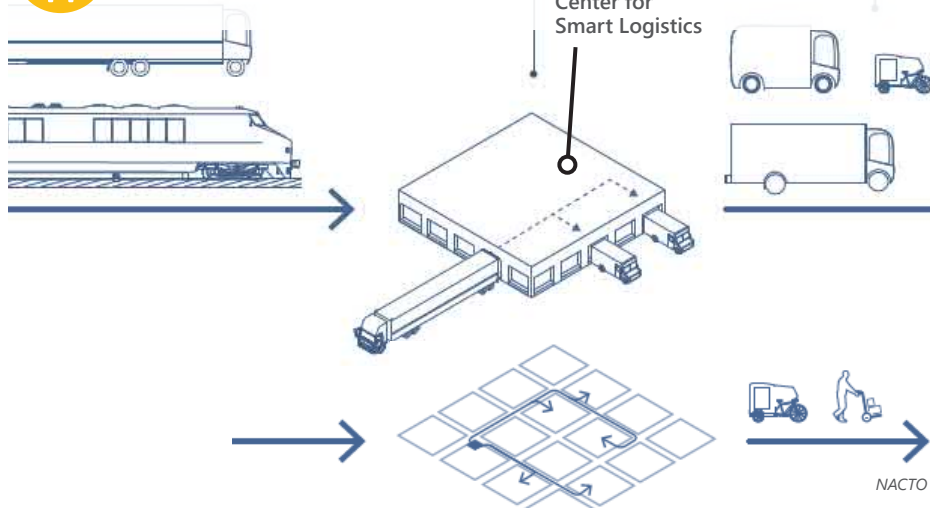
## EXPAND ACCESS TO SHARED MOBILITY SERVICES



- ▶ **Connect2Work First-Mile, Last-Mile Pilot Program.** The Village should procure, deploy, and evaluate a variety of last mile mobility solutions through the C2W Pilot Program. During C2W, the Village should evaluate the impact of new solutions on transit ridership and road congestion. Solutions that potentially increase road congestion should be discontinued. At the same time, the Village should evaluate the impact of TNC solutions to transit ridership and road congestion.
- ▶ **Late Night Service.** Lack of late night transit service was a key concern identified by employers and shift employees. The Village could expand late night service by offering a subsidy for shared TNC rides or an on-demand shuttle that connects workers to 24/7 transit service or directly to their home or neighborhood. The Village should work with employers to identify a sustainable funding model for late night services and other last mile solutions, such as a P3 in which costs are shared.
- ▶ **Expand Carsharing Services.** The Village could work with carsharing vendors that are already in the Chicagoland market to expand their service areas or place additional vehicles in the Bedford Park Area. Harmonizing regulations, permitting, and reporting with those in place in the City of Chicago and other adjacent jurisdictions (or creating regulatory reciprocity) can help support this effort by reducing the administrative overhead required of vendors and increasing vehicle utilization.
- ▶ **Expand Access to Shared and Pooled Rides.** Although not as space-efficient as transit, microtransit (e.g., vans, shuttles) and shared or pooled TNC rides (e.g., Uber Pool, Lyft Line) are preferable to solo driving trips. The Village should expand access to shared mobility services through the C2W Pilot Program. A MaaS platform could make information about all viable services (and ride discounts) available in one place and across trip planning platforms and apps (e.g., Google Maps, Transit App, Moovit, Uber, Lyft, Via, etc.).



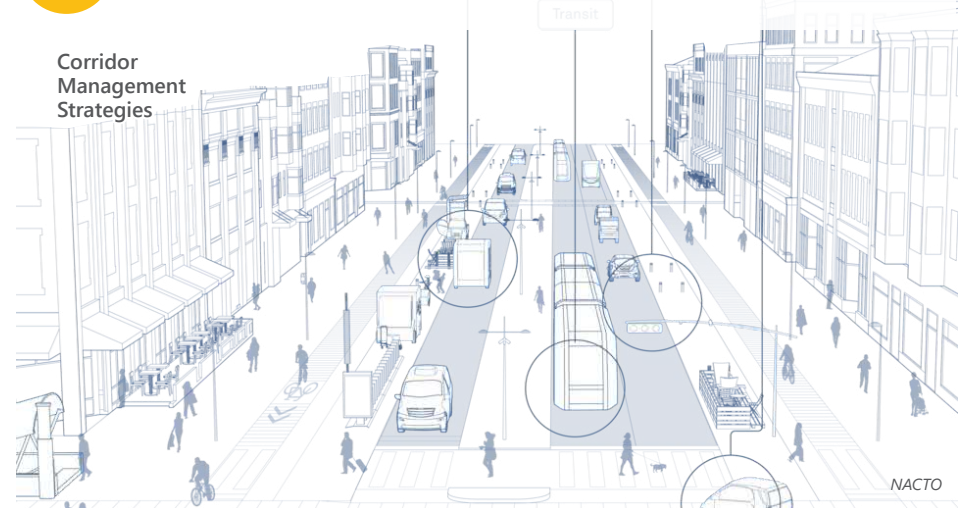
## IMPROVE THE FLOW OF FREIGHT IN AND AROUND BEDFORD PARK



- ▶ **Implement High Priority Grade Crossing Projects.** CREATE is a first-of-its-kind partnership between the U.S DOT, State of Illinois, Cook County, City of Chicago, Metra, Amtrack, and freight railroads aimed at implementing projects that will increase the efficiency and safety of the region's passenger and freight rail infrastructure. The Village should continue to work through this partnership to implement high priority projects that will ensure the safe and efficient movement of people and goods in the Bedford Park Area, including GSI, GS2, GS9, B9/ EWI, and PG. The Village should continue to work with CMAP and other partners to identify and secure funding for other large-scale and regionally-significant projects.
- ▶ **Create a Center for Smart Logistics.** The Center for Smart Logistics would be facility and public-private partnership designed to develop, test, and pilot the application of automated and green freight technologies, focusing specifically on the movements of goods within and between intermodal operations, manufacturing facilities, warehouses and/or e-fulfillment centers, using regional public or private transportation pathways.



## UTILIZE INTEGRATED CORRIDOR MANAGEMENT AND ITS STRATEGIES



- ▶ **Utilize Transportation Demand Management Strategies.** TDM reduces the number of vehicles traveling on roads by promoting alternatives to solo driving. These TDM strategies include concepts discussed in all four mobility networks such as walking, biking, transit, ridesharing, and adjusted work-hour scheduling.
- ▶ **Utilize Integrated Corridor Management Strategies.** Integrated Corridor Management Technologies include smart intersections, active arterial routing, active traffic management, dynamic parking management, and others. Ramp meters regulate traffic flow with a two-section signal light (red and green) to reduce congestion and increase driver safety. Smart intersections use short range communication system technology to detect 360 degrees of an intersection's road users, known as vehicle-to-everything technology. Active Arterial Management can be implemented through smart infrastructure systems that monitor and respond to dynamic traffic patterns, active signal retiming, and implementing CMAP's Smart Corridor concepts. Congestion pricing is a congestion mitigation approach that charges drivers utilizing roads that are subject to excess demand, thereby charging more at peak hours to reduce traffic congestion without increasing the road supply. Dynamic Parking Management allows for the management and tracking of available parking spots in parking facilities in real-time. Other ITS technologies that the Village should consider include: actuated traffic signals and traffic signals interconnects at traffic bottlenecks, and real-time information at bus stops and transit stations.
- ▶ **Support the transition towards Connected and Autonomous Vehicles.** The Village should implement strategies that ensure that CAV technologies are developed, tested, and deployed in a way that is safe, equitable, and integrated with other mobility systems.

# Implementation

## OVERVIEW OF IMPLEMENTATION STRATEGIES

Implementation of the last mile strategies and action recommendations proposed in this plan will require a concerted effort amongst numerous public, private, and civic sector partners at the local, regional, state, and federal levels (See Figure 6.1 and 6.2). Implementation of the last mile solutions proposed in this Plan will require an array of infrastructure, technological, operational, and policy interventions, each of which entail a unique series of steps. There are several high-level implementation strategies that the Village could focus on. These implementation strategies include the following:

- ▶ **Implement Last Mile Solutions ‘In-House’.** The Village can continue to implement high priority capital improvement projects and policy initiatives through existing budgeting and policy-making processes (e.g., capital improvement planning, budgeting, board approval, procurement, etc.). Additionally, the Village can incorporate the Last Mile Mobility Action Plan into its forthcoming comprehensive plan and five-year capital improvement plan.
- ▶ **Support the Implementation of Last Mile Solutions through Regional Partnerships.** The Village can continue to engage in regional coordination efforts (e.g., the SCM, CMAP committees, Resource Group) and public-private partnerships to implement or support regionally significant projects, policies, and programs.
- ▶ **Cultivate Favorable Market Conditions.** The Village has a range of tools that can be used to cultivate market conditions that support the implementation of projects that align with this plan. The Village can implement policies, provide incentives, and establish local priorities that support private sector activities that contribute to a more integrated and equitable mobility system. For example, the initial investment of public dollars in the C2W Pilot Program could catalyze the market and help identify sustainable strategies for funding a last mile solution(s) long-term. The Village can also streamline the permitting process or provide tax incentives to support private sector projects that support walking, biking, transit, and other shared modes of mobility.

Figure 6.1. Implementation Partners and Stakeholders

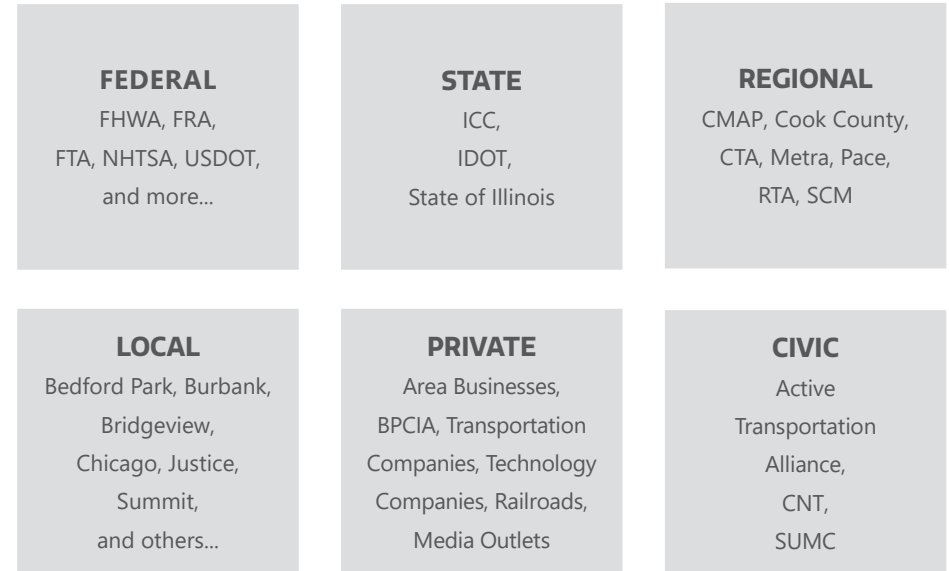


Figure 6.2. A Framework for Cross-Scale Coordination



Creating a more integrated and equitable mobility system in Bedford Park and the surrounding area will require creative combinations of all three strategies. The next pages provide a list of specific funding, financing, and technical assistance opportunities that the Village and their partners could apply for and leverage to support their implementation efforts.

The table below provides a list of various funding, financing, and partnership or technical assistance opportunities that can support the implementation of last mile solutions. Many of the funding, financing and technical assistance tools can support the implementation of last mile strategies and cations on one or more of the mobility networks. The implementation table also delineates which funding source can be utilized for capacity building and coordination.

Funding Source / Program(s)	Pedestrian Network	Bike Network	Transit Network	Motorist and Freight Network	Capacity Building and Coordination
<b>Funding and Financing Opportunities</b>					
<b>Village of Bedford Park</b> General Fund	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>CMAP/SCM</b> Surface Transportation Program / TAP	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Cook County</b> Invest in Cook / CDBG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Regional Transportation Authority</b> Access to Transit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>State of Illinois</b> Illinois Capital Budget / Walk-Bike Fund	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>State of Illinois - DCEO</b> Various Programs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>State of Illinois - IDNR</b> Various Programs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>State of Illinois - IDOT</b> SRTS / Various Programs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Rails to Trails</b> Rails to Trail Conservancy Grant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>State of Illinois - DCEO</b> Bedford Park Enterprise Zone	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Federal Highway Administration</b> CMAQ	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>USDOT</b> CRISI, BUILD, INFRA, TIFIA, RRIF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Federal Railroad Administration</b> Federal-State Funding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Federal Transportation Administration</b> AIM, Access and Mobility Grants	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Funding Source / Program(s)	Pedestrian Network	Bike Network	Transit Network	Motorist and Freight Network	Capacity Building and Coordination
Funding and Financing Opportunities continued...					
<b>Village of Bedford Park</b> TIF/Tax Incentives/Permitting/Others	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Public - Private Partnerships</b> Various structures	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>State of Illinois</b> TIF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Technical Assistance and Partnerships					
<b>CMAP / RTA</b> Local Technical Assistance / Community Planning	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Civic Sector Technical Assistance</b> Shared Use Mobility Center / Center for Neighborhood Technology / Active Transportation Alliance	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>SCM</b> Various Programs	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Active Transportation Alliance</b> Planning and Consulting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>State of Illinois – IDNR</b> Member Initiative Money	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<b>National Parks Service</b> Rivers and Trails Program	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



## FUNDING AND FINANCING OPPORTUNITIES

**Village of Bedford Park General Fund.** This is a municipal account, managed by the Village, to support the regular operating and administrative expenses incurred by the Village. These are funds that can be used when funds from other specified accounts are not eligible for use.

**CMAP/SCM Surface Transportation Program.** Each local Council of Mayors and the City of Chicago administer an Surface Transportation Program (STP) local program according to locally established methodologies. Local agencies that wish to participate in the STP local program must do so through their designated subregional council, according to the methodology of that council.

**Cook County Government Invest in Cook.** This program covers the cost of planning and feasibility studies, engineering, right-of-way acquisition, and construction associated with transportation improvements sponsored by local and regional governments and private partners. These projects should align with the five priorities outlined in Connecting Cook County and high-need communities generally do not require matching funds.

**Cook County CDBG.** Each year, the Bureau of Economic Development partners with the Department of Planning and Development to solicit grant applications for Community Development Block Grant (CDBG) and Emergency Solutions Grants funding through a competitive process. Eligible Activities: Capital Improvement/Demolition and Economic Development Projects; and Planning and Public Service/Planning Projects.

**Regional Transportation Authority Access to Transit Program.** The RTA launched the Access to Transit program in 2012 to provide funding for small-scale capital projects that improve access to the regional transit system for pedestrians and bicyclists. Eligible projects include small-scale, bike and pedestrian infrastructure improvements that are based on recommendations from Community Planning or LTA studies with transit-related components. Eligible projects must be able to demonstrate the ability to increase ridership, improve access to existing transit services and contribute to reduced vehicle emissions.

**State of Illinois – DCEO Bedford Park Enterprise Zone.** The Bedford Park Enterprise Zone was established to assist business development in Bedford Park, Summit, Justice and Bridgeview, Illinois, by providing resources and incentives to commercial, industrial and retail businesses. The Bedford Park Enterprise Zone covers certain geographical properties in the above mentioned communities. New construction and expansion of commercial and industrial projects in the Zone may qualify for significant real estate, sales tax, and construction cost savings.

**State of Illinois – DCEO Various Programs.** The Illinois Department of Commerce administers several programs and services that are designed to strengthen Illinois communities, improve energy efficiency, build neighborhoods, and create opportunities. This includes rental assistance, housing rehabilitation, utility bill assistance, infrastructure improvements to encourage economic development, emergency services, and disaster recovery services. Some programs do have a match requirement; generally high need/low-income communities receive a reduced or completely bypassed match requirement.

**State of Illinois – IDNR Various Programs.** The Illinois Department of Natural Resources manages an extensive list of funding programs and opportunities designed to preserve, acquire, maintain, and improve open spaces, parks, and trail facilities. Some of these programs include; Park and Recreational Facility Construction Grants (PARC), Open Spaces Lands Acquisition & Development (OSLAD), Federal Recreational Trails, Bike Path Grant Program, and more. Some grants may have match requirements, although many will reduce or bypass the match for low-income communities.

**State of Illinois – IDOT Various Programs.** The Illinois Department of Transportation offers a wide range of funding programs to repair, maintain, extend, improve, make safer various roadways throughout the State. Some of the programs include; the Illinois Transportation Enhancement Program (ITEP), Safe Routes to School, Highway Safety Improvement Program, and more. Some programs have a match requirement, though typically low-income communities will receive a reduced or entirely bypassed match amount.

**Last Mile or Congestion Mitigation Fee/Tax.** A Last Mile or Congestion Mitigation Fee/Tax is a tax on the fares paid to rideshare or microtransit companies for rides within a certain jurisdictional boundary. Revenue generated from this tax is typically dedicated to funding transit and transportation safety improvements. Research has showed that introducing similar programs can help to reduce the number of individual rides and can encourage use of shared services.

**National Parks Service Rivers, Trails, and Conservation Assistance.** Also known as the Rivers and Trails Program or RTCA, this program is the community assistance arm of the National Park Service. RTCA staff provide technical assistance to communities so they can conserve rivers, preserve open space, and develop trails and greenways. The RTCA program implements the natural resource conservation and outdoor recreation mission of the National Park Service in communities across America. August 1 is the deadline each year for the next round of assistance. Applicants are strongly encouraged to discuss project ideas with RTCA staff before submitting an application.

**Rails to Trails RAILS to Trails Conservancy Grant Program.** Through our grant programs, RAILS-to-TRAILS Conservancy (RTC) emphasizes strategic investments that support significant regional and community trail development goals. Many of our funded projects are small in scope and scale and can be hard to finance within traditional funding streams. These projects are essential to building, maintaining and managing the trails that so many of us love and that communities rely upon for recreation, transportation and economic vitality. Through these relatively small investments, we are able to help complete and connect trails, improve the trail user experience and support local organizations dedicated to new and existing trails across the country.

**TIF.** Property and business owners often benefit from the construction of new or improved transit through increased rents, sales, land values, and increased access to talent. Value capture is a type of public financing that recovers some or all of the value that public infrastructure generates for private landowners. One value capture strategy already practiced in Illinois, known as tax increment financing (TIF), is commonly used for a variety of public investments. Illinois municipalities can use TIF funds to support transportation improvement projects. For example, TIF has already been used to improve both suburban and City of Chicago transit stations.

## TECHNICAL ASSISTANCE AND PARTNERSHIPS

**Volunteer Program Resident Surveys.** To initially assess the existing condition of community facilities and amenities a survey was distributed to collect responses. This is a proposed strategy for moving forward with collecting feedback from residents. Asking residents to self-rate local sidewalks and trails is also proposed to collect further feedback on existing conditions.

**CMAP Local Technical Assistance.** CMAP has initiated more than 200 local projects with local governments, nonprofits, and intergovernmental organizations to address local issues at the intersection of transportation, land use, and housing, including the natural environment, economic growth, and community development.

**Shared-Use Mobility Center.** When it comes to shared mobility, there is no one-size-fits-all solution. SUMC's work advances a connected, universal, equitable, environmental, and multimodal transportation system through their key areas of focus are Research, Technical Assistance, Strategic Planning & Implementation, and Facilitating Public & Private Partnerships. SUMC has provided technical expertise in support of Bedford Park's Last Mile Mobility Study, Action Plan, and C2W Pilot Program.

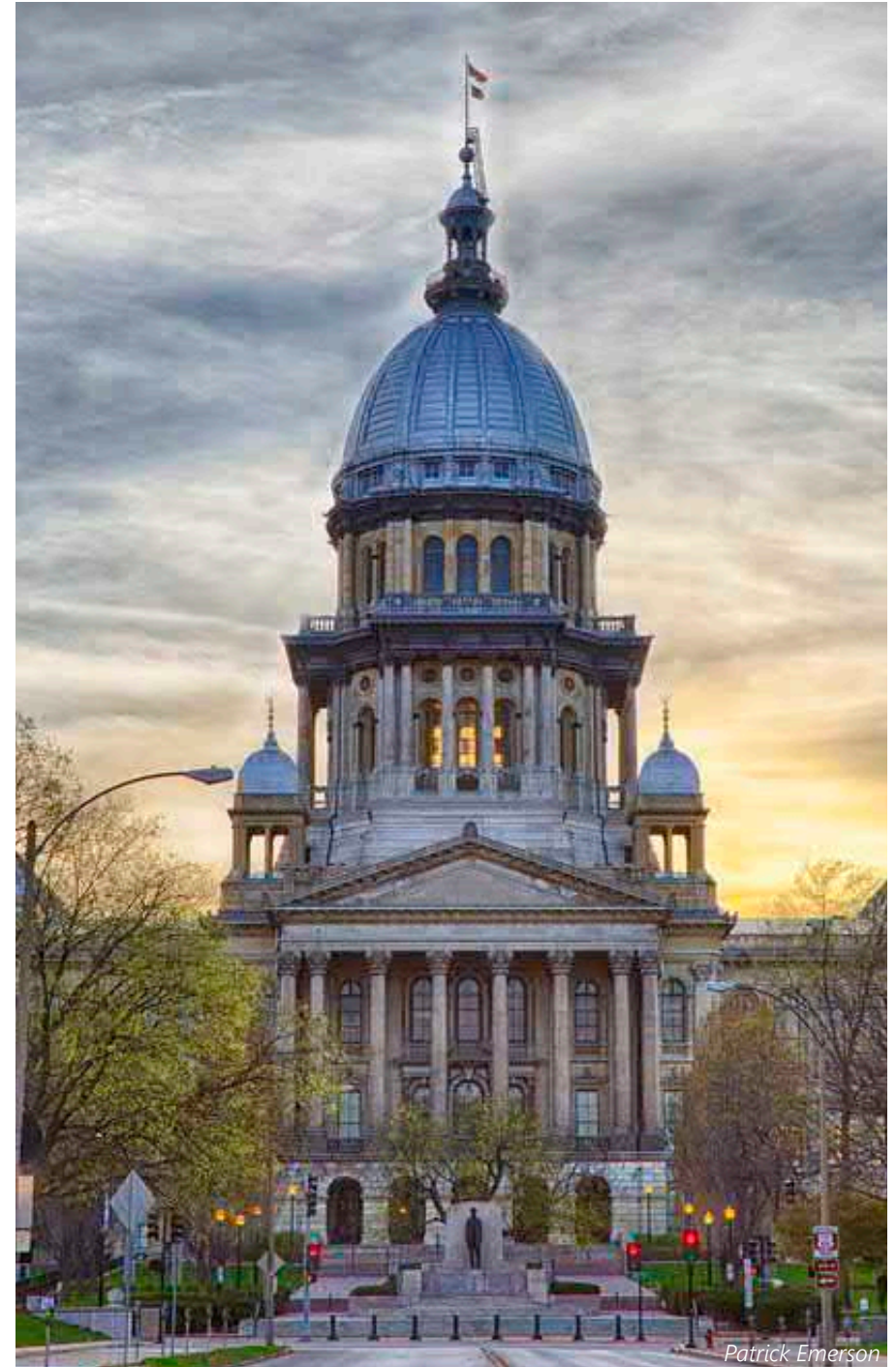
**Southwest Conference of Mayor (SCM).** The SCM is made up of twenty-one southwest suburban communities. The organization's mission is to work together for the betterment of the entire southwest suburban area. Through its various committees, the SCM has supported transportation and road improvements, economic development, legislative initiatives, public works cooperatives, utilities upgrades, and emergency preparedness initiatives. The SCM is an excellent venue for facilitating the intergovernmental cooperation needed to implement many of the recommendations put forth in this plan.

**Active Transportation Alliance.** Every community can benefit from a friendly, safe bicycling and walking environment. At the Active Transportation Alliance, that's a core belief. Our planning and engineering staff have the experience, credibility and talent to take on any bicycle or pedestrian planning project that your community needs. Some of our services include bicycle master planning and policy development, pedestrian master planning, bikeway planning and design, GIS network analysis and mapping, bicycle education and safety programming and bicycle-related technical assistance.

**State of Illinois – IDNR Member Initiative Money.** State legislators have discretionary funds that can be used for projects of their choice. They can be powerful allies for pulling together and providing resources for projects that span municipalities. When the Village of Roselle was seeking support for the design and construction of a pedestrian bridge crossing Lake Street (a busy, multi-lane arterial) to the Village of Bloomingdale, the Senator and Representative for the area, former Senator Doris Karpziel and Representative (now Senator) Carole Pankau provided \$250,000 each—the final pieces of the funding puzzle on this project. The bridge was completed in 2007.

**Public Private Partnerships.** A Public Private Partnership (“P3s”) is a contractual arrangement formed between any public and private sector partners. Typically, these arrangements involve a governmental agency contracting with a private partner to renovate, construct, maintain, or manage a facility or system that provides some form of public service. Under these arrangements the government agency may retain ownership of the public service, but the private partner generally invests capital to design and develop the property. In addition to sharing the resources, each party shares in the risks and rewards in the delivery of the public service.

**TIFIA Loans.** The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. TIFIA can help advance qualified, large-scale projects that otherwise might be delayed or deferred because of size, complexity, or uncertainty over the timing of revenues. Many surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Each dollar of Federal funds can provide up to \$10 in TIFIA credit assistance - and leverage \$30 in transportation infrastructure investment.



*The Illinois Capital Building*

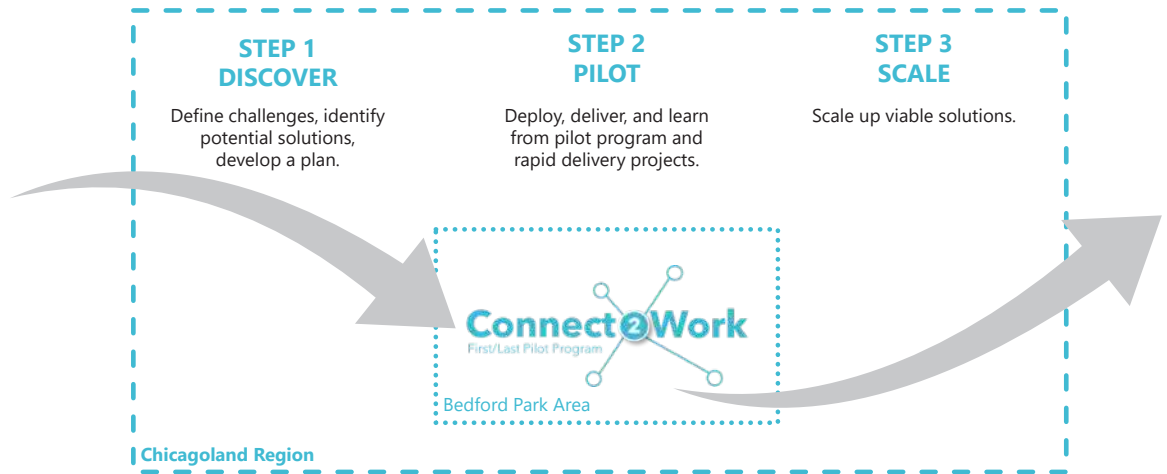
*Patrick Emerson*

# Conclusion

This plan is intended to help make it easier for people to get to work in Bedford Park. This can be accomplished by implementing an array of last mile strategies and actions, which over time, will create a more integrated and equitable mobility system in Bedford Park and the region. Altogether, this plan outlines 16 last mile strategies, including 4 for each mobility network and nearly 50 specific last mile actions. These actions range from pragmatic recommendations, such as repairing the existing sidewalk network, to more innovative ideas, such as the introduction of new First-Mile/Last-Mile, On-Demand Microtransit and MaaS services. Regardless of how pragmatic or innovative an individual recommendation may be, all the actions in this plan are designed to work together contribute to a more integrated and equitable mobility system that achieves the Village's long-term vision and goals.

Implementation of many of the recommended actions goes beyond what Bedford Park can accomplish alone. Many of the recommended projects, programs, and policies will therefore require a concerted effort amongst the Village of Bedford Park, neighboring municipalities, the business community (including area businesses and private transportation and technology companies), Cook County, IDOT, CTA, Pace, RTA, and other local and regional partners. This plan provides a clear path forward for coordinating efforts locally and regionally.

A comprehensive matrix of last mile strategies and actions, including useful implementation resources, is provided in **Appendix A**. The Village can use this matrix to prioritize and phase projects, programs, and policies over the short-term, medium-term, and long-term. In the immediate future, however, the Village should prioritize the following rapid response efforts, which were identified through this last mile study and action planning process:



- ▶ **Launch the *Connect2Work* Pilot Program.** At the time of publication of this plan, the Village has already published a Request for Qualifications (RFQ) for the C2W Pilot Program: A FLM Pilot Program for the Bedford Park Area. The C2W pilot program was driven by the findings of the *Bedford Park Last Mile Mobility Study* and aligns with the goals, strategies, and actions outlined in this *Last Mile Mobility Action Plan*. Moving forward, the Village should evaluate and select FLM mile transportation service and technology providers based on the firm(s) general capacity, the alignment between their proposed service and the C2W Pilot Program goals and program parameters, and the cost competitiveness of the proposed solutions. **Appendix C and D** include resources that support the C2W Pilot Program including a matrix of last mile solution service models and the C2W Marketing and Branding Strategy, respectively.
- ▶ **Adopt and implement this Plan.** The Village of Bedford Park should formally adopt this plan and integrate the proposed recommendations into the Village's forthcoming comprehensive plan and annual capital improvement planning and O&M activities. Too often, well-intended plans sit and gather dust on the shelves of Village Hall, both figuratively and literally. Bedford Park's last mile challenges are too severe, and the opportunity to position the Village as a national leader amongst municipalities that are tackling these challenges is too clear to stop at the point of plan delivery. Given Bedford Park's track record and the fact that the Village has already implemented several rapid response actions including improving the pedestrian crossing at W 65th St and Sayre Ave, constructing new sidewalks, initiating the pilot program, and others, it does not seem likely that implementation stall is going to be a problem. Nonetheless, the Village should take efforts to codify this plan integrate its recommendations into the Village's internal decision-making, budgeting, and work-planning processes. The Village should also consider developing design guidelines that shape future development that aligns with recommendations in this Plan.

- ▶ **Apply for funding opportunities.** There is an array of federal, state, and regional funding opportunities that can be used to advance many of the recommendations in this plan. The implementation chapter includes a table of various funding, financing, and technical assistance opportunities, but there are several forthcoming opportunities that the Village should prioritize including: IDOT’s transportation planning grants; the 2020 round of Invest in Cook, the Surface Transportation Program; and the USDOT’s BUILD and INFRA funding programs. This plan includes a wealth of useful information including a list of classified projects, project descriptions, project limits, and more, which can be packaged into a grant application. The Village should translate the recommended last mile strategies and actions into specific proposals for federal, state, and regional funding opportunities.
- ▶ **Continue to convene the Bedford Park Last Mile Resource Group.** Bedford Park’s Last Mile Resource Group, which consists of Village staff and leaders, and representatives from area businesses, transit agencies, Cook County DOT, and other local and regional partners, is comprised of the stakeholders and partners that are necessary to refine, prioritize, and advance the recommendations outlined in this plan. Moreover, many of these partners represent agencies with the mandate and funding and financings mechanisms necessary to implement proposed last mile actions at the County, regional, and state levels. Indeed, full implementation many of the recommendations in this plan will require action at all these levels, but Bedford Park can drive and inform these higher-level projects, programs, and policies by taking action at the local level. The Resource Group can help accelerate the implementation of actions in Bedford Park by identifying potential resources and translating between different levels of transportation governance.
- ▶ **Secure a dedicated revenue stream for implementing first-mile/last-mile and congestion-mitigation projects, programs, and policies.** Cook County funds were used to complete Bedford Park’s *Last Mile Mobility Study*, develop this action plan, and launch the C2W Pilot Program. Indeed other county, regional, state, and federal funding sources will likely be needed to catalyze and get many of the recommended last mile actions off the ground. However, sustained action towards a more integrated and equitable mobility system in Bedford Park and the broader region will require funding and financing mechanisms that goes beyond what can be secured through annual, government or philanthropic funding opportunities. Grants and other

government-based funding and technical assistance opportunities although necessary, are not sufficient to plan, design, construct or implement, maintain, and adapt the full array of last mile strategies and actions presented in this plan. The Village should therefore continue to work with area businesses, transit agencies, and other regional partners to identify potential P3 opportunities. The goal of any future P3s should be to resolve the funding gap necessary for the delivery of a last mile solution in a way the equitably distributes project risks and benefits between public and private actors. For example, the Village should not (and cannot) be responsible for covering the full costs associated with launching and sustaining a last mile shuttle program. Conversely, an individual employer’s efforts to establish a employer-specific shuttle, although commendable, fails to capture the efficiencies and economies of scale that could be attained through a P3 in which the cost of a village-wide shuttle are equitably shared between all businesses in Bedford park and other public entities. One potential P3 strategy could include developing a local dedicated revenue stream through a “last mile” or “congestion mitigation” tax or fee, which is assessed Village-wide based and which can be used to leverage a low interest loan through the USDOT’s TIFIA or other similar financing mechanism at the state or regional level. Identifying and establishing such a P3 should be a priority that is advanced through the C2W Pilot Program (see Appendix E).

The Village’s efforts to implement this plan will improve the last mile journey for nearly 26,000 employees who commute to and from Bedford Park every day. The potential mobility, economic, and learning benefits of this plan, however, can go beyond Bedford Park and even the broader Bedford Park Area. This plan engages with and proposes solutions for many mobility challenges that other municipalities, counties, transit agencies, and regional actors are dealing with across the country. In addition to implementing this plan at the local level, the Village should continue to share lessons-learned through regional collaboratives, such as the Bedford Park Last Mile Resource Group. In doing so, Bedford Park will help secure the Village’s position as an industrial anchor and employment center for the Chicago region—by improving workers’ access to opportunity—while also becoming a national model for industrial areas seeking to provide integrated and equitable commuter options.

PEDESTRIAN NETWORK IMPLEMENTATION

Strategy	Code	Actions	Project Location(s)
Maintain and Repair Pedestrian Network	P1.1	Conduct a Village-Wide Sidewalk Assessment	Village of Bedford Park
	P1.2	Identify and Repair High Priority Sidewalks	South side of W 65th St from S Lorel Ave to Central Ave*; West side of S Cicero Ave from W 67th St W 73rd St*; North side W 65th St of S LaVergne Ave to Latrobe Ave
	P1.3	Improve Snow Removal Practices	South side of 65th St from S Cicero Ave to S Old Harlem Ave*; North side of 73rd St from S Cicero Ave to S Sayre St
	P1.4	Install Green Stormwater Infrastructure	Prioritize locations where locations where repetitive street flooding is a problem
Implement Targeted Crossing Improvements	P2.1	Install and Maintain ADA Curb Ramps, Tactile Pads, and High Visibility Crosswalks	73rd St from S Cicero Ave to S Sayre Ave*; W 73rd St and S Sayre Ave*; W 75th St and S Sayre Ave*; W 65th and S Linder Ave (Bedford Park Event Center and Hancock School sites)*; W 73rd St and S Central Ave*; W 65th St and S Austin Ave; W 65th St and S Sayre Ave; W 65th and S Austin Ave; W 65th St and S Melvina Ave; W 65th St and S Cicero Ave; W 73rd St and S Cicero Ave; S Harlem Ave and W 73rd St; S Archer Rd and entrance drives to ACH Food and CC Wagner & Company
	P2.2	Install Accessible Pedestrian Countdown Signals with leading pedestrian intervals	W 73rd St and S Sayre Ave*; W 75th St and S Sayre Ave*; W 65th and S Linder Ave (Bedford Park Event Center and Hancock School sites)*; W 73rd St and S Central Ave*; S Cicero Ave and W 73rd St; S Cicero Ave and S State Rd
	P2.3	Install Pedestrian Refuge Islands Where Appropriate	W 65th and S Linder Ave (Bedford Park Event Center and Hancock School sites)*; W 73rd St and S Sayre Ave; W 73rd St and S Cicero Ave; W 63rd St and S Cicero Ave
	P2.4	Install Curb Extensions Where Appropriate	W 65th and S Linder Ave (Bedford Park Event Center and Hancock School sites)*; W 65th St from S Cicero Ave to Old Harlem Ave; W 73rd St from S Cicero Ave to S Sayre Ave
Expand the Pedestrian Network	P231	Connect Gaps in Sidewalk Network	North side of W 73rd St from ComEd Substation (5702 W 73rd St) to Mason Ave*; South side of W 65th St from S LaVergne Ave to S Lorel Ave*; West side of S Cicero Ave from W 73rd St to S State Rd*; North side of W 65th St from Latrobe Ave to S Lockwood Ave; North side of W 65th St from S Austin Ave to S Melvina Ave; North side of W 65th St from S Natchez Ave to S Nashville Ave; North side of W 65th St from S Normandy to S Oak Park Ave; North side of W 65th St from S Sayer to S Nottingham Ave; East side of S Harlem Ave from W 65th St/S Old Harlem Ave to W 63rd St/S Harlem Ave
	P3.2	Widen Sidewalks and Create Buffer Zones	North side of 73rd St from S Cicero Ave to S Sayre St*; South Side of W 65th St from Cicero Ave to S Central Ave
	P3.3	Formalize Pedestrian Cut-Throughs and Improve Internal Parking Lot Circulation	S Harlem Ave and W 75th St to parcel carrier district at Sayre Ave and W 75th St*; Bedford Park's commercial district along S Cicero Ave and W 73rd St*; Connect S Narragansett Ave Ave to Narragansett Park
Install Shared Mobility and Other Amenities	P4.1	Rationalize and Regulate Transportation Network Company Pickup and Drop-Off Activities	Bedford Park's Commercial District; W 65th and S Linder Ave (Bedford Park Event Center and Hancock School sites)*; Mobility Hubs (i.e., Midway Hotel Center; Ford City Mall, Bridgeview Transit Center; nearby CTA and Metra stations)
	P4.2	Install Pedestrian-Scaled Lighting	73rd St from S Cicero Ave to S Sayre Ave*; W 65th St from S Cicero to Old Harlem Rd
	P4.3	Install More Seating and Weather Protection	Bus stops along S Cicero Ave and S Harlem Ave*; W 65th St and S Linder Ave; W 65th St and S Sayre Ave

\* Delineates a priority project

Lead(s)							Phasing				Goal Alignment			
	Village	Businesses	Cook County	IDOT	Transit Agencies	Regional Partners	Short-Term (0-1)	Medium-Term (1-3)	Long-Term (3+)	Ongoing	Goal 1	Goal 2	Goal 3	Goal 4
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>

**BIKE NETWORK IMPLEMENTATION**

Strategy	Code	Actions	Project Location(s)
Install Conventional Bike Lanes	B1.1	Create Neighborhood Greenways	63rd St Bikeway (W 63rd St from S Central Park Ave to Archer St); Narragansett Ave Bikeway (S Narragansett Ave from W 52 St to 65th St S Archer Ave); Austin Ave Bikeway (S Austin Ave from S Archer Ave to W 65th St); Central Ave Bikeway (S Central Ave from W 51st St to W 65th St); Central Ave Bikeway (Both sides of Central Ave from W 73rd St to W 83rd St in Burbank); Narragansett Ave Bikeway (Both sides of S Narragansett Ave from W 73rd St to 83rd St in Burbank)
	B1.2	Install Colored Bike Facilities	At key intersections (e.g., intersections with high AADT counts or intersections along a high crash corridor) along the bikeways listed in B1.1
	B1.3	Install Bikeway Signage	Along bikeways listed in B1.1
	B1.4	Install Bike Racks and Corrals	At key employment centers, transit stops, popular retail locations, and other points of interest (e.g., schools, parks, Village Hall, trail entrances, entertainment districts, etc.)
Install Protected Cycle Tracks and Bike Trails	B2.1	Create Regional Bikeways and Micromobility Corridors	Bridgeview Transit Center - Ford City Mall Bikeway; I&M Trail Extension; 63rd St Bikeway
	B2.2	Support the I&M Canal Trail Extension Project	Bedford Park Area
	B2.3	Promote Biking and Micromobility as a Commuter Option	Bedford Park Area
Expand Bikesharing Services	B3.1	Partner with Divvy	Bedford Park Area
	B3.2	Identify Candidate Bikesharing Station Locations	Bedford Park Area; Potential bikesharing stations or dockless bike hubs include: W 65th and S Central Ave; W 65th and S Central Ave; W 65th and S Austin Ave; W 65th and S Narragansett Ave; W 65th and S Linder Ave; W 73rd and Central Ave; W 74th St and S Narragansett Ave
	B3.3	Promote Divvy for Everyone	Bedford Park Area
Pilot and Expand Micromobility Services	B4.1	Launch a Micromobility Pilot Program	Bedford Park Area
	B4.2	Scale Up Micromobility Services	Bedford Park Area
	B4.3	Install Micromobility Supportive Infrastructure	Bedford Park Area



Lead(s)											Phasing				Goal Alignment			
	Village	Businesses	Cook County	IDOT	Transit Agencies	Regional Partners	Short-Term (0-1)	Medium-Term (1-3)	Long-Term (3+)	Ongoing	Goal 1	Goal 2	Goal 3	Goal 4				
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>				

TRANSIT NETWORK IMPLEMENTATION

Strategy	Code	Actions	Project Location(s)
Optimize Bus Routes and Schedules	T1.1	Provide Feedback to CTA and Pace Regarding Shift Change Times and User Requests	Bedford Park Area
	T1.2	Work with Pace and CTA to Align Bus Schedules with Shift Changes	Potential bus schedule changes include: additional evening eastbound buses along the CTA's 165 W bus route (e.g., adding buses that leave 65th/Harlem at 7:14 p.m., 8:14 p.m., etc.); extending the hours of operation of both CTA 54B and Pace 383 bus routes to 12:00 a.m.
	T1.3	Optimized Routes and Service Types	Pace Bus Route 383 (simplify route and extend service frequency and coverage through a last mile solution); Establish a Harlem Ave Pace Pulse Route
Improve Access to Transit	T2.1	Expand Access to Transit	Midway CTA Station*; Bridgeview Transit Center*; Ford City Mall Mobility Hub*; Midway Hotel Center Mobility Hub*; 63rd/Archer Turnaround; Harlem/64th Turnaround; Summit Metra Station; Ashburn Metra Station; Wrightwood Metra Station
	T2.2	Locate Bus Stops and Pulse Stations Near Key Employment and Activity Centers	Pulse Station at Harlem and W 75th St; Pulse Station at Harlem and W 63rd;
Incentivize and Promote Transit	T3.1	Promote Ventra's Pre-Tax Benefit Program	The Internal Revenue Code allows employees to use pre-tax salary towards their transit and vanpool commuting costs (IRS Code, section 132(f) Qualified Transportation Fringe). This "Transit Benefit Program" program is a win-win for employees and employers. Employees using transit or vanpool to get to work save by not paying income tax on some of their salary, reducing their payroll taxes, and employers save on the payroll taxes for each employee participating.
	T3.2	Encourage Employers to Offer Transit Benefits	Employers are becoming increasingly aware of the costs associated with transportation-driven employee turnover and are offering benefits to mitigate this turnover. For example, some employers cover all or some of the costs of a monthly transit pass. The Village should encourage employers to offer transit benefits, highlight companies that do, and foster a friendly competition between employers to encourage participation and creativity.
	T3.3	Encourage and Support Carpooling and Vanpooling	Areas with high concentrations of Bedford Park employees, but with limited direct transit access to the Bedford Park-Clearing Industrial Area are good candidates for a targeted carpooling or vanpooling outreach campaign. Carpool/Vanpool Target Areas include the following: Chicago (Little Village; South Chicago, Streeterville/Gold Coast Cluster, Milwaukee Ave Corridor Cluster, Lincoln Park/Lakeview/Uptown Cluster)*; Oak Lawn/Chicago Ridge Cluster*; Calumet City/Dolton/Riverdale/South Holland Cluster*; Marrisonete/Alsip Cluster; Cicero; Oak Forest/Midlothian Cluster; Brookfield/Lyons Cluster; Maywood/Bellwood Cluster; Downers Grove
Expand First-Mile/Last-Mile, Late Night, and On-Demand Services	T4.1	Launch the <i>Connect2Work</i> Pilot Program	Bedford Park Area
	T4.2	Develop and test a MaaS platform through the <i>Connect2Work</i> Pilot Program	Bedford Park Area
	T4.3	ADA Accessible Services	Bedford Park Area

\* Delineates a priority project

Lead(s)											Phasing				Goal Alignment			
	Village	Businesses	Cook County	IDOT	Transit Agencies	Regional Partners	Short-Term (0-1)	Medium-Term (1-3)	Long-Term (3+)	Ongoing	Goal 1	Goal 2	Goal 3	Goal 4				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

**MOTORIST & FREIGHT NETWORK IMPLEMENTATION**

Strategy	Code	Actions	Description
Adopt and Implement a Complete Streets Policy	M1.1	Create a Smart and Complete Streets Framework Plan for the Bedford Park Area	Village of Bedford Park
	M1.2	Implement Complete Streets Improvements Incrementally	Village of Bedford Park
	M1.3	Continue Bedford Park's Exemplary Operations and Management Practices	Village of Bedford Park
Expand Access to Shared Mobility Services	M2.1	<i>Connect2Work</i> First-Mile, Last-Mile Pilot Program	Bedford Park Area
	M2.2	Late Night Service	Bedford Park Area
	M2.3	Expand Carsharing Services	Bedford Park Area
	M2.4	Expand Access to Shared and Pooled Rides	Bedford Park Area
Improve the Flow of Freight in and Around Bedford Park	M3.1	Implement High Priority Grade Crossing Projects	Bedford Park Area; GS1 (63rd St/Harlem Ave); GS2 (Central Ave/54th St); GS9 (Archer Ave/Kenton Ave); B9/EW1 (Argo), and P6 (Canal).
	M3.2	Create a Center for Smart Logistics	Bedford Park Area
Utilize Integrated Corridor Management and ITS Strategies	M4.1	Utilize Integrated Corridor Management Strategies	Bedford Park Area
	M4.2	Utilize Transportation Demand Management Strategies	Bedford Park Area
	M4.3	Support the Transition Towards Connected and Autonomous Vehicles	Bedford Park Area

	Lead(s)						Phasing				Goal Alignment			
	Village	Businesses	Cook County	IDOT	Transit Agencies	Regional Partners	Short-Term (0-1)	Medium-Term (1-3)	Long-Term (3+)	Ongoing	Goal 1	Goal 2	Goal 3	Goal 4
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

**GENERAL**

Active Transportation Alliance. Complete Streets Complete Networks: A Manual for the Design of Active Transportation. ATA: 2012. <http://www.atpolicy.org/design>.

Center for Neighborhood Technology. "All Transit." 2019. Accessed on 18 March 2019. <https://alltransit.cnt>.

Chicago Department of Transportation: Rules and Regulations for Construction in the Public Way (Chicago, 2019).

Chicago Metropolitan Agency for Planning (2014). Go To 2040. <https://www.cmap.illinois.gov/about/2040>.

Chicago Metropolitan Agency for Planning (2019). On To 2050. <https://www.cmap.illinois.gov/2050>.

Chicago Metropolitan Agency for Planning parcel-based land use inventory, 2015.

City of Memphis. Memphis Complete Streets Project Delivery Manual. Memphis, TN: 2015. <https://bikedpedmemphis.wordpress.com/plans-and-publication/complete-streets-project-delivery-manual/>.

Connecting Cook County. 2016. <https://www.connectingcookcounty.org/>.

H+T affordability index. Center for Neighborhood Technology, 2019, <https://htaindex.cnt.org/>. Accessed 23 march. 2019.

Illinois Department of Transportation. "Technology Transfer Center." 2018. Accessed on 16 March 2019. <http://apps.dot.illinois.gov/gist2/>.

Illinois Department of Transportation. Bicycle and Pedestrian Accommodations Bureau of Design & Environment Manual. US Department of Transportation: 2011. <http://www.dot.state.il.us/desenv/BDE%20Manual/BDE/pdf/Chapter%2017%Bicycle%20and%20Pedestrian.pdf>.

INRIX 2018 Global Traffic Scorecard. INRIX, 2019. <http://inrix.com/scorecard/>. Accessed 12 Feb. 2019.

LEHD Origin-Destination Employment Statistics (Washington, DC: U.S. Census Bureau, 2002-2015).

Metropolitan Planning Council. Transit Means Business: 2018. <https://transitmeansbusiness.metroplanning.org/>.

National Association of City Transportation Officials. Urban Street Design Guide. NACTO: 2013. <http://nacto.org/publication/urban-street-design-guide/>.

National Association of City Transportation Officials. Urban Street Stormwater Guide. NACTO: 2017. <https://nacto.org/publication/urban-street-stormwater-guide/>.

On The Map. (2002-2015 LEHD origin destination employment statistics).

Parzen, Julia. Shared-Use Mobility Reference Guide. Shared-Use Mobility Center: 2016. <http://www.sharedusemobilitycenter.org/wpcontent/uploads/2016/10/reference-guide-editsweb-version-10.24.2016.pdf>.

Smart Growth America "What are Complete Streets?" (Washington, DC) <https://smartgrowthamerica.org/program/national-complete-streets-coalition/publications/what-are-complete-streets/>.

SUMC. Mobility on Demand Learning Center: 2020. <https://learn.sharedusemobilitycenter.org/>.

The Belt Railway Company of Chicago "Connecting Chicago Since 1882" <http://www2.beltrailway.com/>.

U.S. Census Bureau. 2015 American Community Survey, five-year estimates (Washington DC, 2015).

U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program [distributor], accessed on March, 2019 at <https://onthemap.ces.census.gov>. LODES 7.3 [version]

Untokening. "1.0 – Principals of Mobility Justice," (Untokening Collective, 2017).

Vision Zero Network. <https://visionzeronetwork.org/>.

## PEDESTRIAN NETWORK

---

American Association of State Highway and Transportation Officials. Guide for the Planning, Design, and Operation of Pedestrian Facilities. AASHTO: 2004. <http://www.transportation.org>.

---

Association of Pedestrian and Bicycling Professionals. Bicycle Parking Design Guidelines. APBP: 2015. <http://www.apbp.org/?page=Publications>.

---

Federal Highway Administration. Designing Sidewalks and Trails for Access. US Department of Transportation: 1999. [http://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/sidewalks/index.cfm](http://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/sidewalks/index.cfm).

---

Federal Highway Administration. Pedestrian Safety Guide and Countermeasure Selection System. US Department of Transportation: 2013. <http://www.pedbikesafe.org>

---

National Association of City Transportation Officials. Global Street Design Guide. NACTO: 2017. <https://nacto.org/publication/global-street-design-guide/>.

---

Planning Commission TOD Committee Walking Distance Research (Fairfax County, VA, 2012).

## BIKE NETWORK AND MICROMOBILITY

---

American Association of State Highway and Transportation Officials. Guide for the Development of Bicycle Facilities, 4th Edition. AASHTO: 2012. <http://www.transportation.org>.

---

Chicago Metropolitan Agency for Planning. "Bikeway Inventory System (BIS)." CMAP Data Hub. 2018 Q2. Accessed on 16 March 2019. <https://datahub.cmap.illinois.gov/dataset/bis>.

---

City of Chicago. Chicago's First on-Street Bike Parking Corral Installed. City of Chicago: 2011. [http://www.cityofchicago.org/city/en/depts/cdot/procdrs/bike/news/2011/jul/chicago\\_s\\_first\\_on-streetbikecorralinstalled.html](http://www.cityofchicago.org/city/en/depts/cdot/procdrs/bike/news/2011/jul/chicago_s_first_on-streetbikecorralinstalled.html).

---

Federal Highway Administration. Bicycle Safety Guide and Countermeasure Selection System. US Department of Transportation: 2014. <http://www.pedbikesafe.org>

---

National Association of City Transportation Officials. Bike Share Station Siting Guide. NACTO: 2016. <https://nacto.org/publication/bike-share-station-siting-guide/>.

---

National Association of City Transportation Officials. Urban Bikeway Design Guide. NACTO: 2014. <http://nacto.org/cities-for-cycling/design-guide/>.

---

Thomas Gotschi, "Costs & Benefits of Bicycling Investments in Portland, Oregon." *Journal of Physical Activity & Health* 8 (2001), 49-58.

## TRANSIT NETWORK

---

Accessibility – Metro Magazine. U.S. Commuters Wait Approximately 40 Mins. A Day for Public Transit. Metro for Transit & Motorcoach Business: 2014. <http://www.metro-magazine.com/accessibility/news/292870/u-s-commuters-wait-approximately-40-mins-a-day-for-public-transit>.

---

American Public Transportation Association, Transit Ridership Report, Third Quarter 2018, <https://www.apta.com/resources/statistics/Documents/Ridership/2018-Q3-Ridership-APTA.pdf>

---

Chicago Metropolitan Agency for Planning, “Transit Trends,” (Chicago, IL).

---

Florida Department of Transportation Transit Ridership, Reliability, and Retention (National Center for Transit Research, 2008).

---

Illinois Department of Transportation. “Annual Average Daily Traffic Counts.” Getting Around Illinois. Accessed on 16 March 2019. <http://www.gettingaroundillinois.com/gai.htm?mt=aadt>.

---

National Association of City Transportation Officials. Transit Street Design Guide. NACTO: 2016. <http://nacto.org/publication/transit-street-design-guide/>.

---

Pace Suburban Bus. Transit Supportive Guidelines. Pace: 2013. <http://pacebus.com/guideliens/index/asp>.

---

Regional Transportation Authority. Interagency Transit Passenger Information Design Manual. RTA: 2016. <http://www.rtams.org/pdf/planning/SignageDesignManual.pdf>.

---

Seattle Department of Transportation. Commute Seattle Toolkit. Commute Seattle: 2017. [https://commuteseattle.com/wp-content/uploads/2017/03/cstoolkit\\_tbt.pdf](https://commuteseattle.com/wp-content/uploads/2017/03/cstoolkit_tbt.pdf).

---

William J. Mallett, Trends in Public Transportation Ridership: Implications for Federal Policy (Federation of American Scientists, 2018).

## SHARED USE MOBILITY

---

National Academies of Sciences, Engineering, and Medicine. Shared Mobility and the Transformation of Public Transit. The National Academies Press, Washington, DC: 2016. <https://doi.org/10.17226/23578>.

---

National Association of City Transportation Officials. Bike Share Station Siting Guide. NACTO: 2016. <https://nacto.org/publication/bike-share-station-siting-guide/>.

---

National Association of City Transportation Officials. Guidelines for Regulating Shared Micromobility. NACTO: 2019. <https://nacto.org/sharedmicromobilityguidelines/>

---

Parzen, Julia. Shared-Use Mobility Reference Guide. Shared-Use Mobility Center: 2016. <http://www.sharedusemobilitycenter.org/wpcontent/uploads/2016/10/reference-guide-editsweb-version-10.24.2016.pdf>.

---

SUMC. Mobility on Demand Learning Center: 2020. <https://learn.sharedusemobilitycenter.org/>.

---

SUMC. TCRP research report 195, broadening understanding of the interplay among public transit, shared mobility, and personal automobiles. Transit research board of the national academies (2018).



## MOTORIST AND FREIGHT NETWORK

---

Chicago Metropolitan Agency for Planning. "Mobility: Engine of Our Regional Economy." Chicago Metropolitan Agency for Planning (CMAP), 2019, <https://www.cmap.illinois.gov/mobility/explore#/>. Accessed 12 Feb. 2019.

---

Chicago Metropolitan Agency for Planning. Parking Strategies to Support Livable Communities. CMAP: 2012. <http://www.cmap.illinois.gov/document/20583/c224c06f-2735-4400-8281-d3c263ce5ba6/>.

---

Choe, T., Woolfolk, J., Garza, M., & Rosenberger, S. A. (2017). The future of freight. Retrieved from <https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/future-of-freight-simplifying-last-mile-logistics.html>.

---

Corwin, S., & Pankratz, D. M. (2019). Forces of change: The Future of mobility. Retrieved from <https://www2.deloitte.com/us/en/insights/focus/future-of-mobility/overview>.

---

Federal Highway Administration. Manual on Uniform Traffic Control Devices. US Department of Transportation: 2009. <http://mutcd.fhwa.dot.gov/>.

---

Federal Highway Administration. Materials and Procedures for Repair of Potholes in Asphalt-Surfaced Pavements FHWA-RD-99-168. US Department of Transportation: 1999. <https://www.fhwa.dot.gov/publications/research/infrastructure/pavements/ltp/99168/99168.pdf>.

---

Federal Highway Administration. Methods for Maintaining Pavement Marking Retroreflectivity FHWA-SA-14-017. US Department of Transportation: 2014. [https://safety.fhwa.dot.gov/roadway\\_dept/night\\_visib/fhwasa14017/fhwasa14017.pdf](https://safety.fhwa.dot.gov/roadway_dept/night_visib/fhwasa14017/fhwasa14017.pdf).

---

Illinois Department of Transportation. Illinois Roadway Crash Data. 2012-2016. Accessed on 17 March 2019. <http://www.idot.illinois.gov/transportation-system/safety/Illinois-Roadway-Crash-Data>.

---

Manual on Uniform Traffic Control Devices. United States. Dept. of Transportation. Federal Highway Administration, 2003.

---

McKinsey & Company (2019). Last-mile package delivery in 2030. <https://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/last-mile-package-delivery-in-2030>.

---

National Academies of Sciences, Engineering, and Medicine. Private Transit: Existing Services and Emerging Directions. The National Academies Press. (Washington, DC 2018).

---

National Association of City Transportation Officials. Blueprint for Autonomous Urbanism. NACTO: 2017. <https://nacto.org/publication/bau/>

---

---

Ontario Ministry of Transportation. Freight-Supportive Guidelines. Ministry of Transportation: 2013. <https://www.ceaa-acee.gc.ca/050/documents/p80100/118334E.pdf.org/>.

---

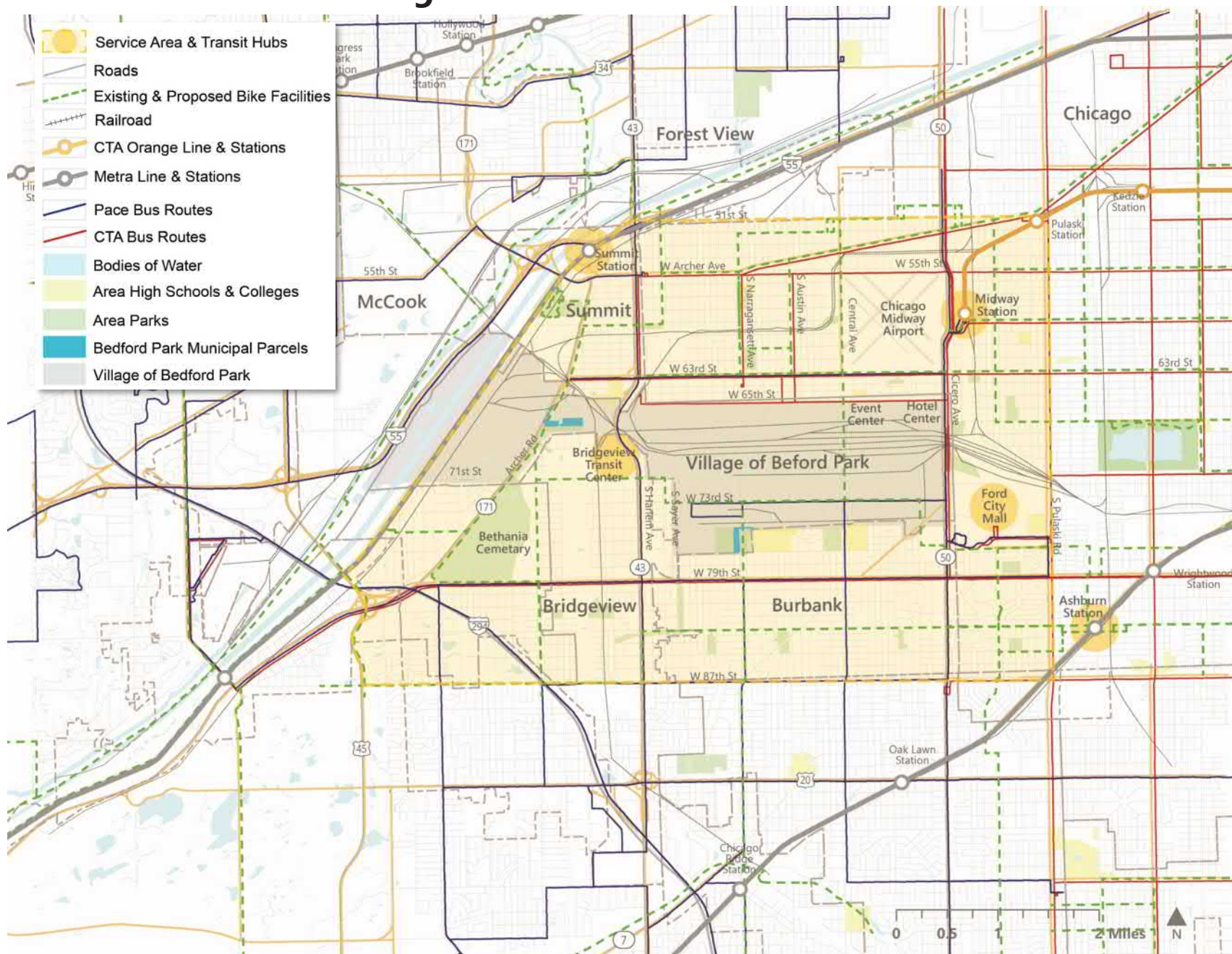
Truck bottlenecks are defined as locations where trucks experience at least six hours of congestion per weekday, (where congestion is defined as truck travel times more than 10% greater than free flow truck travel times).

# APPENDIX C. LAST MILE SOLUTION SERVICE MODELS

	Service or Model	Operational Structure	Vehicle Types	Revenue & Cost Structure, Range of Public Costs	Risks or Considerations	Notes/Examples, VMT/ congestion impacts
PUBLICLY OWNED	<b>Village owned and operated shuttle</b>	Village procures vehicle(s) and support services, hires drivers, and maintains and operates vehicles at their own expense.	Any, but most economical with van to cutaway (12-20 pax). May be wheelchair-lift equipped.	Capital costs depends on vehicle choice, ranging from \$30-150K+ per vehicle depending on size, age, and WAV capability.  Operator base pay range is \$20-30/hr. Assuming maintenance and fueling through village motorpool would not require additional hires, though it would increase operating costs.	Full cost of operation is village responsibility, and spare or substitute vehicles may be necessary for swapping out during maintenance. Running multiple vehicles requires keeping several trained drivers on call. Insurance and liability are fully village's responsibility.	Larger vehicles are not strictly necessary, but since labor is a greater ongoing cost than fuel and maintenance, it makes sense to maximize capacity rather than running more, smaller vehicles with lower upfront cost.  VMT/congestion impacts: moderate to high reduction depending on ridership.
	<b>Pace Vanpool</b>	Groups of 5-14 commuters from same/nearby workplaces sign up together.  In basic vanpool, riders pay monthly cost, Pace covers vehicle & operating costs, including fuel, tolls & insurance.  "Employee Shuttle" model supplies employers with vehicle, including gas & maintenance, and employers recruit riders.	Minivans, passenger vans (5-14 pax). Lift-equipped WAVs available.	Cost to riders in basic model is \$73-120 per month, assuming 20 to 30-mile commute.  Employer Shuttle model is \$600/mo. per vehicle. Renting entity must provide insurance.	Lowest administrative burden—Pace does all program administration and provides all support services.  Recruitment, group formation & maintenance can be a challenge. Little flexibility for overtime, flex shifts, etc. Good for traditional 9-5 workplaces but harder with second and third shifts.	Despite its many benefits, vanpool has not seen widespread adoption in many places. Participation may be encouraged by clear employer support/incentives for taking part.  VMT/congestion impacts: highest commute VMT reduction, likely congestion reduction by removing cars from the district.
PRIVATELY OWNED	<b>On-demand car or pooled-car services (taxi and/or TNC)</b>	Employers or a public entity enter into an agreement with a transportation network company (like Uber, Lyft, or Via) or taxi company, who provide rides to qualifying individuals (employees, residents, etc.) in certain locations or circumstances, using coupons or codes applied through the providers' standard reservation/hailing interfaces. A per-ride subsidy is applied to the fare at the time of the trip, with the difference up to the full price covered by either the rider or the sponsoring entity, depending on the agreement. The ride provider bills the sponsor monthly or quarterly for the subsidized amounts.	Sedans to SUVs (supplied by drivers), 4-7 pax if shared. Generally, not wheelchair accessible.	Riders may pay a flat fee (often in a \$3-5 range) per ride, with the remainder of the fare subsidized by employers or public entities up to a defined limit, or the reverse may be true, with a flat subsidy applied and the rider covering the rest. Since costs rise in line with a program's ridership, sponsoring entities generally cap the total budget so that a popular program does not become too costly.  Many entities only subsidize rides on the pooled-ride portions of the services (Uber Pool, LyftLine, and Via) to encourage sharing.	Administratively, among the easiest models, as it can work on essentially a reimbursement basis with no procurement or operational burden on the public entity.  However, difficult to bank on the model as a long-term solution. The full costs of TNCs are unknown, as they are: <ul style="list-style-type: none"> <li>▶ heavily subsidized by investors and known to be operating at a steep loss</li> <li>▶ dependent on the use of a lower cost contracted workforce and unrecognized capital costs (from drivers supplying their own vehicles which don't appear as liabilities to the businesses).</li> </ul> Low prices currently available to buyers of TNC services (whether individual riders or a corporate or public entity) are likely not sustainable, and the TNC model's overall viability is questionable in the long term.	Easy to set up and implement, though with many unknowns and poor scalability. Perhaps better as a guaranteed or emergency ride program supporting other strategies (such as vanpool), rather than the centerpiece of a transportation approach.  VMT/congestion impacts: Increases commute VMT & congestion v. solo driving because of deadhead trips. Encouraging use of pooled-ride service can help ameliorate these impacts.

	Service or Model	Operational Structure	Vehicle Types	Revenue & Cost Structure, Range of Public Costs	Risks or Considerations	Notes/Examples, VMT/ congestion impacts
PRIVATELY OWNED	<b>Turnkey private shuttle or “microtransit” service (route- or zone-based)</b>	Single vendor provides vehicles, drivers, and operations and maintenance, including app- or phone-based dispatch and routing (for on-demand services).	SUVs, vans, cutaways (6-20 pax). Often lift-equipped for wheelchair accessibility.	Revenues can be a mix of user fares, contributions from participating businesses or properties, and public subsidy.	Fairly low administrative burden after initial procurement. As cost structure is fairly straightforward, may be easier to incorporate business/community revenue contribution than would a more granular contracting approach with multiple vendors.	In Arlington, TX, which has negligible local transit but is connected to regional commuter rail, the city contracted with Via to provide microtransit service from a fleet of around a dozen 6-passenger vans. In the program’s second year, the city budgeted \$2.1m (from all revenue sources, including farebox) for a 15-vehicle fleet expected to serve around 200,000 rides.
				Costs and service productivity are similar to paratransit, in the range of \$30-60 per vehicle service hour, serving at most around 4 pax/hour, or roughly \$10-15 per trip.		
PUBLIC-PRIVATE PARTNERSHIPS	<b>Contracted dispatch/ operation</b>	Reservation, dispatch, routing software and hardware, and vehicle operation can all be procured a la carte, as services rather than capital goods or employment costs. Can augment a system in which the public body supplies the vehicles but doesn’t want to invest in the procurement of support services, hardware, and operation. Can also add on-demand and other features to a traditional shuttle operation.	Any, with same considerations as village owned/ operated shuttles.	Depends on mix of services and contracts, but total cost may be lower than fully public ownership and operation because labor is contracted rather than employed directly.	Procurement and management of multiple vendors and contracts can require more administrative overhead but provides more granular control over requirements and performance of different components.	Using agency-owner vehicles with vendor-supplied routing and dispatch (and often drivers) is a model increasingly used by public transit agencies for microtransit/demand responsive operations.
				Revenue structure similar to turnkey shuttles, and total contracting costs in line with or somewhat lower than turnkey service due to competition on individual operational components.		Procurement and management of multiple vendors and contracts can require more administrative overhead but provides more granular control over requirements and performance of different components.
	<b>Multiparty lease &amp; operation</b>	Same as contracted dispatch/operation above, but with separate vendors for each component of the service, including vehicle lease, drivers, ops & maintenance, dispatch & routing services & hardware, etc.	Any, with same considerations as village owned/ operated shuttles.	Revenue structure similar to turnkey shuttles, and total contracting costs in line with or somewhat lower than turnkey service due to competition on individual operational components.	Procurement and management of multiple vendors and contracts can require more administrative overhead but provides more granular control over requirements and performance of different components.	Procurement can be structured so that a given vendor or team can provide some or all of the services or bid only on providing specific components. A number of vendors provide basic shuttle service (vehicle & operations), which can be overlaid with more sophisticated dispatch and routing from specialized vendors (many of the same companies who provide microtransit services also sell bare software services) to optimize service and provide on-demand operation.
						VMT/congestion impacts: Moderate to high VMT & congestion reduction, growing with ridership.

## Connect2Work Pilot Program Service Area



# Connect2Work Pilot Program Parameters

## The Big Picture



## Pilot Program Goals

- **Mobility Goals**
  - Reduce traffic congestion by providing alternatives to solo driving.
  - Increase transit ridership and the use of shared modes of travel.
  - Expand 24/7 access to/from the Bedford Park-Clearing Industrial Area.
- **Economic Goals**
  - Improve workers' access to opportunity in Bedford Park.
  - Reduce commuter's transportation costs.
  - Expand employers' workforce access.
- **Learning Goals**
  - Collect data that can be used to evaluate and compare the performance of different first- and last-mile mobility solutions.
  - Produce innovative and scalable business and partnership models for delivering mobility services.
  - Encourage a behavioral shift to more sustainable modes of travel.

## Key Performance Indicators (Proposed)

- **Congestion Mitigation.** Number of shared rides completed per day
- **Route Efficiency.** Passengers per vehicle operating hour
- **Transit Benefits.** Number/percentage of rides that begin/end at a transit hub
- **Reliability.** On-time performance
- **Cost to Consumer.** Cost to consumer per trip
- **Customer Satisfaction.** Number of 4/5 star customer ratings

## Sample Data Requested from Providers

- Trip ID
- Trip Start Timestamp
- Trip End Timestamp
- Trip Seconds
- Trip Miles
- Pickup Census Tract
- Dropoff Census Tract
- Fare
- Tip
- Additional Charges
- Trip Total
- Shared Trip Authorized
- Trips Pooled
- Pickup Zone Centroid Latitude
- Pickup Zone Centroid Longitude
- Pickup Zone Centroid Location
- Dropoff Zone Centroid Latitude
- Dropoff Zone Centroid Longitude

# Connect2Work Style Guide

This style guide can be utilized by the Village and its partners to assist with the marketing and branding materials for the *Connect2Work* Pilot Program.

## TYPOGRAPHY

### FONT SPECIMEN

Lato

abcdefghijklmnop  
nopqrstuvwxyz  
12345678910

### HEADER TEXT WEIGHT

Aa

### SUB HEADER TEXT WEIGHT

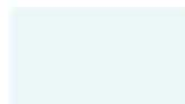
Aa

### BODY TEXT WEIGHT

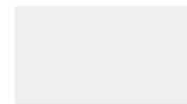
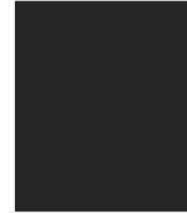
Aa

## COLOR GUIDE

#3BBCD4



#262626



## LOGO VARIATIONS



# Connect2Work Website Concept









**AFTER**

**BEFORE**



**AFTER**



**BEFORE**





**BEFORE**



**AFTER**

